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Accounting Basics

An Introduction for Non-Accounting Majors

By Eric A. Weinstein

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Eric A. Weinstein
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Contents in Brief

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Preface

This first edition of *Accounting Basics: An Introduction for Non-Accounting Majors* provides an easy to use and understand, simplified solution to introductory accounting courses aimed at serving non-accounting majors. The text provides step-by-step guidance on completing each stage in the accounting cycle, along with practice sets, a continuing problem throughout the book, and a comprehensive capstone project as the final chapter.

Supported by an online Student Resource Center and a robust instructor support package, including an eLab license key for instructors wishing to use eLab in their course, the text is designed to teach the complete accounting cycle to students with no prior accounting knowledge. Wide-ranging exercises enable students to practice the skills learned within each chapter. Straightforward guidance is provided on completing each step in the accounting cycle, effectively addressing the most common questions students ask in a classroom setting. The logical progression and clear narrative sets this exciting new text apart from similar offerings currently in use for this course.

Key features include:

- Clear start-of-chapter objectives
- Core concepts coverage and end-of-chapter Concepts Review Quizzes
- Case in Point case exercises
- Putting It Together applied tools
- Knowledge Check A & B reviews
- Progressive accounting cycle graphics
- Comprehensive project
- Fresh, engaging, and clear design and graphics

Visual Conventions

In addition to the core features already noted, this text employs a variety of functional, engaging visual graphics to help students incorporate key content and find useful information.

Accounting Terms included in the glossary are set in bold face. If you are using an eBook, note that the terms are linked to the associated glossary definitions.

TIP! Tip! graphics identify helpful shortcuts, advice, or suggestions.

NOTE! Note! graphics call attention to key points, unusual exceptions, or other key information that may not be included the main text.

WARNING! Warning! graphics highlight important points for students to be aware of and on the lookout for.

A Closer LOOK A Closer Look sections pull out key topics for deeper examination as a useful tool or exemplar.

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We are also deeply grateful to the instructors and professionals who reviewed the text and suggested improvements for this first edition. This book has benefited significantly from the feedback and suggestions of the following reviewers.

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1 Evaluating Transactions

LEARNING OBJECTIVES

After studying this chapter, you will be able to:

- **Describe the accounting equation**
- **Differentiate between account types**
- **Evaluate a transaction**
- **Convey transaction details**

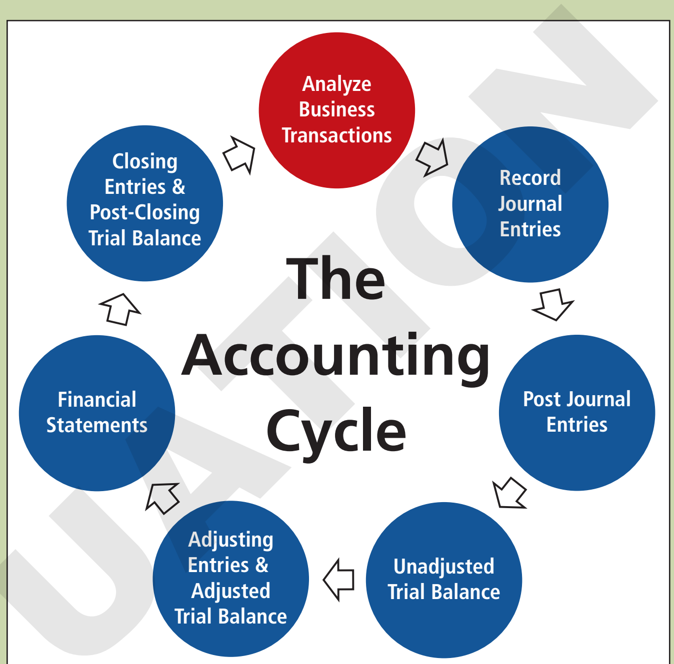
Accounting allows a business to both convey how well it has performed and evaluate how it can improve. Understanding the language of accounting will allow you to communicate with the accountants and financial professionals in any organization. In this chapter, you will be introduced to the accounting equation. You will also learn a number of important accounts, and how to evaluate transactions.

CASE STUDY Opening Nathan's Donut School

Nathaniel H. Spencer has loved donuts since he was very young. His love of donuts led him to pursue a culinary degree, and now that he has graduated he is eager to start his own business. Unfortunately, he focused so heavily on his cooking courses in college, that he never learned any accounting. Nathaniel consulted a lawyer, who helped him to open Nathan's Donut School (a cooking school focused on gourmet baking), but now he is unsure how to track the activity of the business. Nathaniel has asked you to help with all accounting-related work for his new business.

As you will see in the upcoming chapter, to begin to understand accounting you must first examine the accounting equation. You then consider the best way to evaluate business activities, using the language of accounting. Lastly, you practice expressing a number of the business activities of Nathan's Donut School.

The Accounting Cycle includes all necessary steps, and begins with analyzing transactions.



Accounting provides a format in which business activity can be expressed.

	Assets					=	Liabilities	+	Owner's Equity				
	Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable		Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense
Transaction #1	$ 35,000								$ 35,000				
Transaction #2	$ (20,000)				$ 20,000								
Transaction #3			$ 500	$ 1,000			$ 1,500						

Using the Accounting Equation

Accounting provides a manner in which individual business events, and the cumulative impact of those events, can be expressed. This is important not only so that a business can keep track of its own activity, but also so that this activity may be summarized for individuals outside of the business. Outside parties who may be interested in this information include potential investors, bankers, and governmental agencies.

NOTE! A single business event, such as the purchase of an item, is referred to as a **Transaction**.

The most fundamental accounting concept that you will learn is the **Accounting Equation**. The accounting equation is defined as follows:

Assets = Liabilities + Owner's Equity

Assets represent items of value within the business. Examples include cash, accounts receivable (monies owed to the business from a customer), supplies, equipment, and land.

Liabilities represent the portion of the assets that are owed to entities outside of the business. Examples include outstanding loans, mortgages, and monies received in advance of services rendered (for example, a sports team receiving season ticket revenue before the actual games are played has not yet earned the money, and therefore it owes entertainment to its fans).

Owner's Equity represents the portion of the assets that are not owed to entities outside of the business. As a result, the owner(s) of the business can lay claim to this portion of the assets. For example, an owner could lay claim to an investment he/she has made in the business, and therefore this would represent owner's equity.

So, stated in different terms, the accounting equation dictates that all items of value (assets) equal the portion of the assets owed to others (liabilities), plus the portion of the assets not owed to others (owner's equity).

TIP! Another perspective on the accounting equation is that money is raised to purchase assets in two ways. It can either be borrowed from individuals outside of the business (liabilities), or contributed by the owners of the business (owner's equity). This is why assets must automatically equal liabilities plus owner's equity.

A Closer LOOK

What Are the Differences Between Business Types?

Businesses can be formed as one of three different primary types of legal entities: sole proprietorships, partnerships, and corporations.

A sole proprietorship is owned by one individual. One benefit of a sole proprietorship is that the owner may make decisions without consulting others. Another primary benefit is that the profits from the business are only taxed once, on the owner's individual tax return. A third benefit is that a sole proprietorship is a simpler form of business, and therefore easier to start. One significant drawback is that the owner has unlimited liability, which means that his/her personal assets could be jeopardized in a legal proceeding. Another drawback is that the owner must rely entirely on his own experience to effectively run the business. A small business such as Nathan's Donut School could be organized as a sole proprietorship.

A partnership is owned by two or more individuals. A partnership is similar to a sole proprietorship in that its profits are taxed once, and its owners have unlimited liability. However, as there are multiple owners, decisions must be agreed upon by each of them, and profits must be shared. In spite of this, the benefits of having multiple owners, each with a particular expertise, can outweigh the previously-listed drawbacks.

A corporation issues shares of stock to its owners, and can be either public (any investor may purchase an ownership stake) or private (only certain investors are permitted to purchase an ownership stake; these are often family-owned). The primary benefit of corporations is that they offer limited liability to each owner. Although an owner's investment in the corporation could be lost if the business fails, each owner's personal assets are fully protected. The primary drawback of corporations is that they are subject to double-taxation. The profits from a corporation are taxed first on the business tax return, and once again on individual tax returns when they are distributed to the owners in the form of dividends.

Case In Point 1-1

Manipulate the Accounting Equation

Throughout this textbook you will be provided with examples that illustrate the use of recently-introduced concepts. In this example, we will determine the missing amount within each independent accounting equation.

1. Assets = $7,500, Liabilities = $3,000, Owner's Equity = $X.

   The accounting equation dictates that $7,500 = $3,000 + $X. Subtract $3,000 from both sides of the equation to arrive at $4,500 = $X. Owner's Equity equals $4,500 in this example.

   The accounting equation is nothing more than a basic algebraic equation. In these examples, you are simply solving for "X."

2. Assets = $13,000, Liabilities = $X, Owner's Equity = $9,250.

   In this example, $13,000 = $X + $9,250. Subtract $9,250 from both sides to arrive at $3,750 = $X. Liabilities equal $3,750.

3. Assets = $X, Liabilities = $24,500, Owner's Equity = $45,000.

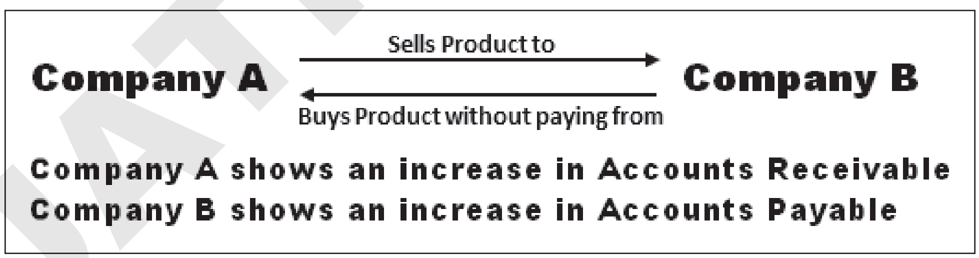
   In this example, $X = $24,500 + $45,000. Simply add together the components on the right side of the equation to arrive at $X = $69,500. Assets equal $69,500.

Using Account Names and Descriptions

Within each category of the accounting equation can be found a variety of accounts. A number of asset accounts, such as Cash, Accounts Receivable, and Supplies, were listed above. Others include Prepaid Insurance, Buildings, and Patents.

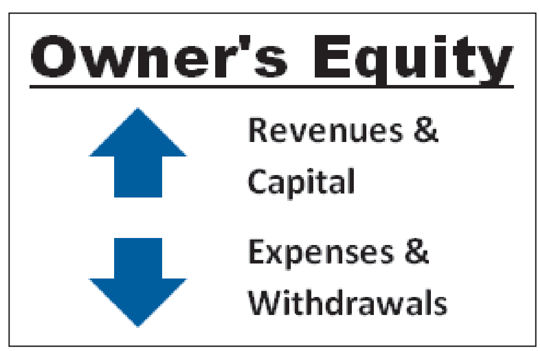
Liability accounts include Accounts Payable (monies owed for purchases usually made in the past few months), Notes Payable (similar to accounts payable; monies owed for which a formal document has been signed by both parties), and Salaries Payable (monies owed to employees).

When Company A sells a product to Company B (which doesn't immediately pay), accounts receivable is impacted for one company while accounts payable is impacted for the other company.



Owner's Equity accounts include expense accounts such as Rent Expense and Utilities Expense (costs of doing business), revenue accounts such as Sales Revenue (monies earned from the sale of goods as part of the typical operations of the business) and Service Revenue (monies earned from providing services as part of the typical operations of the business), and Drawing (withdrawals made by the owner).

While revenues and capital increase owner's equity, expenses and withdrawals decrease it.



Listing of Common Accounts

Assets	Liabilities	Owner's Equity
Cash	Accounts Payable	Sales Revenue
Accounts Receivable	Notes Payable	Service Revenue
Supplies	Salaries Payable	Rent Expense
Prepaid Insurance	Unearned Revenue	Utilities Expense
Inventory	Mortgage Payable	Telephone Expense
Equipment		John Doe, Capital
Buildings		John Doe, Drawing
Land		

TIP! Different companies utilize different account names. Although the overall list of account names is far too long to memorize (or even identify), you'll find that there is a core list of accounts that are used in the majority of transactions.

When a transaction occurs, it is important that the correct accounts be identified. Therefore, you should focus heavily on understanding what each account represents.

Case In Point 1-2 Identify the Account Type

In this example, we will determine whether each account listed is an Asset, Liability, or Owner's Equity account.

1. Rent Revenue

   This account represents revenue earned from renting out a facility. All revenue accounts are ***Owner's Equity*** accounts.

2. Buildings

   This account represents the cost of all buildings that have been purchased. Buildings are valuable to a business, and therefore this is an ***Asset*** account.

3. Accounts Receivable

   This account represents monies that are owed to a business, and that are due to be paid in the short term (typically within a few months). Accounts receivables are typically generated when goods are sold, or services are provided, and payment is not immediately made. As an Accounts Receivable is valuable to a business, it is an ***Asset*** account.

NOTE! The Notes Receivable account operates in a similar manner to Accounts Receivable. However, it is due to be paid at least 12 months later (long-term), and is associated with a formal document signed by both parties (buyer and seller).

4. Telephone Expense

   This account represents expenses incurred for telephone usage. All Expense accounts are ***Owner's Equity*** accounts.

5. Accounts Payable

   This account represents monies that are owed to others by the business, and that are due to be paid in the short term (typically within a few months). Accounts Payables are typically generated when goods are bought, or services are received, and payment is not immediately made. As an account payable is an amount that is owed to others, it is a ***Liability*** account.

6. Nathaniel H. Spencer, Drawing

   This account represents monies that were withdrawn from the business by the owner. Similar to revenues and expenses, all drawing accounts are ***Owner's Equity*** accounts.

7. Supplies

   This account represents the cost of unused supplies currently held by the business. Because supplies are valuable to the business, this is an ***Asset*** account.

Evaluating a Transaction

As you have seen, a transaction represents a single business event that has occurred. The purchase of a machine, the payment of a debt, and the withdrawal of cash for personal use would each comprise a single transaction. When a transaction takes place, the concept of **Double-Entry Bookkeeping** dictates that at least two accounts must be impacted. It is possible that many more accounts could be impacted by a single transaction, but in order for the accounting equation to remain in balance, there always must be at least two.

NOTE! A number of concepts, such as Double-Entry Bookkeeping, will be introduced throughout this book. All of these approaches are mandated by **Generally Accepted Accounting Principles (GAAP)**, which are currently established by the **Financial Accounting Standards Board (FASB)**.

When evaluating a transaction, a three-step process should be undertaken:

- ***Step 1:*** Determine which accounts have been impacted. For example, if a company purchases equipment for cash, then the two accounts impacted are Cash and Equipment.

- ***Step 2:*** Determine whether the balance (expressed in terms of monetary value) in each account has increased or decreased. In the above example, equipment was purchased, therefore the equipment account balance has increased. Cash was paid out, therefore the cash account balance has decreased.
- ***Step 3:*** Determine by how much each account has been impacted. If there are only two accounts that are affected, then they will both be affected by the same amount. However, if there are more than two accounts affected, you will need to look more closely to determine by how much each account has changed.

When evaluating a transaction, be certain to always view the transaction from the perspective of your business. In the above example, cash was received by another company, but for our purposes this has no consequence. We are only concerned with the fact that our business now has less cash than it did before, therefore our cash account balance has decreased.

An illustration of the approach you should take when evaluating a transaction in which $1,500 of furniture is purchased for cash is as follows:

Accounts Impacted	**Increase or Decrease?**	**Dollar Amount**
Furniture	Increase	$1,500
Cash	Decrease	$1,500

Case In Point 1-3 Determine the Impact on Accounts

In this example, we will determine which accounts have been impacted by each transaction, and by how much they have either increased or decreased.

1. Nathaniel invests $35,000 to open Nathan's Donut School.

   Step 1: Cash was invested in the business, and since none of the $35,000 is owed to anybody, Nathaniel can claim ownership of the entire amount. Therefore, the ***Cash*** account and the ***Nathaniel H. Spencer, Capital*** account (which represents Nathaniel's share of the equity), are impacted.

   Step 2: As a result of the investment, the company has more cash than it did before. Nathaniel's ownership interest has also increased, as he is now the owner of more assets. Therefore, both accounts have ***increased***.

   Step 3: Since $35,000 was invested by Nathaniel, both the cash account and the ***Nathaniel H. Spencer, Capital*** account have increased by ***$35,000***.

Assets	**=**	**Liabilities**	**+**	**Owner's Equity**
+ $35,000	=	$0	+	+ $35,000

2. Nathan's Donut School pays $20,000 for baking equipment.

   Step 1: Cash was paid to complete the purchase, and baking equipment was obtained. Therefore, the ***Cash*** and ***Equipment*** accounts are impacted.

Step 2: Nathan's Donut School now has less cash than it did before, but it has more equipment. Therefore, the cash account has ***decreased*** and the equipment account has ***increased***.

Step 3: Since $20,000 was paid to obtain the baking equipment, the cash account decreases by ***$20,000,*** while the equipment account increases by ***$20,000***.

Assets	=	Liabilities	+	Owner's Equity
+ $20,000	=	$0	+	$0
- $20,000				
$0				

NOTE! As seen in this transaction, it is possible for all affected accounts to appear on only one side of the accounting equation.

3. The company purchases $500 of supplies and $1,000 of furniture on account.

NOTE! When an asset is purchased on account, cash is not paid when the asset is acquired, but instead is owed.

Step 1: Both supplies and furniture were obtained, and cash was not paid. As a result, the ***Supplies***, ***Furniture***, and ***Accounts Payable*** (an amount owed to others) accounts are all impacted.

Step 2: The Company now has more supplies and furniture. In addition, Nathan's Donut School owes more money than it did before the transaction. Therefore, all three accounts have ***increased***.

Step 3: In this transaction, each account is impacted by a different amount. Supplies increased by ***$500***, furniture increased by ***$1,000***, and because the total amount is owed, Accounts Payable increased by ***$1,500***.

Assets	=	Liabilities	+	Owner's Equity
+ $500	=	+ $1,500	+	$0
+ $1,000				

4. Nathan's Donut School opens for business, and on its first day earns $850. As of now, the company only accepts cash payments.

Step 1: The Company received cash in exchange for services, and in doing so has earned revenue. Therefore, the ***Cash*** account and ***Service Revenue*** account were impacted.

Step 2: The Company has more cash than it did before, and has now earned more revenue than it had previously. Therefore, both accounts have ***increased***.

Step 3: As $850 was both earned and received for these services, both accounts increased by ***$850***.

Assets	=	Liabilities	+	Owner's Equity
+ $850	=	$0	+	+ $850

5. The company pays off the $1,500 that was owed from the purchase of supplies and furniture. This represents a cash payment on account.

   Step 1: Cash has been paid out, and an amount owed to others has been paid off, so the ***Cash*** account and the ***Accounts Payable*** account have been impacted.

   Step 2: The Company now has less cash, and owes less than it did before, so both accounts have ***decreased***.

   Step 3: Since $1,500 was paid out to reduce the liability, both accounts are reduced by ***$1,500***.

Assets	**=**	**Liabilities**	**+**	**Owner's Equity**
- $1,500	=	- $1,500	+	$0

TIP! Over time you will not need to work through each step independently, as practice will improve your ability to quickly analyze a transaction. Your speed will also increase as you commit to memory whether each account is an asset, liability, or owner's equity account.

Recording Transactions

The benefit to recording transactions is that a company can maintain a running balance of the value in each account. This allows the company to review its financial position at any point in time. To calculate these account balances, we must combine the impact of every transaction. This may be done by creating a chart in which all active accounts are listed on top, and a row is created for each transaction.

When listing transactions, accounts are displayed within each section of the accounting equation.

Assets					=	Liabilities	+
Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable	

Owner's Equity				
Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense

Case In Point 1-4 Record Transactions

In this example, we will record transactions and calculate the ending balances for each account.

1. Nathaniel invests $35,000 to open Nathan's Donut School.

	Assets					=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable	
Transaction #1	$ 35,000							

Owner's Equity				
Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense
$ 35,000				

2. Nathan's Donut School pays $20,000 for baking equipment.

	Assets					=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable	
Transaction #2	$ (20,000)				$ 20,000			

Owner's Equity				
Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense

Parentheses surrounding an amount indicate that it is a negative number.

3. The company purchases $500 of supplies and $1,000 of furniture from Office Space on account.

The result of this transaction is that the company has more supplies, more furniture, and more accounts payable than it did before, therefore all of the amounts displayed are positive (each account is increasing).

	Assets					=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable	
Transaction #3			$ 500	$ 1,000			$ 1,500	

Owner's Equity				
Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense

4. Nathan's Donut School opens for business, and on its first day earns $850 cash.

	Assets					=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable	
Transaction #4	$ 850							

Owner's Equity				
Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense
		$ 850		

5. The company pays off the $1,500 that was owed from the purchase of supplies and furniture.

	Assets					=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable	
Transaction #5	$ (1,500)						$ (1,500)	

Owner's Equity				
Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense

6. On its second day of operations, Nathan's Donut School earns $2,500 on account from SportCo.

NOTE! Although companies typically earn revenue consistently throughout a given month, for simplicity you will not examine any further revenue transactions for the current month of operations of Nathan's Donut School.

	Assets					=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable	
Transaction #6		$ 2,500						

Owner's Equity				
Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense
		$ 2,500		

7. The company purchases advertising in local newspapers for $250.

	Assets					=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable	
Transaction #7	$ (250)							

	Owner's Equity				
	Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense
Transaction #7				$ (250)	

Both expenses and withdrawals reduce owner's equity, as they result in fewer assets to which the owner can lay claim. As a result, an increase in either expense or withdrawal accounts is expressed as a negative amount.

8. The company receives $300 on account (in partial payment for the previously-earned revenue).

	Assets					=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable	
Transaction #8	$ 300	$ (300)						

	Owner's Equity				
	Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense

Although the company was owed $2,500 from the transaction in step 6, only a portion of that amount is paid here. Regardless of the amount paid, this transaction type always leads to an increase in cash and a decrease in accounts receivable.

9. Nathan's Donut School pays rent of $1,700 for the month.

	Assets					=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable	
Transaction #9	$ (1,700)							

	Owner's Equity				
	Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense
Transaction #9					$ (1,700)

10. Nathaniel withdraws $400 from the business for his own personal use.

	Assets					=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable	
Transaction #10	$ (400)							

Owner's Equity				
Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense
	$ (400)			

11. Based on the above transactions, determine the ending balances for each account.

	Assets					=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Furniture	Equipment		Accounts Payable	
Transaction #1	$ 35,000							
Transaction #2	$ (20,000)				$ 20,000			
Transaction #3			$ 500	$ 1,000			$ 1,500	
Transaction #4	$ 850							
Transaction #5	$ (1,500)						$ (1,500)	
Transaction #6		$ 2,500						
Transaction #7	$ (250)							
Transaction #8	$ 300	$ (300)						
Transaction #9	$ (1,700)							
Transaction #10	$ (400)							
Ending Balance	$ 12,300	$ 2,200	$ 500	$ 1,000	$ 20,000		$ -	
			$36,000				$0	

Owner's Equity				
Nathaniel H. Spencer, Capital	Nathaniel H. Spencer, Drawing	Service Revenue	Advertising Expense	Rent Expense
$ 35,000				
		$ 850		
		$ 2,500		
			$ (250)	
				$ (1,700)
	$ (400)			
$ 35,000	$ (400)	$ 3,350	$ (250)	$ (1,700)
		$36,000		

Notice that the final totals displayed below the accounting equation have remained in balance.

A Closer LOOK

How Would a Company Handle the Sale of a Product?

As Nathan's Donut School is a culinary school, it does not sell a product, but instead provides a service (baking lessons) to its clients. For a company that does sell a product, a slightly more complicated approach to the transaction is required.

Transactions in which inventory is sold are unique, in that they are recorded by using two sets of accounts instead of one as you have seen in all prior examples. This is because when selling inventory, the company must both remove the inventory from its books and add the revenue earned to its books.

Therefore, not only do the revenue and cash (or accounts receivable, if the customer has not yet paid) accounts increase, but the Cost of Goods Sold expense account increases (to account for the money the seller originally paid for the item), and the Inventory account decreases (as the seller now has less inventory).

NOTE! Cost of Goods Sold is an expense account that represents the original cost to a business of inventory that is sold. Don't confuse this with the sales price that a business charges, which is typically higher than the original cost of the inventory.

Concepts Review

To check your knowledge of the key concepts introduced in this chapter, complete the Concepts Review quiz by choosing the appropriate access option below.

If you are...	Then access the quiz by...
Using eLab	Logging in, choosing Content, and navigating to the Concepts Review quiz for this chapter
Not using eLab	Going to the Student Resource Center for this book

Putting It Together

PIT 1-1 Record the Transactions

Amber's Lacrosse Emporium offers sporting goods for all sports, with an emphasis on lacrosse, and is owned and operated by Amber Stein. In this exercise, using a worksheet based on the accounting equation, you will record the following transactions that took place during the first month of operations.

1. Amber invests $75,000 to open Amber's Lacrosse Emporium.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #1	$ 75,000								

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense
$ 75,000								

2. Amber's Lacrosse Emporium pays $15,000 for sporting goods inventory.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #2	$ (15,000)			$ 15,000					

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense

3. The company purchases display equipment for $12,000 in cash.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #3	$ (12,000)					$ 12,000			

Owner's Equity

Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense

4. Amber pays rent on the company's retail location of $1,500.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #4	$ (1,500)								

Owner's Equity

Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense
					$ (1,500)			

5. The company purchases $750 of supplies and $2,000 of furniture on account.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #5			$ 750		$ 2,000			$ 2,750	

Owner's Equity

Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense

6. Amber's Lacrosse Emporium opens for business, and on its first day sells $2,400 of sporting goods for cash. The cost of the goods sold is $1,350.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #6	$ 2,400								
Transaction #6				$ (1,350)					

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense
		$ 2,400						
			$ (1,350)					

Remember that transactions involving inventory require the altering of two different sets of accounts. The first pair of accounts impacted (Cash & Sales Revenue) recognize the revenue earned, while the second pair of accounts impacted (Inventory & Cost of Goods Sold) recognize the expense incurred in order to sell these goods.

7. The company pays the $2,750 that was owed from the purchase of supplies and furniture.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #7	$ (2,750)							$ (2,750)	

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense

8. On its second day of operations, Amber's Lacrosse Emporium sells $1,450 of sporting goods for cash. It also sells another $3,000 of sporting goods to a local school district on account. The cost of all the goods sold is $2,100.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #8	$ 1,450	$ 3,000							
Transaction #8				$ (2,100)					

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense
		$ 4,450						
			$ (2,100)					

9. The company purchases advertising in local newspapers for $600.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #9	$ (600)								

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense
				$ (600)				

10. The company receives $2,100 in partial payment for the sporting goods previously sold to the local school district on account.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #10	$ 2,100	$ (2,100)							

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense

11. Amber's Lacrosse Emporium pays wages of $1,600 to its employees.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #11	$ (1,600)								

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense
						$ (1,600)		

12. The company pays its telephone bill of $135.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #12	$ (135)								

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense
							$ (135)	

13. The company pays $200 for monthly utilities.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #13	$ (200)								

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense
								$ (200)

14. Amber's Lacrosse Emporium buys an additional $2,000 of sporting equipment inventory on account.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #14				$ 2,000				$ 2,000	

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense

15. Amber withdraws $600 from the business.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #15	$ (600)								

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense
	$ (600)							

16. Based on the above transactions, determine the ending balances for each account.

	Assets						=	Liabilities	+
	Cash	Accounts Receivable	Supplies	Inventory	Furniture	Equipment		Accounts Payable	
Transaction #1	$ 75,000								
Transaction #2	$ (15,000)			$ 15,000					
Transaction #3	$ (12,000)					$ 12,000			
Transaction #4	$ (1,500)								
Transaction #5			$ 750		$ 2,000			$ 2,750	
Transaction #6	$ 2,400								
Transaction #6				$ (1,350)					
Transaction #7	$ (2,750)							$ (2,750)	
Transaction #8	$ 1,450	$ 3,000							
Transaction #8				$ (2,100)					
Transaction #9	$ (600)								
Transaction #10	$ 2,100	$ (2,100)							
Transaction #11	$ (1,600)								
Transaction #12	$ (135)								
Transaction #13	$ (200)								
Transaction #14				$ 2,000				$ 2,000	
Transaction #15	$ (600)								
Ending Balance	$ 46,565	$ 900	$ 750	$ 13,550	$ 2,000	$ 12,000		$ 2,000	
				$75,765				$2,000	

Owner's Equity								
Amber Stein, Capital	Amber Stein, Drawing	Sales Revenue	Cost of Goods Sold	Advertising Expense	Rent Expense	Wages Expense	Telephone Expense	Utilities Expense
$ 75,000								
					$ (1,500)			
		$ 2,400						
			$ (1,350)					
		$ 4,450						
			$ (2,100)					
				$ (600)				
						$ (1,600)		
							$ (135)	
								$ (200)
	$ (600)							
$ 75,000	$ (600)	$ 6,850	$ (3,450)	$ (600)	$ (1,500)	$ (1,600)	$ (135)	$ (200)
				$73,765				

Knowledge Check A

KCa 1-1 Manipulate the Accounting Equation

Determine the missing amount within each independent circumstance, based on the accounting equation. These represent different month-end balances for Molly's Modeling Agency. Molly W. Virginia owns the company, which provides representation and guidance for aspiring models. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

1. Assets = $15,750, Liabilities = $6,250, Owner's Equity = $X.
2. Assets = $158,000, Liabilities = $X, Owner's Equity = $102,000.
3. Assets = $X, Liabilities = $2,500, Owner's Equity = $5,000.

KCa 1-2 Determine Ending Accounting Equation Balances

Examine three independent circumstances, and determine the ending balances for assets, liabilities, and owner's equity, based on the information provided below.

1. Beginning of year: Assets = $27,000, Liabilities = $19,000, Owner's Equity = $X.

   During the year: Assets increase by $2,000, Liabilities decrease by $4,000.
2. Beginning of year: Assets = $X, Liabilities = $5,500, Owner's Equity = $10,000.

   During the year: Assets decrease by $1,500, Owner's Equity decreases by $950.
3. Beginning of year: Assets = $59,000, Liabilities = $X, Owner's Equity = $41,000.

   During the year: Liabilities increase by $6,500, Owner's Equity decreases by $2,250.

KCa 1-3 Advanced Accounting Equation Work

Determine the first year beginning balances for each accounting equation element after examining two years of activity.

1. End of second year: Assets = $138,500, Liabilities = $49,000, Owner's Equity = $X.

   During the second year: Assets decrease by $12,000, Liabilities decrease by $3,500.

   During the first year: Liabilities decrease by $7,500, Owner's Equity increases by $500.
2. End of second year: Assets = $X, Liabilities = $21,000, Owner's Equity = $68,000.

   During the second year: Assets increase by $4,500, Owner's Equity decreases by $900.

   During the first year: Assets decrease by $2,200, Liabilities decrease by $7,500.

3. End of second year: Assets = $6,600, Liabilities = $X, Owner's Equity = $2,700.

   During the second year: Liabilities increase by $1,900, Owner's Equity increases by $300.

   During the first year: Assets increase by $1,100, Owner's Equity decreases by $200.

KCa 1-4 Identify the Account Type

Determine whether each account listed is an Asset, Liability, or Owner's Equity account.

1. Cash: ____________________
2. John Doe, Capital: ____________________
3. Rent Expense: ____________________
4. Sales Revenue: ____________________
5. Notes Receivable: ____________________
6. Supplies Expense: ____________________
7. Furniture: ____________________

KCa 1-5 Distinguish Between Different Accounts

Write one or two sentences describing the difference between the two listed accounts.

1. Accounts Receivable and Accounts Payable

   ____

   ____

2. Rent Revenue and Rent Expense

   ____

   ____

3. John Doe, Capital and John Doe, Drawing

   ____

   ____

4. Accounts Receivable and Notes Receivable

   ____

   ____

5. John Doe, Capital, and Cash

   ____

   ____

KCa 1-6 Determine the Impact on Accounts

Determine which accounts have been impacted by each transaction, and by how much they have either increased or decreased.

1. William Martin invests $150,000 to open his new company.

2. The company purchased a building for $65,000 cash, and furniture for $12,000 cash.

3. The company earned revenue of $2,500 for services rendered. It is paid $1,500 now, and is owed the remaining $1,000.

4. The company purchased $4,500 of equipment on account.

5. The company paid $2,100 of the $4,500 that it owed for the previously purchased equipment.

6. The company paid $250 for telephone expenses.

7. The company paid $825 for weekly employee salaries.

8. The company is paid the remaining $1,000 it is owed from the previously rendered services.

9. The company purchased $600 of supplies on account.

10. William Martin withdrew $13,000 from the company for his own personal use.

KCa 1-7 Record Transactions

Record transactions and calculate the ending balances for each account. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

1. Martin Johnson invests $425,000 to open his new appliance repair business.
2. The company pays $150,000 for land and $70,000 for a building.
3. Martin repairs appliances for three customers. Two of these paid cash totaling $825, while the third customer was billed $300, but has not yet paid.
4. The company purchases radio advertisements for $3,000 cash.
5. The company purchases a car for $23,000 by taking out a no-interest automobile loan.
6. Martin repairs appliances for two customers, receiving a total of $500 in cash.
7. The company makes its first automobile loan payment of $475.
8. The company pays $350 for utilities expense.
9. The company pays $2,000 for employee salaries.
10. Martin withdraws $10,000 from the business.
11. Based on the above transactions, determine the ending balances for each account.

Knowledge Check B

KCb 1-1 Manipulate the Accounting Equation

Determine the missing amount within each independent circumstance, based on the accounting equation. These represent different month-end balances for Heart Breaker Records. Samuel Collins owns the company, which produces albums in a wide variety of musical genres.

1. Assets = $325,000, Liabilities = $92,000, Owner's Equity = $X.
2. Assets = $49,000, Liabilities = $X, Owner's Equity = $43,000.
3. Assets = $X, Liabilities = $32,000, Owner's Equity = $197,000.

KCb 1-2 Determine Ending Accounting Equation Balances

Examine three independent circumstances, and determine the ending balances for assets, liabilities, and owner's equity, based on the information provided below.

1. Beginning of year: Assets = $15,000, Liabilities = $4,000, Owner's Equity = $X.
   During the year: Assets decrease by $600, Liabilities decrease by $1,300.
2. Beginning of year: Assets = $X, Liabilities = $28,500, Owner's Equity = $50,000.
   During the year: Assets decrease by $9,200, Owner's Equity increases by $1,350.
3. Beginning of year: Assets = $140,000, Liabilities = $X, Owner's Equity = $99,000.
   During the year: Liabilities decrease by $14,000, Owner's Equity increases by $8,400.

KCb 1-3 Advanced Accounting Equation Work

For each independent circumstance, determine the first year beginning balances for each accounting equation element after examining two years of activity.

1. End of second year: Assets = $61,000, Liabilities = $13,000, Owner's Equity = $X.
   During the second year: Assets decrease by $8,000, Liabilities decrease by $800.
   During the first year: Liabilities increase by $2,100, Owner's Equity decreases by $5,000.
2. End of second year: Assets = $X, Liabilities = $6,000, Owner's Equity = $24,000.
   During the second year: Assets decrease by $3,200, Owner's Equity increases by $200.
   During the first year: Assets increase by $6,300, Liabilities increase by $4,100.
3. End of second year: Assets = $188,200, Liabilities = $X, Owner's Equity = $155,000.
   During the second year: Liabilities decrease by $18,400, Owner's Equity decreases by $9,200.
   During the first year: Assets increase by $5,700, Owner's Equity increases by $9,300.

KCb 1-4 Identify the Account Type

Determine whether each account listed is an Asset, Liability, or Owner's Equity account.

1. Wages Expense: ____________________
2. Interest Revenue: ____________________
3. Land: ____________________
4. Loan Payable: ____________________
5. John Doe, Drawing: ____________________
6. Utilities Expense: ____________________
7. Supplies: ____________________

KCb 1-5 Distinguish Between Different Accounts

Write one or two sentences describing the difference between the two listed accounts.

1. Interest Revenue and Interest Expense
2. Loans Receivable and Loans Payable
3. John Doe, Withdrawals and Rent Expense
4. Notes Payable and Accounts Payable
5. Telephone Expense and Utilities Expense

KCb 1-6 Determine the Impact on Accounts

Determine which accounts have been impacted by each transaction, and by how much they have either increased or decreased.

1. Maximillian Smith invests $70,000 to open his new company.
2. The company purchased a truck for $32,000 cash.
3. Prior to performing any services, the company purchases $2,400 of insurance for the first year of operations.

NOTE! Insurance purchased in advance of its use is an asset (it is valuable to a company) and is referred to as *Prepaid Insurance*.

4. Maximillian performed $1,100 of services, and was paid in full.

5. The company paid $825 for office expenses.

6. Maximillian performed $1,400 of services. The customer paid for half of the services, and owes the remainder.

7. The company paid $425 for employee wages.

8. The company received $300 of the amount owed for previously performed services.

9. The company purchased $2,200 of equipment on account.

10. Maximillian withdrew $1,000 from the company.

KCb 1-7 Record Transactions

Record transactions and calculate the ending balances for each account. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

1. Katherine Johnson invests $200,000 to open her new antique shop.
2. The company pays $35,000 for inventory.
3. The company purchases supplies on account for $650.
4. On its first day of operations, the company sells $1,850 of merchandise for cash. The cost of the merchandise sold is $775.
5. The company pays off the full amount owed for the previously purchased supplies.
6. The company pays $110 for telephone expense.
7. On its second day of operations, the company sells $2,300 of merchandise for cash. The cost of the merchandise sold is $1,115.
8. The company sells $6,200 of merchandise to a local business on account. The cost of the merchandise sold is $4,000.
9. The company pays $1,250 for employee wages.
10. Katherine withdraws $5,500 from the business.
11. Based on the above transactions, determine the ending balances for each account.

2 The Accounting Cycle

LEARNING OBJECTIVES

After studying this chapter, you will be able to:

- **Explain the concept of posting journal entries**
- **Identify the purpose of the Trial Balance**
- **Distinguish between adjusting entries and closing entries**
- **Discuss the four primary financial statements**

In order for accounting information to be meaningful, it must be expressed over periods of time. For example, learning that a company has earned $10,000 is not beneficial unless you know over what period of time this revenue was generated. To ensure that all financial information is accurate, a series of steps, collectively referred to as the accounting cycle, must be followed. In this chapter, you will be introduced to every step of the accounting cycle. As you progress through the remainder of the book, you will delve deeper into each of these steps.

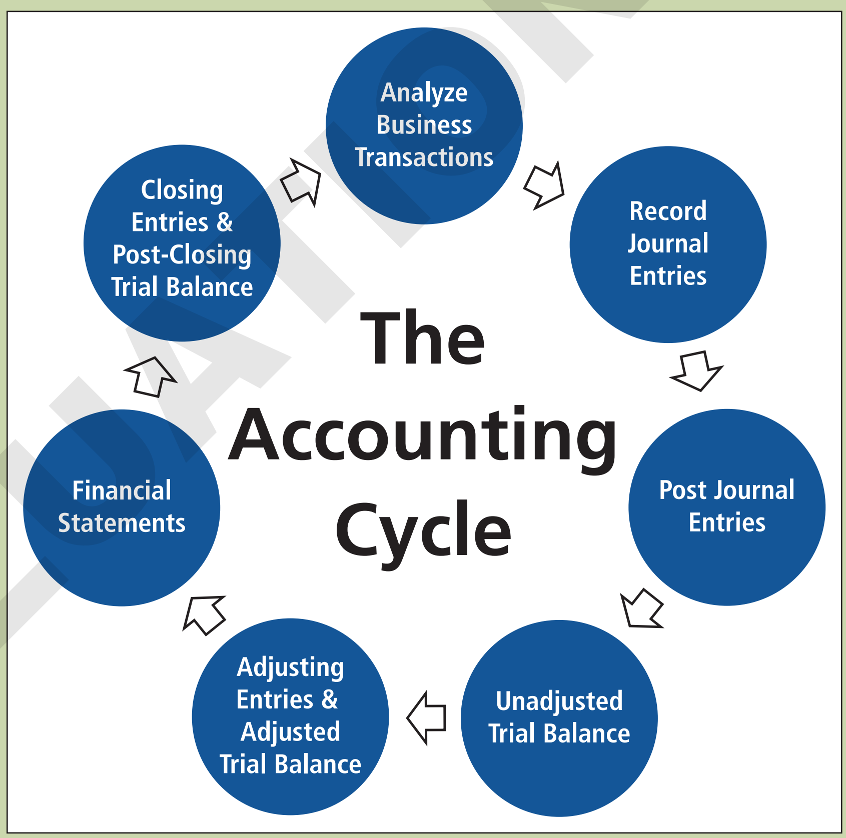
CASE STUDY

Completing the First Month at Nathan's Donut School

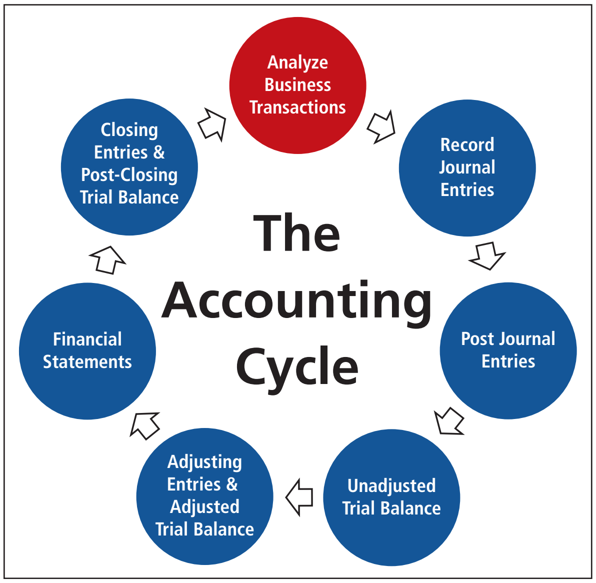
You have been helping Nathaniel H. Spencer with the accounting for his business, Nathan's Donut School, for the past month. Nathaniel is excited about how many students have taken his culinary classes, but is uncertain as to whether the company made any money during its first month of operations. He would like to know how well his new business has performed thus far, and has asked you to summarize the company's performance.

Having only examined individual transactions thus far, you recognize that there must be more steps involved in gauging the company's performance. You complete some research and learn that the accounting cycle, which encompasses all of these activities, includes completion of all necessary postings, the Trial Balance, adjusting entries, closing entries, and four different financial statements. Before attempting any of these, you decide to first examine each stage of the accounting cycle in detail.

The accounting cycle contains seven stages, and is typically completed monthly.



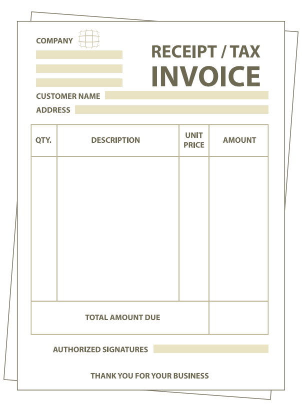
TIP! This chapter will provide a broad overview of the stages of the accounting cycle. Don't be intimidated by the details of this cycle. In subsequent chapters, each stage will be broken down individually.



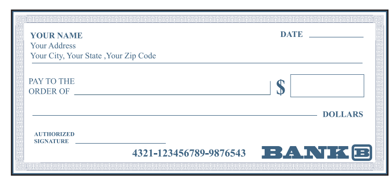
Analyzing Business Transactions

As you have seen, the first step in the accounting cycle is to analyze the business transaction. When doing so, the goal is to determine which accounts have been impacted, whether they have increased or decreased, and by what amount for each.

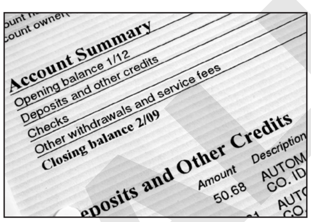
In order to properly analyze business transactions, a company must examine a wide variety of source documents. A **Source Document** provides information regarding one or more transactions, and can take on many different forms. A few of the most common source documents are discussed below.



- An **Invoice** is a bill for goods or services that summarizes the amounts owed from one party to another. When a company receives an invoice from an outside party, the invoice is analyzed to determine the accounts impacted, and the amounts by which they have changed. Similarly, when an invoice is prepared by a company, it uses the information within the invoice when it records the associated sale or service.



- A **Check** is a source document that provides information regarding payment that is received from a customer, or made to a supplier.



- A **Bank Statement** is typically sent to a company by the bank for each bank account on a monthly basis. The statement outlines all activity during the month, and can include certain activities (such as the levying of bank fees) of which the company was not previously aware.
- A **Purchase Order** is prepared by the purchasing company and sent to the seller to indicate a desire to purchase items. The seller then uses the purchase order to not only prepare the goods for sale, but also as a source document for determining the accounts impacted by the sale.

Case In Point 2-1 Consider Various Source Documents

In this example, we will examine a variety of source documents that may impact a business. Source documents provide the information necessary to analyze a transaction, so it is important to understand their use.

1. First, we will consider some of the source documents listed above, and identify three additional benefits of these source documents.

   Among the additional benefits of source documents are that they provide evidence of transactions that can be used if a dispute arises. They also allow for convenient communication between a buyer and seller, particularly when the source documents are sent electronically. Lastly, they can be retained so that the circumstance leading to a given transaction can be reviewed at a later date.

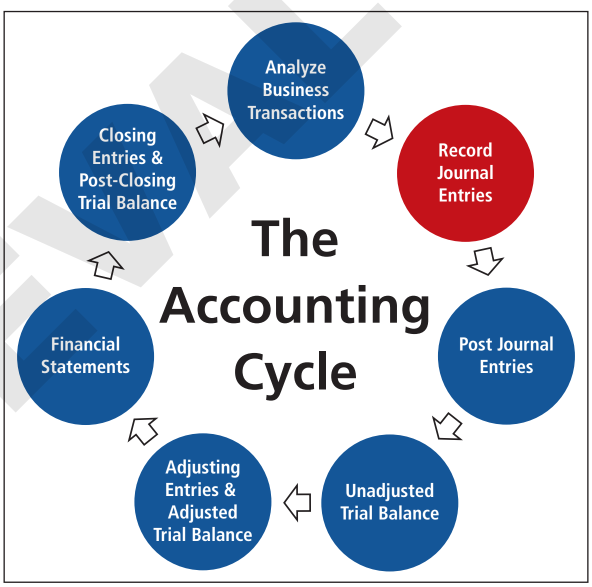
2. Bank Statements provide a great deal of information, and therefore serve as excellent source documents. Aside from bank fees, which were discussed above, what additional pieces of information are provided by a bank statement?

   A bank statement is likely the first place where a company learns of credit card fees that have been assessed. An error made by the bank could also be identified on a bank statement. Additionally, interest earned on the balance in a company's account can be viewed on the bank statement.

3. The above-listed source documents are only a few of the many that can be used. What other source documents might a company utilize?

   A ***Deposit Slip*** is used to verify the date and amount of a deposit. A ***Receipt*** is used to trigger the recording of a transaction in which goods are purchased. ***Employee Time Cards*** are used to record the wages earned by employees.

Recording Journal Entries



Once a transaction has been analyzed, it then must be expressed as a journal entry. In the prior lesson, you learned how to express the impact of a transaction by listing it within a chart structured around the accounting equation. Although that method provides accurate results, it is not used in practice, as the summary would be too large. Instead, journal entries (which are examined in detail in Chapter 3) are utilized. As you will see, these provide a more concise method through which to express transactions.

A journal entry provides a more concise method through which accounting transactions may be expressed.

3/1	Cash	35,000	
	Nathaniel H. Spencer, Capital		35,000
	Investment by Owner		

Generally Accepted Accounting Principles

Generally Accepted Accounting Principles (GAAP) dictate that certain rules must be followed when recording journal entries.

The **Cost Principle** dictates that every asset must be recorded at the amount paid for the item. If a business purchases office furniture for $750, but believes that it is actually worth $1,100, it still must be recorded for the $750 cost.

The **Time-Period Principle** dictates that accounting activity may be expressed over specific periods of time. To understand the benefit that this approach provides, imagine if revenue for the Disney Corporation were provided to investors from the time the corporation began. Doing so would not provide useful information, as the revenue would have been earned over many decades, whereas providing revenue over only the past year would give a far better picture of the recent performance of the company.

TIP! Financial information may be conveyed over other periods of time, however, year, quarter, and month are the most commonly-used.

- The **Revenue Principle** requires that revenue must be recorded in the period in which it is earned. For example, if a painter were to paint a house during the current year, but was not paid until the subsequent year, the revenue must still be recorded in the current year.
- The **Matching Principle** dictates that expenses must be recorded in the same period as the revenues that they generated, regardless of when cash is paid to satisfy these expenses. For example, if the house painter referenced above bought supplies for use while painting the house, this expense must be recorded during the current year, even if payment for the supplies is made in the subsequent year.

As you work through recording transactions in the remainder of this book, keep these important principles in mind.

Case In Point 2-2 Apply Accounting Principles Properly

In this example, we will answer a series of questions by applying the above accounting principles.

1. A piece of equipment is purchased at an auction for $12,000. Current market price dictates that this same piece of equipment would cost $16,000 elsewhere. What amount should be used to record the cost of the equipment, and why?

   The Cost Principle dictates that, in this instance, the equipment must be recorded at the purchase price of $12,000. The actual market value of an asset is not taken into consideration when it is recorded on a company's books.

2. Near the end of 2015, a moving company completes a cross-country move for a new customer, and charges $6,500. The customer pays for this service in January of 2016. During which year should the moving company record this revenue?

   The Revenue Principle dictates that because this revenue was earned in 2015, it must be recorded in 2015. The year in which the money is received has no bearing on when the revenue is recorded.

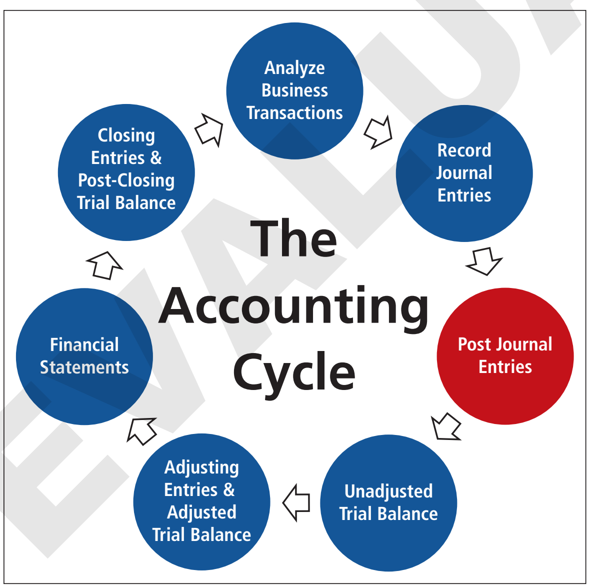
3. A company is preparing to discuss its recent performance with a group of investors. When calculating its revenue, must the company show all revenue since it began operations? If not, what period of time should be used when conveying this information?

   The Time-Period Principle dictates accounting information must be expressed for periods of time. Therefore, the company does not need to show all revenue since it began operations. It may use any period of time that it believes will be most useful in making financial decisions. It is most common for a company to break down financial data by either month, quarter or year.

4. On December 29, 2015 a company receives a telephone bill of $125. This bill is for services provided during the months of November and December. The company pays the bill on January 8, 2016. During which year should this telephone expense be recorded?

   The Matching Principle dictates that because this expense was incurred during 2015, and helped to generate revenue during 2015, it must be recorded in 2015.

Posting Journal Entries



After all journal entries are recorded, the total account balances must be determined. In Chapter 1 this was accomplished by adding together all amounts within each column. In practice, a different method called *posting* is used to calculate these balances. As part of this process, each amount within a given journal entry is copied to a running total (called a T-Account) for its respective account. Once all amounts have been posted, the total balance for each account can be determined (this process is examined in detail in Chapter 3).

This T-Account displays a balance within the Cash account of $12,300.

Cash	
$ 35,000	$ 20,000
$ 850	$ 1,500
$ 300	$ 250
	$ 1,700
	$ 400
$ 12,300	

The **Monetary Unit Principle** dictates that these balances can be used to express the performance of the company. Because of this principle, we express a company's performance using account balances (expressed in U.S. dollars) as of a given date, instead of writing lengthy descriptions for each activity.

TIP! Companies outside of the United States can comply with the Monetary Unit Principle by expressing financial information in the applicable local currency.

The **Full Disclosure Principle** indicates that a public company (one for which shares of stock can be purchased by any outside investor) must disclose all pertinent information regarding the company's activity. This includes the company's financial performance, and is the reason why account balances must be accurately calculated at this stage of the Accounting Cycle.

Case In Point 2-3 Further Examine Accounting Principles

In this example, we will continue our examination of vital accounting principles.

1. A company is summarizing its performance during its first year of operations. For every transaction, it has written one or two sentences describing the activity and the accounts impacted. Is this an acceptable approach? Why or why not?

   The Monetary Unit Principle dictates that accounting activity must be expressed in monetary terms. Therefore, describing each transaction is an insufficient approach, as entries must be journalized and posted in order to quantify each account balance. Doing so ensures that all companies can be examined on an apples-to-apples basis.

2. A company purchases a truck for $14,000, but is concerned that if it records this purchase in its accounting records, investors will look unfavorably on its current cash balance. To avoid this issue, the company decides not to record the transaction on its books. Is this permissible? Why or why not?

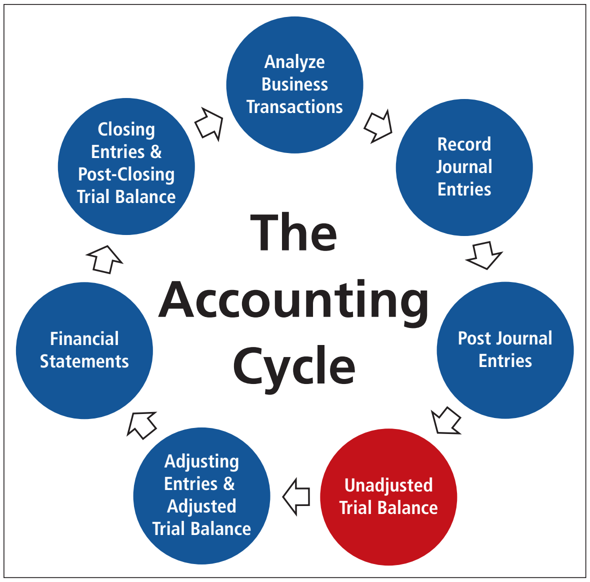
   The Full Disclosure Principle dictates that all activity for a company must be recorded. Failing to do so would result in financial documents providing an incomplete picture of a company's performance. Therefore, this approach is not permissible, and could lead to legal action against the company.

NOTE! The Cost Principle is also violated in this instance, as the item is not being recorded at its original cost.

3. A company is sued by a competitor for copyright infringement, and attorneys indicate that the company is likely to lose the lawsuit. Must the company disclose this fact in order to comply with the Full Disclosure Principle?

   The Full Disclosure Principle dictates that all pertinent activity, including legal proceedings in which the company is unlikely to prevail, must be disclosed. No transactions would be recorded in this instance, as the lawsuit is still pending. However, a note in which the likely resolution of the lawsuit is discussed should be included within the company's annual report.

Preparing the Unadjusted Trial Balance



After completing all of the postings, an Unadjusted Trial Balance is prepared. The Unadjusted Trial Balance is designed to summarize all account balances in one location, and to ensure that all account balances have been correctly calculated.

A number of factors can lead to the incorrect calculation of an account balance. If an amount is incorrectly copied from a source document, or if a transaction is recorded using an incorrect account, the ending balances can be incorrect. Other common reasons for recording incorrect balances include the transposition of digits (mixing up two digits within an amount), the omission of a transaction, and the recording of a transaction multiple times. Even a small instance of these types of errors can have a devastating impact on a company.

WARNING! The Unadjusted Trial Balance can be used to identify many potential errors, but will not necessarily assist in finding all mistakes. Therefore, a company must be careful when recording transactions, and not rely on the Unadjusted Trial Balance to subsequently correct all errors.

Case In Point 2-4 Examine the Impact of Errors

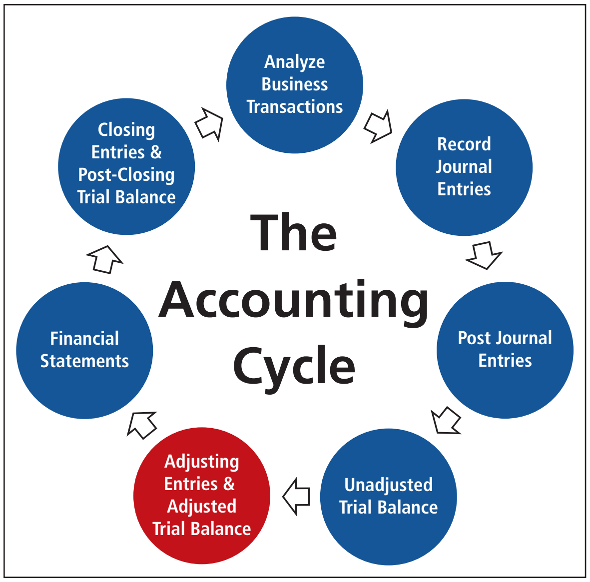
In this example, we will consider how a recording error could impact a company's books.

1. Errors are never desirable, but in relation to a company's accounting records, even a small error can be devastating. Consider why this is the case, and identify two ways in which an error could negatively impact a company.

   Companies make business decisions based on their financial position. If an error leads to the misstatement of an account balance, a poor business decision could result. An error could also lead an investor to believe that the company is more or less desirable, as an investment, than it actually is.

NOTE! An annual report is a document that public companies are required to release yearly. It summarizes the company's activity and provides investors with valuable information when making investment decisions.

Adjusting Journal Entries



There are certain types of transactions for which there is no obvious trigger that leads to the recording of a journal entry. A good example of this relates to the expense that is incurred when office supplies are used. We cannot record every instance in which we use a pencil or paper clip, as this is impractical. However, we do incur supplies expense as we use up our supplies, so we need a method by which we can record this activity.

For these types of transactions, a company waits until the end of the period, and then records an adjusting journal entry for each to ensure that they are properly reflected on the books. After the adjusting journal entries have been recorded and posted, an Adjusted Trial Balance (which is the same as the Unadjusted Trial Balance, except that it also takes into account the adjusting entries) is prepared.

The reason why most companies must record adjusting journal entries is because they use the **Accrual Basis of Accounting**. Under this method, revenues are recorded when they are earned, and expenses are recorded when they are incurred, regardless of when cash changes hands. This is in keeping with the Revenue Principle and the Matching Principle that you learned earlier, and therefore complies with GAAP. If these companies were only required to record revenue and expense transactions when cash changes hands, then the exchange of cash would trigger the recording of all of these transactions. No adjusting entries would be required if this were the case.

Some smaller companies find themselves in this exact circumstance, as they are permitted to use the **Cash Basis of Accounting** instead. Under this method of accounting, transactions are only recorded when cash changes hands, regardless of whether the revenues have been earned or the expenses have been incurred. As a result, these companies do not record any adjusting journal entries.

Case In Point 2-5 Distinguish Between the Accrual and Cash Basis of Accounting

In this example, we will examine four independent circumstances, and determine whether the company in question is using the accrual basis of accounting or the cash basis of accounting.

1. CompuReady Corp. prepares two adjusting journal entries at the end of its first month of operations. The entries both record revenue that has been earned, but for which an invoice has not yet been sent.

   As the invoice has not yet been sent, payment could not have been received from the customer. Given that an adjusting entry is being recorded prior to the receipt of cash, the ***accrual basis of accounting*** is being used in this instance.

2. InfoTech Inc. has experienced cash flow problems during the past few months. The company has discussed this circumstance with its landlord, and he has agreed to accept rent for May at the end of June. InfoTech Inc. does not record an adjusting entry at the end of May to record Rent Expense, as it plans to record the expense when payment is made.

   In this instance, InfoTech Inc. does not record the expense when it is incurred, but instead waits until payment is made. Therefore, the ***cash basis of accounting*** is being used.

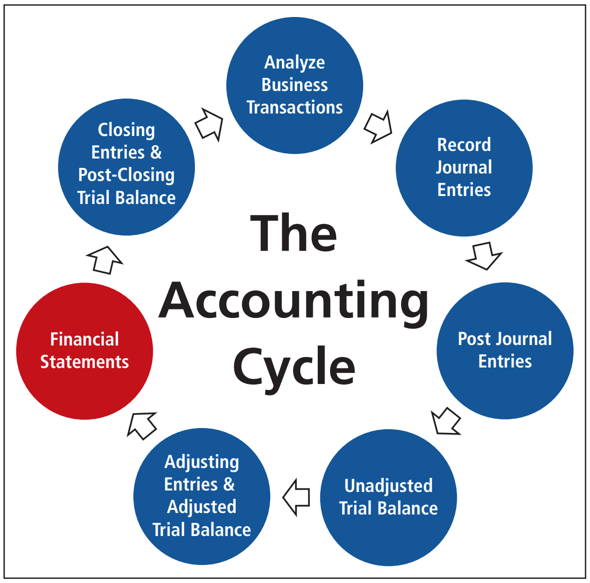
3. Legal Assistance Company performs services for a client during February. The company receives payment in March, and at that time records a journal entry to account for the cash received and the revenue earned.

   The revenue earned by Legal Assistance Company was recorded after it was earned (when the cash was received). This approach is consistent with the ***cash basis of accounting***.

4. Sewing Masters Inc. has been in business for over two decades. It has dealt with many of the same companies for the majority of that time, and therefore Sewing Masters Inc. is often permitted to pay for expenses after they are incurred. During October, the company incurs both a Utilities Expense and Telephone Expense, records journal entries to reflect this fact, but does not make payment until November.

   The utilities expense and telephone expense are both recorded prior to payment being made. This is done when a company uses the ***accrual basis of accounting***.

Preparing Financial Statements



After the adjusting entries are recorded, the financial statements are prepared. The four financial statements are the **Income Statement**, the **Statement of Owner's Equity**, the **Balance Sheet**, and the **Statement of Cash Flows**. These financial statements are designed to convey the performance of a company. An examination of the financial statements can allow external parties to gauge the performance of the company. The financial statements can also be used by the company to steer its own business decisions.

- *The Income Statement* displays the ending balances for all revenue and expense accounts. The final figure within the Income Statement is **Net Income**, which can be calculated by subtracting total expenses from total revenues. Essentially, the higher the net income, the better the performance of the company.

WARNING! The term *Net Income* is used only when revenues exceed expenses. When expenses exceed revenues, the term *Net Loss* is applied.

- *The Statement of Owner's Equity* is a reconciliation that starts with the beginning Owner's Equity balance, displays all activity related to owner's equity, and concludes with the ending Owner's Equity balance. This statement effectively summarizes the activity related to Owner's Equity for a specific period of time. Among those items that can impact the Owner's Equity balance are Net Income (or Net Loss), an additional investment by the owner, and a withdrawal by the owner. It should be noted that the Net Income (or Net Loss) within the Statement of Owner's Equity is taken from the Income Statement. For this reason, the Income Statement must be completed prior to the Statement of Owner's Equity.
- *The Balance Sheet* is used to illustrate that the accounting equation is in balance at the end of the period. It displays all asset, liability, and owner's equity account balances at the end of the month. Both the *Total Assets,* and the *Total Liabilities* and *Owner's Equity* amounts must be equal on the Balance Sheet. It should be noted that the ending Owner's Equity balance within the Balance Sheet is taken from the Statement of Owner's Equity. For this reason, the Statement of Owner's Equity must be completed prior to the Balance Sheet.

NOTE! Because all revenue and expense accounts are listed on the Income Statement, there is no need to also display them on the Balance Sheet. Therefore, the Balance Sheet excludes these accounts.

- *The Statement of Cash Flows* displays a summary of the activities that led to the ending cash balance. As cash is the most important asset on a company's books, it is important to keep a close eye on both where it comes from, and how it is used. The Statement of Cash Flows accomplishes this by breaking down all transactions related to cash into one of three categories, based on the activity associated with the transaction. The statement concludes by displaying the beginning cash balance, the increase or decrease during the period, and the ending cash balance.

A Closer LOOK

Who Uses the Financial Statements?

There are many different parties who may use a company's financial statements. These individuals can be divided into two groups: internal users and external users.

Internal Users of the financial statements work within the company. Among those internal users who may use the financial statements are finance professionals (who may prepare annual budgets based on them), marketing professionals (who may gauge the success of marketing campaigns on the results within them), and internal auditors (who will examine the data within them to confirm its accuracy).

External Users of the financial statements work outside of the company. These users include potential investors (who review them to determine if the company would be a good investment), governmental agencies (who examine them to ensure that the company has complied with GAAP, and all applicable laws), and potential lenders (who try to ensure that a potential loan could be repaid by reviewing them).

Because so many different individuals will rely on the financial statements, it is important to ensure that they are fully accurate.

Case In Point 2-6

Identify the Financial Statement

In this example, we will determine whether each of the listed accounts appears on the Income Statement, Statement of Owner's Equity, or Balance Sheet. Note that certain accounts may appear on more than one financial statement.

1. Accounts Receivable

   This is an asset account, and therefore will appear on the ***Balance Sheet***.

2. John Doe, Capital

   As this is an Owner's Equity account, it will appear on the ***Statement of Owner's Equity***. The ending John Doe, Capital balance will also appear on the ***Balance Sheet***.

3. Rent Expense

   All expense and revenue accounts appear on the ***Income Statement***.

4. Cash

   As Cash is an asset account, it will appear on the ***Balance Sheet***.

5. John Doe, Drawing

   Withdrawals reduce a company's Owner's Equity total. Therefore, as the ***Statement of Owner's Equity*** is a reconciliation that shows all activity related to Owner's Equity, this is where the John Doe, Drawing account will appear.

6. Equipment

   Equipment is another asset account, and therefore appears on the ***Balance Sheet***.

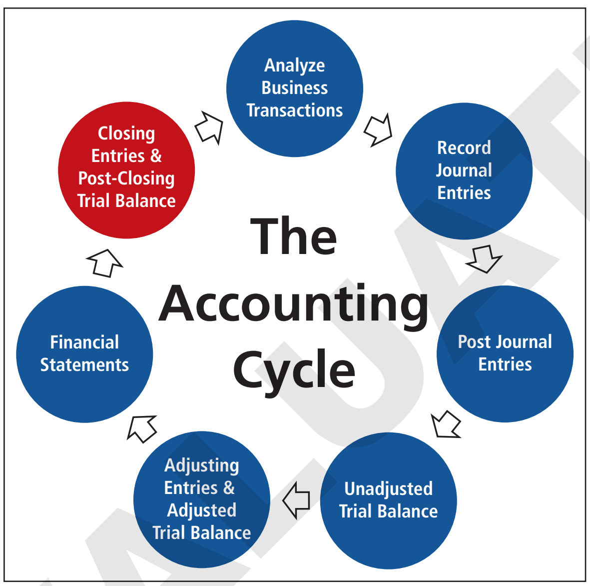
7. Service Revenue

   The ***Income Statement*** displays all revenues and expenses, and therefore will include Service Revenue.

8. Depreciation Expense

   All expenses, regardless of type, appear on the ***Income Statement***.

Closing Journal Entries



The final stage of the accounting cycle is the preparation of closing journal entries. Closing entries are designed to remove account balances from **Temporary Accounts**. Temporary accounts include all revenue, expense, and withdrawal accounts. These balances are ultimately transferred to the Capital account(s). This closing process is undertaken in order to ensure that account balances always provide pertinent information to the user, and that the impact of revenues, expenses, and withdrawals is reflected within the owner's Capital account(s). An important result of the closing process is that the balances of the temporary accounts are reset to zero prior to the beginning of the next period.

Consider a company that has been in business for over 50 years. If you were looking to invest in this company, would it be more beneficial to review total revenues and expenses for the last 50 years, or to review the revenues earned and expenses incurred during only the most recent year? The most recent financial information will give you a far better understanding of the company's current position, and its likelihood of being a good investment. This is why it makes sense to close all temporary accounts at the end of each period. The impact of doing so is that you start from a zero balance in the next period, and can then use the running balance during that period to gauge only current-period activity.

TIP! The closing of temporary accounts at the end of a period results in these accounts containing zero balances at the beginning of the subsequent period.

Accounts that are not closed at the end of a period (which include asset, liability, and capital accounts) are referred to as **Permanent Accounts**. As the balances are not removed from these accounts at the end of each period, their ending balances for one year automatically become their beginning balances for the subsequent year.

TIP! The only accounts that appear on the Balance Sheet are permanent accounts.

Case In Point 2-7 Determine if Accounts Are Temporary or Permanent

In this example, we will determine whether each account is a temporary or permanent account.

1. Furniture

   This is an asset account, and therefore a running balance that extends from one period to the next is beneficial. As a result, this is a ***permanent account***.

2. Sales Revenue

   All revenue accounts, including Sales Revenue, are ***temporary accounts***.

3. Utilities Expense

   All expense accounts, including Utilities Expense, are ***temporary accounts***.

4. Accounts Payable

   This is a liability account, and therefore is a ***permanent account***.

5. Salaries Expense

   All expense accounts, including Salaries Expense, are ***temporary accounts***.

6. John Doe, Drawing

   Similar to revenue and expense accounts, all withdrawal accounts are ***temporary accounts***.

7. John Doe, Capital

   This is an Owner's Equity account, and therefore is a ***permanent account***.

8. Cash

   This is an asset account, and therefore is a ***permanent account***.

Concepts Review

To check your knowledge of the key concepts introduced in this chapter, complete the Concepts Review quiz by choosing the appropriate access option below.

If you are...	Then access the quiz by...
Using eLab	Logging in, choosing Content, and navigating to the Concepts Review quiz for this chapter
Not using eLab	Going to the Student Resource Center for this book

Putting It Together

PIT 2-1 Examine the Accounting Cycle

In this example, you will identify the reason why Amber's Lacrosse Emporium benefits from undertaking each stage of the accounting cycle.

1. Analyze Business Transactions

   This initial stage allows Amber's Lacrosse Emporium to view its business performance as a series of individual activities. By viewing its performance in this manner, Amber's Lacrosse Emporium is able to subsequently quantify and record these activities.

2. Record Journal Entries

   Recording journal entries allows Amber's Lacrosse Emporium to express its business transactions in a standardized manner. Not only does this allow the company to compare apples-to-apples when considering various transactions, but it also ensures that its activities will be expressed in the same manner as other business' activities.

3. Post Journal Entries

   By posting journal entries, Amber's Lacrosse Emporium can view its business performance on an account-by-account basis. Completion of the posting process allows for subsequent comparisons to be made between the current period performance of Amber's Lacrosse Emporium and competitor's performance. Comparisons can also be made to the company's own prior periods.

4. Unadjusted Trial Balance

   The Unadjusted Trial Balance for Amber's Lacrosse Emporium facilitates the comparisons referenced above by summarizing the account balances in one location.

5. Adjusting Entries and Adjusted Trial Balance

   The purpose of the adjusting entry process is to account for all transactions of Amber's Lacrosse Emporium that occurred during the period, including those for which there was no overt trigger. These transactions must be recorded in order to ensure that the company's records are entirely accurate. This results in the development of accurate financial statements during the next stage of the accounting cycle.

6. Financial Statements

   Although individual account balances can be reviewed during earlier stages of the accounting cycle, the financial statements convey them in the most useful format. Business decisions for Amber's Lacrosse Emporium can be made based on the information conveyed within the four financial statements.

7. Closing Entries and Post-Closing Trial Balance

   The closing entry process ensures that all temporary accounts of Amber's Lacrosse Emporium are closed (reduced to zero) prior to the beginning of the subsequent period. Closing the temporary accounts is beneficial because it results in revenue, expense, and withdrawal accounts only displaying the current period's activity at any given time.

Knowledge Check A

KCa 2-1 Examine the Accounting Cycle

List the seven stages of the accounting cycle in the proper order.

NOTE! Try to complete this exercise without referring to the chapter information. Memorizing the accounting cycle now will be beneficial as you proceed through the subsequent material.

1. ______________________
2. ______________________
3. ______________________
4. ______________________
5. ______________________
6. ______________________
7. ______________________

KCa 2-2 Explain Accounting Principles

Describe each accounting principle listed in one or two sentences.

1. Time-Period Principle
2. Monetary Unit Principle
3. Revenue Principle

KCa 2-3 Review Account Placement Within Financial Statements

List whether each account is a temporary or permanent account. Also list whether the account is included within the Income Statement, Statement of Owner's Equity, or Balance Sheet, or if it is included within multiple financial statements.

1. Wages Payable
2. Supplies
3. Insurance Expense
4. John Doe, Withdrawals
5. Interest Revenue

KCa 2-4 Consider the Purpose of Financial Statements

Write one or two sentences describing the primary reason for completing each listed financial statement.

1. Income Statement

2. Statement of Owner's Equity

3. Balance Sheet

4. Statement of Cash Flows

Knowledge Check B

KCb 2-1 Examine the Accounting Cycle

Write one or two sentences describing each of the seven stages of the accounting cycle, in the proper order.

1.
2.
3.
4.
5.
6.
7.

KCb 2-2 Explain Accounting Principles

Describe each accounting principle listed in one or two sentences.

1. Cost Principle

2. Matching Principle

3. Full Disclosure Principle

KCb 2-3 Review Account Placement Within Financial Statements

List whether each account is a temporary or permanent account. Also list whether the account is included within the Income Statement, Statement of Owner's Equity, Balance Sheet, or whether it is included within multiple financial statements.

1. Office Expense

2. Rent Revenue

3. Accounts Receivable

4. John Doe, Capital

5. Land

KCb 2-4 Consider the Purpose of Financial Statements

Write one or two sentences describing the concluding figure within the listed financial statement, and how it is arrived at within each.

1. Income Statement

2. Statement of Owner's Equity

3. Balance Sheet

4. Statement of Cash Flows

3 Journal Entries & T-Accounts

LEARNING OBJECTIVES

After studying this chapter, you will be able to:

- Distinguish between debits and credits
- Work with T-Accounts
- Journalize a transaction
- Post a transaction
- Use a special journal and a subsidiary ledger

Efficiency is one of the most important skills that an accountant can learn. Although listing the impact of transactions on individual rows is an effective recording method, it is not very efficient. Therefore, instead of using this method, companies will record journal entries, and then post the components of those entries to a ledger. In this chapter, you will learn about debits and credits, and how these impact the transaction-recording process.

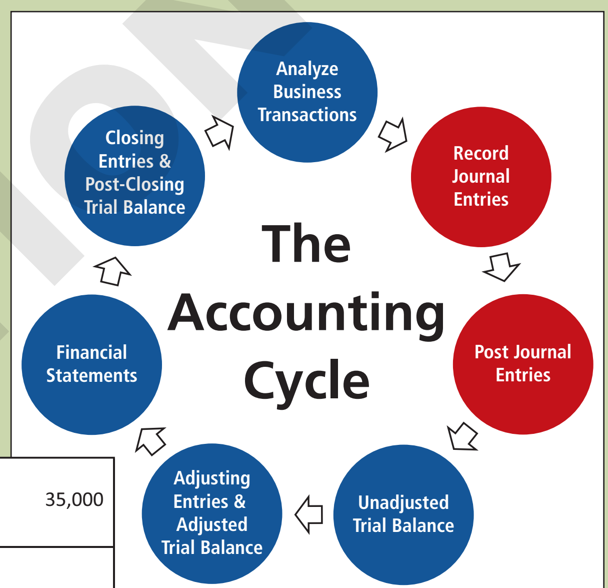
CASE STUDY

Recording the First Month's Transactions

Now that you have an understanding of the entire accounting cycle, you can see that a more efficient method of recording transactions would be beneficial. Nathaniel H. Spencer has requested a formal listing of all transactions related to Nathan's Donut School for the first month of operations. Since the listing that you previously created is relatively informal, you decide that you must further investigate the recording of transactions.

You start by examining the role of debits and credits. You then learn how T-Accounts can be used to visually convey the impact of a transaction. After practicing recording a number of journal entries, you finish by reviewing special journals and subsidiary ledgers, which are used to summarize account details for specific companies with which Nathan's Donut School does business.

Two stages of the accounting cycle will be covered in this chapter.



Journal entries offer an efficient method for recording transactions.

3/1	Cash	35,000	
	Nathaniel H. Spencer, Capital		35,000
	Investment by Owner		
3/2	Equipment	20,000	
	Cash		20,000
	Purchase of Equipment for cash		
3/4	Supplies	500	
	Furniture	1,000	
	Accounts Payable		1,500
	Purchase of Supplies and Furniture on account		

Using Debits & Credits

The method for recording transactions that you practiced in the first chapter, although accurate, is not used in the real world. Instead, a **Journal Entry** is recorded for each transaction. A journal entry lists the accounts impacted, and the amount by which each account has changed.

This journal entry indicates that the Cash account and Nathaniel H. Spencer, Capital account have been impacted.

3/1	Cash	35,000	
	Nathaniel H. Spencer, Capital		35,000
	Investment by Owner		

It is easy to see which accounts have been impacted in the above journal entry, but how can you tell whether each account has increased or decreased? This can be determined by looking at whether a **Debit** or **Credit** is being booked for each account. In this example, we know that Cash is being debited, as it is listed at the top of the journal entry. We also know that Nathaniel H. Spencer, Capital is being credited, as it is listed at the bottom of the journal entry, and is indented.

NOTE! When a journal entry contains multiple debits, they are each listed on an individual row at the top of the entry. Multiple credits are also each listed on an individual row at the bottom of the entry and are all indented only once.

We can determine the impact of a debit or credit on an individual account by memorizing a number of rules. For example, when a transaction results in an asset increasing, this is conveyed by debiting the asset. Conversely, when an asset decreases, we credit the asset to illustrate this. Keep in mind that every journal entry must contain at least one debited account and one credited account.

WARNING! The total debits and total credits within each entry must be equal.

The following table summarizes the impact of a debit and credit on each type of account. While it may initially seem a bit daunting, memorizing the table as soon as possible will make upcoming work much easier.

Impact of Debits and Credits on Account Types

Account Type	Debit	Credit
Asset	Increase ⬆	Decrease ⬇
Liability	Decrease ⬇	Increase ⬆
Capital	Decrease ⬇	Increase ⬆
Withdrawal	Increase ⬆	Decrease ⬇
Revenue	Decrease ⬇	Increase ⬆
Expense	Increase ⬆	Decrease ⬇

When you were first introduced to transactions, a three-step process was used to analyze each. This process consisted of determining which accounts were impacted, by how much, and whether each account increased or decreased. Now that debits and credits have been introduced, this three-step process can be modified as follows:

Step 1 Determine which accounts have been impacted.

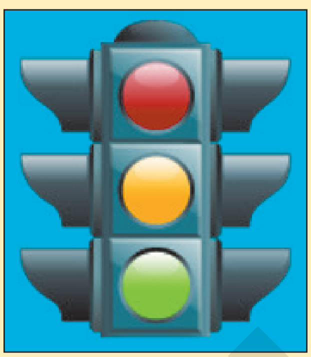
Step 2 Determine by how much each account has increased or decreased.

Step 3 Determine if these accounts must be debited or credited, based on whether each is an asset, liability, capital, withdrawal, revenue, or expense account.

A Closer LOOK

Where Have I Seen "Debit" and "Credit" Before?

Many beginning accounting students are confused by the terms *debit* and *credit*. This confusion results from students having used these terms in the past, typically in a banking context. Students who have used "debit cards" or have had their bank accounts "credited" view the rules as working backwards. They ask why the rules dictate that a credit decreases the Cash account (an asset), while a credit to their personal bank account increases the balance.



The answer lies in the fact that these terms can be viewed from different perspectives. For example, when you receive a credit from the bank to your account, while it increases your balance, it also increases the bank's liability (recall that a credit increases a liability). The easiest way to overcome this potential confusion is to view these terms as ones that you have not used previously. Don't search for reasons why a debit or credit has the impact you see in the above chart, simply memorize these rules.

A good analogy relates to traffic signals. Think about why you proceed at a green light, while stopping at a red light. Is there some deep philosophical reason why you go on green and stop on red? No, this is simply how the system works. Debits and credits operate in much the same way. The above rules apply simply because this is how accounting functions.

Case In Point 3-1 Journalize Transactions

Let's walk though recording journal entries for multiple transactions of Nathan's Donut School.

1. On March 1, Nathaniel invests $35,000 to open Nathan's Donut School.

Date

3/1	Cash	35,000	
	Nathaniel H. Spencer, Capital		35,000
	Investment by Owner		

Explanation

Notice that the date is displayed to the left of the first debited account, and a brief explanation is written below the final credited account.

2. On March 2, Nathan's Donut School pays $20,000 for baking equipment.

3/2	Equipment	20,000	
	Cash		20,000
	Purchase of Equipment for cash		

The credit to Cash already indicates that the account has decreased, therefore we do not display the associated $20,000 as a negative amount. All figures within journal entries are displayed as positive amounts.

3. On March 4, the company purchases $500 of supplies and $1,000 of furniture from Office Place on account.

3/4	Supplies	500	
	Furniture	1,000	
	Accounts Payable		1,500
	Purchase of Supplies and Furniture on account		

Notice that this journal entry contains multiple debits. For this reason, it is referred to as a ***compound journal entry***.

4. On March 7, Nathan's Donut School opens for business, and on its first day earns $850 cash.

3/7	Cash	850	
	Service Revenue		850
	Cooking classes provided for cash		

All $850 in earnings increases the cash balance. This is why the cash account is debited here.

5. On March 12, the company pays off the $1,500 that was owed from the purchase of supplies and furniture.

3/12	Accounts Payable	1,500	
	Cash		1,500
	Payment of accounts payable		

6. On March 13, Nathan's Donut School earns $2,500 on account from SportCo.

3/13	Accounts Receivable	2,500	
	Service Revenue		2,500
	Cooking classes provided on account		

7. On March 18, the company purchases advertising in local newspapers for $250.

3/18	Advertising Expense	250	
	Cash		250
	Payment of advertising expenses		

8. On March 21, the company receives $300 on account (in partial payment for the previously-earned amount).

3/21	Cash	300	
	Accounts Receivable		300
	Receipt of cash owed from prior sale		

The revenue for these cooking classes was recorded on March 13, when it was earned. Now that payment is being received for a portion of this revenue, the Accounts Receivable account (amount owed to Nathan's Donut School) is reduced (credited).

9. On March 30, Nathan's Donut School pays rent of $1,700 for the month.

3/30	Rent Expense	1,700	
	Cash		1,700
	Payment of rent expense		

10. On March 31, Nathaniel withdraws $400 from the business for his personal use.

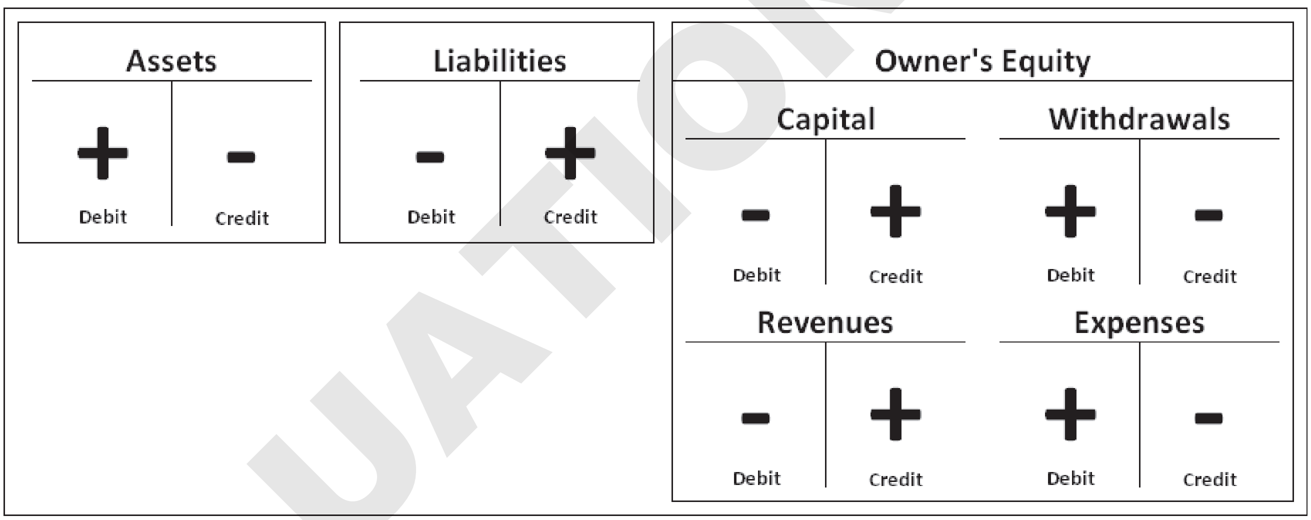
3/31	Nathaniel H. Spencer, Drawing	400	
	Cash		400
	Withdrawal of cash by owner		

Using T-Accounts

You may have noticed that, within the above discussion of debits and credits, there was no mention of how to determine final balances for each account. After booking our journal entries, there is another process called **Posting**, which we must undertake in order to calculate these balances. The posting process transfers the amounts listed within each journal entry to each account's respective **T-Account**. A T-Account is a visual representation of the activity within a single account. The left side of a T-Account is always the *debit* side, while the right side of a T-Account is always the *credit* side. The name of the account for which activity is displayed is written at the top of the T-Account.

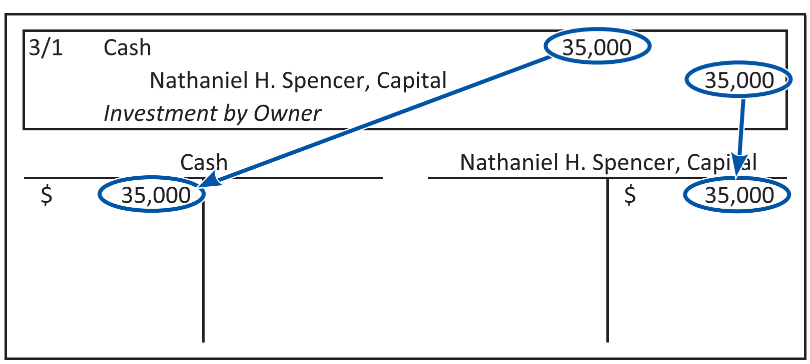
NOTE! A debit within a journal entry will always be transferred to the debit side of the appropriate T-Account, while a credit within a journal entry will always be transferred to the credit side of the appropriate T-Account.

Debit and credit rules dictate that T-Accounts operate as shown here.



A T-Account will accumulate all of the activity within a single account for a given period of time. We can then calculate the ending balance for an account in one convenient location.

The posting process copies amounts from journal entries to the individual T-Accounts.



In order to determine the ending balance for an account, you first add up all amounts on the debit side, and then add up all amounts on the credit side. Lastly, you subtract the smaller amount from the larger amount, and place the resulting figure on the side that contained the larger amount.

As the total debits exceeded the total credits, the balance for this Cash account is placed on the debit side.

	Cash			
	$	35,000	$	20,000
	$	850	$	1,500
	$	300	$	250
			$	1,700
			$	400
*	$	12,300		

* Total Debits:	$	36,150
Total Credits:	$	23,850
Difference:	$	12,300

TIP! We typically expect to see account balances on the account's **Normal Balance** side. This is the side on which the account increases. In the case of the Cash account above, since cash is an asset, and assets increase on the debit side, this is where the balance usually lies. Therefore, the Normal Balance side is the debit side.

A Closer LOOK

Are T-Accounts Really Used by Companies?

Although T-Accounts will often be relied upon informally within a company, they are not used as part of the formal accounting process. Instead, companies will commonly utilize the **Balance Column Format**. This format conveys the same information as a T-Account, but does so in a more streamlined manner.

Here we use the Balance Column Format to calculate the same balance as in the previous T-Account.

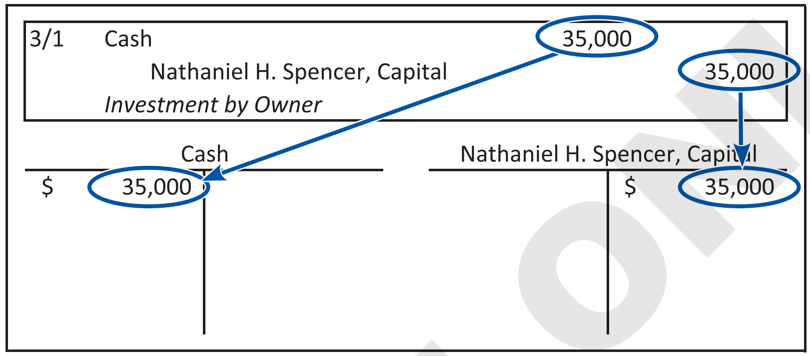
Cash				
Date	Explanation	Debit	Credit	Balance
3/1		$ 35,000		$ 35,000
3/2			$ 20,000	$ 15,000
3/7		$ 850		$ 15,850
3/12			$ 1,500	$ 14,350
3/18			$ 250	$ 14,100
3/21		$ 300		$ 14,400
3/30			$ 1,700	$ 12,700
3/31			$ 400	$ 12,300

There are two reasons why we use T-Accounts here to explain the posting process. First, students typically find that it is easier to understand both how to complete postings and the impact that they have on an account by examining the T-Account. Second, the likelihood is that you will not use the Balance Column Format in the future, as the majority of companies today utilize computerized accounting systems. These automatically calculate ending balances without the user needing to manually complete the posting process.

Case In Point 3-2 Post Transactions

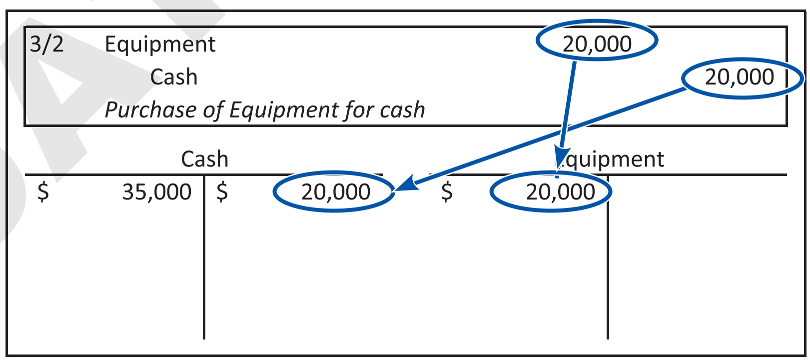
In this example, we will post the transactions that you previously journalized to the respective T-Accounts.

1. On March 1, Nathaniel invests $35,000 to open Nathan's Donut School.

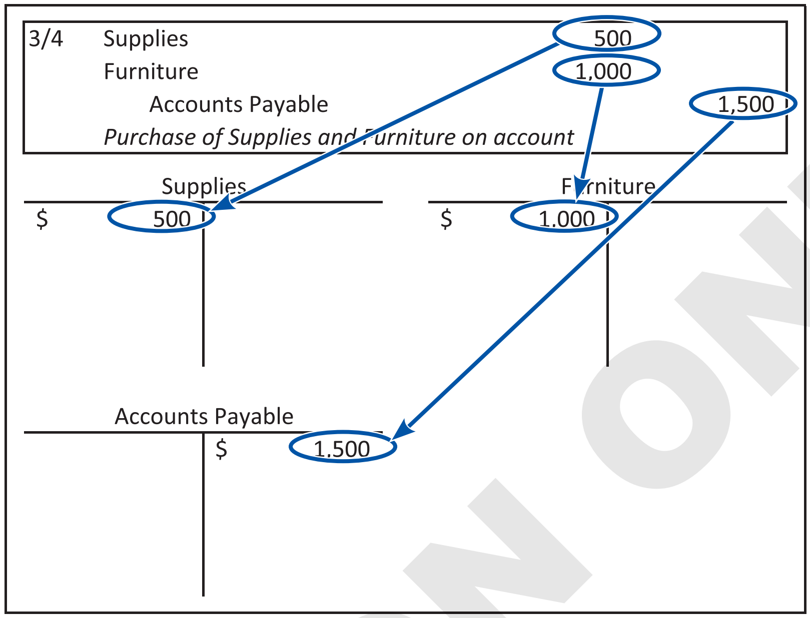


The journal entry shown at the top here was created during the previous example. In order to post the two amounts within the journal entry, we first create T-Accounts for the two impacted accounts (Cash & Nathaniel H. Spencer, Capital). We then post (transfer) the amounts from the journal entry to the T-Accounts. We move all debits in the journal entry to the left side (debit side) of the corresponding T-Account, and move all credits in the journal entry to the right side (credit side) of the corresponding T-Account.

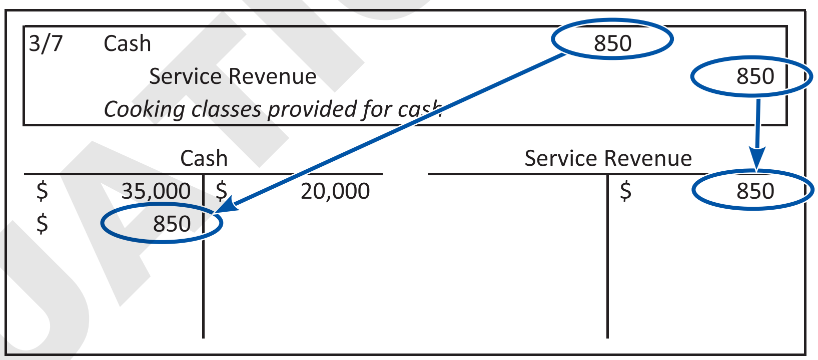
2. On March 2, Nathan's Donut School pays $20,000 for baking equipment.



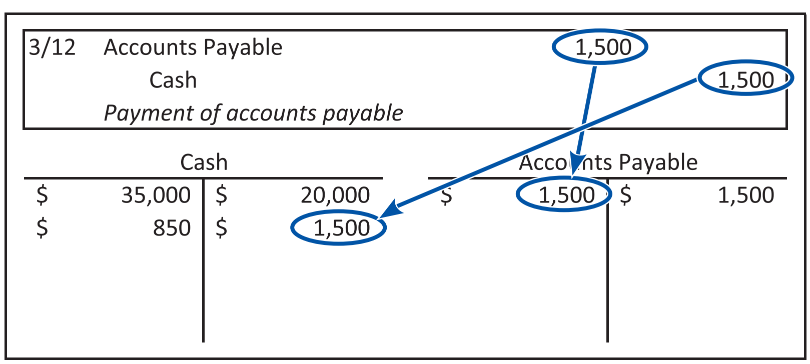
3. On March 4, the company purchases $500 of supplies and $1,000 of furniture from Office Place on account.



4. On March 7, Nathan's Donut School opens for business, and on its first day earns $850 cash.



5. On March 12, the company pays off the $1,500 that was owed from the purchase of supplies and furniture.



Notice that, when the previously owed amount is paid in this journal entry, neither the Supplies nor the Furniture accounts are impacted.

6. On March 13, Nathan's Donut School earns $2,500 on account from SportCo.

3/13	Accounts Receivable	2,500	
	Service Revenue		2,500
	Cooking classes provided on account		

Accounts Receivable

$ 2,500	

Service Revenue

	$ 850
	$ 2,500

7. On March 18, the company purchases advertising in local newspapers for $250.

3/18	Advertising Expense	250	
	Cash		250
	Payment of advertising expenses		

Cash

$ 35,000	$ 20,000
$ 850	$ 1,500
	$ 250

Advertising Expense

$ 250	

8. On March 21, the company receives $300 on account (in partial payment for the previously-earned amount).

3/21	Cash	300	
	Accounts Receivable		300
	Receipt of cash owed from prior sale		

Cash

$ 35,000	$ 20,000
$ 850	$ 1,500
$ 300	$ 250

Accounts Receivable

$ 2,500	$ 300

9. On March 30, Nathan's Donut School pays rent of $1,700 for the month.

3/30	Rent Expense	1,700	
	Cash		1,700
	Payment of rent expense		

Cash

$ 35,000	$ 20,000
$ 850	$ 1,500
$ 300	$ 250
	$ 1,700

Rent Expense

$ 1,700	

10. On March 31, Nathaniel withdraws $400 from the business for his personal use.

3/31	Nathaniel H. Spencer, Drawing	400	
	Cash		400
	Withdrawal of cash by owner		

Cash

Debit	Credit
$ 35,000	$ 20,000
$ 850	$ 1,500
$ 300	$ 250
	$ 1,700
	$ 400

Nathaniel H. Spencer, Drawing

Debit	Credit
$ 400	

11. Based on the above transactions, we'll now determine the ending balances for each account.

Cash

Debit	Credit
$ 35,000	$ 20,000
$ 850	$ 1,500
$ 300	$ 250
	$ 1,700
	$ 400
$ 12,300	

Accounts Receivable

Debit	Credit
$ 2,500	$ 300
$ 2,200	

Supplies

Debit	Credit
$ 500	
$ 500	

Furniture

Debit	Credit
$ 1,000	
$ 1,000	

Equipment

Debit	Credit
$ 20,000	
$ 20,000	

Accounts Payable

Debit	Credit
$ 1,500	$ 1,500
	$ -

Nathaniel H. Spencer, Capital

Debit	Credit
	$ 35,000
	$ 35,000

Nathaniel H. Spencer, Drawing

Debit	Credit
$ 400	
$ 400	

Service Revenue

Debit	Credit
	$ 850
	$ 2,500
	$ 3,350

Advertising Expense

Debit	Credit
$ 250	
$ 250	

Rent Expense

Debit	Credit
$ 1,700	
$ 1,700	

For every T-Account, we calculate a total for each side, subtract the smaller amount from the larger amount, and place the result on the side containing the larger amount. For example, to determine the ending balance within the Cash account, we first add all amounts on the debit side (this gives us $36,150). We then add all amounts on the credit side (this gives us $23,850). When we subtract the smaller amount of $23,850 from the larger amount of $36,150, we arrive at the ending balance of $12,300. This balance is placed on the debit side of the T-Account, as this side had a larger total than the credit side.

Using General & Special Journals

Based on the type of transactions being booked (recorded), journal entries may be recorded within specific journals. Because these Special Journals display all transactions of a specific type, they provide an efficient method for reviewing business activity. Companies can tailor a **Special Journal** to their own specific needs.

Journal Types & Corresponding Activity

Journal Name	Activity Displayed Within Journal
Cash Receipts Journal	Journal entries in which cash is received.
Cash Payments Journal	Journal entries in which cash is paid out.
Revenue Journal	Journal entries in which revenue is earned on account (accounts receivable).
Purchases Journal	Journal entries in which purchases are made on account (accounts payable).
General Journal	Journal entries that do not fit within the preceding journals.

Because each special journal is designed to contain the same type of information, they can all take on a more streamlined appearance.

This Cash Receipts Journal displays the partial payment received from SportCo.

Cash Receipts Journal					
Date	Account Credited	Accounts Receivable Cr.	Service Revenue Cr.	Other Accounts Cr.	Cash Dr.
3/21	SportCo	300			300

TIP! As seen in the above figure, Dr. is an abbreviation for *Debit*, and Cr. is an abbreviation for *Credit*.

Within the Cash Receipts Journal, commonly credited accounts (such as Accounts Receivable and Service Revenue here) have a designated column. Any amounts credited to other accounts are displayed within the *Other Accounts Cr.* column.

The remaining special journals, each containing a transaction that you recorded earlier in this chapter, are shown here.

This Cash Payments Journal shows the purchase of Equipment for cash.

Cash Payments Journal					
Date	Account Debited	Other Accounts Dr.	Accounts Payable Dr.	Supplies Dr.	Cash Cr.
3/2	Equipment	20,000			20,000

This Revenue Journal shows revenue earned from SportCo on account.

Revenue Journal		
Date	Account Debited	Accounts Receivable Dr. & Sales Revenue Cr.
3/13	SportCo	2,500

This Purchases Journal shows the purchase of supplies and furniture from Office Place on account.

Purchases Journal					
Date	Account Credited	Inventory Dr.	Supplies Dr.	Account Debited	Other Accounts Dr.
3/4	Office Place		500	Furniture	1,000

NOTE! The General Journal displays journal entries in the standard manner that you learned earlier in the chapter.

Case In Point 3-3 Identify the Appropriate Journal

In this example, we will identify whether each transaction should be recorded in the Cash Receipts Journal, Cash Payments Journal, Revenue Journal, Purchases Journal, or General Journal.

1. Purchase of equipment for cash.

   Because cash was paid to make this purchase, the transaction would be recorded in the ***Cash Payments Journal***.

2. A service is provided to a client, who pays in full.

   Cash was received in this transaction, so it would be recorded in the ***Cash Receipts Journal***.

3. A sale is made to a customer on account.

   In this transaction, revenue was earned, but the customer did not yet pay. This type of transaction would be recorded in the ***Revenue Journal***.

4. A withdrawal of cash is made by the owner.

   As cash is being paid to the owner, this transaction would be recorded in the ***Cash Payments Journal***.

5. An expense is recorded for the portion of Prepaid Insurance that has been used up at the end of the month.

   This transaction does not fit within any of the four specialized journals, and therefore is recorded in the ***General Journal***.

6. Purchase of supplies on account.

   In this transaction, a purchase was made, but no cash was paid out. This type of transaction would be recorded in the ***Purchases Journal***.

7. Purchase of office furniture in which seller agrees to accept payment at a later date.

   This circumstance is identical to buying office furniture "on account." When we make a purchase on account, the transaction would be recorded in the ***Purchases Journal***.

8. Cash is received from a customer as a down payment, prior to any services being provided.

   Although the revenue has not yet been earned, the cash was received, and therefore the transaction would be recorded in the ***Cash Receipts Journal***.

9. Services are provided to a client, who is given thirty days to remit payment.

   In this transaction, revenue was earned, however payment was not received. This type of transaction would be recorded in the ***Revenue Journal***.

10. You realize that, within a previously completed journal entry, you incorrectly increased the Rent Expense account, when you should have increased the Utilities Expense account instead. You record a journal entry to correct this error.

    There is no subsidiary journal in which this transaction would fit, so it would be recorded in the ***General Journal***.

Using General & Subsidiary Ledgers

Just as journal entries are entered within different journals, T-Accounts are contained within ledgers. Most T-Accounts can be found within the **General Ledger**; however there are two other ledgers that play a prominent role in recording transactions.

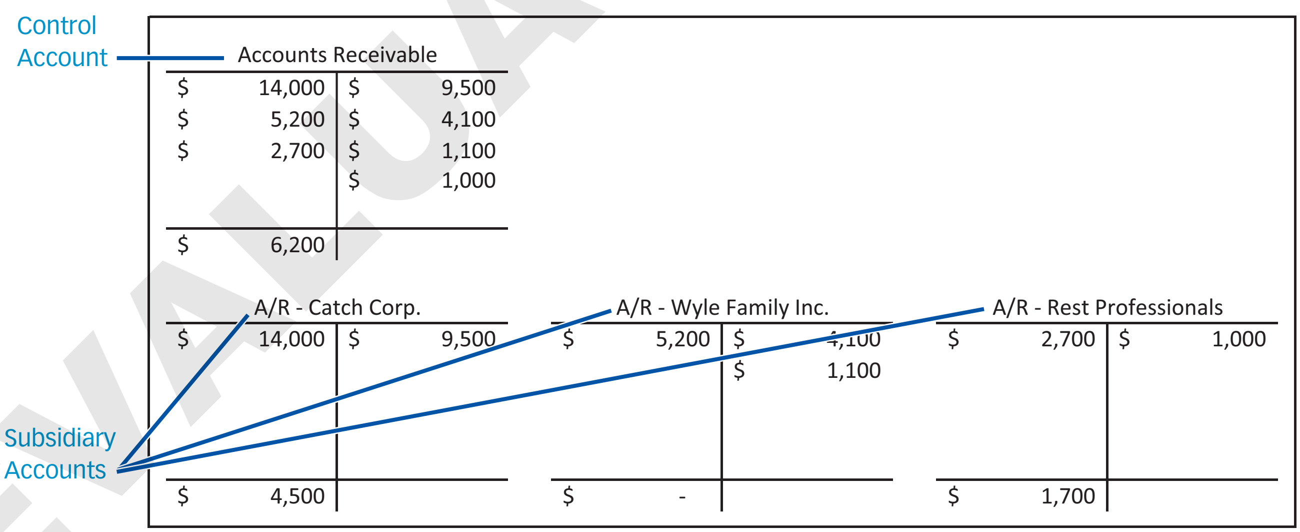
The **Accounts Receivable Subsidiary Ledger** contains an individual accounts receivable T-Account for each company that purchases goods or services on account from a business.

Similarly, the **Accounts Payable Subsidiary Ledger** contains an individual accounts payable T-Account for each company from which a business purchases goods or services on account.

NOTE! The Accounts Receivable Subsidiary Ledger is associated with the Revenue Journal and the Cash Receipts Journal, while the Accounts Payable Subsidiary Ledger is associated with the Purchases Journal and the Cash Payments Journal.

The General Ledger contains a **Control Account** for Accounts Receivable and Accounts Payable, which displays the total balance across the entire business. The subsidiary ledgers mentioned above contain multiple versions of each of these T-Accounts, in which details related to specific outside companies can be examined.

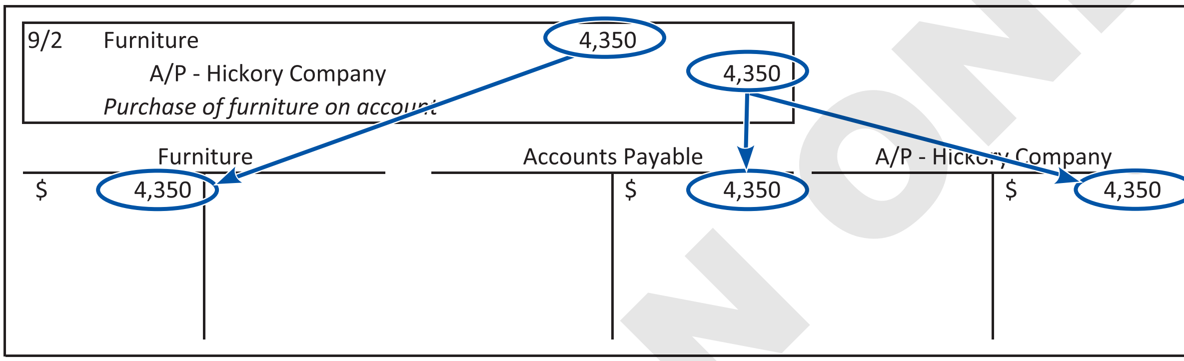
The subsidiary ledger account balances, when added together, equal the total within the general ledger control account.



Case In Point 3-4 Record and Post Accounts Payable Journal Entries

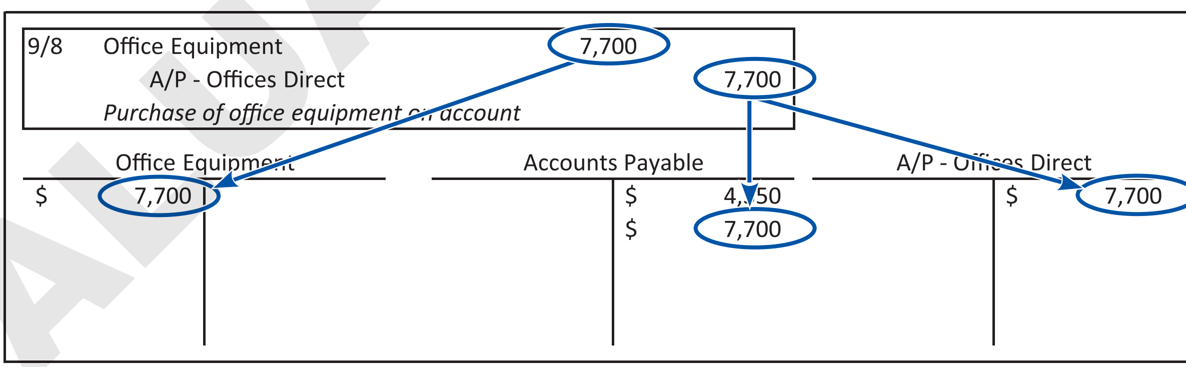
In this example, we will record the necessary journal entry for each transaction, and will post to both the General Ledger and the Accounts Payable Subsidiary Ledger. You will then determine all applicable Accounts Payable balances.

1. On Sept. 2, furniture is purchased for $4,350 from Hickory Company on account.



As with any transaction in which furniture is purchased on account, this journal entry debits Furniture and credits A/P – Hickory Company for $4,350. The amount is posted to the general ledger accounts (Furniture & Accounts Payable), and then must also be posted to the applicable subsidiary ledger account. In this instance, the subsidiary ledger account is A/P – Hickory Company, so this T-Account (with its $4,350 posted amount) is also shown here.

2. On Sept. 8, Office Equipment is purchased for $7,700 from Offices Direct on account.



3. On Sept. 9, $2,000 is paid in partial payment of the previously purchased furniture from Hickory Company. Prior to this transaction, the Cash account had a balance of $31,500.

9/9	A/P - Hickory Company	2,000	
	Cash		2,000
	Partial payment of amount owed for furniture		

Cash		Accounts Payable		A/P - Hickory Company	
$ 31,500	$ 2,000	$ 2,000	$ 4,350	$ 2,000	$ 4,350
			$ 7,700		

4. On Sept. 21, supplies are purchased for $800 from Clips, Inc. on account.

9/21	Supplies	800	
	A/P - Clips, Inc.		800
	Purchase of supplies on account		

Supplies		Accounts Payable		A/P - Clips, Inc.	
$ 800		$ 2,000	$ 4,350	$	800
			$ 7,700		
			$ 800		

5. On Sept. 26, the entire amount owed to Offices Direct for the previously purchased Office Equipment is paid.

9/26	A/P - Offices Direct	7,700	
	Cash		7,700
	Payment of amount owed for office equipment		

Cash		Accounts Payable		A/P - Offices Direct	
$ 31,500	$ 2,000	$ 2,000	$ 4,350	$ 7,700	$ 7,700
	$ 7,700	$ 7,700	$ 7,700		
			$ 800		

6. Determine the ending balances for the Accounts Payable control account, and for each of the three Accounts Payable subsidiary accounts.

Accounts Payable

$	2,000	$	4,350
$	7,700	$	7,700
		$	800
		$	3,150

A/P - Hickory Company

$	2,000	$	4,350
		$	2,350

A/P - Offices Direct

$	7,700	$	7,700
		$	-

A/P - Clips, Inc.

		$	800
		$	800

Concepts Review

To check your knowledge of the key concepts introduced in this chapter, complete the Concepts Review quiz by choosing the appropriate access option below.

If you are...	Then access the quiz by...
Using eLab	Logging in, choosing Content, and navigating to the Concepts Review quiz for this chapter
Not using eLab	Going to the Student Resource Center for this book

Putting It Together

PIT 3-1 Record Journal Entries and Post Transactions

In this example, we will record journal entries, and complete all postings, for the following transactions that took place during the first month of operations for Amber's Lacrosse Emporium.

1. On May 1, Amber invests $75,000 to open Amber's Lacrosse Emporium.

5/1	Cash	75,000	
	Amber Stein, Capital		75,000
	Investment by Owner		

Cash		Amber Stein, Capital	
$ 75,000			$ 75,000

2. On May 2, Amber's Lacrosse Emporium pays $15,000 for sporting goods inventory.

5/2	Inventory	15,000	
	Cash		15,000
	Purchase of inventory for cash		

Cash		Inventory	
$ 75,000	$ 15,000	$ 15,000	

3. On May 4, the company purchases display equipment for $12,000 in cash.

5/4	Equipment	12,000	
	Cash		12,000
	Purchase of equipment for cash		

Cash	
$ 75,000	$ 15,000
	$ 12,000

Equipment	
$ 12,000	

4. On May 5, Amber pays rent on the company's retail location of $1,500.

5/5	Rent Expense	1,500	
	Cash		1,500
	Payment of rent expense		

Cash	
$ 75,000	$ 15,000
	$ 12,000
	$ 1,500

Rent Expense	
$ 1,500	

5. On May 8, the company purchases $750 of supplies and $2,000 of furniture on account.

5/8	Supplies	750	
	Furniture	2,000	
	Accounts Payable		2,750
	Purchase of Supplies and Furniture on account		

Supplies	
$ 750	

Furniture	
$ 2,000	

Accounts Payable	
	$ 2,750

6. On May 11, Amber's Lacrosse Emporium opens for business, and on its first day sells $2,400 of sporting goods for cash. The cost of the goods sold is $1,350.

5/11	Cash	2,400	
	Sales Revenue		2,400
	Sale of sporting goods for cash		
5/11	Cost of Goods Sold	1,350	
	Inventory		1,350
	Reduction of inventory associated with above sale		

Cash

$ 75,000	$ 15,000
$ 2,400	$ 12,000
	$ 1,500

Sales Revenue

	$ 2,400

Cost of Goods Sold

$ 1,350	

Inventory

$ 15,000	$ 1,350

7. On May 11, the company pays the $2,750 that was owed from the purchase of supplies and furniture.

5/11	Accounts Payable	2,750	
	Cash		2,750
	Payment of accounts payable		

Cash

$ 75,000	$ 15,000
$ 2,400	$ 12,000
	$ 1,500
	$ 2,750

Accounts Payable

$ 2,750	$ 2,750

8. On May 12, Amber's Lacrosse Emporium sells $1,450 of sporting goods for cash. It also sells another $3,000 of sporting goods to a local school district on account. The cost of all the goods sold is $2,100.

5/12	Cash	1,450	
	Accounts Receivable	3,000	
	Sales Revenue		4,450
	Partial payment made on sale of sporting goods		
5/12	Cost of Goods Sold	2,100	
	Inventory		2,100
	Reduction of inventory associated with above sale		

Cash

Debit	Credit
$ 75,000	$ 15,000
$ 2,400	$ 12,000
$ 1,450	$ 1,500
	$ 2,750

Accounts Receivable

Debit	Credit
$ 3,000	

Inventory

Debit	Credit
$ 15,000	$ 1,350
	$ 2,100

Sales Revenue

Debit	Credit
	$ 2,400
	$ 4,450

Cost of Goods Sold

Debit	Credit
$ 1,350	
$ 2,100	

9. On May 14, the company purchases advertising in local newspapers for $600.

5/14	Advertising Expense	600	
	Cash		600
	Payment of advertising expense		

Cash

Debit	Credit
$ 75,000	$ 15,000
$ 2,400	$ 12,000
$ 1,450	$ 1,500
	$ 2,750
	$ 600

Advertising Expense

Debit	Credit
$ 600	

10. On May 18, the company receives $2,100 in partial payment for the sporting goods previously sold to the local school district on account.

5/18	Cash	2,100	
	Accounts Receivable		2,100
	Receipt of cash owed from prior sale		

Cash

Debit	Credit
$ 75,000	$ 15,000
$ 2,400	$ 12,000
$ 1,450	$ 1,500
$ 2,100	$ 2,750
	$ 600

Accounts Receivable

Debit	Credit
$ 3,000	$ 2,100

11. On May 22, Amber's Lacrosse Emporium pays wages of $1,600 to its employees.

5/22	Wages Expense	1,600	
	Cash		1,600
	Payment of wages expense		

Cash

Debit	Credit
$ 75,000	$ 15,000
$ 2,400	$ 12,000
$ 1,450	$ 1,500
$ 2,100	$ 2,750
	$ 600
	$ 1,600

Wages Expense

Debit	Credit
$ 1,600	

12. On May 25, the company pays its telephone bill of $135.

5/25	Telephone Expense	135	
	Cash		135
	Payment of telephone expense		

Cash

Debit	Credit
$ 75,000	$ 15,000
$ 2,400	$ 12,000
$ 1,450	$ 1,500
$ 2,100	$ 2,750
	$ 600
	$ 1,600
	$ 135

Telephone Expense

Debit	Credit
$ 135	

13. On May 27, the company pays $200 for monthly utilities.

5/27	Utilities Expense	200	
	Cash		200
	Payment of utilities expense		

Cash

Debit	Credit
$ 75,000	$ 15,000
$ 2,400	$ 12,000
$ 1,450	$ 1,500
$ 2,100	$ 2,750
	$ 600
	$ 1,600
	$ 135
	$ 200

Utilities Expense

Debit	Credit
$ 200	

14. On May 28, Amber's Lacrosse Emporium buys an additional $2,000 of sporting equipment inventory on account.

5/28	Inventory	2,000	
	Accounts Payable		2,000
	Purchase of inventory on account		

Inventory

Debit	Credit
$ 15,000	$ 1,350
$ 2,000	$ 2,100

Accounts Payable

Debit	Credit
$ 2,750	$ 2,750
	$ 2,000

15. On May 31, Amber withdraws $600 from the business.

5/31	Amber Stein, Drawing	600	
	Cash		600
	Withdrawal of cash by owner		

Cash

Debit	Credit
$ 75,000	$ 15,000
$ 2,400	$ 12,000
$ 1,450	$ 1,500
$ 2,100	$ 2,750
	$ 600
	$ 1,600
	$ 135
	$ 200
	$ 600

Amber Stein, Drawing

Debit	Credit
$ 600	

16. Based on the above transactions, determine the ending balances for each account.

Cash

$ 75,000	$ 15,000
$ 2,400	$ 12,000
$ 1,450	$ 1,500
$ 2,100	$ 2,750
	$ 600
	$ 1,600
	$ 135
	$ 200
	$ 600
$ 46,565	

Accounts Receivable

$ 3,000	$ 2,100
$ 900	

Supplies

$ 750	
$ 750	

Inventory

$ 15,000	$ 1,350
$ 2,000	$ 2,100
$ 13,550	

Furniture

$ 2,000	
$ 2,000	

Equipment

$ 12,000	
$ 12,000	

Accounts Payable

$ 2,750	$ 2,750
	$ 2,000
	$ 2,000

Amber Stein, Capital

	$ 75,000
	$ 75,000

Amber Stein, Drawing

$ 600	
$ 600	

Sales Revenue

	$ 2,400
	$ 4,450
	$ 6,850

Cost of Goods Sold

$ 1,350	
$ 2,100	
$ 3,450	

Advertising Expense

$ 600	
$ 600	

Rent Expense

$ 1,500	
$ 1,500	

Wages Expense

$ 1,600	
$ 1,600	

Telephone Expense

$ 135	
$ 135	

Utilities Expense

$ 200	
$ 200	

Knowledge Check A

KCa 3-1 Determine the Normal Balance

Indicate whether the Normal Balance for each account is the debit or credit side of the T-Account. Remember that the Normal Balance side of the T-Account is the side on which the account increases.

1. Accounts Payable: ______________________________
2. Sales Revenue: ______________________________
3. Furniture: ______________________________
4. Advertising Expense: ______________________________
5. Cash: ______________________________
6. Notes Receivable: ______________________________
7. John Doe, Drawing: ______________________________
8. Utilities Expense: ______________________________
9. Supplies: ______________________________
10. Cost of Goods Sold: ______________________________

KCa 3-2 Calculate Ending Balances

Calculate the ending balance for each T-Account.

1. Cash

$ 25,400	$ 3,100
$ 3,250	$ 1,550
$ 4,500	$ 4,120
	$ 800

2. Accounts Receivable

$ 19,500	$ 4,500
$ 2,500	$ 3,000
$ 4,500	$ 550
	$ 2,000

3. Accounts Payable

$ 750	$ 1,550
$ 1,200	$ 1,200
$ 400	

4. Supplies

$ 1,250	$ 325
$ 400	$ 205
	$ 240

KCa 3-3 Record Journal Entries

Record journal entries for each of the following transactions.

1. On Aug. 1, Martin Johnson invests $425,000 to open his new appliance repair business.

2. On Aug. 3, the company pays $150,000 for land and $70,000 for a building.

3. On Aug. 5, Martin repairs appliances for three customers. Two of these paid cash totaling $825, while the third customer was billed $300, but has not yet paid.

4. On Aug. 8, the company purchases radio advertisements for $3,000.

5. On Aug. 11, the company purchases a car for $23,000 by taking out an automobile loan.

6. On Aug. 15, Martin repairs appliances for two customers, receiving a total of $500 in cash.

7. On Aug. 20, the company makes its first automobile loan payment of $475.

8. On Aug. 21, the company pays $350 for utilities expense.

9. On Aug. 27, the company pays $2,000 for employee salaries.

10. On Aug. 31, Martin withdraws $10,000 from the business.

KCa 3-4 Post to T-Accounts

Post all ten journal entries from the preceding exercise (KCa 3-3) to the appropriate T-Accounts. After completing all postings, determine the ending balances of each account. An Excel template, in which your answer(s) may be recorded, can be found in the Student Resource Center.

KCa 3-5 Record Journal Entries & Post to T-Accounts

Record journal entries for each of the following transactions. Then post all journal entries to the appropriate T-Accounts. After completing all postings, determine the ending balances of each account. An Excel template, in which your answer(s) may be recorded, can be found in the Student Resource Center.

1. On Oct. 1, Willy Baker invests $150,000 to open his new furniture refinishing business.
2. On Oct. 2, the company purchases $18,000 of equipment on account.
3. On Oct. 8, the company pays employee wages of $1,100.
4. On Oct. 10, Willy refinishes furniture for two customers, receiving $2,200 cash in full payment for the work.
5. On Oct. 11, the company purchases supplies for $500.
6. On Oct. 14, Willy refinishes furniture for a customer, who agrees to pay the $750 bill within two weeks.
7. On Oct. 17, the company pays $425 for telephone expense.
8. On Oct. 21, the company receives $200 in partial payment for the bill from the Oct. 14 services.
9. On Oct. 25, Willy withdraws $430 from the business.
10. On Oct. 29, the company pays $825 in monthly rent.

KCa 3-6 Interpret Journal Entries Within Special Journals

Rewrite the journal entries within special journals shown below as standard journal entries (in which debits are displayed on top and credits are displayed on the bottom). Note that each special journal contains two journal entries.

1.

Cash Receipts Journal					
Date	Account Credited	Accounts Receivable Cr.	Service Revenue Cr.	Other Accounts Cr.	Cash Dr.
4/5			1,450		1,450
4/12	CMS, Inc.	2,200			2,200

2.

Cash Payments Journal					
Date	Account Debited	Other Accounts Dr.	Accounts Payable Dr.	Supplies Dr.	Cash Cr.
4/8				650	650
4/22	Furniture	2,250			2,250

3.

Revenue Journal		
Date	Account Debited	Accounts Receivable Dr. & Sales Revenue Cr.
4/14	AllNight	2,400
4/19	RobbinsCo	785

4.

Purchases Journal					
Date	Account Credited	Inventory Dr.	Supplies Dr.	Account Debited	Other Accounts Dr.
4/9	Fulto, Corp.	6,850			
4/30	BEED, Inc.			Equipment	4,850

KCa 3-7 Record & Post Accounts Receivable Journal Entries

Record the necessary journal entry for each transaction, and post to both the General Ledger Accounts Receivable account, and the Accounts Receivable Subsidiary Ledger accounts. Then determine all applicable Accounts Receivable balances. An Excel template, in which your answer(s) may be recorded, can be found in the Student Resource Center.

1. On Feb. 4, PaleTech Company is billed $3,000 for services performed on account.
2. On Feb. 5, Fernandez Corp. is billed $4,900 for services performed on account.
3. On Feb. 14, Fernandez Corp. pays the entire $4,900 that is owed from the Feb. 5 invoice (bill).
4. On Feb. 23, MoonSite Corporation is billed $2,500 for services provided on account.

5. On Feb. 24, MoonSite Corporation pays $1,000 in partial payment of the Feb. 23 invoice.
6. Determine the ending balances for the Accounts Receivable control account, and for each of the three Accounts Receivable subsidiary accounts.

Knowledge Check B

KCb 3-1 Determine the Normal Balance

Indicate whether the Normal Balance for each account is the debit or credit side of the T-Account. Remember that the Normal Balance side of the T-Account is the side on which the account increases.

1. Equipment: ____________________
2. John Doe, Capital: ____________________
3. Rent Expense: ____________________
4. Inventory: ____________________
5. Accounts Receivable: ____________________
6. Notes Payable: ____________________
7. Land: ____________________
8. Insurance Expense: ____________________
9. Buildings: ____________________
10. Service Revenue: ____________________

KCb 3-2 Calculate Ending Balances

Calculate the ending balance for each T-Account.

1. John Doe, Capital

$	12,500	$	84,000
		$	27,000

2. Furniture

$	27,500	$	3,150
$	14,000	$	4,875

3. Notes Receivable

$	12,000	$	3,275
$	6,500	$	7,000
$	7,000	$	3,200
		$	2,000

4. Inventory

$	15,000	$	2,450
$	9,500	$	1,380
$	9,500	$	3,850
		$	1,925

KCb 3-3 Record Journal Entries

Record journal entries for each of the following transactions.

1. On Jul. 1, Katherine Johnson invests $200,000 to open her new antique shop.

2. On Jul. 4, the company pays $35,000 for inventory.

3. On Jul. 6, the company purchases supplies on account for $650.

4. On Jul. 7, its first day of operations, the company sells $1,850 of merchandise for cash. The cost of the merchandise sold is $775.

5. On Jul. 14, the company pays off the full amount owed for the previously purchased supplies.

6. On Jul. 16, the company pays $110 for telephone expense.

7. On Jul. 19, the company sells $2,300 of merchandise for cash. The cost of the merchandise sold is $1,115.

8. On Jul. 22, the company sells $6,200 of merchandise to a local business on account. The cost of the merchandise sold is $4,000.

9. On Jul. 23, the company pays $1,250 for employee wages.

10. On Jul. 31, Katherine withdraws $5,500 from the business.

KCb 3-4 Post to T-Accounts

Post all ten journal entries from the preceding exercise to the appropriate T-Accounts. After completing all postings, determine the ending balances of each account. An Excel template, in which your answer(s) may be recorded, can be found in the Student Resource Center.

KCb 3-5 Record Journal Entries & Post to T-Accounts

Record journal entries for each of the following transactions. Then post all journal entries to the appropriate T-Accounts. After completing all postings, determine the ending balances of each account. An Excel template, in which your answer(s) may be recorded, can be found in the Student Resource Center.

1. On Nov. 1, Bernard Oliver invests $325,000 to open his new gardening tool boutique.
2. On Nov. 5, the company pays $57,000 for inventory.
3. On Nov. 8, its first day of operations, the company sells $3,475 of merchandise on account. The cost of the merchandise sold is $1,900.
4. On Nov. 13, the company pays $84 for utilities.
5. On Nov. 15, the company pays $925 for supplies.
6. On Nov. 17, the company receives $3,000 in partial payment for the goods sold on Nov. 8.
7. On Nov. 20, the company purchases furniture for $2,000 on account.
8. On Nov. 23, the company sells $4,800 of merchandise for cash. The cost of the merchandise sold is $3,100.
9. On Nov. 28, the company receives interest earned on its bank account of $45.
10. On Nov. 29, Bernard withdraws $24,500 from the business.

KCb 3-6 Interpret Journal Entries Within Special Journals

Rewrite the journal entries within special journals shown below as standard journal entries (in which debits are displayed on top and credits are displayed on the bottom). Note that each special journal contains two journal entries.

1.

Cash Receipts Journal					
Date	Account Credited	Accounts Receivable Cr.	Sales Revenue Cr.	Other Accounts Cr.	Cash Dr.
11/15	Interest Revenue			125	125
11/29			800		800

2.

Cash Payments Journal					
Date	Account Debited	Other Accounts Dr.	Accounts Payable Dr.	Supplies Dr.	Cash Cr.
11/4	Buildings	65,000			65,000
11/17	BHV, Corp.		2,750		2,750

3.

Revenue Journal		
Date	Account Debited	Accounts Receivable Dr. & Sales Revenue Cr.
11/10	DGY, Co.	1,770
11/24	HIT, Inc.	1,350

4.

Purchases Journal					
Date	Account Credited	Inventory Dr.	Supplies Dr.	Account Debited	Other Accounts Dr.
11/23	HomeCo.		1,150		
11/24	Smith Inc.	4,000			

KCb 3-7 Record and Post Accounts Receivable Journal Entries

Record the necessary journal entry for each transaction, and post to both the General Ledger Accounts Receivable account, and the Accounts Receivable Subsidiary Ledger accounts. Then determine all applicable Accounts Receivable balances. An Excel template, in which your answer(s) may be recorded, can be found in the Student Resource Center.

1. On Dec. 1, RNI Incorporated is billed $18,500 for services performed on account.
2. On Dec. 12, Aerial USA is billed $23,200 for services performed on account.
3. On Dec. 16, RNI Incorporated pays $10,000 in partial payment of the Dec. 1 invoice (bill).
4. On Dec. 19, TableMakers Cooperative is billed $9,700 for services provided on account.
5. On Dec. 29, Aerial USA pays the entire $23,200 that is owed from the Dec. 12 invoice.
6. Determine the ending balances for the Accounts Payable control account, and for each of the three Accounts Payable subsidiary accounts.

4 Adjusting Entries

LEARNING OBJECTIVES

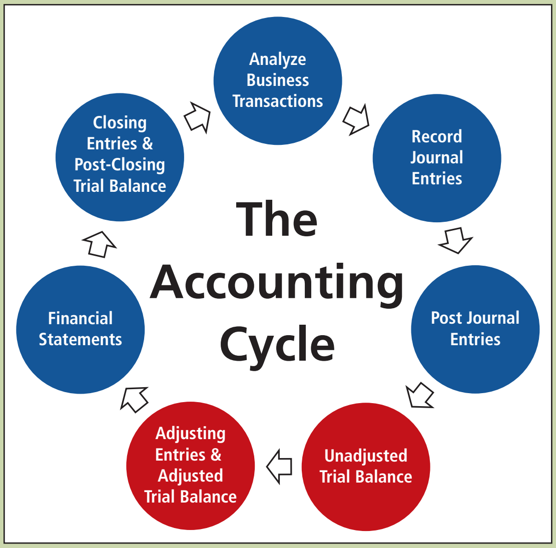
After studying this chapter, you will be able to:

- **Format and complete a Trial Balance**
- **Record adjusting entries**
- **Calculate depreciation using the straight-line method**
- **Calculate depreciation using the double-declining balance method**

After a company has recorded and posted journal entries, it must then summarize this information for it to be useful. In addition, certain journal entries are not recorded during the period, and therefore must be recorded at the end of a period in order to ensure the accuracy of financial records. In this chapter, you will learn how a Trial Balance summarizes information, and why completing adjusting entries is a necessary element of the Accounting Cycle.

CASE STUDY

Adjusting the Books at the End of the First Month of Operations



Two stages of the accounting cycle will be covered in this chapter. As you review the journal entries for the first month of operations of Nathan's Donut School, you realize that there are certain activities that have not been accounted for. For example, the company has used up some of the supplies that were purchased on March 4, but you have not recorded a journal entry to account for this. You also realize that certain of the assets are going to lose value as they are used. But how do you account for this?

You first review the format of the Unadjusted Trial Balance, which summarizes all of the ending account balances. You then examine different types of adjusting entries, and record those that are necessary for the first month. You also examine the purpose behind recording depreciation, and multiple ways in which it can be calculated. Lastly, you complete an Adjusted Trial Balance.

Different Trial Balances are completed before and after the recording of adjusting entries.

Nathan's Donut School
Unadjusted Trial Balance
March 31, 2015

	Debit	Credit
Cash	$ 12,300	
Accounts Receivable	2,200	
Supplies	500	
Furniture	1,000	
Equipment	20,000	
Accounts Payable		$ -
Nathaniel H. Spencer, Capital		35,000
Nathaniel H. Spencer, Drawing	400	
Service Revenue		3,350
Advertising Expense	250	
Rent Expense	1,700	
	$ 38,350	$ 38,350

Nathan's Donut School
Adjusted Trial Balance
March 31, 2015

	Debit	Credit
Cash	$ 12,300	
Accounts Receivable	2,350	
Supplies	185	
Furniture	1,000	
Equipment	20,000	
Accounts Payable		$ -
Wages Payable		750
Nathaniel H. Spencer, Capital		35,000
Nathaniel H. Spencer, Drawing	400	
Service Revenue		3,500
Advertising Expense	250	
Rent Expense	1,700	
Supplies Expense	315	
Wages Expense	750	
	$ 39,250	$ 39,250

Creating a Trial Balance

After all of the postings have been completed, the account balances are scattered throughout the different T-Accounts. The next step in the accounting cycle is to summarize these balances within the **Trial Balance**. The Trial Balance lists all accounts, and displays their respective debit or credit balances as of a specific date. Therefore, an additional benefit of the Trial Balance is that it allows us to ensure that the debit balances equal the credit balances.

WARNING! Just as debits and credits must be equal within individual journal entries, the debit and credit totals on the Trial Balance must add up to the same figure as well.

The Trial Balance displays all account balances, and sums both the debit and credit column.

[Company Name]
Unadjusted Trial Balance
[Date]

	Debit	Credit
Cash	$ XXX	
Accounts Receivable	XXX	
Supplies	XXX	
Furniture	XXX	
Equipment	XXX	
Accounts Payable		$ XXX
Nathaniel H. Spencer, Capital		XXX
Nathaniel H. Spencer, Drawing	XXX	
Service Revenue		XXX
Advertising Expense	XXX	
Rent Expense	XXX	
	$ XXX	$ XXX

TIP! A single underline indicates that a calculation is occurring (in the case of the Trial Balance, the above figures are being added). A double underline indicates that the above figure is the final total within the statement.

Notice that the Trial Balance displayed here includes a title, which lists the company name, statement name, and date on which it was completed. Also note that this is the *Unadjusted* Trial Balance. As we work through the accounting cycle, we complete a total of three trial balances:

- The first comes before the adjusting entries (**Unadjusted Trial Balance**).
- The second is completed after the adjusting entries (**Adjusted Trial Balance**).
- The third comes after the closing entries (**Post-Closing Trial Balance**).

Each of these trial balances provides a method by which we can summarize accounts and verify that they are all in balance. The order of accounts listed within the Trial Balance is shown in the chart at the left.

Order of Accounts within Trial Balance

Trial Balance Position	Account Type
First	Asset
Second	Liability
Third	Capital
Fourth	Withdrawal
Fifth	Revenue
Sixth	Expense

Case In Point 4-1 Complete the Trial Balance

In this example, we will use the account balances from the prior chapter (Chapter 3) to complete an Unadjusted Trial Balance.

Cash (Debit)	Cash (Credit)
$ 35,000	$ 20,000
$ 850	$ 1,500
$ 300	$ 250
	$ 1,700
	$ 400
$ 12,300	

Accounts Receivable (Debit)	Accounts Receivable (Credit)
$ 2,500	$ 300
$ 2,200	

Supplies (Debit)	Supplies (Credit)
$ 500	
$ 500	

Furniture (Debit)	Furniture (Credit)
$ 1,000	
$ 1,000	

Equipment (Debit)	Equipment (Credit)
$ 20,000	
$ 20,000	

Accounts Payable (Debit)	Accounts Payable (Credit)
$ 1,500	$ 1,500
	$ -

Nathaniel H. Spencer, Capital (Debit)	Nathaniel H. Spencer, Capital (Credit)
	$ 35,000
	$ 35,000

Nathaniel H. Spencer, Drawing (Debit)	Nathaniel H. Spencer, Drawing (Credit)
$ 400	
$ 400	

Service Revenue (Debit)	Service Revenue (Credit)
	$ 850
	$ 2,500
	$ 3,350

Advertising Expense (Debit)	Advertising Expense (Credit)
$ 250	
$ 250	

Rent Expense (Debit)	Rent Expense (Credit)
$ 1,700	
$ 1,700	

Nathan's Donut School
Unadjusted Trial Balance
March 31, 2015

		Debit	Credit
Assets	Cash	$ 12,300	
	Accounts Receivable	2,200	
	Supplies	500	
	Furniture	1,000	
	Equipment	20,000	
Liability	Accounts Payable		$ -
Capital	Nathaniel H. Spencer, Capital		35,000
Withdrawal	Nathaniel H. Spencer, Drawing	400	
Revenue	Service Revenue		3,350
Expenses	Advertising Expense	250	
	Rent Expense	1,700	
		$ 38,350	$ 38,350

Adjusting Entries

During a given period, such as the first month of operations for Nathan's Donut School (which you have been examining), certain business activities will not be recorded. This occurs because, for these activities, there is no "trigger" that indicates that a journal entry should be recorded. For example, when a sale is made, this triggers a journal entry to record the sale. Similarly, when a company pays for an item it had previously purchased, this payment also triggers a journal entry. However, when a paper clip or staple is used, no journal entry is booked to record the reduction in supplies, even though they have been used up. It would be impractical to record an entry for every office supply that is used during the period. In instances such as this, the company waits until the end of the period, and records an **Adjusting Entry**.

There are five types of adjusting entries. These are **Deferred Expense**, **Deferred Revenue**, **Accrued Expense**, **Accrued Revenue**, and **Depreciation**. While depreciation will be discussed later in this chapter, the other four types are addressed here.

Adjusting Journal Entry Types

Journal Entry Type	Definition
Deferred Expense	Expenses paid for in advance, and subsequently incurred
Deferred Revenue	Cash received in advance of revenue being earned
Accrued Expense	Expenses that are incurred prior to being paid off
Accrued Revenue	Revenues that are earned prior to the receipt of cash
Depreciation	Estimated loss in value that an asset experiences over time

Deferred Expenses

A deferred expense is one that is incurred after payment has been made. For example, when supplies are purchased they are initially recorded as an asset (debit to supplies account). Over time, as the company uses its supplies, it incurs supplies expense. This expense was *deferred* until a point in time after the purchase was made.

At the end of the period, the company records an adjusting entry to account for the total supplies expense incurred during the period. This is done by comparing the value of the supplies that are physically counted at the end of the period to the amount purchased. The difference between these two figures represents the dollar amount of supplies that have been used up. For example, if $600 in supplies are purchased during September, and the physical count reveals only $150 remaining on September 30, the supplies expense incurred during the period would be $450 ($600 - $150).

9/30	Supplies Expense	450	
	Supplies		450
	Adjusting entry to record supplies expense		

Another common example of a deferred expense is Insurance Expense. When insurance is purchased in advance of its use (to cover the next 12 months, for example), it is recorded as an asset called Prepaid Insurance. At the end of the period, an adjusting entry is recorded in which Insurance Expense is booked based on the amount of time that has passed. For example, if $1,200 of insurance (covering the next 12 months) is purchased on February 1, then the adjusting entry on February 28 would record $100 of insurance expense ($1,200/12 months) as follows:

2/28	Insurance Expense	100	
	Prepaid Insurance		100
	Adjusting entry to record insurance expense		

As $100 of Prepaid Insurance is used up every month, this same adjusting journal entry would be recorded at the end of each of the 12 months over which the insurance policy is in place.

TIP! Always keep in mind that the purpose of an adjusting entry for deferred expenses is to account for the previously unrecorded expense incurred during the period. This also results in the reduction of the associated asset balance to its correct level.

Deferred Revenues

In some instances, customers pay a company prior to the associated services being performed. A good example of this relates to professional sports teams. When fans purchase season tickets, they do so prior to the completion of the games. When this money is received by the team, it is not yet earned. The revenue is *deferred* until the team actually plays the games. Therefore, when the money is received, the team will not credit a revenue account, but instead will credit Unearned Revenue, which is a liability account (the team owes entertainment to the customer, the value of which is equal to the amount paid).

A more common instance of deferred revenues is when a customer pays for a service (such as the painting of a house) in advance. If the customer pays $1,000 on August 12, prior to the work being performed, the following journal entry is recorded by the painting company:

8/12	Cash	1,000	
	Unearned Revenue		1,000
	Receipt of cash prior to rendering of service		

NOTE! The above entry is *not* an adjusting entry.

On August 31, if $800 of the $1,000 in services has been provided to date, then the adjusting entry would be as follows:

8/31	Unearned Revenue	800	
	Service Revenue		800
	Adjusting entry for completion of services		

Accrued Expenses

Certain expenses are incurred over a period of time prior to being paid off. Because these expenses accumulate prior to being satisfied, we refer to them as *accrued* expenses. A good example of accrued expenses are the wages paid to employees. Wages are typically paid on a weekly or biweekly basis. Therefore, unless today is payday, at any given time employees will have worked (and the company will have therefore incurred wages expense) prior to cash being paid to employees.

If employees are paid on Friday, July 28, do not work on the weekend, and then earn a total of $1,100 on Monday, July 31 (the last day of the period), the following adjusting journal entry would be necessary to account for the accrued expenses:

Here we credit Wages Payable because the company owes the $1,100 to employees.

7/31	Wages Expense	1,100	
	Wages Payable		1,100
	Adjusting entry for employee wages owed		

Accrued Revenues

Just as expenses can accumulate prior to being paid off, revenues can accumulate prior to cash being received in exchange for them. These revenues are referred to as *accrued* revenues. For example, if as of December 31 a company has earned $2,400 for services rendered, but has not yet been paid, the following adjusting journal entry would be necessary:

Here we debit Accounts Receivable because the $2,400 is owed to the company.

12/31	Accounts Receivable	2,400	
	Service Revenue		2,400
	Adjusting entry for revenue earned in advance of payment		

A Closer LOOK

Are Adjusting Entries Absolutely Necessary?

Many students ask why we should bother recording adjusting entries, especially since in most cases they will be taken care of eventually. For example, why should we record accrued wage expense when payday will come around in a few days, and we will record the necessary journal entry at that time?

The answer to this question is simple. We must ensure that, at the end of a period, our books are completely accurate. This means that all activity that occurred during the period must be reflected within our account balances. Many people rely on a company's financial statements to make important financial decisions, and therefore the balances that comprise these financial statements must take into account everything that has happened to a company. It is for this reason that we must be certain to record all adjusting journal entries prior to the end of a period.

Case In Point 4-2 Record Adjusting Journal Entries

In these examples, we will record the necessary adjusting journal entries for Nathan's Donut School, based on the information provided. Note that the first month of operations ended on Wednesday, March 31.

1. On Monday, March 29, Nathan's Donut School begins an intensive workshop with a group of students. Nathaniel charges $250 for the five-day workshop (Monday–Friday), and is paid on Friday.

3/31	Accounts Receivable	150	
	Service Revenue		150
	Adjusting entry for revenue earned in advance of payment		

The Company earns $50 per day ($250/5 days). Since the period ended on a Wednesday, three days (Monday, Tuesday, and Wednesday) of revenue has been earned thus far. $50 * 3 days results in the $150 used in this entry.

2. Employees of Nathan's Donut School earn a total of $1,250 for a five-day workweek. They are paid on Friday each week.

3/31	Wages Expense	750	
	Wages Payable		750
	Adjusting entry for employee wages owed		

Employees earn $250 per day ($1,250/5 days). After the last day of the period, the employees have worked three days without yet being paid. Therefore, they have earned $750 ($250 * 3 days) thus far.

3. On March 4, Nathan's Donut School purchased $500 of supplies. On March 31, a physical examination reveals that $185 of supplies remains.

3/31	Supplies Expense	315	
	Supplies		315
	Adjusting entry to record supplies expense		

The purpose of this entry is to account for the supplies that have been used up. If the company began with $500 of supplies, and only has $185 remaining at the end of the period, the difference of $315 ($500 - $185) is the supplies expense that was incurred during the period.

4. During its second month of operations, Nathan's Donut School begins a five-day children's cooking course. The course begins on Tuesday, April 27 and ends on Saturday, May 1. On April 22, the parents pay $550 in full payment.

4/30	Unearned Revenue	440	
	Service Revenue		440
	Adjusting entry for completion of services		

Recall that Cash is debited and Unearned Revenue (a liability) is credited when cash is received in advance of services being performed. This is why it is necessary to debit Unearned Revenue (reducing it) here after a portion of the services has been provided. As of April 30, Nathan's Donut School had earned $440 ($550/5 days = $110 per day; $110 * 4 days earned = $440)

Working with Depreciation

Over time, most fixed assets lose value. A **Fixed Asset** (also called a *long-term asset* or *plant asset*, as they are expected to be held for more than 12 months) is one that cannot be easily converted to cash. This is in contrast to a **Short-Term Asset** (also called a *current asset*), such as supplies or inventory, which is expected to be held for less than 12 months, and can more easily be used up or converted to cash if necessary.

All fixed assets, with the notable exception of Land, are subject to depreciation as a result of the loss in value they experience. Depreciation expense represents an estimate of the loss in value that an asset experiences over time. Think about an office table that is purchased for $250. Could a company resell this table for the same amount five years later, after it has been used consistently? No, if a buyer could even be found, he/she would be willing to pay far less. Since this depreciation process consistently occurs, businesses must be certain to account for it over time. There are two primary methods used to calculate depreciation: the Straight-Line method and the Double-Declining Balance method.

WARNING! Depreciation is a method by which an asset's loss in value is *estimated*. There is no guarantee that an asset could be sold for its current **Book Value** (Cost – Accumulated Depreciation) at any given point in time.

Straight-Line Depreciation

Under the straight-line method of depreciation, a company will record the same amount of depreciation for each year of the asset's **Useful Life**. The useful life (number of years the company expects to use the asset) is estimated based on past experience. For the straight-line method, the **Salvage Value** (alternatively referred to as **Residual Value**) also must be estimated. This represents the amount the company expects to receive for the asset at the time of disposal (when the company is done with it, and it is sold or discarded).

The calculation for the straight-line method is as follows:

$$\frac{\text{Cost - Salvage Value}}{\text{Useful Life}} = \text{Annual Depreciation}$$

Double-Declining Balance Depreciation

While the straight-line method is by far the most common, the double-declining balance method is also used by many companies. This is referred to as an *accelerated depreciation method*, as it results in more depreciation during the early years of an asset's useful life than in the later years.

To calculate depreciation using this method, you must first determine the straight-line rate of depreciation. This can be done by dividing 1 (the number of years for which you are calculating depreciation; this number never changes) by the useful life. For example, if the useful life is five years, the straight-line rate would be 20% (1/5).

TIP! An alternate calculation for this step would be to divide 100% by the useful life.

You can then determine the first year's depreciation by multiplying the cost of the asset by twice the straight-line rate (this is why the method is called *double*-declining balance).

NOTE! Other "declining balance" methods may also be used, such as triple-declining balance and 1.5 declining balance.

Double-declining balance depreciation for year 1.

	Beginning Book Value	Double-Declining Balance Rate	Depreciation Expense	Accumulated Depreciation	Ending Book Value
Year #1	$2,500	40%	$1,000	$1,000	$1,500

In subsequent years, the same calculation is used, except that the current book value (cost – accumulated depreciation) replaces the cost. So, an asset costing $2,500, with a five-year useful life and salvage value of $250, would be depreciated using the double-declining balance method as follows:

	Beginning Book Value	Double-Declining Balance Rate	Depreciation Expense	Accumulated Depreciation	Ending Book Value
Year #1	$2,500	40%	$1,000	$1,000	$1,500
Year #2	$1,500	40%	$600	$1,600	$900
Year #3	$900	40%	$360	$1,960	$540
Year #4	$540	40%	$216	$2,176	$324
Year #5	$324	40%	*$74	$2,250	$250

* $324 (Year 5 Beginning Book Value) - $250 (Salvage Value) = $74 (Year 5 Depreciation)

Notice that up to this point, the salvage value has not impacted our calculation. Under the double-declining balance method, we do not factor in the salvage value until near the end of the useful life. As we calculate each year's depreciation, we must check to ensure that the book value of the asset has not dropped below the salvage value. If this occurs, as it did in the final year of the above example, we disregard our calculation for that year, and substitute an amount that brings the book value down to the salvage value, but not below it.

A Closer LOOK

Are These the Only Depreciation Methods Available?

While straight-line depreciation and double-declining balance depreciation are the two most common methods, there are a number of others that can be used as well. One method commonly used to determine depreciation for an asset that can be used either for a finite number of hours or that can produce a finite number of units, is the *Units of Production* method. Under this method, you first determine the depreciation rate as follows: Cost – Salvage Value / Total Units. Total Units represents the total hours we expect to use the asset over its life, or total units we expect to produce over its life. You then multiply this rate by the number of actual hours (or units) for each year to determine the depreciation for those years.

The *Sum of the Years Digits* method is an accelerated depreciation method. Under this method, the digits of each year within the useful life are added together, and then used to calculate each year's depreciation. In the first year, the useful life is divided by the sum of all digits, and then multiplied by (Cost – Salvage Value). For an asset with a five-year useful life, the sum of the year's digits would be 5 + 4 + 3 + 2 + 1 = 15. The same calculation is done for every year, except that the first digit is removed from each subsequent calculation (so that the year two calculation of the sum of the year's digits for an asset with a five-year useful life would be 4 + 3 + 2 + 1 = 10).

Units of Production Depreciation & Sum of the Years Digits Depreciation.

Units of Production

Step 1:	$\dfrac{\textbf{Cost - Salvage Value}}{\textbf{Total Units of Production}}$	**=**	**Depreciation Rate**
Step 2:	**Depreciation Rate * Annual Units Produced**	**=**	**Annual Depreciation**

Sum of the Years Digits

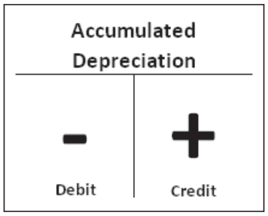
$$\textbf{(Cost - Salvage Value)} \ * \ \dfrac{\textbf{Remaining Years in Useful Life}}{\textbf{Sum of the Years Digits}} = \textbf{Annual Depreciation}$$

One additional depreciation method is MACRS (Modified Accelerated Cost Recovery System). This method assigns useful lives and depreciation rates to specific classes of assets. Whereas each of the depreciation methods previously discussed in this chapter is acceptable under GAAP, MACRS is not. Instead, this method is the only one that is acceptable for tax purposes. Depreciation reported on a corporate tax return is calculated using MACRS depreciation.

Recording the Depreciation Adjusting Entry

Once depreciation has been calculated at the end of a period, a journal entry must be recorded for the depreciation. For example, if $260 of depreciation is calculated, the adjusting journal entry is as follows:

9/30	Depreciation Expense	260	
	Accumulated Depreciation		260
	Adjusting entry for depreciation expense		



This adjusting entry is designed to increase depreciation expense, and increase the *Accumulated Depreciation* account. As opposed to being an asset, liability, or owner's equity account, accumulated depreciation is a **Contra-Asset Account**. This type of account is designed to offset the balance of its associated asset accounts, and as shown in the image to the left, operates in an opposite manner from assets. Because it is associated with an asset account, this contra-asset account appears within the asset section of the Balance Sheet.

Case In Point 4-3 Calculate and Record Depreciation

In this example, we will calculate the first two years of depreciation for a piece of equipment using both the straight-line method and the double-declining balance method. We will also create the associated adjusting journal entries for the first two years under each method. The equipment cost of $20,000 has a salvage value of $2,000, and a useful life of five years.

1. We begin by calculating the depreciation expense for each of the first two years, using the Straight-Line method. We then record the necessary journal entry for each year.

$$\frac{\$20{,}000 - \$2{,}000}{5} = \$3{,}600$$

Depreciation Expense	3,600	
Accumulated Depreciation		3,600
Adjusting entry for Year 1 depreciation expense		

Depreciation Expense	3,600	
Accumulated Depreciation		3,600
Adjusting entry for Year 2 depreciation expense		

2. Next, we calculate the depreciation expense for each of the first two years, using the Double-Declining Balance method. We then record the necessary journal entry for each year.

	Beginning Book Value	Double-Declining Balance Rate	Depreciation Expense	Accumulated Depreciation	Ending Book Value
Year #1	$20,000	40%	$8,000	$8,000	$12,000
Year #2	$12,000	40%	$4,800	$12,800	$7,200

Depreciation Expense	8,000	
Accumulated Depreciation		8,000
Adjusting entry for Year 1 depreciation expense		

Depreciation Expense	4,800	
Accumulated Depreciation		4,800
Adjusting entry for Year 2 depreciation expense		

Preparing the Adjusted Trial Balance

After all adjusting entries have been journalized, a second trial balance, called the Adjusted Trial Balance, is completed. Similar to the Unadjusted Trial Balance, the purpose at this stage is to summarize all account balances and ensure that the debit balances equal the credit balances. Unlike the balances within the Unadjusted Trial Balance, those within the Adjusted Trial Balance will have been altered by the adjusting entries.

WARNING! While the debits and credits must be equal on the trial balance, the actual total amount of each is a meaningless figure.

Case In Point 4-4 Prepare the Adjusted Trial Balance

In this example, we will complete the Adjusted Trial Balance for Nathan's Donut School, taking into account the adjusting entries previously recorded for the first month of operations.

Cash

$ 35,000	$ 20,000
$ 850	$ 1,500
$ 300	$ 250
	$ 1,700
	$ 400
$ 12,300	

Accounts Receivable

$ 2,500	$ 300
$ 150	
$ 2,350	

Supplies

$ 500	315
$ 185	

Furniture

$ 1,000	
$ 1,000	

Equipment

$ 20,000	
$ 20,000	

Accounts Payable

$ 1,500	$ 1,500
	$ -

Wages Payable

	$ 750
	$ 750

Nathaniel H. Spencer, Capital

	$ 35,000
	$ 35,000

Nathaniel H. Spencer, Drawing

$ 400	
$ 400	

Service Revenue

	$ 850
	$ 2,500
	$ 150
	$ 3,500

Advertising Expense

$ 250	
$ 250	

Rent Expense

$ 1,700	
$ 1,700	

Supplies Expense

$ 315	
$ 315	

Wages Expense

$ 750	
$ 750	

Nathan's Donut School
Adjusted Trial Balance
March 31, 2015

	Debit	Credit
Cash	$ 12,300	
Accounts Receivable	2,350	
Supplies	185	
Furniture	1,000	
Equipment	20,000	
Accounts Payable		$ -
Wages Payable		750
Nathaniel H. Spencer, Capital		35,000
Nathaniel H. Spencer, Drawing	400	
Service Revenue		3,500
Advertising Expense	250	
Rent Expense	1,700	
Supplies Expense	315	
Wages Expense	750	
	$ 39,250	$ 39,250

Concepts Review

To check your knowledge of the key concepts introduced in this chapter, complete the Concepts Review quiz by choosing the appropriate access option below.

If you are...	Then access the quiz by...
Using eLab	Logging in, choosing Content, and navigating to the Concepts Review quiz for this chapter
Not using eLab	Going to the Student Resource Center for this book

Putting It Together

PIT 4-1 Record the Adjusting Journal Entries

In this exercise, we will complete the Unadjusted Trial Balance, adjusting entry process, and Adjusted Trial Balance at the end of the first month of operation for Amber's Lacrosse Emporium. The account balances prior to the adjusting entries are as follows:

Cash

$ 75,000	$ 15,000
$ 2,400	$ 12,000
$ 1,450	$ 1,500
$ 2,100	$ 2,750
	$ 600
	$ 1,600
	$ 135
	$ 200
	$ 600
$ 46,565	

Accounts Receivable

$ 3,000	$ 2,100
$ 900	

Supplies

$ 750	
$ 750	

Inventory

$ 15,000	$ 1,350
$ 2,000	$ 2,100
$ 13,550	

Furniture

$ 2,000	
$ 2,000	

Equipment

$ 12,000	
$ 12,000	

Accounts Payable

$ 2,750	$ 2,750
	$ 2,000
	$ 2,000

Amber Stein, Capital

	$ 75,000
	$ 75,000

Amber Stein, Drawing

$ 600	
$ 600	

Sales Revenue

	$ 2,400
	$ 4,450
	$ 6,850

Cost of Goods Sold

$ 1,350	
$ 2,100	
$ 3,450	

Advertising Expense

$ 600	
$ 600	

Rent Expense

$ 1,500	
$ 1,500	

Wages Expense

$ 1,600	
$ 1,600	

Telephone Expense

$ 135	
$ 135	

Utilities Expense

$ 200	
$ 200	

1. Based on the above account balances, complete the Unadjusted Trial Balance.

Amber's Lacrosse Emporium
Unadjusted Trial Balance
May 31, 2015

	Debit	Credit
Cash	$ 46,565	
Accounts Receivable	900	
Supplies	750	
Inventory	13,550	
Furniture	2,000	
Equipment	12,000	
Accounts Payable		$ 2,000
Amber Stein, Capital		75,000
Amber Stein, Drawing	600	
Sales Revenue		6,850
Cost of Goods Sold	3,450	
Advertising Expense	600	
Rent Expense	1,500	
Wages Expense	1,600	
Telephone Expense	135	
Utilities Expense	200	
	$ 83,850	$ 83,850

2. A physical count of the supplies on May 31 indicates that $275 of supplies remain at the end of the month.

5/31	Supplies Expense	475	
	Supplies		475
	Adjusting entry to record supplies expense		

3. Employees for Amber's Lacrosse Emporium earned wages totaling $850 for working Monday, May 30 and Tuesday, May 31. The employees will be paid on Friday, June 3.

5/31	Wages Expense	850	
	Wages Payable		850
	Adjusting entry for employee wages owed		

4. Amber's Lacrosse Emporium has set aside an area in which sports-related events can be held. A local lacrosse league has agreed to hold a series of events at the store, and will pay the total balance after the completion of all events. As of May 31, Amber's Lacrosse Emporium has charged $1,450 for completed events.

5/31	Accounts Receivable	1,450	
	Service Revenue		1,450
	Adjusting entry for revenue earned in advance of payment		

5. During its second month of operations, Amber's Lacrosse Emporium receives $820 in advance of holding two events ($410 per event) at the store. As of June 30, one of the two events was held.

6/30	Unearned Revenue	410	
	Service Revenue		410
	Adjusting entry for completion of services		

6. The equipment that was purchased has a four-year useful life and a salvage value of $600. Amber's Lacrosse Emporium uses the Straight-Line method to calculate depreciation.

TIP! Remember that Amber's Lacrosse Emporium has completed only one month of operations. Therefore, you are calculating monthly depreciation here, and should express the useful life in months within your calculation.

$$\frac{\$12{,}000 - \$600}{48} = \$237.50$$

5/31	Depreciation Expense	237.50	
	Accumulated Depreciation - Equipment		237.50
	Adjusting entry for first month's depreciation expense		

Notice that the Accumulated Depreciation account displays ***Equipment*** beside it. There will be a separate Accumulated Depreciation account created for each depreciable asset on a company's books.

7. The Furniture that was purchased has a six-year useful life and a salvage value of $200. Amber's Lacrosse Emporium uses the Straight-Line method to calculate depreciation.

$$\frac{\$2{,}000 - \$200}{72} = \$25$$

5/31	Depreciation Expense	25	
	Accumulated Depreciation - Furniture		25
	Adjusting entry for first month's depreciation expense		

8. Factoring in the prior adjusting entries, complete the Adjusted Trial Balance. Keep in mind that one entry occurred during the second month of operations, and therefore should not impact this Trial Balance.

TIP! You may want to post the adjusting entries to the T-Accounts on scrap paper prior to completing the Adjusted Trial Balance.

Amber's Lacrosse Emporium
Adjusted Trial Balance
May 31, 2015

	Debit	Credit
Cash	$ 46,565.00	
Accounts Receivable	2,350.00	
Supplies	275.00	
Inventory	13,550.00	
Furniture	2,000.00	
Accum. Depreciation - Furniture		$ 25.00
Equipment	12,000.00	
Accum. Depreciation - Equipment		237.50
Accounts Payable		2,000.00
Wages Payable		850.00
Amber Stein, Capital		75,000.00
Amber Stein, Drawing	600.00	
Sales Revenue		6,850.00
Service Revenue		1,450.00
Cost of Goods Sold	3,450.00	
Advertising Expense	600.00	
Rent Expense	1,500.00	
Wages Expense	2,450.00	
Telephone Expense	135.00	
Utilities Expense	200.00	
Supplies Expense	475.00	
Depreciation Expense	262.50	
	$ 86,412.50	$ 86,412.50

In this Trial Balance, both dollars and cents are displayed. There was no need to display cents in the Unadjusted Trial Balance, as all account balances were whole dollar amounts.

Knowledge Check A

KCa 4-1 Prepare the Unadjusted Trial Balance

Use the following account balance to prepare the Unadjusted Trial Balance for Spot Cleaners as of October 31, 2015. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

Account Name	Account Balance
Cash	$2,400
Accounts Receivable	$900
Prepaid Insurance	$325
Equipment	$1,900
Accounts Payable	$675

Account Name	Account Balance
Service Revenue	$1,850
Rent Expense	$700
Salaries Expense	$350
Tom Wilson, Drawing	$200
Tom Wilson, Capital	$4,250

KCa 4-2 Correct an Unadjusted Trial Balance

Rewrite a corrected version of the Unadjusted Trial Balance displayed below. All accounts within the Unadjusted Trial Balance ended the period with a normal balance.

TIP! You should be able to identify nine errors within the Unadjusted Trial Balance.

Bookworm Central, Inc.
Unadjusted Trial Balance
December 31, 2015

	Credit	Debit
Cash	$ 35,700	
Accounts Receivable		$ 2,120
Supplies	475	
Automobile	9,450	
Equipment		7,200
Accounts Payable	3,450	
Salaries Payable		1,200
Service Revenue		11,000
Advertising Expense	200	
Rent Expense	950	
Supplies Expense		625
Greta Frank, Drawing		400
Greta Frank, Capital		41,470
	$ 50,225	$ 64,015

KCa 4-3 Determine Account Balance and Complete the Unadjusted Trial Balance

Determine the ending balance for each account by examining the below T-Accounts. Then complete an Unadjusted Trial Balance based on these ending balances. For the Unadjusted Trial Balance, an Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

Cash	
$ 20,000	$ 1,250
$ 1,000	$ 350
	$ 200
	$ 100
	$ 150

Accounts Receivable	
$ 1,750	$ 1,000

Supplies	
$ 1,250	
$ 400	

Accounts Payable	
$ 100	$ 400
$ 150	

Vincent Guzman, Capital	
	$ 20,000

Service Revenue	
	$ 1,750

Telephone Expense	
$ 350	

Utilities Expense	
$ 200	

KCa 4-4 Record Adjusting Entries

Record the necessary adjusting entries for each of the following four circumstances on January 31.

1. On January 4, an insurance policy covering the next twelve months was purchased for $2,400.

2. On January 17, a customer pays $4,500 in advance of services being provided. As of January 31, $1,800 of these services have not yet been earned.

3. Employees work a five-day workweek, earn a total of $2,400 each week, and are paid for each week's work on Friday. January 31 of the current year falls on a Thursday.

4. During January, the company performed services totaling $3,900 for which customers had not yet been billed as of January 31.

KCa 4-5 Identify Adjusting Entries

In this exercise, you will record the adjusting journal entries that led to the following account balances. Note that one account was impacted by two different adjusting entries. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

Account Name	Unadjusted Trial Balance amount	Adjusted Trial Balance amount
Accounts Receivable	$820	$1,245
Prepaid Insurance	$1,900	$1,275
Wages Payable	$0	$1,500
Unearned Revenue	$4,600	$1,100
Wages Expense	$7,100	$8,600
Insurance Expense	$0	$625
Service Revenue	$7,700	$11,625

KCa 4-6 Describe the Adjusting Entry

Write one to two sentences for each adjusting journal entry, describing the circumstance that led to the entry.

1.

1/31	Insurance Expense	800	
	Prepaid Insurance		800

2.

1/31	Salaries Expense	1,800	
	Salaries Payable		1,800

3.

1/31	Accounts Receivable	2,850	
	Service Revenue		2,850

4.

1/31	Unearned Revenue	675	
	Service Revenue		675

KCa 4-7 Calculate Depreciation Using the Straight-Line Method

Calculate annual depreciation for a piece of equipment using the Straight-Line method. Then record the necessary adjusting journal entry based on your calculations. The equipment costs $65,000, has a useful life of ten years, and a salvage value of $7,000.

KCa 4-8 Calculate Depreciation Using the Double-Declining Balance Method

Use the information from the previous exercise to calculate depreciation using the Double-Declining Balance Method. Complete the calculation for the first two years of the asset's life, and record the necessary adjusting journal entry for each year.

KCa 4-9 Calculate Depreciation Using Two Methods

Calculate depreciation on a piece of Machinery for the first two years of its useful life, using both the Straight-Line Method and the Double-Declining Balance Method. The Machinery cost $47,000, has a useful life of eight years, and a salvage value of $3,000.

KCa 4-10 Prepare the Adjusted Trial Balance

Use the figures provided in KCa 4-1, in conjunction with the adjusting entries shown below, to prepare the Adjusted Trial Balance for Spot Cleaners as of October 31, 2015. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

10/31	Insurance Expense	75	
	Prepaid Insurance		75
	Adjusting entry to record insurance expense		
10/31	Depreciation Expense	50	
	Accum. Depreciation - Equipment		50
	Adjusting entry for depreciation expense		
10/31	Accounts Receivable	200	
	Service Revenue		200
	Adjusting entry for revenue earned in advance of payment		
10/31	Salaries Expense	1,350	
	Salaries Payable		1,350
	Adjusting entry for employee salaries owed		

Knowledge Check B

KCb 4-1 Prepare the Unadjusted Trial Balance

Use the following account balance to prepare the Unadjusted Trial Balance for Willow Branch, Inc. as of April 30, 2015. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

Account Name	Account Balance
Cash	$51,000
Accounts Receivable	$6,450
Supplies	$1,895
Furniture	$16,700
Accounts Payable	$8,200

Account Name	Account Balance
Wages Payable	$1,750
Service Revenue	$11,200
Telephone Expense	$425
Utilities Expense	$360
Tom Wilson, Capital	$55,680

KCb 4-2 Correct an Unadjusted Trial Balance

Rewrite a corrected version of the Unadjusted Trial Balance displayed below. All accounts within the Unadjusted Trial Balance ended the period with a normal balance. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

TIP! You should be able to identify eight errors within the Unadjusted Trial Balance.

Fish Mongers, Corp.
October 31, 2015
Unadjusted Trial Balance

	Debit	Credit
Cash	$ 24,000	
Accounts Receivable	4,200	
Supplies		$ 1,000
Furniture	3,000	
Accounts Payable		7,500
Wages Payable		2,000
Sales Revenue		6,500
Interest Revenue	250	
Advertising Expense	550	
Telephone Expense	260	
Truck		9,000
Joey Irrizary, Drawing	750	
Joey Irrizary, Capital	26,510	
	$ 59,520	$ 26,000

KCb 4-3 Determine Account Balance and Complete the Unadjusted Trial Balance

Determine the ending balance for each account by examining the below T-Accounts. Then complete an Unadjusted Trial Balance based on these ending balance. For the Unadjusted Trial Balance, an Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

Cash	
$ 47,500	$ 8,500
$ 1,800	$ 900
$ 1,500	$ 3,800
	$ 875
	$ 1,000

Accounts Receivable	
$ 3,800	$ 1,800
$ 4,000	$ 1,500

Equipment	
$ 8,500	
$ 2,500	

Accounts Payable	
$ 875	$ 2,500

Ed Stephens, Capital	
	$ 47,500

Ed Stephens, Drawing	
$ 3,800	
$ 1,000	

Sales Revenue	
	$ 3,800
	$ 4,000

Rent Expense	
$ 900	

KCb 4-4 Record Adjusting Entries

Record the necessary adjusting entries for each of the following four circumstances on June 30.

1. Prior to the recording of adjusting entries, the Supplies account had a $900 balance. A physical count of supplies on June 30 indicates that $625 of supplies remain at the end of the month.

2. On June 9, a customer pays $7,000 in advance of services being provided. As of June 30, $4,500 of these services have been earned.

3. Employees work a seven-day workweek, earn a total of $4,200 each week, and are paid for each week's work on Sunday. June 30 of the current year falls on a Wednesday.

4. During June, the company performed services totaling $12,200 for which customers had not yet been billed as of June 30.

KCb 4-5 Identify Adjusting Entries

Record the adjusting journal entries that led to the following account balances. Note that one account was impacted by two different adjusting entries. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

Account Name	Unadjusted Trial Balance amount	Adjusted Trial Balance amount
Accounts Receivable	$3,200	$4,750
Supplies	$1,000	$625
Salaries Payable	$0	$800
Unearned Revenue	$2,000	$500
Salaries Expense	$3,700	$4,500
Supplies Expense	$0	$375
Service Revenue	$9,200	$12,250

KCb 4-6 Describe the Adjusting Entry

Write one to two sentences for each adjusting journal entry, describing the circumstance that led to the entry.

1.

7/31	Wages Expense	450	
	Wages Payable		450

2.

7/31	Unearned Revenue	2,700	
	Service Revenue		2,700

3.

7/31	Supplies Expense	525	
	Supplies		525

4.

7/31	Accounts Receivable	1,400	
	Service Revenue		1,400

KCb 4-7 Calculate Depreciation Using the Straight-Line Method

Calculate annual depreciation for a piece of furniture using the Straight-Line method. Then record the necessary adjusting journal entry based on your calculations. The furniture cost $22,000, has a useful life of five years, and a salvage value of $2,000.

KCb 4-8 Calculate Depreciation Using the Double-Declining Balance Method

Use the information from the previous exercise to calculate depreciation using the Double-Declining Balance Method. Complete this calculation for the first two years of the asset's life, and record the necessary adjusting journal entry for each year.

KCb 4-9 Calculate Depreciation Using Two Methods

Calculate depreciation on a truck for the first two years of its useful life, using both the Straight-Line Method and the Double-Declining Balance Method. The truck cost $28,000, has a useful life of six years, and a salvage value of $1,000.

KCb 4-10 Prepare the Adjusted Trial Balance

Use the figures provided in KCb 4-1, in conjunction with the adjusting entries shown below, to prepare the Adjusted Trial Balance. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

4/30	Supplies Expense	725	
	Supplies		725
	Adjusting entry to record supplies expense		
4/30	Depreciation Expense	100	
	Accum. Depreciation - Furniture		100
	Adjusting entry for depreciation expense		
4/30	Accounts Receivable	1,800	
	Service Revenue		1,800
	Adjusting entry for revenue earned in advance of payment		
4/30	Wages Expense	800	
	Wages Payable		800
	Adjusting entry for employee wages owed		

5

Financial Statements & Closing Entries

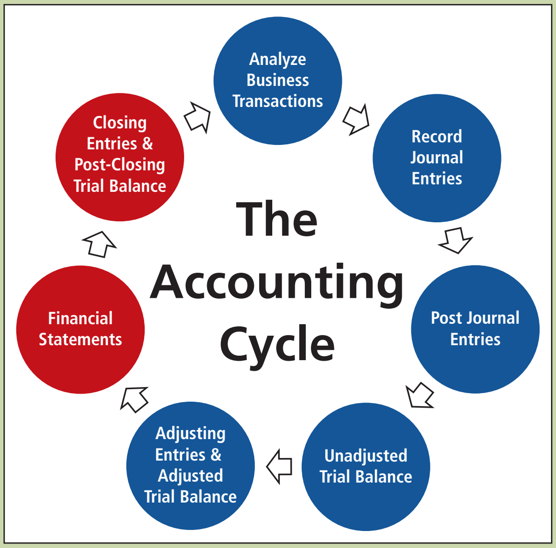
LEARNING OBJECTIVES

After studying this chapter, you will be able to:

- **Prepare an income statement**
- **Prepare a statement of owner's equity**
- **Prepare a balance sheet**
- **Identify the sections of a statement of cash flows**
- **Record closing entries**

Once the adjusting entries have been recorded, a company is ready to prepare all of its financial statements. Each financial statement summarizes a different set of information, and they can all be invaluable when analyzing a company's performance. Once the financial statements have been completed, the company's books can then be closed. Completion of the closing process ensures that all accounts are ready to be utilized. In this chapter, you will learn about each of the four financial statements, and you will examine the four closing entries and the Post-Closing Trial Balance, which constitute the closing process.

CASE STUDY Closing the Books for Nathan's Donut School



The final two stages of the accounting cycle are examined in this chapter. Having completed the adjusting journal entries, you are now comfortable that all activity related to the first month has been properly recorded. However, you recognize that you are not yet finished, even though you have recorded all activity. Nathaniel has asked you to provide financial summaries of his company's performance. But what exactly should you give him?

You decide that you will first examine each of the four financial statements. You are intrigued by the fact that each of these financial statements provides insight into a different aspect of the performance of Nathan's Donut School. As you then consider how you will approach the second month of operations, you learn about the closing entry process, which prepares the company's books for the next month.

The Income Statement and the Balance Sheet are two very useful Financial Statements.

Nathan's Donut School
Income Statement
For the Month Ended March 31, 2015

Revenues:		
Service Revenue		$ 3,500
Expenses:		
Rent Expense	$ 1,700	
Wages Expense	750	
Supplies Expense	315	
Advertising Expense	250	
Total Expenses		3,015
Net Income		$ 485

Nathan's Donut School
Balance Sheet
March 31, 2015

Assets:		
Cash	$ 12,300	
Accounts Receivable	2,350	
Supplies	185	
Furniture	1,000	
Equipment	20,000	
Total Assets		$ 35,835
Liabilities:		
Accounts Payable	-	
Wages Payable	750	
Owner's Equity:		
Nathaniel H. Spencer, Capital	35,085	
Total Liabilities & Owner's Equity		$ 35,835

Preparing an Income Statement

The majority of companies are for-profit, meaning that they are in business to earn more money than they spend to run the business. Notable exceptions include public universities and charitable organizations, which operate in order to provide a benefit to specific individuals. It is vital that all companies, whether for-profit or not-for-profit, closely monitor revenues and expenses.

A company can determine whether it has earned a profit by examining its net income. *Net income* is calculated as follows:

Net Income = Revenues - Expenses

Although companies could complete this calculation by adding up the necessary figures from the Adjusted Trial Balance, they instead will display all revenues and expenses within the Income Statement. This is the first financial statement that a company completes, and the final figure within the Income Statement shows the Net Income for the period being examined.

The Income Statement lists all revenues and expenses, and concludes with Net Income.

Lists of individual account balances

Totals of individual accounts listed

Auto Repair Center
Income Statement
For the Month Ended June 30, 2015

Revenues:		
Sales Revenue	$ 27,500	
Service Revenue	3,500	
Total Revenue		$ 31,000
Expenses:		
Salaries Expense	2,750	
Rent Expense	1,200	
Utilities Expense	800	
Telephone Expense	550	
Total Expenses		5,300
Net Income		$ 25,700

All financial statements display lists of figures in a column to the left, and the sum (or difference) of these figures in an adjacent column to the right. This is why the individual revenue amounts are displayed in a different column than Total Revenue. Doing so ensures that total amounts (such as Total Revenue and Total Expenses) line up properly, and can then be easily added or subtracted.

NOTE! The date within the header is always displayed as "for the month/year ended…" or "for the period ended…" on the Income Statement. This is because the Income Statement displays activity over the course of an entire period.

Case In Point 5-1 Prepare the Income Statement

In this example, we will use the Adjusted Trial Balance to prepare an Income Statement for the first month of operations of Nathan's Donut School. The Adjusted Trial Balance is displayed here for reference:

Nathan's Donut School
Adjusted Trial Balance
March 31, 2015

	Debit	Credit
Cash	$ 12,300	
Accounts Receivable	2,350	
Supplies	185	
Furniture	1,000	
Equipment	20,000	
Accounts Payable		$ -
Wages Payable		750
Nathaniel H. Spencer, Capital		35,000
Nathaniel H. Spencer, Drawing	400	
Service Revenue		3,500
Advertising Expense	250	
Rent Expense	1,700	
Supplies Expense	315	
Wages Expense	750	
	$ 39,250	$ 39,250

Nathan's Donut School
Income Statement
For the Month Ended March 31, 2015

Revenues:		
Service Revenue		$ 3,500
Expenses:		
Rent Expense	$ 1,700	
Wages Expense	750	
Supplies Expense	315	
Advertising Expense	250	
Total Expenses		3,015
Net Income		$ 485

Prior to this stage, you have already calculated the balances for each account. Therefore, all you must do to complete the Income Statement is to place those balances in the proper format, as shown here. Don't forget to always include a three-line header, as this is a required element.

Preparing the Statement of Owner's Equity

The Statement of Owner's Equity is often referred to as a reconciliation, as it displays the activity within the equity account(s). The statement can be used to reconcile the manner in which the beginning balance, and transactions during the period, led to the ending balance.

As equity represents the portion of the assets to which the owner can lay claim, it is important for the owner to have a clear understanding of its derivation. Similar to the Income Statement, it is important to note that all balances within the Statement of Owner's Equity have already been calculated. The task here is to simply organize them in the correct manner.

The Statement of Owner's Equity illustrates how the ending Owner's Equity balance is calculated.

Auto Repair Center
Statement of Owner's Equity
For the Month Ended June 30, 2015

Mark Mayhew, Capital, June 1			$ 225,000
Add:	Net Income	$ 25,700	
	Investment	5,000	
		30,700	
Less:	Mark Mayhew, Drawing	5,000	
Increase in Owner's Equity			25,700
Mark Mayhew, Capital, June 30			$ 250,700

NOTE! Notice that the date is displayed in the same manner as that shown on the Income Statement. The Statement of Owner's Equity also displays activity over a period of time.

The Statement of Owner's Equity includes Net Income, which was previously calculated on the Income Statement. For this reason, the Statement of Owner's Equity will always be the second financial statement that is prepared. The Income Statement must first be completed so that the Net Income figure will be available for insertion within the Statement of Owner's Equity.

Case In Point 5-2 Prepare the Statement of Owner's Equity

In this example, we will use the account balances displayed earlier in this chapter to prepare a Statement of Owner's Equity for the first month of operations of Nathan's Donut School.

Nathan's Donut School
Statement of Owner's Equity
For the Month Ended March 31, 2015

Nathaniel H. Spencer, Capital, March 1			$ -
Add:	Net Income	$ 485	
	Investment	35,000	
		35,485	
Less:	Nathaniel H. Spencer, Drawing	400	
Increase in Owner's Equity			35,085
Nathaniel H. Spencer, Capital, March 31			$ 35,085

Because Nathan's Donut School experienced Net Income during the first month of operations, this amount was added within the Statement of Owner's Equity. If Nathan's Donut School had instead experienced a Net Loss (expenses exceed revenues), then that amount would have been subtracted on the Statement of Owner's Equity. This is because a Net Loss reduces the portion of assets to which the owner can lay claim, and therefore reduces total Owner's Equity.

Preparing the Balance Sheet

The Balance Sheet is designed to prove that the accounting equation remains in balance at the end of the period. The Balance Sheet displays all asset, liability and equity account balances that have not been listed within an earlier financial statement.

NOTE! As the revenue, expense, and withdrawal account balances have been listed within the previous two financial statements, their individual balances are not included within the Balance Sheet.

The ending Owner's Equity balance is displayed within the equity section of the Balance Sheet. This ending Owner's Equity balance is the final figure calculated within the Statement of Owner's Equity. Therefore, the Balance Sheet must be prepared after the Statement of Owner's Equity, and is always the third financial statement to be completed.

The Balance Sheet is, essentially, an expanded display of the accounting equation.

Auto Repair Center
Balance Sheet
June 30, 2015

Assets:		
Cash	$ 175,000	
Accounts Receivable	31,800	
Prepaid Insurance	7,500	
Buildings	22,000	
Land	35,700	
Total Assets		$ 272,000
Liabilities:		
Accounts Payable	21,300	
Owner's Equity:		
Mark Mayhew, Capital	250,700	
Total Liabilities & Owner's Equity		$ 272,000

The Balance Sheet can be configured in two different ways. It can be designed to display all asset balances at the top of the statement, and all liability and owner's equity balances at the bottom of the statement. Alternatively, assets can be displayed on the left, with liabilities and owner's equity on the right. With either configuration, the goal is to illustrate that Total Assets are equal to Total Liabilities and Owner's Equity.

NOTE! Unlike the Income Statement and the Statement of Owner's Equity, the Balance Sheet is a "snapshot," which displays account balances as of a single point in time. For this reason, only the date for which the Balance Sheet is prepared (typically the last day of the period) will be displayed within the header.

Case In Point 5-3 Prepare the Balance Sheet

In this example, we will use the account balances displayed earlier in this chapter to prepare a Balance Sheet for the first month of operations of Nathan's Donut School.

Nathan's Donut School
Balance Sheet
March 31, 2015

Assets:		
Cash	$ 12,300	
Accounts Receivable	2,350	
Supplies	185	
Furniture	1,000	
Equipment	20,000	
Total Assets		$ 35,835
Liabilities:		
Accounts Payable	-	
Wages Payable	750	
Owner's Equity:		
Nathaniel H. Spencer, Capital	35,085	
Total Liabilities & Owner's Equity		$ 35,835

Just like the accounting equation, the Balance Sheet must always be in balance (assets must equal liabilities + owner's equity). If the Balance Sheet does not balance, you must review each account balance to determine where the error lies.

Setting Up the Statement of Cash Flows

Cash is the most important asset on any company's books. For this reason, keeping a close eye on the factors that led to the current cash balance is vital. Therefore, the fourth financial statement, the Statement of Cash Flows, is devoted to displaying all activity related to the cash account.

The Statement of Cash Flows includes three sections.

1. The Operating Activities section is listed first, and shows all cash-related activity that was associated with the standard revenue-generating operations of the company. Basically, any receipt or use of cash associated with the daily running of the business is included here.
2. The Investing Activities section is shown next within the Statement of Cash Flows. It displays any cash that was spent on long-term (fixed) assets, or cash that was received from the sale of such assets.

3. The Financing Activities section is the third and final section within the Statement of Cash Flows. It shows any cash-related activity associated with stocks, bonds, withdrawals, or long-term liabilities (amounts owed for longer than one year). Any cash received from these activities, or paid out for these activities, is included in this section.

The Statement of Cash Flows provides a detailed view of the activity within the Cash account.

Auto Repair Center
Statement of Cash Flows
For the Month Ended June 30, 2015

Operating Activities:		
Cash Received from Customers		$ 34,800
Cash Paid for Inventory	$ 25,200	
Cash Paid for Salaries Expense	3,000	
Cash Paid for General & Admin Exp.	2,840	31,040
Net Cash Flow From Operating Activities		$ 3,760
Investing Activities:		
Cash Received for Sale of Equipment		12,100
Cash Paid for Buildings	5,000	
Cash Paid for Land	9,000	14,000
Net Cash Flow Used By Investing Activities		$ (1,900)
Financing Activities:		
Cash paid for Withdrawals		5,000
Net Cash Flow Used By Financing Activities		$ (5,000)
Decrease in Cash Balance		(3,140)
Beginning Cash Balance		178,140
Ending Cash Balance		$ 175,000

WARNING! Remember, the Statement of Cash Flows only includes activities in which ***cash*** changed hands. If, for instance, furniture is purchased on account, this transaction would not be displayed on the Statement of Cash Flows, as it did not involve the Cash account.

Although the completion of the Statement of Cash Flows is beyond the scope of this book, you will find it very helpful to have an understanding of the different sections within the statement.

Case In Point 5-4 Determine Where Activities Belong Within the Statement of Cash Flows

In these examples, we will indicate the section of the Statement of Cash Flows (Operating Activities section, Investing Activities section, or Financing Activities section) in which each item belongs.

1. Purchase of a truck with cash.

   The purchase or sale of a fixed asset, such as a truck, is displayed within the ***Investing Activities*** section.

2. Sale of bonds for cash.

   Any transaction involving bonds in which cash changes hands is displayed within the ***Financing Activities*** section.

3. Withdrawal of cash by the owner.

   Owner withdrawals are not a typical element of a company's ongoing operations, and therefore do not appear within the Operating Activities section. Instead, similar to cash transactions involving stocks and bonds, an owner withdrawal appears within the ***Financing Activities*** section.

4. Payment of telephone expense.

   As this activity is part of a company's ongoing operations, it appears within the ***Operating Activities*** section.

5. Receipt of cash from a customer.

   Similar to a typical expense, cash received from a customer in exchange for goods or services is displayed in the ***Operating Activities*** section.

6. Sale of equipment for cash.

   Equipment is a fixed asset, and therefore the sale of equipment appears within the ***Investing Activities*** section.

Closing the Entries

All accounts can be divided into two groups: *temporary accounts* and *permanent accounts*.

- A temporary account is closed (zeroed out) at the end of each period. Temporary accounts are the revenue, expense, and withdrawal accounts.
- All other accounts are classified as permanent accounts, for which account balances are carried over from one period to the next. This means that, for these accounts, the ending balance for one period automatically becomes the beginning balance for the next period.

The closing entry process, during which all temporary accounts are closed, requires four journal entries. These entries are always completed in the same order.

1. The first entry closes the revenue account(s)
2. The second entry closes the expense account(s)
3. The third entry closes the Income Summary account
4. The fourth entry closes the withdrawal account(s)

Income Summary is a holding account that is used to facilitate the closing entry process. The income summary account will always have a zero balance after the closing process is complete.

The four closing entries are always completed in the order shown here.

12/31	Service Revenue	XXX	
	Interest Revenue	XXX	
	Income Summary		XXX
	Closing entry to close revenue account(s)		
12/31	Income Summary	XXX	
	Insurance Expense		XXX
	Office Expense		XXX
	Salaries Expense		XXX
	Utilities Expense		XXX
	Closing entry to close expense account(s)		
12/31	Income Summary	XXX	
	John Doe, Capital		XXX
	Closing entry to close Income Summary account		
12/31	John Doe, Capital	XXX	
	John Doe, Drawing		XXX
	Closing entry to close withdrawal account.		

Notice that the revenue accounts are debited in the first closing entry. This is necessary because revenue accounts have a normal credit balance. A debit serves to offset this credit balance, and to therefore reduce the revenue account balance to zero (close the account). Similarly, as expense accounts and withdrawal accounts have a normal debit balance, these accounts must be credited in order to reduce their balances to zero.

If revenues exceed expenses (leading to net income, as in the example above), then the Income Summary account will have a credit balance after the second closing entry. As a result, in order to close the Income Summary account in the third closing entry, a debit to the account is required. If expenses exceed revenues (net loss), then the circumstance is reversed, and a credit to Income Summary is required in the third closing entry.

After the closing entries have been recorded, a final trial balance called the *Post-Closing Trial Balance* is completed.

Case In Point 5-5 Record Closing Entries

In this example, we will record the four closing entries for the first month of operations of Nathan's Donut School. The balances of the temporary accounts (as well as the Capital account) after the adjusting entries are as follows:

Nathaniel H. Spencer, Capital	
	$ 35,000
	$ 35,000

Nathaniel H. Spencer, Drawing	
$ 400	
$ 400	

Service Revenue	
	$ 850
	$ 2,500
	$ 150
	$ 3,500

Advertising Expense	
$ 250	
$ 250	

Rent Expense	
$ 1,700	
$ 1,700	

Supplies Expense	
$ 315	
$ 315	

Wages Expense	
$ 750	
$ 750	

3/31	Service Revenue	3,500	
	Income Summary		3,500
	Closing entry to close revenue account(s)		
3/31	Income Summary	3,015	
	Rent Expense		1,700
	Wages Expense		750
	Supplies Expense		315
	Advertising Expense		250
	Closing entry to close expense account(s)		
3/31	Income Summary	485	
	Nathaniel H. Spencer, Capital		485
	Closing entry to close Income Summary account		
3/31	Nathaniel H. Spencer, Capital	400	
	Nathaniel H. Spencer, Drawing		400
	Closing entry to close withdrawal account.		

To determine the correct amount for the third closing journal entry, create an Income Summary T-Account after the second entry is complete. It will then be easy to see that the Income Summary has a credit balance after the second closing entry. A debit to Income Summary in the third closing entry is necessary, then, to offset the $485 credit balance.

Income Summary	
$ 3,015	$ 3,500
	$ 485

Completing the Post-Closing Trial Balance

The final step in the accounting cycle is the completion of the Post-Closing Trial Balance. The Post-Closing Trial Balance is completed in the same manner as the Unadjusted Trial Balance and the Adjusted Trial Balance. The primary distinction is that the Post-Closing Trial Balance will include only the permanent accounts, as all of the temporary accounts are closed prior to the completion of this final trial balance. Therefore, the Post-Closing Trial Balance is the shortest of the three trial balances.

[Company Name]
Post-Closing Trial Balance
[Date]

	Debit	Credit
Cash	$ XXX	
Accounts Receivable	XXX	
Supplies	XXX	
Furniture	XXX	
Equipment	XXX	
Accounts Payable		$ XXX
Nathaniel H. Spencer, Capital		XXX
	$ XXX	$ XXX

NOTE! As with the previous trial balances, the Post-Closing Trial Balance must display equal totals for debits and credits.

Prior to the completion of the Post-Closing Trial Balance, the Statement of Owner's Equity was used to determine the ending balance of the capital account. The Post-Closing Trial Balance displays this ending balance. This is another distinction between the Post-Closing Trial Balance and the previous trial balances, as those earlier versions did not contain the ending capital balance.

Case In Point 5-6 Complete the Post-Closing Trial Balance

In this example, we will use the previously-utilized balances within the financial statements to complete the Post-Closing Trial Balance.

Nathan's Donut School
Post-Closing Trial Balance
March 31, 2015

	Debit	Credit
Cash	$ 12,300	
Accounts Receivable	2,350	
Supplies	185	
Furniture	1,000	
Equipment	20,000	
Accounts Payable		$ -
Wages Payable		750
Nathaniel H. Spencer, Capital		35,085
	$ 35,835	$ 35,835

The balances displayed within the Post-Closing Trial Balance are the ending balances for all permanent accounts. Therefore, these balances automatically become the beginning balances for the next period.

The balance within the Nathaniel H. Spencer, Capital account has increased in comparison to that shown on the Adjusted Trial Balance. This is the result of the recording of the closing journal entries.

Concepts Review

To check your knowledge of the key concepts introduced in this chapter, complete the Concepts Review quiz by choosing the appropriate access option below.

If you are...	Then access the quiz by...
Using eLab	Logging in, choosing Content, and navigating to the Concepts Review quiz for this chapter
Not using eLab	Going to the Student Resource Center for this book

Putting It Together

PIT 5-1 Prepare Financial Statements and the Closing Entry Process

In this example, we will complete the Income Statement, Statement of Owner's Equity, Balance Sheet, closing journal entries, and Post-Closing Trial Balance for the first month of operations of Amber's Lacrosse Emporium. The Adjusted Trial Balance, which includes all account balances prior to the completion of the financial statements, is as follows:

Amber's Lacrosse Emporium
Adjusted Trial Balance
May 31, 2015

	Debit	Credit
Cash	$ 46,565.00	
Accounts Receivable	2,350.00	
Supplies	275.00	
Inventory	13,550.00	
Furniture	2,000.00	
Accum. Depreciation - Furniture		$ 25.00
Equipment	12,000.00	
Accum. Depreciation - Equipment		237.50
Accounts Payable		2,000.00
Wages Payable		850.00
Amber Stein, Capital		75,000.00
Amber Stein, Drawing	600.00	
Sales Revenue		6,850.00
Service Revenue		1,450.00
Cost of Goods Sold	3,450.00	
Advertising Expense	600.00	
Rent Expense	1,500.00	
Wages Expense	2,450.00	
Telephone Expense	135.00	
Utilities Expense	200.00	
Supplies Expense	475.00	
Depreciation Expense	262.50	
	$ 86,412.50	$ 86,412.50

1. Based on the account balances within the Adjusted Trial Balance, we first complete the Income Statement.

Amber's Lacrosse Emporium
Income Statement
For the Month Ended May 31, 2015

Revenues:		
Sales Revenue	$ 6,850.00	
Service Revenue	1,450.00	
Total Revenue		$ 8,300.00
Expenses:		
Cost of Goods Sold	3,450.00	
Wages Expense	2,450.00	
Rent Expense	1,500.00	
Advertising Expense	600.00	
Supplies Expense	475.00	
Depreciation Expense	262.50	
Utilities Expense	200.00	
Telephone Expense	135.00	
Total Expenses		9,072.50
Net Loss		$ (772.50)

Amber's Lacrosse Emporium incurred greater expenses during its first month of operations than revenues earned. As a result, a Net Loss is shown as the final figure within the Income Statement instead of Net Income.

2. Based on the account balances displayed within the Adjusted Trial Balance, we then complete the Statement of Owner's Equity.

Amber's Lacrosse Emporium
Statement of Owner's Equity
For the Month Ended May 31, 2015

Amber Stein, Capital, May 1			$ -
Add:	Investment	$ 75,000.00	
Less:	Net Loss	772.50	
	Mark Mayhew, Drawing	600.00	
Increase in Owner's Equity			73,627.50
Amber Stein, Capital, May 31			$ 73,627.50

Unlike Net Income, a Net Loss is subtracted on the Statement of Owner's Equity.

TIP! Remember that the Net Loss amount within the Statement of Owner's Equity is taken from the bottom of the Income Statement.

3. Based on the account balances displayed within the Adjusted Trial Balance, we now complete the Balance Sheet.

Amber's Lacrosse Emporium
Balance Sheet
May 31, 2015

Assets:			
Cash		$ 46,565.00	
Accounts Receivable		2,350.00	
Supplies		275.00	
Inventory		13,550.00	
Furniture	$ 2,000.00		
Accum. Dep. - Furniture	25.00	1,975.00	
Equipment	12,000.00		
Accum. Dep. - Equipment	237.50	11,762.50	
Total Assets			$ 76,477.50
Liabilities:			
Accounts Payable		2,000.00	
Wages Payable		850.00	
Owner's Equity:			
Amber Stein, Capital		73,627.50	
Total Liabilities & Owner's Equity			$ 76,477.50

When Accumulated Depreciation is displayed on the Balance Sheet, it is listed directly beneath its associated asset account, and both amounts are displayed in a column to the left. The Net Book Value (Cost – Accumulated Depreciation) is then calculated and displayed directly to the right.

TIP! Remember that the Amber Stein, Capital amount within the Balance Sheet is taken from the bottom of the Statement of Owner's Equity.

4. Next, we record the four closing entries necessary to close the temporary accounts.

5/31	Sales Revenue	6,850.00	
	Service Revenue	1,450.00	
	Income Summary		8,300.00
	Closing entry to close revenue account(s)		
5/31	Income Summary	9,072.50	
	Cost of Goods Sold		3,450.00
	Wages Expense		2,450.00
	Rent Expense		1,500.00
	Advertising Expense		600.00
	Supplies Expense		475.00
	Depreciation Expense		262.50
	Utilities Expense		200.00
	Telephone Expense		135.00
	Closing entry to close expense account(s)		
5/31	Amber Stein, Capital	772.50	
	Income Summary		772.50
	Closing entry to close Income Summary account		
5/31	Amber Stein, Capital	600.00	
	Amber Stein, Drawing		600.00
	Closing entry to close withdrawal account.		

Because Amber's Lacrosse Emporium experienced a Net Loss, the Income Summary account contained a ***debit*** balance of $772.50 after the second closing entry. Therefore, as a result of the Net Loss, the Income Summary account was credited in the third closing entry in order to close it.

5. Lastly, we prepare the Post-Closing Trial Balance.

Amber's Lacrosse Emporium
Post-Closing Trial Balance
May 31, 2015

	Debit	Credit
Cash	$ 46,565.00	
Accounts Receivable	2,350.00	
Supplies	275.00	
Inventory	13,550.00	
Furniture	2,000.00	
Accum. Dep. - Furniture		$ 25.00
Equipment	12,000.00	
Accum. Dep. - Equipment		237.50
Accounts Payable		2,000.00
Wages Payable		850.00
Amber Stein, Capital		73,627.50
	$ 76,740.00	$ 76,740.00

Notice that you must show the Accumulated Depreciation accounts on their own lines, with the balances appearing in the credit column.

Knowledge Check A

KCa 5-1 Determine the Purpose of Each Financial Statement

Write one or two sentences for the listed financial statement, indicating the primary information conveyed within each.

1. Income Statement

2. Statement of Owner's Equity

3. Balance Sheet

4. Statement of Cash Flows

KCa 5-2 Prepare an Income Statement

Use the following Adjusted Trial Balance to prepare the Income Statement for the first month of operations of Max Energy, Inc. as of July 31, 2015. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

Max Energy, Inc.
Adjusted Trial Balance
July 31, 2015

	Debit	Credit
Cash	$ 212,000	
Accounts Receivable	24,500	
Supplies	1,575	
Prepaid Insurance	2,300	
Equipment	18,000	
Accum. Depreciation - Equipment		$ 150
Truck	24,000	
Accum. Depreciation - Truck		400
Land	65,000	
Accounts Payable		37,500
Notes Payable		11,000
Service Revenue		35,500
Interest Revenue		125
Advertising Expense	1,450	
Automobile Expense	975	
Depreciation Expense	550	
Insurance Expense	100	
Supplies Expense	425	
Telephone Expense	885	
Wages Expense	3,200	
Utilities Expense	400	
Max Granger, Drawing	1,000	
Max Granger, Capital		271,685
	$ 356,360	$ 356,360

Notice that the Land account does not have an associated Accumulated Depreciation account. Although Land is a fixed asset, it is never depreciated, and therefore does not have an associated Accumulated Depreciation account.

KCa 5-3 Prepare a Statement of Owner's Equity

Use the Adjusted Trial Balance in KCa 5-2 to prepare a Statement of Owner's Equity for the first month of operations of Max Energy, Inc. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

KCa 5-4 Prepare a Balance Sheet

Use the Adjusted Trial Balance in KCa 5-2 to prepare a Balance Sheet for the first month of operations of Max Energy, Inc. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

KCa 5-5 Complete the Closing Entry Process

Use the Adjusted Trial Balance in KCa 5-2 to prepare the Closing Journal Entries for the first month of operations of Max Energy, Inc. You will then complete the Post-Closing Trial Balance. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

KCa 5-6 Prepare an Income Statement

Use the following account balances to prepare the Income Statement for the first month of operations of Munchkin Snacks, Corp. as of September 30, 2015. Note that not all of the following account balances will be necessary to complete the Income Statement. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

Account Name	Account Balance
Accounts Payable	$8,750
Telephone Expense	$700
Accounts Receivable	$5,400
Utilities Expense	$825
Office Expense	$225
Equipment	$8,200
Joe Munch, Capital	$46,875

Account Name	Account Balance
Inventory	$3,000
Sales Revenue	$7,500
Joe Munch, Drawing	$575
Cash	$42,000
Rent Expense	$2,200
Depreciation Expense	$100
Accum. Dep. - Equip	$100

KCa 5-7 Prepare a Statement of Owner's Equity

Use the account balances in KCa 5-6 to prepare a Statement of Owner's Equity for the first month of operations of Munchkin Snacks, Corp. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

KCa 5-8 Prepare a Balance Sheet

Use the account balances in KCa 5-6 to prepare a Balance Sheet for the first month of operations of Munchkin Snacks, Corp. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

KCa 5-9 Complete the Closing Entry Process

Use the account balances in KCa 5-6 to prepare the Closing Journal Entries for the first month of operations of Munchkin Snacks, Corp. Then complete the Post-Closing Trial Balance. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

Knowledge Check B

KCb 5-1 Explain the Benefits of Completing Closing Entries

Write four to five sentences in which you discuss the reasons why the closing process is necessary, and how it facilitates the assessment of a company's performance.

KCb 5-2 Prepare an Income Statement

Use the following Adjusted Trial Balance to prepare the Income Statement for the first month of operations of Crime Investigators as of October 31, 2015. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

Crime Investigators
Adjusted Trial Balance
October 31, 2015

	Debit	Credit
Cash	$ 27,000	
Accounts Receivable	4,000	
Supplies	1,000	
Equipment	10,000	
Accum. Depreciation - Equipment		$ 150
Accounts Payable		6,200
Salaries Payable		400
Melina Giles, Capital		32,190
Melina Giles, Drawing	1,100	
Service Revenue		8,500
Advertising Expense	400	
Supplies Expense	1,000	
Telephone Expense	650	
Salaries Expense	1,800	
Utilities Expense	490	
	$ 47,440	$ 47,440

KCb 5-3 Prepare a Statement of Owner's Equity

Use the Adjusted Trial Balance in KCb 5-2 to prepare a Statement of Owner's Equity for the first month of operations of Crime Investigators. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

KCb 5-4 Prepare a Balance Sheet

Use the Adjusted Trial Balance in KCb 5-2 to prepare a Balance Sheet for the first month of operations of Crime Investigators. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

KCb 5-5 Complete the Closing Entry Process

Use the Adjusted Trial Balance in KCb 5-2 to prepare the Closing Journal Entries for the first month of operations of Crime Investigators. You will then complete the Post-Closing Trial Balance. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

KCb 5-6 Prepare an Income Statement

Use the following account balances to prepare the Income Statement for the first month of operations of Dollar Bill Enterprises as of April 30, 2015. Note that not all of the following account balances will be necessary to complete the Income Statement. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

Account Name	Account Balance
Land	$10,000
Cash	$8,750
Rent Expense	$1,200
Service Revenue	$3,200
Bill Samuels, Drawing	$800
Insurance Expense	$90
Supplies Expense	$500

Account Name	Account Balance
Prepaid Insurance	$2,000
Bill Samuels, Capital	$23,875
Salaries Expense	$950
Accounts Receivable	$700
Interest Revenue	$65
Auto Expense	$650
Supplies	$1,500

KCb 5-7 Prepare a Statement of Owner's Equity

Use the account balances in KCb 5-6 to prepare a Statement of Owner's Equity for the first month of operations of Dollar Bill Enterprises. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

KCb 5-8 Prepare a Balance Sheet

Use the account balances in KCb 5-6 to prepare a Balance Sheet for the first month of operations of Dollar Bill Enterprises. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

KCb 5-9 Complete the Closing Entry Process

Use the account balances in KCb 5-6 to prepare the Closing Journal Entries for the first month of operations of Dollar Bill Enterprises. Then complete the Post-Closing Trial Balance. An Excel template, in which you may record your answer(s), can be found in the Student Resource Center.

6
Computerized Systems, Cash, & Payroll

LEARNING OBJECTIVES

After studying this chapter, you will be able to:

- **Describe appropriate internal control procedures**
- **Prepare a bank reconciliation**
- **Calculate both employer and employee payroll taxes**
- **Record journal entries for payroll**
- **Describe a computerized accounting system**

Cash and payroll are both addressed within the accounting cycle, however due to their complexity, they warrant additional consideration. Cash must be monitored closely, in order to ensure that it has not been stolen or lost. When payroll is calculated, employers must determine not only the gross pay owed, but also the amounts to be withheld from each paycheck. Employers also must pay some additional payroll taxes along with these withheld amounts. Another topic to be addressed is computerized accounting systems, which can greatly improve the efficiency of the recording process. In this chapter, you will examine internal control procedures for cash, bank reconciliations, and journal entries for petty cash. You will also calculate payroll taxes that are owed by the employer and the employee, and examine the benefits of a computerized accounting system.

CASE STUDY

Monitoring Cash & Calculating Payroll for Nathan's Donut School

You have now completed the entire accounting cycle, but there are certain topics that you would like to examine in further detail. Nathaniel is concerned that all cash is properly accounted for, and therefore wants assurances that it is being monitored closely. He has also asked how the payroll taxes for Nathan's Donut School are calculated. Finally, he is considering purchasing a computerized accounting system, and would like you to help him with this decision.

You begin by considering methods that can be used to monitor cash. You determine that certain internal control procedures can help to safeguard cash. To this end, you also examine petty cash journal entries and bank reconciliations. You then examine the calculations for payroll. You know that both the employee and the employer must pay payroll taxes, and that separate journal entries are necessary for each. You look closely at each type of tax, so that you can fully explain them to Nathaniel. You then research computerized accounting systems, and learn of both the benefits and drawbacks.

A bank reconciliation ensures that all cash-related activity has been accounted for.

Nathan's Donut School
Bank Reconciliation
April 30, 2015

Bank Statement Balance			$ 14,250	Book Balance		$ 13,700
Add:				Add:		
Deposits in Transit			$ 355	Note Receivable		$ 600
			$ 14,605			$ 14,300
Deduct:				Deduct:		
Outstanding Checks:	#007	$ 145		NSF Check	$ 250	
	#013	$ 35		Bank Charges	$ 75	$ 325
	#015	$ 90				
Bank error for check #009		$ 360	$ 630			
Adjusted Bank Balance			$ 13,975	**Adjusted Book Balance**		$ 13,975

Safeguarding Cash

The Statement of Cash Flows provides an overview of all cash-related activity for a period of time. However, this financial statement is only completed at the end of each period. So, how can you ensure that cash is being safeguarded on an ongoing basis during the period? The proper application of internal control procedures can greatly facilitate this process.

Using Internal Controls

There are a number of procedures that an organization can undertake to ensure that cash is properly safeguarded. Collectively, these are referred to as **Internal Control Procedures**. Among these procedures are the following:

- *Maintaining Physical Safeguards*: Cash registers should be accessible only by authorized employees, and should be routinely emptied. Cash should be deposited in the bank on a daily basis, and any cash kept at the location of business should be maintained in a lockbox or otherwise secured.
- *Segregation of Duties*: The cash-related recordkeeping duties should be performed by an employee who does not physically handle cash. This ensures that the same person cannot both steal money and alter the accounting records to hide the theft.
- *Transaction Authorization*: Cash-related transactions exceeding a predetermined amount (such as withdrawing large sums from a bank account, or approving large cash returns) should be authorized by a manager or owner. This ensures that large transactions, which can have a significant impact on the cash account, are reviewed prior to their completion.
- *Record Retention*: All cash-related supporting materials (such as check stubs, bank statements, and voided checks) should be retained for a period of at least seven years. This ensures that transactions can be properly reviewed if questions regarding their validity are raised.

Case In Point 6-1 Identify the Disregarded Internal Control

In these examples, we will read four independent circumstances. We will then identify the internal control procedure that, if properly followed, could have prevented the circumstance.

1. Express Assistance Corp. has a current cash balance of $24,000. A recently hired junior employee completes the purchase of $22,000 of furniture, and delivers a check to the seller. Upon learning of this, the owner is frustrated that such a large portion of the company's cash was spent in this manner.

   The internal control procedure that would have prevented this circumstance is ***Transaction Authorization***. If the owner had required all employees to obtain his authorization for large cash-related transactions, he could have more closely monitored cash outflows such as this.

2. Electronic World, Inc. sells large electronic equipment. One evening, after the store has closed and all employees have gone home, a robbery occurs. The next day the manager confirms that two days' worth of sales, totaling $23,500, was stolen from the cash register.

   In this instance, ***Maintaining Physical Safeguards*** would have prevented the loss of such a large amount of cash. The cash register should have been emptied at regular intervals, so that only smaller totals were contained therein at any given time. This money then should have been deposited in the bank each day, so that only a small amount of cash was available to be stolen from inside the store after closing.

3. Wallpaper House is a seller and installer of a wide variety of wallpaper. The company recently switched accountants, and the new accountant has conducted a thorough review of the company's prior financial statements and tax returns. Upon completion of this review, the new accountant believes that a significant amount of cash is missing. No further investigation can be performed, as no additional records are available for review.

   Record Retention would have allowed for a more thorough investigation in this circumstance. This investigation, which would have examined documents such as check stubs and payment vouchers (which contain itemized payment details), could have uncovered when the cash went missing, and who was responsible.

4. Old World Cabinetry is a small company with six employees. John was recently hired, and was placed in charge of billing and payments. John creates a fake bill from one of the company's vendors, and cuts a check to *cash* in order to pay this bill. He then deposits the money into his personal bank account.

   This theft could have been avoided through the proper implementation of ***Segregation of Duties***. The individual responsible for managing billing and payments should not also be able to write checks. If a different individual was placed in charge of writing checks, then John couldn't have stolen the cash.

A Closer LOOK

Can Internal Controls Prevent All Theft?

Effective internal controls can prevent a great deal of theft (and the accidental loss of assets) from occurring. However, it is almost impossible for a company to create such effective controls that no theft can occur. For example, the segregation of duties ensures that no single individual has control over both the handling of cash, and the recordkeeping for the cash. The result is that one person cannot manipulate the accounting records to hide a theft. But what if two people work together to steal cash? This is referred to as **Collusion**, and is much more difficult for a company to prevent.

One step that companies can take to combat collusion is to undertake both internal audits and/or external audits. An **Internal Audit** involves company employees (in a different department from those handling cash) reviewing a random sampling of transactions. Supporting documentation is examined for each of the selected transactions to verify that they have been accurately recorded. Although collusion can still occur if internal auditors are involved, it is far more difficult to successfully manage.

An **External Audit** involves the same process, but is completed by an outside organization. Public corporations are required to have external audits completed on an annual basis, so that the audit firm can sign off on the accuracy of the publicly-issued financial statements. However, any company can hire an external audit firm. As external auditors do not work for the company being examined, the possibility of collusion is significantly diminished (in comparison to an internal audit) when an external audit is undertaken.

Recording Petty Cash

The proper recording of **Petty Cash** is another element that helps to safeguard a company's cash. Many companies maintain a lockbox, which is often overseen by an administrative assistant, containing a small amount of petty cash. This cash is used for incidental purchases such as postage expense (purchase of stamps or delivery of packages), or miscellaneous expense (pizza for all employees, for example).

When cash is first set aside for these purposes, a petty cash fund is established through the recording of the following journal entry:

11/5	Petty Cash	500	
	Cash		500
	Establishment of a petty cash fund		

If, over the next few weeks, the company spends $220 on postage expense, $145 on supplies, and $85 on miscellaneous expense, the following journal entry would be recorded when the fund is replenished:

11/18	Postage Expense	220	
	Supplies Expense	145	
	Miscellaneous Expense	85	
	Cash		450
	Replenishment of the petty cash fund		

TIP! Notice that the *Petty Cash* account is not included in the above journal entry. This account is only used when the petty cash fund is first established, or when the amount within the petty cash fund is altered.

If, over time, the company believes that more money is necessary within the petty cash fund, the following journal entry would be booked to reflect this increase:

1/20	Petty Cash	100	
	Cash		100
	Increase of the petty cash fund		

Case In Point 6-2 Create, Replenish, and Adjust the Petty Cash Fund

In these examples, we will record the necessary journal entries for Nathan's Donut School to establish, replenish, and increase the total value of the petty cash fund during its second month of operations.

1. On April 2, Nathan's Donut School decides that it should keep some cash on hand at the front desk. Therefore, it establishes a petty cash fund containing $250.

4/2	Petty Cash	250	
	Cash		250
	Establishment of a petty cash fund		

2. As of April 19, Nathan's Donut School spent $85 of petty cash on postage, $45 on supplies, and $110 on miscellaneous expenses.

4/19	Postage Expense	85	
	Supplies Expense	45	
	Miscellaneous Expense	110	
	Cash		240
	Replenishment of the petty cash fund		

3. On May 5, Nathan's Donut School decides to increase its petty cash fund by $100, as it expects more petty cash purchases in the future.

5/5	Petty Cash	100	
	Cash		100
	Increase of the petty cash fund		

Preparing a Bank Reconciliation

Companies receive a bank statement for each of their bank accounts on a monthly basis. Certain business activities occur over the course of a month that are apparent to the company, but of which the bank is unaware. There are also some activities that the bank knows about, but of which the company is unaware. As a result, the balance displayed on the bank statement often differs from the cash balance within the General Ledger. Another key component of maintaining close controls over cash is ensuring that the company can account for these differences.

In order to ensure that all cash is accounted for, in spite of the different balances, a **Bank Reconciliation** is completed. The bank reconciliation displays all reconciling items, which are those items that account for the differences between the bank balance and the book (general ledger) balance.

A Bank Reconciliation is divided into two sides: the bank side on the left and the book side on the right.

Azzara Theme Park Guides
Bank Reconciliation
January 31, 2015

Bank Statement Balance			$ 26,500	Book Balance			$ 27,200
Add:				Add:			
Deposits in Transit			$ 1,250	Note Receivable		$ 400	
			$ 27,750	Error in recording check #2174		$ 220	$ 620
							$ 27,820
Deduct:				Deduct:			
Outstanding Checks:	#2156	$ 650		NSF Check		$ 1,800	
	#2162	$ 1,225	$ 1,875	Bank Charges		$ 145	$ 1,945
Adjusted Bank Balance			$ 25,875	**Adjusted Book Balance**			$ 25,875

Evaluating a Reconciling Item

When considering where a reconciling item should be placed on the bank reconciliation, a two-step process should be used. First, determine which party (the bank or the company) was unaware of the reconciling item during the period. This is the side on which the reconciling item will be placed. Second, determine whether the reconciling item increased or decreased the cash balance. This allows you to determine whether each item should be added to or subtracted from its designated side.

Step 1	Determine if the reconciling item should be on the bank side or the book side.
Step 2	Determine if the reconciling item should be added or subtracted.

There are a number of common reconciling items that appear within the majority of bank reconciliations. These include:

- **Deposit in Transit**: This represents a deposit that is made on one of the last days of the month. For these deposits, the bank was unable to process them prior to the end of the month, and therefore has not included them within the bank statement. However, since the company was aware of the deposit prior to the end of the month, it has included the deposit within the cash balance. As the bank was unaware of this reconciling item, it is placed on the bank side. As this deposit serves to increase the cash balance, it is added to the bank side.
- **Outstanding Check**: This is a check that has been written by the company, but has not yet been cashed by the payee. Because these checks have not yet been cashed, the bank is unaware of them. As these checks reduce the cash balance, they are subtracted from the bank side.
- ***Note Receivable Collected by the Bank***: In some instances, note receivables can be paid by customers directly into a company's bank account. In this case, the company is unaware that cash has been deposited. Since the deposit increases the cash balance, it is added to the book side.
- **NSF Check**: This is often referred to as an *insufficient funds check* or a *nonsufficient funds check*. These checks are received and deposited by the company into its bank account. However, because the payer does not have enough money in its account to cover the check, it is subsequently rejected (the check bounces). When this happens, the bank reduces the balance of the company's account, but the company is unaware that this has occurred. As this reversal of the deposited check decreases the cash balance, it is subtracted from the book side.
- **Bank Charges**: This can be levied by the bank for a variety of reasons such as low balances or the receipt of NSF Checks. The company is not initially informed that these charges are being levied (it doesn't learn of this until the bank statement arrives). As these charges reduce the cash balance, these charges are subtracted from the book side.

NOTE! Each of the above items will always appear in the same location within every bank reconciliation.

- ***Errors***: These are the only reconciling items that can be found in different locations within the bank reconciliation. For example, assume the bank erroneously records a deposit of $2,000 as being a deposit of only $200. As this error resulted in too little cash being added to the bank account, the $1,800 ($2,000 - $200) error must be added to the bank side. Alternatively, assume a check written by the company for $500 is recorded as being a payment of only $50. As this error resulted in too small a reduction of the cash balance, the $450 ($500 - $50) error must be subtracted from the book side.

WARNING! Always place a reconciling error on the side (bank or book) where the mistake was made.

Case In Point 6-3 Prepare a Bank Reconciliation

In this example, we will complete a bank reconciliation at the end of the second month of operations of Nathan's Donut School.

The bank reconciliation should be based on the following information:

- The Bank Statement displays an ending cash balance of $14,250 (**see item #1**).
- The General Ledger displays an ending cash account balance of $13,700 (**see item #2**).
- A check written by HHO Corp. for $250 was rejected by the bank for insufficient funds (**see item #3**).
- The following outstanding checks had been written by month-end (**see item #4**):

  Check #007 - $145 Check #013 - $35 Check #015 - $90

- Bank charges for the month totaled $75 (**see item #5**).
- On behalf of the company, the bank collected a Note Receivable of $600 from Speed Inc. (**see item #6**).
- Deposits in transit totaled $355 (**see item #7**).
- The bank erroneously reduced the company's bank account balance by $370 for check #009, which was written by the company for $730 (**see item #8**).

Nathan's Donut School
Bank Reconciliation
April 30, 2015

Bank Statement Balance			$ 14,250	Book Balance		$ 13,700
Add:				Add:		
Deposits in Transit			$ 355	Note Receivable		$ 600
			$ 14,605			$ 14,300
Deduct:				Deduct:		
Outstanding Checks:	#007	$ 145		NSF Check	$ 250	
	#013	$ 35		Bank Charges	$ 75	$ 325
	#015	$ 90				
Bank error for check #009		$ 360	$ 630			
Adjusted Bank Balance			$ 13,975	**Adjusted Book Balance**		$ 13,975

In this instance, the error was made by the bank, and resulted in the cash balance being too high. Therefore, the amount of the error was subtracted from the bank side to arrive at the adjusted bank balance. All other reconciling items appear in the same locations within every bank reconciliation.

Reconciling Journal Entries

As you have seen previously, every transaction must be recorded in journal entry form. Items within the bank reconciliation are no different; however certain of these items will have already been recorded prior to month-end.

All reconciling items on the bank side of the reconciliation are items of which the bank was unaware prior to month-end. However, the company knew of these items (such as deposits in transit and outstanding checks), and therefore booked journal entries to account for them prior to month-end. The items on the book side were not previously accounted for by the company though, and therefore after completion of the bank reconciliation, journal entries must be recorded for each of these.

Case In Point 6-4 Record Journal Entries from a Bank Reconciliation

In these examples, we will use the bank reconciliation completed in Case In Point 6-3 to record the necessary journal entries for Nathan's Donut School.

1.

4/30	Cash	600	
	Notes Receivable - Speed Inc.		600
	Satisfaction of note receivable from Speed Inc.		

The cash account will be impacted by every journal entry that derives from the bank reconciliation. In this instance, cash was collected for Nathan's Donut School by the bank, so the cash account is increased (debited).

2.

4/30	Bank Charges	75	
	Cash		75
	Bank Charges incurred during April		

These journal entries are recorded in the same manner as standard journal entries recorded during the period. In this instance, ***bank charges*** represent a standard expense of doing business.

3.

4/30	Accounts Receivable - HHO Corp.	250	
	Cash		250
	Re-establishment of A/R due to NSF check		

This previously owed amount had been removed from the books of Nathan's Donut School when the check was received. Now that the company is aware that the check bounced, and that the company has therefore not received the cash, this journal entry is recorded to re-establish the receivable.

TIP! Instead of recording the last two journal entries separately, they could have been recorded together in a single **Compound Journal Entry**, as both entries contain a credit to *Cash*. If this option had been selected, the journal entry would have appeared as follows:

4/30	Bank Charges	$ 75	
	Accounts Receivable - HHO Corp.	$ 250	
	Cash		$ 325
	Monthly bank charges and A/R resulting from NSF check		

Determining Payroll Calculations and Journal Entries

Similar to cash, payroll is an area that is monitored closely by most companies. As you will see, journal entries for payroll are typically more extensive than the basic example you reviewed in prior chapters.

Calculating Employee Withholdings

While the **Gross Pay** for an employee represents the total amount earned, the actual payroll check will only include the **Net Pay**, which is far less. This is the case because a number of amounts are withheld from an employee's pay, for a variety of reasons. The most common withholding amounts are as follows:

- **Social Security Tax**: Also referred to as a FICA (Federal Insurance Contributions Act) tax, this amount is withheld from the employee's pay and remitted to the Internal Revenue Service (IRS) of the federal government. This tax funds the Old Age, Survivors, and Disability Insurance (OASDI) program, and since 1990 has been calculated as 6.2% of gross pay.

NOTE! As of 2014, social security tax is calculated on only the first $117,000 of an employee's gross pay in a given year.

- **Medicare Tax**: Another FICA tax that is withheld from gross pay and remitted to the IRS, Medicare tax funds the Hospital Insurance (HI) program. Since 1994 there has been no limit on the amount of Medicare tax an employee can pay, and since 1986 it has been calculated as 1.45% of gross pay.
- **Federal Income Tax**: One of many taxes designed to fund the general operations of the federal government, federal income tax is calculated as a percentage of gross pay. The applicable percentage for an individual can be determined by examining IRS rate tables, and increases as total gross pay increases.

- **State Income Tax**: The vast majority of states require that state income tax be withheld from gross pay. These taxes can be determined through the use of the applicable state's rate table, and are used to fund the operations of the state government.
- **Voluntary Deduction**: Employees can elect to have amounts automatically withheld from their gross pay for a variety of reasons. Common voluntary deductions include retirement contributions, insurance premiums, and union dues.

When these amounts are withheld from an employee's gross pay, they are immediately owed to the associated organization. As a result, each of these withholdings is credited within the payroll journal entry as a liability. As you have previously seen, Salaries (or Wages) Expense is debited within this journal entry for the gross pay amount, while Cash is credited for the net pay amount.

Calculating Employer Payroll Taxes

In addition to the taxes that are withheld from an employee's paycheck, employers must also pay certain taxes out of their own pockets. While some of these taxes are the same as those that are withheld from an employee's pay, others are only levied on the employer.

- ***Social Security Tax***: The employer must match the social security taxes that are withheld from an employee's pay, and must remit those to the IRS as well. The employer's tax is also calculated as 6.2% of the gross pay, and as of 2014 is also subject to the aforementioned $117,000 threshold.
- ***Medicare Tax***: The employer must also match the Medicare taxes that are withheld from an employee's pay. As with the corresponding employee withholding amount, this tax is calculated as 1.45% of gross pay.
- **Federal Unemployment Tax**: Also referred to as FUTA (Federal Unemployment Tax Act) tax, this tax is used to pay unemployment benefits to qualified individuals. The tax is calculated as 6% of the first $7,000 of an employee's gross pay in a given year. However, this tax can be reduced by up to 5.4% (resulting in a FUTA tax rate of as low as 0.6%) based on the timely payment of the employer's SUTA tax.
- **State Unemployment Tax**: Also referred to as SUTA (State Unemployment Tax Act) tax, this tax is also used to pay unemployment benefits. The tax rates vary from state to state (as do the gross pay thresholds), and they offset a portion of the FUTA tax owed.

Similar to the employee withholdings, these employer payroll taxes are owed to the respective government agencies as soon as the employee earns his/her pay. As a result, these amounts are credited to liability accounts within the associated journal entry. The corresponding debit is to *payroll tax expense*, which is a standard expense account used to account for all employer payroll taxes.

Case In Point 6-5 Record Payroll Journal Entries

In this example, we will record the two necessary journal entries to account for all withholdings and employer payroll taxes of the employees of Nathan's Donut School during the first week of its second month of operations. Note that no single employee has, to date, reached the Social Security tax, FUTA tax, or SUTA tax thresholds.

1. Gross pay (wages) for all employees during the week was $4,000. Federal income tax withholding totaled $421, state income tax withholding totaled $157, and retirement fund contributions withheld totaled $40. Record the necessary journal entry on April 9 (payday) to account for all employee withholdings, and the cash paid to employees.

4/9	Wages Expense	4,000	
	Social Security Tax Payable		248
	Medicare Tax Payable		58
	Federal Income Tax Payable		421
	State Income Tax Payable		157
	Retirement Fund Payable		40
	Cash		3,076
	Weekly wages earned by employees		

The Social Security Tax Payable and Medicare Tax Payable are calculated by multiplying the applicable percentages by the $4,000 Gross Pay. The $3,076 credit to Cash represents Net Pay for the period and is calculated as gross pay of $4,000, less all payable amounts.

2. Applicable SUTA and FUTA tax rates for employees of Nathan's Donut School are 5.4% and 0.6% respectively. Now we'll record the necessary journal entry to account for all employer payroll taxes on April 9.

4/9	Payroll Tax Expense	546	
	Social Security Tax Payable		248
	Medicare Tax Payable		58
	SUTA Tax Payble		216
	FUTA Tax Payable		24
	Weekly payroll taxes owed		

Similar to Social Security and Medicare taxes, SUTA Tax Payable and FUTA Tax Payable are calculated by multiplying the applicable percentages by the $4,000 gross pay. Remember, these taxes in the second journal entry are paid out of the employer's pocket, not withheld from the employee's pay.

Utilizing Computerized Accounting Systems

Although all accounting work can be completed using pen and paper, many companies elect to employ some type of computerized accounting system. A wide variety of accounting programs, in all budget ranges, can presently be obtained. As a result, even the smallest of companies can afford to take advantage of the benefits these systems offer. Among the most important benefits are:

- *Efficiency*: Many elements of the accounting cycle, such as the preparation of trial balances, are automated within a computerized accounting system. Therefore, these systems can save the user a great deal of time.
- *Accuracy*: Because of its level of automation, a computerized accounting system highlights errors far more quickly than could be done otherwise.
- *Backup Capability*: As you saw previously, record retention is an important internal control. Digital backup copies of all accounting information can be easily created from a computerized accounting system. Doing the same with a pen and paper system is a far more time-consuming process.
- *Cost*: Although these systems can range from relatively inexpensive to very costly, their use can reduce the number of required accounting personnel. This reduction in payroll can, in some instances, offset the initial cost of the computerized system.

Although they are excellent tools, computerized accounting systems do have certain drawbacks. Among these are the initial purchase price (which can significantly exceed associated savings), the time spent training employees, and the electronic safeguards necessary to prevent the unauthorized access of data.

Case In Point 6-6 Consider Computerized Accounting Systems

In these examples, we will describe how, for each accounting task listed, a computerized accounting system is more effective than a manual system.

1. Posting Journal Entries

   When using a manual accounting system, individual postings must be made to the general and subsidiary ledgers. This process can be time-consuming, and the possibility of making an error is significant. With a computerized accounting system, postings are made automatically, as account balances are updated by the system when a journal entry is booked. Additionally, as long as the journal entries are entered correctly, there is no risk that either incorrect amounts or incorrect accounts will be posted.

2. Generating Financial Statements

   Again, these can be automatically generated within a computerized accounting system, whereas under a manual system they must be individually created. Additionally, electronic versions of financial statements can be more easily distributed to outside parties (via e-mail, online data storage, etc.) than paper copies.

3. Performing Financial Analyses

   Analyzing financial records involves examining comparisons between different account balances for the current period, and between an account's balances over different periods. A number of accounting systems are designed to automatically perform and display certain of these analyses. Multi-period comparisons can also be made easier by generating custom financial statements that display all periods in question. A far more time-consuming process must be undertaken to perform similar analyses of accounting data within a manual system.

Concepts Review

To check your knowledge of the key concepts introduced in this chapter, complete the Concepts Review quiz by choosing the appropriate access option below.

If you are...	Then access the quiz by...
Using eLab	Logging in, choosing Content, and navigating to the Concepts Review quiz for this chapter
Not using eLab	Going to the Student Resource Center for this book

Putting It Together

PIT 6-1 Examine Cash & Payroll for Amber's Lacrosse Emporium

In these examples, we will record petty cash journal entries, complete a bank reconciliation, and record payroll-related journal entries for Amber's Lacrosse Emporium.

1. On June 3, record a journal entry to establish a petty cash fund of $1,000 for Amber's Lacrosse Emporium.

6/3	Petty Cash	1,000	
	Cash		1,000
	Establishment of a petty cash fund		

2. On June 26, record a journal entry to replenish the petty cash fund. Expenses paid from petty cash include postage expense of $135, delivery expense of $370, office expense of $220, and miscellaneous expense of $110.

6/26	Postage Expense	135	
	Delivery Expense	370	
	Office Expense	220	
	Miscellaneous Expense	110	
	Cash		835
	Replenishment of the petty cash fund		

3. On September 14, record a journal entry to increase the petty cash fund from $1,000 to $1,300.

9/14	Petty Cash	300	
	Cash		300
	Increase of the petty cash fund		

4. Now we'll complete a bank reconciliation for the month of June, using the following information:
   - The bank statement balance on June 30 is $33,100.
   - The general ledger shows a cash balance on June 1 of $29,650. During the month of June, total cash payments were $9,400, and total cash receipts were $10,850.
   - Bank charges for the month were $305.
   - Outstanding checks, as of June 30, were as follows:

     Check #021 - $550 Check #033 - $25 Check #038 - $300

   - Deposits in transit on June 30 totaled $250.
   - A deposited check for $400 from Paws Up Co. was rejected by the bank as an NSF check.
   - A $950 Notes Receivable from TireHouse was collected on behalf of Amber's Lacrosse Emporium by the bank.
   - A check received from QFT Co. for $1,400 in full payment of its accounts receivable was erroneously recorded by Amber's Lacrosse Emporium as being a receipt of $270.

Amber's Lacrosse Emporium
Bank Reconciliation
June 30, 2015

Bank Statement Balance			$ 33,100	Book Balance		$ 31,100
Add:				Add:		
Deposits in Transit			$ 250	Note Receivable	$ 950	
			$ 33,350	Error recording QFT Co. payment	$ 1,130	$ 2,080
						$ 33,180
Deduct:				Deduct:		
Outstanding Checks:	#021	$ 550		NSF Check	$ 400	
	#033	$ 25		Bank Charges	$ 305	$ 705
	#038	$ 300	$ 875			
Adjusted Bank Balance			$ 32,475	**Adjusted Book Balance**		$ 32,475

The book balance of $31,100 within the bank reconciliation was determined by adding the monthly cash receipts of $10,850 to the beginning cash balance of $29,650 and then subtracting the monthly cash payments of $9,400.

5. Now we'll record two journal entries (one in which cash is debited, and one in which cash is credited) to account for all items within the bank reconciliation that were previously unrecorded.

6/30	Cash	2,080	
	Notes Receivable - TireHouse		950
	Accounts Receivable - QFT Co.		1,130
	Satisfaction of note receivable & correction of A/R error		

6/30	Bank Charges	305	
	Accounts Receivable - Paws Up Co.	400	
	Cash		705
	Monthly bank charges and A/R resulting from NSF check		

6. Record the journal entry for June 10 (payday) to record both the cash (wages) paid to employees and the withholding amounts owed to employees of Amber's Lacrosse Emporium. For the week, gross pay totaled $6,500, federal income tax withholding totaled $628, state income tax withholding totaled $238, and life insurance premiums withheld (that are subject to FICA tax) totaled $115. No single employee has, to date, reached the Social Security tax, FUTA tax, or SUTA tax threshold.

6/10	Wages Expense	6,500.00	
	Social Security Tax Payable		403.00
	Medicare Tax Payable		94.25
	Federal Income Tax Payable		628.00
	State Income Tax Payable		238.00
	Life Insurance Premium Payable		115.00
	Cash		5,021.75
	Weekly wages earned by employees		

7. Record the journal entry for June 10 to record payroll tax expense owed. Applicable SUTA and FUTA tax rates for employees of Amber's Lacrosse Emporium are 5.4% and 0.6% respectively.

6/10	Payroll Tax Expense	887	
	Social Security Tax Payable		403
	Medicare Tax Payable		94
	SUTA Tax Payble		351
	FUTA Tax Payable		39
	Weekly payroll taxes owed		

Knowledge Check A

KCa 6-1 Consider Internal Control Procedures

In this exercise, you will consider what you have learned about each of the listed internal control procedures. Then write two to three sentences for each procedure in which you describe steps that a business can take, beyond those discussed in the chapter, to employ the procedure.

1. Maintaining physical safeguards

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2. Segregation of duties

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3. Transaction Authorization

4. Record Retention

KCa 6-2 Examine Petty Cash

In this exercise, you will write a short paragraph of at least five sentences describing two internal control procedures that can be used to safeguard petty cash. Discuss why your selected procedures are particularly applicable to petty cash, and why petty cash is one of the assets most vulnerable to employee theft.

KCa 6-3 Record Petty Cash Journal Entries

In this exercise, you will record the necessary journal entries related to petty cash for Hound Sports Enterprises. An Excel template, in which your answers may be entered, can be found in the Student Resource Center.

1. On February 22, Hound Sports Enterprises establishes a petty cash fund of $1,500.
2. On March 1, the company replenishes the petty cash fund for the following expenses:

   Delivery Expense - $435
   Entertainment Expense - $200
   Supplies Expense - $150
   Miscellaneous Expense - $85

3. On March 15, the company decides that the petty cash fund is unnecessarily large, and reduces petty cash from $1,500 to $1,000

   The recording of a reduction in size of a petty cash fund is no different from that used to increase its size, except that the debit and credit within the journal entry are reversed.

KCa 6-4 Prepare a Bank Reconciliation

In this exercise, you will prepare a bank reconciliation for the month of September for Stepping Stone Corp. Use the following information to complete the bank reconciliation:

- The ending balance displayed on the bank statement was $8,200.
- The general ledger shows an ending cash balance of $9,450.
- Outstanding checks as of September 30 were as follows:

Check #547 - $95 Check #624 - $180 Check #627 - $230

- A deposit of $2,000 made by Stepping Stone Corp. on September 24 was erroneously recorded by the bank as a deposit of only $200.
- A deposited check for $875 from TreeCo. was rejected by the bank as an NSF check.
- Deposits in transit as of September 30 totaled $350.
- A notes receivable of $1,400 owed by WRM Inc. was collected on behalf of Stepping Stone Corp. by the bank.
- Bank charges of $130 were levied during the month.

An Excel template, in which your answers may be entered, can be found in the Student Resource Center.

KCa 6-5 Record Bank Reconciliation-Related Journal Entries

In this exercise, you will record one journal entry for each reconciling item from KCa 6-4 for which a journal entry is necessary.

KCa 6-6 Calculate Payroll Taxes

In this exercise, you will calculate the payroll taxes owed by BrewHaus Restaurant. Gross wages earned for the week totaled $3,200, and the applicable SUTA and FUTA tax rates are 5.4% and 0.6% respectively. No single employee has, to date, reached the Social Security tax, FUTA tax, or SUTA tax threshold.

1. How much Social Security tax should be withheld from employee pay?

2. How much Medicare tax should be remitted to the IRS?

3. How much SUTA tax is owed by BrewHaus Restaurant?

4. How much FUTA tax should be withheld from employee pay?

KCa 6-7 Record Payroll Journal Entries

In this exercise, you will record the two necessary payroll-related journal entries for Frank's Fuel Corp. For the current week, gross salaries totaled $1,200, federal income tax withheld was $114, state income tax withheld was $44, applicable SUTA and FUTA tax rates are 5.4% and 0.6% respectively, and union dues withheld totaled $55. No single employee has, to date, reached the Social Security tax, FUTA tax, or SUTA tax threshold. An Excel template, in which your answers may be entered, can be found in the Student Resource Center.

1. Record the necessary journal entry for employee withholdings.
2. Record the necessary journal entry for employer payroll taxes.

Knowledge Check B

KCb 6-1 Consider Internal Control Procedures

In this exercise, you will consider what you have learned about each of the listed internal control procedures. Recognizing that these procedures can all be used to safeguard non-cash assets as well, write two or three sentences for each procedure in which you identify a different asset that could be safeguarded using each procedure. Then discuss how the procedure could be employed to do so.

1. Maintaining physical safeguards

2. Segregation of duties

3. Transaction authorization

4. Record retention

KCb 6-2 Examine Petty Cash

In this exercise, you will write a paragraph of at least five sentences in which you describe two circumstances that are facilitated through the use of petty cash. For each, discuss why the situation would create either payment or recording difficulties if petty cash were not utilized.

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KCb 6-3 Record Petty Cash Journal Entries

In this exercise, you will record the necessary journal entries related to petty cash for Legal Advisors Corp. An Excel template, in which your answers may be entered, can be found in the Student Resource Center.

1. On April 8, Legal Advisors Corp. establishes a petty cash fund of $750.
2. On April 29, the company replenishes the petty cash fund for the following expenses:

   Postage Expense - $85
   Office Expense - $220
   Transportation Expense - $165
   Miscellaneous Expense - $185

3. On May 13, the company decides that the petty cash fund should be increased from $750 to $950.

KCb 6-4 Prepare a Bank Reconciliation

In this exercise, you will prepare a bank reconciliation for the month of December for Salsa Ingredients Co. Use the following information to complete the bank reconciliation:

- The ending balance displayed on the bank statement was $17,825.
- The general ledger shows an ending cash balance of $14,200.
- A notes receivable of $4,050 owed by Bad Break Corp. was collected on behalf of Salsa Ingredients Co. by the bank.
- Bank charges of $45 were levied during the month.
- Outstanding checks as of December 31 were as follows:

  Check #825 - $325
  Check #904 - $100
  Check #905 - $720

- Deposits in transit as of December 31 totaled $125.
- A deposited check for $1,300 from Holiday Specialties was rejected by the bank as an NSF check.
- A check received from OJD Inc. for $450 in full payment of its accounts receivable was erroneously recorded by Salsa Ingredients Co. as a payment of $550.

An Excel template, in which your answers may be entered, can be found in the Student Resource Center.

KCb 6-5 Record Bank Reconciliation-Related Journal Entries

In this exercise, you will record one journal entry for each reconciling item from KCb 6-4 for which a journal entry is necessary.

KCb 6-6 Calculate Payroll Taxes

In this exercise, you will calculate the payroll taxes owed by BCS Investigators. Gross wages earned for the week totaled $8,350, and the applicable SUTA and FUTA tax rates are 5.4% and 0.6% respectively. No single employee has, to date, reached the Social Security tax, FUTA tax, or SUTA tax threshold.

1. How much Social Security tax should be paid to the IRS?
2. How much Medicare tax should be matched by BCS Investigators?
3. How much SUTA tax should be matched by BCS Investigators?
4. How much FUTA tax should be paid to the IRS?

KCb 6-7 Record Payroll Journal Entries

In this exercise, you will record the two necessary payroll-related journal entries for Betsy's Interior Decorators. For the current week, gross salaries totaled $2,500, federal income tax withheld was $260, state income tax withheld was $101, applicable SUTA and FUTA tax rates are 5.4% and 0.6% respectively, and life insurance premiums withheld totaled $80. No single employee has, to date, reached the Social Security tax, FUTA tax, or SUTA tax threshold. An Excel template, in which your answers may be entered, can be found in the Student Resource Center.

1. Record the necessary journal entry for employee withholdings.
2. Record the necessary journal entry for employer payroll taxes.

7 Financial Statement Analysis

LEARNING OBJECTIVES

After studying this chapter, you will be able to:

- **Complete a horizontal analysis**
- **Complete a vertical analysis**
- **Prepare common-size financial statements**
- **Calculate various financial ratios**

Once all journal entries have been recorded and financial statements have been prepared, a company can then analyze these financial records. The completion of the accounting cycle ensures only that accurate financial information has been generated. In order to use this information to intelligently run a business, it must be subsequently analyzed. There are a number of analysis methods that can be utilized. In this chapter, you will examine different methods used to analyze financial statements. You will also look at relationships between accounts that can provide further insight into an organization's performance.

CASE STUDY

Performing Financial Statement Analysis for Nathan's Donut School

Over the course of the first few months of operations, Nathaniel has been very pleased at how well you have monitored and recorded the activity of Nathan's Donut School. He would like to use your accounting records to analyze his company's performance, and has asked you to assist with this process. His hope is that you can provide him with an understanding of not only how well the company performed during this time, but also what it can do to improve going forward.

Your first step is to examine the financial statements and compare ending balances from different months. You then make similar comparisons between individual account balances of Nathan's Donut School for a single month. You also realize that the size of a competitor can make apples-to-apples comparisons difficult. To combat this, you learn how to create common-size financial statements. Lastly, you examine different types of ratios, each of which can provide information about a different aspect of the company's performance.

A combination of different analyses can provide an excellent view of how well a company has performed.

Nathan's Donut School
Comparative Income Statement
For the Months Ended March 31, 2015 and April 30, 2015

	April	March	Dollar Change	Percent Change
Revenues:				
Service Revenue	$ 5,950	$ 3,500	$ 2,450	70.00%
Expenses:				
Rent Expense	1,700	1,700	-	0.00%
Wages Expense	1,100	750	350	46.67%
Advertising Expense	980	250	730	292.00%
Supplies Expense	775	315	460	146.03%
Total Expenses	4,555	3,015	1,540	51.08%
Net Income	$ 1,395	$ 485	$ 910	187.63%

Nathan's Donut School
Income Statement
For the Month Ended March 31, 2015

	Dollar Amount	Percentage
Revenues		
Service Revenue	$ 3,500	100.00%
Expenses:		
Rent Expense	1,700	48.57%
Wages Expense	750	21.43%
Supplies Expense	315	9.00%
Advertising Expense	250	7.14%
Total Expenses	3,015	86.14%
Net Income	$ 485	13.86%

Completing a Horizontal Analysis

An important element of running any business is to analyze its performance, in an effort to identify potential improvements. This typically consists of making comparisons between the company's account balances for the most recent period, and some other useful **Benchmark**. A number of benchmarks can be used for this purpose, the most common of which include:

- *Prior performance*: By making comparisons to prior periods, the trend in various accounts can be examined.
- *Competitor's balances*: Fluctuations in market conditions can result in specific financial results appearing more impressive at some times, and less so at others. Comparisons to competitors who face the same market conditions can eliminate the need to consider these external impacts.
- *Industry standards*: A single financial figure can be viewed very differently, depending on the industry of the business in question. By comparing results to established industry standards, a clearer view of a company's performance can be established.

One way in which a company's performance can be compared to any of the above benchmarks is through a **Horizontal Analysis**. A horizontal analysis is typically performed on either the Income Statement and/or the Balance Sheet. When completing a horizontal analysis, account balances are compared across time to determine both the dollar and percentage difference between them.

This horizontal analysis examines account balances within a company's income statement for two consecutive years.

Wilson Legal Advisors
Comparative Income Statement
For the Years Ended June 30, 2015 and June 30, 2016

	2016	2015	Dollar Change	Percent Change
Revenues:				
Sales Revenue	$ 48,750	$ 39,000	$ 9,750	25.00%
Interest Revenue	1,350	1,425	(75)	-5.26%
Total Revenue	50,100	40,425	9,675	23.93%
Expenses:				
Rent Expense	14,250	14,250	-	0.00%
Insurance Expense	8,750	7,200	1,550	21.53%
Depreciation Expense - Truck	3,550	3,550	-	0.00%
Utilities Expense	1,875	1,220	655	53.69%
Supplies Expense	1,530	1,620	(90)	-5.56%
Telephone Expense	1,300	740	560	75.68%
Miscellaneous Expense	475	500	(25)	-5.00%
Total Expenses	31,730	29,080	2,650	9.11%
Net Income	$ 18,370	$ 11,345	$ 7,025	61.92%

The dollar changes shown within this income statement are calculated by subtracting the base (earlier) year figure from the comparison (later) year figure. The percent change is calculated as follows:

Percent Change = Dollar Change / Base Year

These account changes can provide a good deal of information regarding a company's performance. For example, the above-displayed increase in supplies expense (which is greater than any other expense increase) could indicate that supplies are being inefficiently utilized. A thorough analysis can provide more information about this potential issue.

WARNING! No single piece of analysis can provide a full picture of how well a company has performed. A thorough analysis includes the examination of a variety of data.

After completing this horizontal analysis, the account changes can be compared to comparable changes from competitors or industry averages, in order to glean further information regarding company performance.

Case In Point 7-1 Perform a Horizontal Analysis

In this example, we will create a horizontal analysis in which we compare the first two months of operations of Nathan's Donut School. We'll use the following income statements to complete the horizontal analysis.

Nathan's Donut School
Income Statement
For the Month Ended March 31, 2015

Revenues:		
Service Revenue		$ 3,500
Expenses:		
Rent Expense	$ 1,700	
Wages Expense	750	
Supplies Expense	315	
Advertising Expense	250	
Total Expenses		3,015
Net Income		$ 485

Nathan's Donut School
Income Statement
For the Month Ended April 30, 2015

Revenues:		
Service Revenue		$ 5,950
Expenses:		
Rent Expense	$ 1,700	
Wages Expense	1,100	
Advertising Expense	980	
Supplies Expense	775	
Total Expenses		4,555
Net Income		$ 1,395

When completing a horizontal analysis, any time period (month, quarter, year) can be used, but be certain that the two periods are consecutive.

Nathan's Donut School
Comparative Income Statement
For the Months Ended March 31, 2015 and April 30, 2015

	April	March	Dollar Change	Percent Change
Revenues:				
Service Revenue	$ 5,950	$ 3,500	$ 2,450	70.00%
Expenses:				
Rent Expense	1,700	1,700	-	0.00%
Wages Expense	1,100	750	350	46.67%
Advertising Expense	980	250	730	292.00%
Supplies Expense	775	315	460	146.03%
Total Expenses	4,555	3,015	1,540	51.08%
Net Income	$ 1,395	$ 485	$ 910	187.63%

Net Income has increased by a greater percentage (187.63%) than Service Revenue (70%). This indicates that Nathan's Donut School operated more efficiently during the month of April, and required a smaller increase in expenses to generate the increased revenues. That said, two areas of concern are Advertising Expense and Supplies Expense. Although the dollar values are relatively low, the significant increase in both expenses could be problematic if it continues into the future. Nathan's Donut School should pay close attention to these expenses in the future, to ensure that they do not become unmanageably large.

Completing a Vertical Analysis

Similar to a horizontal analysis, a **Vertical Analysis** is typically performed on either an Income Statement or Balance Sheet. Unlike a horizontal analysis, in which account balances for two periods are compared, a vertical analysis compares account balances within the same period. When used in conjunction with a horizontal analysis, a vertical analysis can provide a fuller picture of a business' performance.

A vertical analysis has been performed on this Balance Sheet.

Bird Watchers Co.
Balance Sheet
September 30, 2015

	Dollar Amount	Percentage
Assets:		
Cash	$ 58,000	55.37%
Accounts Receivable	13,000	12.41%
Supplies	4,250	4.06%
Furniture	8,000	7.64%
Building	21,500	20.53%
Total Assets	104,750	100.00%
Liabilities:		
Accounts Payable	24,000	22.91%
Owner's Equity:		
Mike Schilling, Capital	80,750	77.09%
Total Liabilities & Owner's Equity	104,750	100.00%

The percentages displayed adjacent to each account balance are calculated by dividing the respective balance by the base figure within the Balance Sheet.

This formula was used to calculate the cash percentage within the vertical analysis.

Account Balance /	Base Figure =	Account Percentage
58,000 /	104,750	55.37%

The base figure, for which the percentage will always be 100%, is *total assets* (or *total liabilities and owner's equity*, which equals total assets) within the Balance Sheet. When a vertical analysis is performed on an Income Statement, the base figure is *total revenue*.

Preparing Common-Size Financial Statements

Comparing the percentages within a vertical analysis to any of the previously discussed benchmarks can indicate if any account is unusually large or small. We make this comparison by completing a **Common-Size Financial Statement**. A common-size financial statement may exclude the actual financial data, in which case it would display only the percentages yielded from a vertical analysis.

This common-size balance sheet compares two years of data for a single company.

Bird Watchers Co.
Common-Size Balance Sheet
September 30, 2015 and September 30, 2016

	2016 Dollar Amount	2015 Dollar Amount	2016 Percentage	2015 Percentage
Assets:				
Cash	$ 52,500	$ 58,000	51.78%	55.37%
Accounts Receivable	14,000	13,000	13.81%	12.41%
Supplies	2,000	4,250	1.97%	4.06%
Furniture	11,400	8,000	11.24%	7.64%
Building	21,500	21,500	21.20%	20.53%
Total Assets	101,400	104,750	100.00%	100.00%
Liabilities:				
Accounts Payable	31,000	24,000	30.57%	22.91%
Owner's Equity:				
Mike Schilling, Capital	70,400	80,750	69.43%	77.09%
Total Liabilities & Owner's Equity	101,400	104,750	100.00%	100.00%

Comparisons of different-sized companies can be difficult, as total account balances can be widely different. For example, all account balances for a national restaurant chain will be far larger than the corresponding balances for a small regional restaurant. This difficulty is overcome through the use of common-size percentages, as the percent calculations create apples-to-apples comparisons within the Income Statement or Balance Sheet.

TIP! Common-size financial statements can display more than two sets of data. For example, three years of account balances can be displayed beside one another.

Case In Point 7-2 Perform a Vertical Analysis and Complete a Common-Size Income Statement

In these examples, we will use the Income Statements for the first two months of operations of Nathan's Donut School to complete two vertical analyses. We will then create a common-size income statement in which you can compare data from these months. The following Income Statements are displayed again for reference:

Nathan's Donut School
Income Statement
For the Month Ended March 31, 2015

Revenues:		
Service Revenue		$ 3,500
Expenses:		
Rent Expense	$ 1,700	
Wages Expense	750	
Supplies Expense	315	
Advertising Expense	250	
Total Expenses		3,015
Net Income		$ 485

Nathan's Donut School
Income Statement
For the Month Ended April 30, 2015

Revenues:		
Service Revenue		$ 5,950
Expenses:		
Rent Expense	$ 1,700	
Wages Expense	1,100	
Advertising Expense	980	
Supplies Expense	775	
Total Expenses		4,555
Net Income		$ 1,395

1. First we will complete a vertical analysis of the Income Statement of Nathan's Donut School for its first month of operations.

Nathan's Donut School
Income Statement
For the Month Ended March 31, 2015

	Dollar Amount	Percentage
Revenues		
Service Revenue	$ 3,500	100.00%
Expenses:		
Rent Expense	1,700	48.57%
Wages Expense	750	21.43%
Supplies Expense	315	9.00%
Advertising Expense	250	7.14%
Total Expenses	3,015	86.14%
Net Income	$ 485	13.86%

Notice that Total Revenue is the starting point for the vertical analysis, as it is the base figure for which 100% is designated. In this instance, as there is only one revenue account, Service Revenue is the same as Total Revenue. All other account percentages are displayed as a portion of total revenue.

2. Now we will complete a vertical analysis of the Income Statement of Nathan's Donut School for its second month of operations.

Nathan's Donut School
Income Statement
For the Month Ended April 30, 2015

	Dollar Amount	Percentage
Revenues		
Service Revenue	$ 5,950	100.00%
Expenses:		
Rent Expense	1,700	28.57%
Wages Expense	1,100	18.49%
Advertising Expense	980	16.47%
Supplies Expense	775	13.03%
Total Expenses	4,555	76.55%
Net Income	$ 1,395	23.45%

Now that two sets of percentages have been calculated, the first two months of operations can be compared.

3. Now we complete a common-size Income Statement for the first two months of operations of Nathan's Donut School.

Nathan's Donut School
Common-Size Income Statement
For the Months Ended March 31, 2015 and April 30, 2015

	April Dollar Amount	March Dollar Amount	April Percentage	March Percentage
Revenues:				
Service Revenue	$ 5,950	$ 3,500	100.00%	100.00%
Expenses:				
Rent Expense	1,700	1,700	28.57%	48.57%
Wages Expense	1,100	750	18.49%	21.43%
Advertising Expense	980	250	16.47%	7.14%
Supplies Expense	775	315	13.03%	9.00%
Total Expenses	4,555	3,015	76.55%	86.14%
Net Income	1,395	485	23.45%	13.86%

When analyzing a common-size financial statement, a good rule of thumb is to first examine the bottom-line figure, and then determine why it changed. Here the bottom-line figure is Net Income, which has significantly increased as a percent of revenue. Of course, the increase in revenue contributed to this higher Net Income, but if expenses had increased at the same rate, then Net Income as a percent of revenue would have remained steady. Instead, because expenses did not increase by the same magnitude (they now represent 76.55% of revenue, instead of the 86.14% they represented in March), the company is in a better financial position in April.

Calculating Liquidity Ratios

Horizontal and vertical analyses provide a good deal of information on a company's performance, and on how it can improve. However, this picture can be enhanced through the use of other analytical tools. **Ratio Analysis** examines relationships between specific account balances. These relationships can provide further evidence as to a company's current level of success, and its future prospects. Different ratios provide information about different elements of a company.

Liquidity Ratios indicate how quickly a company can convert assets to cash. Maintaining adequate cash, or being able to access it quickly, allows a company to react to business opportunities when they present themselves. It also ensures that a business will be able to meet its short-term obligations (amounts owed in the near future). Two of the most widely used liquidity ratios are the Current Ratio and the Quick Ratio.

Liquidity Ratios

Current Ratio = Current Assets / Current Liabilities

$$\text{Quick Ratio} = \frac{\text{Cash} + \text{Short-Term Investments} + \text{A/R}}{\text{Current Liabilities}}$$

The Current Ratio

Current assets are those assets that can be easily converted to cash, or used up, within the next twelve months. Similarly, current liabilities are those that are owed within the next twelve months. By comparing current assets to current liabilities, the **Current Ratio** indicates how well positioned a company is to pay off that which it owes in the next twelve months. The higher the ratio, the more current assets are available to make these payments, and therefore the better the company is positioned.

The Quick Ratio

The **Quick Ratio** (also referred to as the **Acid-Test Ratio**) provides a similar measurement as the current ratio, however a more stringent approach is taken relative to the assets included in the calculation. Instead of including all current assets in the numerator of the fraction, the quick ratio only includes the most liquid assets (those that can most easily be converted to cash). By excluding current assets such as inventory and supplies, this ratio focuses more heavily on a company's ability to spend cash quickly. Similar to the current ratio, a higher quick ratio indicates that a company is better positioned to meet its short-term obligations.

WARNING! The ratio result must be compared to prior period performance, competitors, and/or industry averages in order to yield useful information. In a bubble, the ratio result does not provide any indication of a company's performance.

Case In Point 7-3 Calculate Liquidity Ratios

In this example, we will calculate liquidity ratios for the first two months of operations of Nathan's Donut School. We will then analyze our results. The following Balance Sheets should be used to calculate the required ratios:

Nathan's Donut School
Balance Sheet
March 31, 2015

Assets:		
Cash	$ 12,300	
Accounts Receivable	2,350	
Supplies	185	
Furniture	1,000	
Equipment	20,000	
Total Assets		$ 35,835
Liabilities:		
Accounts Payable	-	
Wages Payable	750	
Owner's Equity:		
Nathaniel H. Spencer, Capital	35,085	
Total Liabilities & Owner's Equity		$ 35,835

Nathan's Donut School
Balance Sheet
April 30, 2015

Assets:		
Cash	$ 8,750	
Accounts Receivable	3,250	
Supplies	275	
Furniture	1,000	
Equipment	20,000	
Total Assets		$ 33,275
Liabilities:		
Accounts Payable	150	
Wages Payable	600	
Unearned Revenue	440	
Owner's Equity:		
Nathaniel H. Spencer, Capital	32,085	
Total Liabilities & Owner's Equity		$ 33,275

1. We begin by calculating the Current Ratio and Quick Ratio for the first month of operations of Nathan's Donut School.

$$\textbf{Current Ratio} = \$14{,}835 / \$750 = 19.78 \text{ to } 1$$

$$\textbf{Quick Ratio} = \frac{\$12{,}300 + \$0 + \$2{,}350}{\$750} = 19.53 \text{ to } 1$$

Note that the $14,835 in the numerator of the Current Ratio was calculated by adding the balances of Cash, Accounts Receivable, and Supplies. All other figures within the ratios can be located within the March Balance Sheet.

As Nathan's Donut School did not have any short-term investments on its Balance Sheet during its first month of operations, this amount was displayed as ***$0*** within the quick-ratio calculation. In this example, only a small Supplies balance was removed from the current assets to arrive at the numerator for the Quick Ratio (referred to as the Quick Assets). Because there was only this small difference, the Current Ratio and Quick Ratio results were very similar.

2. Now we calculate the Current Ratio and Quick Ratio for the second month of operations of Nathan's Donut School.

$$\textbf{Current Ratio} = \$12{,}275 \,/\, \$1{,}190 = 10.32 \text{ to } 1$$

$$\textbf{Quick Ratio} = \frac{\$8{,}750 + \$0 + \$3{,}250}{\$1{,}190} = 10.08 \text{ to } 1$$

Similar to the March ratios, here we calculated the $12,275 by adding the account balances for Cash, Accounts Receivable, and Supplies, while obtaining all other figures directly from the April Balance Sheet.

Now that a second set of ratios has been calculated, comparisons can be made between the first two months to determine if Nathan's Donut School's liquidity position has improved or deteriorated.

3. What can you conclude from the ratios you have calculated?

Both ratios have decreased significantly from March to April, indicating that Nathan's Donut School's ability to pay its short-term debt has declined. However, the April ratios indicate that short-term assets exceed current liabilities by approximately 10 to 1, so in spite of the decreased liquidity, the company should still have no trouble meeting its financial obligations.

Keep in mind that ratios should not be examined independent of other types of analyses. While the above ratios indicate that Nathan's Donut School should be able to meet all financial obligations, it may actually be below that of competitors and/or industry averages. To determine if this ratio is favorable or unfavorable for this type of business, more analyses should be performed.

Calculating Solvency Ratios

Whereas liquidity ratios gauge a company's ability to meet short-term obligations, **Solvency Ratios** gauge a company's ability to meet long-term obligations. An organization can raise funds for operations through two methods.

- It can borrow cash (liability).
- It can sell an ownership stake in the business (equity).

Solvency ratios measure the extent to which each of these methods is utilized, and the balance between them. Leaning too heavily on either of these two methods can be viewed negatively. While a business does not want to incur more debt than it can pay off over the long term, it also wants to avoid selling too many ownership stakes, such that the value of each owner's share is diluted.

Solvency Ratios

Debt Ratio = Total Liabilities / Total Assets

Equity Ratio = Total Equity / Total Assets

Debt-to-Equity Ratio = Total Liabilities / Total Equity

Unlike liquidity ratios, which focus only on current assets and liabilities, solvency ratios are calculated using total figures.

The **Debt Ratio** expresses the portion of assets that are generated through liabilities.

The **Equity Ratio** expresses the portion of assets that are generated through equity.

The **Debt-to-Equity Ratio** expresses the balance between liabilities and equity. When liabilities exceed equity, this ratio will be greater than 1, while the reverse circumstance leads to a ratio that is less than 1.

Although a favorable debt-to-equity ratio differs from one industry to another, a general rule of thumb dictates that a particularly high or low ratio is concerning.

Case In Point 7-4 Calculate Solvency Ratios

In this example, we will calculate solvency ratios for the first month of operations of Nathan's Donut School. We will then analyze our results. The following Balance Sheet is displayed again for reference:

Nathan's Donut School
Balance Sheet
March 31, 2015

Assets:		
Cash	$ 12,300	
Accounts Receivable	2,350	
Supplies	185	
Furniture	1,000	
Equipment	20,000	
Total Assets		$ 35,835
Liabilities:		
Accounts Payable	-	
Wages Payable	750	
Owner's Equity:		
Nathaniel H. Spencer, Capital	35,085	
Total Liabilities & Owner's Equity		$ 35,835

1. First we calculate the Debt Ratio, Equity Ratio, and Debt-to-Equity Ratio for the first month of operations of Nathan's Donut School.

   Debt Ratio = $750 / $35,835 = 2.09%

   Equity Ratio = $35,085 / $35,835 = 97.91%

   Debt-to-Equity Ratio = $750 / $35,085 = .02

2. If the industry average for the Debt-to-Equity ratio were .40, here is what we could conclude about Nathan's Donut School after its first month of operations.

   It is clear that Nathan's Donut School has obtained the vast majority of its assets through equity instead of liabilities. This is why the Debt Ratio is so low, and conversely why the Equity Ratio is so close to 100%. The result is that the Debt-to-Equity Ratio appears very small, and this is confirmed by comparing it to the industry average. While it is good that, in comparison to its competitors, Nathan's Donut School does not owe a great deal to creditors, keep in mind that at times it can be beneficial to borrow funds. For example, if the company is presented with an expansion opportunity that can lead to significantly increased revenues, it may be worth borrowing the funds, and paying the associated interest, to be able to take advantage of the opportunity. One key to effectively running a business is finding the appropriate balance between debt and equity.

Calculating Profitability Ratios

Another group of ratios, referred to as **Profitability Ratios**, provide insight into a company's ability to effectively generate income. Among the most commonly used profitability ratios are the Profit Margin, and Return on Assets.

Profitability Ratios

Profit Margin = Net Income / Revenue

Return on Assets = Net Income / Average Total Assets

The **Profit Margin** indicates the percentage of revenue that a company converts to net income. Companies seek as high a profit margin as possible, as this indicates that the company is efficiently generating net income.

Return on Assets illustrates a company's ability to use assets to generate net income. Similar to profit margin, it is preferable to have a higher return on assets.

TIP! Average Total Assets is determined by adding the beginning total assets to the ending total assets, and dividing by 2.

A Closer LOOK

Are There Other Ratios That Can Be Used For Evaluation?

The ratios presented here are only a few of the many that can be examined. Other popular ratios include *Accounts Receivable Turnover* and *Inventory Turnover* (which gauge a company's efficiency), *Times Interest Earned* (a solvency ratio), and *Gross Margin Ratio* (a profitability ratio). In addition to these, there are a few common ratios, shown below, that only apply to corporations.

One profitability ratio that is used to gauge a corporation's performance is **Basic Earnings per Share (EPS)**.

$$\textbf{Basic EPS} = \frac{\textbf{Net Income - Preferred Dividends}}{\textbf{Weighted Average Common Shares Outstanding}}$$

Basic Earnings per Share indicates how much a company has earned for each share of stock that it has outstanding (held by an investor). The higher the EPS, the better the company is performing, and therefore the more attractive it appears as an investment.

Two other ratios that investors use to gauge how attractive a company is as an investment are the **Price-Earnings Ratio (P/E Ratio)** and the **Dividend Yield**.

$$\textbf{PE Ratio} = \frac{\textbf{Market Price per Share}}{\textbf{Earnings per Share}}$$

$$\textbf{Dividend Yield} = \frac{\textbf{Cash Dividends per Share}}{\textbf{Market Price per Share}}$$

The P/E Ratio compares the market price of the stock (what an investor would pay for each share) to the EPS. If a company has a high EPS in comparison to the market price per share, this could indicate that it would be a bargain for an investor.

The Dividend Yield indicates how much an investor receives in dividends (distributions of corporate earnings to investors) in comparison to the market price. A high dividend yield indicates that investors are receiving a healthy dividend for their investment. This, in turn, can make the company's stock appear more attractive to future investors.

Case In Point 7-5 Calculate Profitability Ratios

In this example, we will calculate profitability ratios for the first two months of operations of Nathan's Donut School. We will then analyze the results. The following balances will be necessary to calculate the required ratios:

	March, 2015	April, 2015
Revenue	$3,500	$5,950
Net Income	$485	$1,395
Average Total Assets	$35,835	$34,555

Because March was the first month of operations, we'll use the ending total asset balance for that month. Averaging the ending balance with the beginning balance of $0 would provide a skewed result.

1. First we will calculate the Profit Margin and Return on Assets for the first month of operations of Nathan's Donut School.

   Profit Margin = $485 / $3,500 = 13.86%

   Return on Assets = $485 / $35,835 = 1.35%

2. Now we calculate the Profit Margin and Return on Assets for the second month of operations of Nathan's Donut School.

   Profit Margin = $1,395 / $5,950 = 23.45%

   Return on Assets = $1,395 / $34,555 = 4.04%

3. What can you conclude from the ratios you have calculated?

   Both the profit margin and return on assets increased from March to April. These increases were significant in both instances, and therefore indicate that the company is now doing a better job of converting revenues to net income, and using the assets to generate net income. Ideally, Nathan's Donut School would like to see this trend of improving profitability ratios continue into future months.

Concepts Review

To check your knowledge of the key concepts introduced in this chapter, complete the Concepts Review quiz by choosing the appropriate access option below.

If you are...	Then access the quiz by...
Using eLab	Logging in, choosing Content, and navigating to the Concepts Review quiz for this chapter
Not using eLab	Going to the Student Resource Center for this book

Putting It Together

PIT 7-1 Analyze Financial Statements

In this example, we will perform a variety of financial statement analyses, including a horizontal analysis, a vertical analysis, a common-size financial statement, and a series of financial ratios. We will show how to draw conclusions from our work as we complete these analyses. The following financial statements are provided again for reference:

Amber's Lacrosse Emporium
Income Statement
For the Month Ended May 31, 2015

	Dollar Amount	Percentage
Revenues:		
Sales Revenue	$ 6,850.00	82.53%
Service Revenue	1,450.00	17.47%
Total Revenue	8,300.00	100.00%
Expenses:		
Cost of Goods Sold	3,450.00	41.57%
Wages Expense	2,450.00	29.52%
Rent Expense	1,500.00	18.07%
Advertising Expense	600.00	7.23%
Supplies Expense	475.00	5.72%
Depreciation Expense	262.50	3.16%
Utilities Expense	200.00	2.41%
Telephone Expense	135.00	1.63%
Total Expenses	9,072.50	109.31%
Net Loss	$ (772.50)	-9.31%

Amber's Lacrosse Emporium
Income Statement
For the Months Ended June 30, 2015

	Dollar Amount	Percentage
Revenues:		
Sales Revenue	$ 5,900.00	94.40%
Service Revenue	350.00	5.60%
Total Revenue	6,250.00	100.00%
Expenses:		
Cost of Goods Sold	3,620.00	57.92%
Wages Expense	2,700.00	43.20%
Rent Expense	1,500.00	24.00%
Advertising Expense	3,575.00	57.20%
Supplies Expense	700.00	11.20%
Depreciation Expense	262.50	4.20%
Utilities Expense	450.00	7.20%
Telephone Expense	125.00	2.00%
Total Expenses	12,932.50	206.92%
Net Loss	$ (6,682.50)	-106.92%

The following is the Balance Sheet for Amber's Lacrosse Emporium as of June 30, 2015.

Amber's Lacrosse Emporium
Balance Sheet
30-Jun-15

Assets:			
Cash		$ 38,500.00	
Accounts Receivable		4,200.00	
Supplies		750.00	
Inventory		11,225.00	
Furniture	$ 2,000.00		
Accum. Dep. - Furniture	50.00	1,950.00	
Equipment	12,000.00		
Accum. Dep. - Equipment	475.00	11,525.00	
Total Assets			$ 68,150.00
Liabilities:			
Accounts Payable		7,250.00	
Wages Payable		975.00	
Owner's Equity:			
Amber Stein, Capital		59,925.00	
Total Liabilities & Owner's Equity			$ 68,150.00

Now we will use this Balance Sheet, in conjunction with the May 31, 2015 Balance Sheet, to complete a horizontal analysis of Amber's Lacrosse Emporium.

Amber's Lacrosse Emporium
Comparative Balance Sheet
For the Months Ended May 31, 2015 and June 30, 2015

	June	May	Dollar Change	Percent Change
Assets:				
Cash	$ 38,500.00	$ 46,565.00	$ (8,065.00)	-17.32%
Accounts Receivable	4,200.00	2,350.00	1,850.00	78.72%
Supplies	750.00	275.00	475.00	172.73%
Inventory	11,225.00	13,550.00	(2,325.00)	-17.16%
Furniture	2,000.00	2,000.00	-	0.00%
Accum. Dep. - Furniture	50.00	25.00	25.00	100.00%
Equipment	12,000.00	12,000.00	-	0.00%
Accum. Dep. - Equipment	475.00	237.50	237.50	100.00%
Total Assets	$ 68,150.00	$ 76,477.50	$ (8,327.50)	-10.89%
Liabilities:				
Accounts Payable	7,250.00	2,000.00	5,250.00	262.50%
Wages Payable	975.00	850.00	125.00	14.71%
Owner's Equity:				
Amber Stein, Capital	59,925.00	73,627.50	(13,702.50)	-18.61%
Total Liabilities & Owner's Equity	$ 68,150.00	$ 76,477.50	$ (8,327.50)	-10.89%

Remember that Accumulated Depreciation accounts must be subtracted in order to arrive at Total Assets.

1. Let's examine our horizontal analysis of Amber's Lacrosse Emporium, and analyze the results.

   To begin the analysis, we make an examination of the bottom-line figures within the Balance Sheet. In this case, Total Assets (and therefore Total Liabilities & Owner's Equity as well) have declined by almost 11%. To determine what this decline indicates, we next look at the individual accounts.

   There are two assets accounts, Cash and Inventory, which have decreased by approximately 17%. The reduction in Cash is somewhat concerning, although if the company has used the cash to generate higher revenues, this reduction would be reasonable.

   The increase in Accounts Payable, and the reduction in Amber Stein, Capital, are also concerning. Again, if the increase in amounts owed has allowed the company to generate more revenue, then higher Accounts Payable would be acceptable. The reduction in Amber Stein, Capital likely resulted from either the company experiencing a Net Loss, or the owner withdrawing funds. Further examination of the other financial statements should provide more clarity regarding this decrease.

2. The following is the Income Statement for Amber's Lacrosse Emporium for the month ended June 30, 2015.

Amber's Lacrosse Emporium
Income Statement
For the Month Ended June 30, 2015

Revenues:		
Sales Revenue	$ 5,900.00	
Service Revenue	350.00	
Total Revenue		$ 6,250.00
Expenses:		
Cost of Goods Sold	3,620.00	
Advertising Expense	3,575.00	
Wages Expense	2,700.00	
Rent Expense	1,500.00	
Supplies Expense	700.00	
Utilities Expense	450.00	
Depreciation Expense	262.50	
Telephone Expense	125.00	
Total Expenses		12,932.50
Net Loss		$ (6,682.50)

Let's complete a vertical analysis of both this Income Statement, and the May 31, 2015 Income Statement.

Amber's Lacrosse Emporium
Income Statement
For the Month Ended May 31, 2015

	Dollar Amount	Percentage
Revenues:		
Sales Revenue	$ 6,850.00	82.53%
Service Revenue	1,450.00	17.47%
Total Revenue	8,300.00	100.00%
Expenses:		
Cost of Goods Sold	3,450.00	41.57%
Wages Expense	2,450.00	29.52%
Rent Expense	1,500.00	18.07%
Advertising Expense	600.00	7.23%
Supplies Expense	475.00	5.72%
Depreciation Expense	262.50	3.16%
Utilities Expense	200.00	2.41%
Telephone Expense	135.00	1.63%
Total Expenses	9,072.50	109.31%
Net Loss	$ (772.50)	-9.31%

Amber's Lacrosse Emporium
Income Statement
For the Months Ended June 30, 2015

	Dollar Amount	Percentage
Revenues:		
Sales Revenue	$ 5,900.00	71.08%
Service Revenue	350.00	4.22%
Total Revenue	6,250.00	100.00%
Expenses:		
Cost of Goods Sold	3,620.00	43.61%
Wages Expense	2,700.00	32.53%
Rent Expense	1,500.00	18.07%
Advertising Expense	3,575.00	43.07%
Supplies Expense	700.00	8.43%
Depreciation Expense	262.50	3.16%
Utilities Expense	450.00	5.42%
Telephone Expense	125.00	1.51%
Total Expenses	12,932.50	155.81%
Net Loss	$ (6,682.50)	-80.51%

Over time, you will find that you do not need to complete these vertical analyses in order to then prepare a common-size financial statement. As you become more comfortable with the process, you will be able to jump directly to completing the common-size financial statement.

3. Now we will complete a Common-Size Income Statement for the months of May & June for Amber's Lacrosse Emporium.

Amber's Lacrosse Emporium
Common-Size Income Statement
For the Months Ended May 31, 2015 and June 30, 2015

	June Dollar Amount	May Dollar Amount	June Percentage	May Percentage
Revenues:				
Sales Revenue	$ 5,900.00	$ 6,850.00	94.40%	82.53%
Service Revenue	350.00	1,450.00	5.60%	17.47%
Total Revenue	6,250.00	8,300.00	100.00%	100.00%
Expenses:				
Cost of Goods Sold	3,620.00	3,450.00	57.92%	41.57%
Wages Expense	2,700.00	2,450.00	43.20%	29.52%
Rent Expense	1,500.00	1,500.00	24.00%	18.07%
Advertising Expense	3,575.00	600.00	57.20%	7.23%
Supplies Expense	700.00	475.00	11.20%	5.72%
Depreciation Expense	262.50	262.50	4.20%	3.16%
Utilities Expense	450.00	200.00	7.20%	2.41%
Telephone Expense	125.00	135.00	2.00%	1.63%
Total Expenses	12,932.50	9,072.50	206.92%	109.31%
Net Loss	$ (6,682.50)	$ (772.50)	-106.92%	-9.31%

WARNING! The expenses are listed within the two Income Statements in a different order, as the standard approach is to list expenses from largest to smallest. Be careful that when you complete the Common-Size Income Statement, you do not mix up balances and place them on an incorrect row as a result of these different orders.

4. Let's examine the Common-Size Income Statement for Amber's Lacrosse Emporium, and analyze the results.

   Looking first at the Net Loss percentages, it is clear that the company's performance declined from May to June. The Net Loss for June now represents a significantly larger percentage of Total Revenue than it did during May. As we examine the individual expenses, the most prominent change related to Advertising Expense. This is likely due to Amber's Lacrosse Emporium undertaking a large marketing campaign during June. While this does explain some of the increase in the Net Loss, the fact remains that the company must start to convert the money spent on expenses into a profit (Net Income). If the company experiences a few more months similar to June, it will quickly run into cash-flow problems.

   One other item to note is that we now have more information regarding the decrease in Owner's Equity that we examined on the Comparative Balance Sheet. That decrease was approximately $13,700, and we now know that approximately $6,700 of that was attributable to the Net Loss. As the only other common reduction to the Capital account results from an owner withdrawal, the remaining $7,000 decrease likely resulted from Amber Stein withdrawing the funds. This is concerning, as the company could run into cash-flow problems if the owner continues to withdraw cash while the company is losing money (experiencing a Net Loss).

5. Using the June Balance Sheet, we will calculate the Current Ratio and Quick Ratio and comment on the results.

TIP! Recall that the Current Ratio = Current Assets / Current Liabilities, and the Quick Ratio = (Cash + Short-Term Liabilities + A/R) / Current Liabilities.

$$\text{Current Ratio} = \$54{,}675 \,/\, \$8{,}225 = 6.65 \text{ to } 1$$

$$\text{Quick Ratio} = \frac{\$38{,}500 + \$0 + \$4{,}200}{\$8{,}225} = 5.19 \text{ to } 1$$

The ratio results indicate that the current assets exceed current liabilities by over 6.5 times, while quick assets exceed current liabilities by approximately 5 times. Presently, the company is in a position to repay its debts. However, in order to determine if these ratios indicate that the company is performing well, comparisons must be made to competitors and industry averages.

6. Using the June Balance Sheet, we will calculate the Debt Ratio, Equity Ratio, and Debt-to-Equity Ratio, and comment on the ratio results.

TIP! Recall that the Debt Ratio = Total Liabilities / Total Assets, the Equity Ratio = Total Equity / Total Assets, and the Debt-to-Equity Ratio = Total Liabilities / Total Equity.

Debt Ratio = $8,225 / $68,150 = 12.07%

Equity Ratio = $59,925 / $68,150 = 87.93%

Debt-to-Equity Ratio = $8,225 / $59,925 = .14

These ratios indicate that, for Amber's Lacrosse Emporium, equity is significantly greater than debt. Remember that there are both benefits and drawbacks to using debt (liabilities) or equity. A company must determine the proper balance between the two. In this instance, comparisons should be made to competitors and industry averages to determine whether the balance for Amber's Lacrosse Emporium is appropriate.

7. Using the June Income Statement & Balance Sheet, let's calculate the Profit Margin and Return on Assets. Then we will comment on the ratio results.

TIP! Recall that Profit Margin = Net Income / Revenue, and Return on Assets = Net Income / Average Total Assets.

Profit Margin = $(6,682.50) / $6,250 = -106.92%

Return on Assets = $(6,682.50) / $72,313.75 = -9.24%

These profitability ratios for Amber's Lacrosse Emporium are very concerning. Not only are they negative, which is a result of the company experiencing a Net Loss instead of Net Income, but they are relatively large. This indicates that the Net Loss was large in comparison to both Total Revenue and Average Total Assets. In fact, the Net Loss exceeded Total Revenues, indicating that expenses were over twice as large as revenue for the month. This circumstance must be corrected in order for the company to have enough money to continue operating for the foreseeable future.

Knowledge Check A

KCa 7-1 Prepare a Horizontal Analysis

Complete two horizontal analyses, one based on Income Statement balances and one based on Balance Sheet balances, for Rhythmic Dance Studio. Use the following financial statements to prepare these horizontal analyses. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

Rhythmic Dance Studio
Income Statement
For the Year Ended December 31, 2015

Revenues:		
Service Revenue		$ 194,000
Expenses:		
Salaries Expense	82,400	
Rent Expense	32,275	
Supplies Expense	8,370	
Telephone Expense	7,000	
Utilities Expense	6,200	
Depreciation Expense	4,200	
Postage Expense	2,700	
Miscellaneous Expense	8,500	
Total Expenses		151,645
Net Income		42,355

Rhythmic Dance Studio
Balance Sheet
December 31, 2015

Assets:			
Cash		$ 41,000	
Accounts Receivable		$ 8,250	
Supplies		$ 24,975	
Furniture	$ 12,500		
Accum. Dep. - Furniture	$ 2,200	$ 10,300	
Equipment	$ 26,500		
Accum. Dep. - Equipment	$ 14,750	$ 11,750	
Total Assets			$ 96,275
Liabilities:			
Accounts Payable		$ 52,500	
Salaries Payable		$ 4,150	
Owner's Equity:			
Lucia Manning, Capital		$ 39,625	
Total Liabilities & Owner's Equity			$ 96,275

Rhythmic Dance Studio
Income Statement
For the Year Ended December 31, 2016

Revenues:		
Service Revenue		$ 261,500
Expenses:		
Salaries Expense	101,450	
Rent Expense	32,275	
Supplies Expense	13,500	
Telephone Expense	9,150	
Utilities Expense	5,850	
Depreciation Expense	6,300	
Postage Expense	4,000	
Miscellaneous Expense	17,200	
Total Expenses		189,725
Net Income		71,775

Rhythmic Dance Studio
Balance Sheet
December 31, 2016

Assets:			
Cash		$ 62,500	
Accounts Receivable		$ 11,200	
Supplies		$ 24,140	
Furniture	$ 12,500		
Accum. Dep. - Furniture	$ 4,350	$ 8,150	
Equipment	$ 38,000		
Accum. Dep. - Equipment	$ 18,900	$ 19,100	
Total Assets			$ 125,090
Liabilities:			
Accounts Payable		$ 50,300	
Salaries Payable		$ 5,650	
Owner's Equity:			
Lucia Manning, Capital		$ 69,140	
Total Liabilities & Owner's Equity			$ 125,090

1. Use the Income Statement for both 2015 and 2016 to complete a horizontal analysis.
2. Use the Balance Sheet for both 2015 and 2016 to complete a horizontal analysis.

KCa 7-2 Analyze a Horizontal Analysis

Review the horizontal analyses you completed in KCa 7-1. Write a paragraph of at least five sentences in which you draw conclusions about the financial performance of Rhythmic Dance Studio based on your horizontal analyses.

KCa 7-3 Prepare a Vertical Analysis

Use the financial statements provided in KCa 7-1 to complete four vertical analyses for Rhythmic Dance Studio. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

1. Prepare a vertical analysis based on the 2015 Income Statement.
2. Prepare a vertical analysis based on the 2016 Income Statement.
3. Prepare a vertical analysis based on the 2015 Balance Sheet.
4. Prepare a vertical analysis based on the 2016 Balance Sheet.

KCa 7-4 Prepare Common-Size Financial Statements

Use the vertical analyses you completed in KCa 7-3 to prepare Common-Size Financial Statements. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

1. Prepare a Common-Size Income Statement comparing accounts balances for 2015 and 2016.
2. Prepare a Common-Size Balance Sheet comparing accounts balances for 2015 and 2016.

KCa 7-5 Analyze Common-Size Financial Statements

Review the Common-Size Financial Statements you completed in KCa 7-4. Write a paragraph of at least five sentences in which you draw conclusions about the financial performance of Rhythmic Dance Studio based on your Common-Size Financial Statements.

KCa 7-6 Calculate Liquidity Ratios

Use the financial statements provided in KCa 7-1 to complete liquidity ratios for Rhythmic Dance Studio for both 2015 and 2016.

1. Calculate the Current Ratio for 2015 and 2016.

2. Calculate the Quick Ratio for 2015 and 2016.

KCa 7-7 Calculate Solvency Ratios

Use the financial statements provided in KCa 7-1 to complete solvency ratios for Rhythmic Dance Studio for both 2015 and 2016.

1. Calculate the Debt Ratio for 2015 and 2016.

2. Calculate the Equity Ratio for 2015 and 2016.

3. Calculate the Debt-to-Equity Ratio for 2015 and 2016.

KCa 7-8 Calculate Profitability Ratios

Use the financial statements provided in KCa 7-1 to complete profitability ratios for Rhythmic Dance Studio for both 2015 and 2016.

1. Calculate the Profit Margin for 2015 and 2016.

2. Calculate the Return on Assets for 2015 and 2016.

KCa 7-9 Analyze Financial Ratios

Review the financial ratios you completed in KCa 7-6, KCa 7-7, and KCa 7-8. Write a paragraph of at least five sentences in which you draw conclusions about the financial performance of Rhythmic Dance Studio based on your ratio calculations.

Knowledge Check B

KCb 7-1 Prepare a Horizontal Analysis

Complete two horizontal analyses, one based on Income Statement balances and one based on Balance Sheet balances, for Photography Professionals. Use the following financial statements to prepare these horizontal analyses. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

Photography Professionals
Income Statement
For the Year Ended December 31, 2015

Revenues:		
Service Revenue		$ 108,500
Expenses:		
Salaries Expense	61,500	
Photography Supplies Expense	14,750	
Advertising Expense	11,350	
Telephone Expense	1,740	
Depreciation Expense	1,400	
Postage Expense	925	
Office Supplies Expense	625	
Miscellaneous Expense	370	
Total Expenses		92,660
Net Income		15,840

Photography Professionals
Balance Sheet
December 31, 2015

Assets:			
Cash		$ 8,450	
Accounts Receivable		$ 13,500	
Photography Supplies		$ 3,150	
Office Supplies		$ 170	
Photography Equipment	$ 6,950		
Accum. Dep. - Photo Equip.	$ 5,270	$ 1,680	
Truck	$ 21,500		
Accum. Dep. - Truck	$ 11,000	$ 10,500	
Total Assets			$ 37,450
Liabilities:			
Accounts Payable		$ 12,350	
Salaries Payable		$ 1,350	
Owner's Equity:			
Lucia Manning, Capital		$ 23,750	
Total Liabilities & Owner's Equity			$ 37,450

Photography Professionals
Income Statement
For the Year Ended December 31, 2016

Revenues:		
Service Revenue		$ 88,500
Expenses:		
Salaries Expense	59,000	
Photography Supplies Expense	16,200	
Advertising Expense	6,800	
Telephone Expense	1,600	
Depreciation Expense	1,400	
Postage Expense	1,125	
Office Supplies Expense	500	
Miscellaneous Expense	440	
Total Expenses		87,065
Net Income		1,435

Photography Professionals
Balance Sheet
December 31, 2016

Assets:			
Cash		$ 12,100	
Accounts Receivable		$ 3,250	
Photography Supplies		$ 5,750	
Office Supplies		$ 425	
Photography Equipment	$ 6,950		
Accum. Dep. - Photo Equip.	$ 5,670	$ 1,280	
Truck	$ 21,500		
Accum. Dep. - Truck	$ 12,000	$ 9,500	
Total Assets			$ 32,305
Liabilities:			
Accounts Payable		$ 5,805	
Salaries Payable		$ 300	
Owner's Equity:			
Lucia Manning, Capital		$ 26,200	
Total Liabilities & Owner's Equity			$ 32,305

1. Use the Income Statement for both 2015 and 2016 to complete a horizontal analysis.
2. Use the Balance Sheet for both 2015 and 2016 to complete a horizontal analysis.

KCb 7-2 Analyze a Horizontal Analysis

Review the horizontal analyses you completed in KCb 7-1. Write a paragraph of at least five sentences in which you draw conclusions about the financial performance of Photography Professionals based on your horizontal analyses.

KCb 7-3 Prepare a Vertical Analysis

Use the financial statements provided in KCb 7-1 to complete four vertical analyses for Photography Professionals. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

1. Prepare a vertical analysis based on the 2015 Income Statement.
2. Prepare a vertical analysis based on the 2016 Income Statement.
3. Prepare a vertical analysis based on the 2015 Balance Sheet.
4. Prepare a vertical analysis based on the 2016 Balance Sheet.

KCb 7-4 Prepare Common-Size Financial Statements

Use the vertical analyses you completed in KCb 7-3 to prepare Common-Size Financial Statements. An Excel template, in which your answer(s) may be entered, can be found in the Student Resource Center.

1. Prepare a Common-Size Income Statement comparing accounts balances for 2015 and 2016.
2. Prepare a Common-Size Balance Sheet comparing accounts balances for 2015 and 2016.

KCb 7-5 Analyze Common-Size Financial Statements

Review the Common-Size Financial Statements you completed in KCb 7-4. Write a paragraph of at least five sentences in which you draw conclusions about the financial performance of Photography Professionals based on your Common-Size Financial Statements.

KCb 7-6 Calculate Liquidity Ratios

Use the financial statements provided in KCb 7-1 to complete liquidity ratios for Photography Professionals for both 2015 and 2016.

1. Calculate the Current Ratio for 2015 and 2016.
2. Calculate the Quick Ratio for 2015 and 2016.

KCb 7-7 Calculate Solvency Ratios

Use the financial statements provided in KCb 7-1 to complete solvency ratios for Photography Professionals for both 2015 and 2016.

1. Calculate the Debt Ratio for 2015 and 2016.
2. Calculate the Equity Ratio for 2015 and 2016.
3. Calculate the Debt-to-Equity Ratio for 2015 and 2016.

KCb 7-8 Calculate Profitability Ratios

Use the financial statements provided in KCb 7-1 to complete profitability ratios for Photography Professionals for both 2015 and 2016.

1. Calculate the Profit Margin for 2015 and 2016.
2. Calculate the Return on Assets for 2015 and 2016.

KCb 7-9 Analyze Financial Ratios

Review the financial ratios you completed in KCb 7-6, KCb 7-7, and KCb 7-8. Write a paragraph of at least five sentences in which you draw conclusions about the financial performance of Photography Professionals based on your ratio calculations.

8 Comprehensive Exercise

After examining each individual aspect of the accounting cycle, it is important to practice the skills you've learned. In this exercise chapter, you will complete the monthly accounting cycle for Mother Molly's Childcare—a daycare and babysitting service—for its first month of operations. You will then analyze the financial results from these two periods.

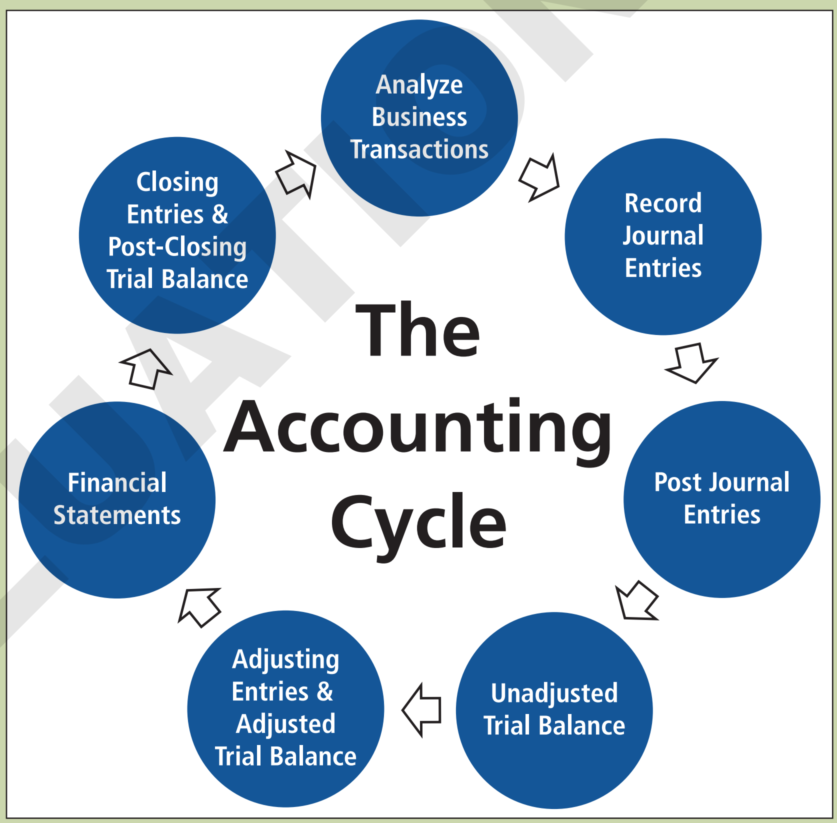
SCENARIO

Completing the Accounting Cycle for Mother Molly's Childcare

Nathaniel has been raving to his friends about the excellent job you've done managing the financial records for Nathan's Donut School. One of Nathaniel's closest friends, Molly Fabrizio, is about to begin operating a new business named Mother Molly's Childcare. Because of how highly Nathaniel has spoken of you, Molly has asked if you will assist with her business as well. She would like you to complete all accounting work for the first month of operations, and to teach her as you do so. After the first month, she intends to conduct the work on her own.

Your first task is to complete the accounting cycle for the first month of operations of Mother Molly's Childcare. You will then analyze the results for the first month. As you are teaching Molly how to perform these accounting functions, you must be certain to complete all work correctly. Therefore, you should refer to the earlier chapters, if necessary, as you work through the accounting cycle.

The Accounting Cycle remains the same, regardless of the business type and size.



First Month of Operations

The following transactions took place during the first month of operations of Mother Molly's Childcare.

- On May 1, Molly invests $50,000 to open Mother Molly's Childcare.
- On May 2, the company spends $11,000 on furniture for use in the childcare facility.
- On May 2, the company purchases $1,450 of supplies from a local office supply store on account.
- On May 8, the company establishes a petty cash fund containing $400.
- On May 12, the company purchases $350 of children's snacks on account. Mother Molly's Childcare treats this as a Miscellaneous Expense.
- On May 13, the company purchases advertising in a local newspaper for $505 cash.
- On May 15, the company determines that revenue for the first half of the month totaled $7,350. Of this amount, $4,000 was paid in cash, while the remainder is owed.
- On May 15, the company pays its employees. Gross wages for the first half of the month totaled $3,000. Federal income tax withholding totaled $337, state income tax withholding totaled $130, and life insurance premiums withheld totaled $65. In addition, applicable SUTA and FUTA tax rates for employees of Mother Molly's Childcare are 5.4% and 0.6% respectively. No single employee has, to date, reached the Social Security tax, FUTA tax, or SUTA tax threshold.
- On May 17, the company pays $800 of the previously owed amount from the May 2 purchase of supplies.
- On May 19, the company receives $1,200 of the previously-owed amount from the revenue recorded on May 15.
- On May 22, the company receives $2,000 cash from a customer paying for the next two months of childcare services in advance.
- On May 23, the life insurance premiums withheld on May 15 are remitted to the insurance company.
- On May 24, the company replenishes its petty cash fund, from which $305 has been spent. The $305 total was comprised of $157 of supplies, $83 of postage, and $65 of miscellaneous expense.
- On May 25, the company receives $1,325 of the previously-owed amount from the revenue recorded on May 15.
- On May 29, the company pays $1,620 cash for monthly rent.
- On May 30, the company pays cash of $220 for its telephone bill.
- On May 30, the company pays cash of $315 for its utility (electric) bill.
- On May 30, the company pays its employees. Gross wages for the first half of the month totaled $3,500. Federal income tax withholding totaled $389, state income tax withholding totaled $156, and life insurance premiums withheld totaled $70. In addition, applicable SUTA and FUTA tax rates for employees of Mother Molly's Childcare are 5.4% and 0.6% respectively. No single employee has, to date, reached the Social Security tax, FUTA tax, or SUTA tax threshold.
- On May 31, the company determines that revenue for the second half of the month totaled $9,200. Of this amount, $7,600 was paid in cash, while the remainder is owed.
- On May 31, Molly Fabrizio withdraws $4,000 cash for personal use.

To complete the comprehensive problem for the first month of operations, perform the following:

1. Record journal entries for each of the transactions of Mother Molly's Childcare during its first month of operations.
2. Post all journal entries to T-Accounts for each account used by Mother Molly's Childcare.
3. Prepare the Unadjusted Trial Balance.
4. Record adjusting journal entries based on the following information:
   a. A physical count of supplies on May 31 indicates that supplies worth $625 remain in the supply cabinet.
   b. $750 of the unearned revenue received on May 22 has been earned as of May 31.
   c. As of May 31, the company has provided $850 of services for which it has not yet billed the client, and which were not previously recorded.
   d. As of May 31, employees of Mother Molly's Childcare have worked for one day, and earned wages of $200. They will not receive paychecks for this work until the following month.
5. Prepare the Adjusted Trial Balance.
6. Prepare the Income Statement.
7. Prepare the Statement of Owner's Equity.
8. Prepare the Balance Sheet.
9. Record the closing entries.
10. Prepare the Post-Closing Trial Balance.
11. Prepare a vertical analysis for both the Income Statement and the Balance Sheet.
12. Calculate the Current Ratio and the Quick Ratio (Liquidity Ratios).
13. Calculate the Debt Ratio, Equity Ratio, and the Debt-to-Equity Ratio (Solvency Ratios).
14. Calculate the Profit Margin and the Return on Assets (Profitability Ratios).

Glossary

Accounting Equation Assets = Liabilities plus Owner's Equity

Accounting A system that provides a manner in which individual business events, and the cumulative impact of those events, can be expressed

Accounts Payable Subsidiary Ledger The location where Accounts Payable subsidiary T-Accounts are maintained

Accounts Receivable Subsidiary Ledger The location where Accounts Receivable subsidiary T-Accounts are maintained

Accrual Basis of Accounting A method of accounting under which revenues are recorded when they are earned, and expenses are recorded when they are incurred, regardless of when cash changes hands

Accrued Expense A type of adjusting entry for which the expense is incurred prior to payment being made

Accrued Revenue A type of adjusting entry for which the revenue is earned prior to payment being made

Acid-Test Ratio See *Quick Ratio*

Adjusted Trial Balance The second Trial Balance that a company completes during a period (after recording adjusting entries, and prior to recording closing entries)

Adjusting Entry An entry that is recorded as part of the adjusting entry process, which is designed to record activity for which there was no previous trigger indicating that it should have already been recorded

Assets Items of value within a business

Balance Column Format An alternative to the T-Account, which conveys account information in a more streamlined manner

Balance Sheet A financial statement that illustrates that the accounting equation is in balance by displaying asset, liability, and owner's equity balances

Bank Charges Charges levied by the bank for a variety of services

Bank Reconciliation A process through which the differences between the cash balances within the bank statement, and those in the general ledger, are reviewed for accuracy

Bank Statement A source document that outlines a business' banking activity for a single month

Basic Earnings per Share (EPS) (Net Income minus Preferred Dividends) divided by Weighted Average Common Shares Outstanding

Benchmark An amount that can be compared against that of a company in order to gauge its performance

Book Value The cost of an asset minus accumulated depreciation

Cash Basis of Accounting A method of accounting under which revenues and expenses are only recorded when cash changes hands

Cash Payments Journal A journal designed to record journal entries in which cash is paid out

Cash Receipts Journal A journal designed to record journal entries in which cash is received

Check A source document that provides information regarding payment that is received from a customer, or made to a supplier

Collusion A type of theft in which multiple employees work together to conceal their actions

Common-Size Financial Statement A financial statement in which percentages are displayed, thus allowing for comparisons of different-sized companies

Compound Journal Entry A journal entry that contains multiple debits and/or multiple credits

Contra-Asset Account A type of account that is designed to offset the balance of its associated asset account

Control Account A general ledger account that summarizes the balances within its corresponding subsidiary accounts

Corporation A business that issues shares of stock to its owners. It can be either public or private

Cost Principle Dictates that every asset must be recorded at the amount paid for the item

Credit The right side of a T-Account

Current Ratio Current Assets divided by Current Liabilities

Debit The left side of a T-Account

Debt Ratio Total Liabilities divided by Total Assets

Debt-to-Equity Ratio Total Liabilities divided by Total Equity

Deferred Expense A type of adjusting entry for which the expense is incurred after payment has been made

Deferred Revenue A type of adjusting entry for which the revenue is earned after payment has been made

Deposit in Transit A deposit made on one of the last days of a period, which the bank therefore does not process prior to the end of the month

Depreciation A method through which the loss in value of an asset over time can be recorded as an expense

Dividend Yield Cash Dividends per Share divided by Market Price per Share

Double-Entry Bookkeeping A concept that dictates that every transaction must impact at least two accounts

Equity Ratio Total Equity divided by Total Assets

External Audit A process through which an outside organization reviews a random sampling of transactions for accuracy

External Users Individuals outside of a company who use the financial statements to evaluate the business' performance

Federal Income Tax A tax that is withheld from employee pay to fund the general operations of the federal government

Federal Unemployment Tax A tax that an employer pays to the federal government to provide unemployment benefits to qualified individuals

Financial Accounting Standards Board (FASB) The organization that establishes accounting standards (including GAAP) in the United States

Fixed Asset An asset that is expected to be held for at least 12 months

Full Disclosure Principle Dictates that a public company must disclose all pertinent information regarding the company's activities

General Journal A journal designed to record entries that are not recorded within a special journal

General Ledger The location where T-Account balances, including Accounts Receivable and Accounts Payable control accounts, are maintained

Generally Accepted Accounting Principles (GAAP) Principles that dictate the manner in which businesses in the United States account for their activity

Gross Pay The total amount earned by an employee

Horizontal Analysis An analysis in which account balances are compared across time to determine both the dollar and percentage differences between them

Income Statement A financial statement that displays the balances for all revenue and expenses accounts, as well as the Net Income

Internal Audit A process through which company employees review a random sampling of transactions for accuracy

Internal Control Procedures Procedures that a company can undertake to ensure that cash is properly safeguarded

Internal Users Employees of a company who use the financial statements to improve the performance of the company

Invoice A bill for goods or services that summarizes amounts owed from one party to another, and therefore is a source document

Journal Entry A method for recording transactions that lists the accounts impacted, and the amount by which each account has changed

Liabilities Portions of the assets owed to an entity outside of the business

Liquidity Ratios Types of ratios that indicate how quickly a company can convert assets to cash

Matching Principle Dictates that expenses must be recorded in the same period as the revenues that they generated

Medicare Tax A tax that is withheld from employee pay to fund the Hospital Insurance program

Monetary Unit Principle Dictates that account balances can be used to express the performance of a company

Net Income Revenues minus expenses

Net Pay The amount received by an employee after taxes (and other withholdings) are subtracted from gross pay

Normal Balance The side of a T-Account on which an account increases

NSF Check (Non-Sufficient Funds Check) A deposited check that subsequently bounces

Outstanding Check A check that has been written but not yet cashed

Owner's Equity A portion of the assets not owed to an entity outside of the business, and therefore a portion to which the owner can lay claim

Partnership A business owned by two or more individuals

Permanent Accounts Accounts that are not closed at the end of each period, and therefore for which the ending balance from one period becomes the beginning balance for the subsequent period

Petty Cash A small amount of cash that is easily accessible and is used for incidental purchases

Plant Asset See *Fixed Asset*

Post-Closing Trial Balance The third and final Trial Balance that a company completes during a period (after recording closing entries)

Posting The process of transferring amounts within journal entries to the corresponding T-Accounts

Price-Earnings Ratio (P/E Ratio) Market Price per Share divided by Earnings per Share

Profit Margin Net Income divided by Revenue

Profitability Ratios Types of ratios that provide insight into a company's ability to effectively generate income

Purchase Order A source document that is prepared by the purchasing company and sent to the seller to indicate a desire to purchase items

Purchases Journal A journal designed to record journal entries in which purchases are made on account

Quick Ratio (Cash plus Short-Term Investments plus Accounts Receivable) divided by Current Liabilities

Ratio Analysis A type of analysis in which relationships between specific account balances are examined

Residual Value See *Salvage Value*

Return on Assets Net Income divided by Average Total Assets

Revenue Journal A journal designed to record journal entries in which revenue is earned on account

Revenue Principle Dictates that revenue must be recorded in the period in which it is earned

Salvage Value The amount a company expects to receive for an asset at the time of disposal

Short-Term Asset An asset that is expected to be held for fewer than 12 months

Social Security Tax A tax that is withheld from employee pay to fund the Old Age, Survivors, and Disability Insurance program

Sole Proprietorship A business owned by one individual

Solvency Ratios Types of ratios that gauge a company's ability to meet long-term obligations

Source Document Any document that provides information regarding one or more transactions

Special Journal A journal designed to record one specific type of business activity

State Income Tax A tax that is withheld from employee pay to fund the general operations of the state government

State Unemployment Tax A tax that an employer pays to the state government to provide unemployment benefits to qualified individuals

Statement of Cash Flows A financial statement that displays a summary of all activities that led to the ending cash balance

Statement of Owner's Equity A financial statement that reconciles beginning owner's equity with ending owner's equity by displaying Net Income (Loss), owner investments, and owner withdrawals

T-Account A visual representation of the activity within a single account

Temporary Accounts Accounts that are closed at the end of each period (these include revenue, expense, and withdrawal accounts)

Time-Period Principle Dictates that accounting activity may be expressed over specific periods of time

Transaction A single business event

Trial Balance Lists all accounts and displays their respective debit or credit balances as of a specific date

Unadjusted Trial Balance The first Trial Balance that a company completes during a period (prior to recording adjusting entries)

Useful Life The number of years a company expects to use as asset

Vertical Analysis An analysis in which different account balances within the same period are compared

Voluntary Deduction An amount that an employee elects to have withheld from pay, which can be used for a variety of reasons

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