## Investing and Financing Decisions and the Accounting System

Steve Ells is a classically trained chef who is often called one of the most innovative men in the world of food. He is the founder, chairman of the board, and co-chief executive officer of Chipotle Mexican Grill, a leader in the fastest-growing segment of the restaurant industry, now called "fast-casual." In 1993, this entrepreneur opened his first restaurant in a former Dolly Madison ice cream store in Denver, Colorado. His vision was a restaurant that serves food fast but uses higher-quality fresh ingredients and cooking techniques found in finer restaurants. As of December 31, 2011, the Chipotle chain had over 1,230 restaurants in the United States, two in Toronto, Canada, and two in London, England. It plans to open about 160 additional restaurants in 2012.

How did Chipotle grow so fast? It did so in two stages. First, in 1999, McDonald's Corporation became the majority stockholder by investing about $\$ 360$ million in Chipotle. This provided funding for its tremendous early growth from 19 stores to nearly 490 restaurants

## Learning Objectives

After studying this chapter, you should be able to:
2-1 Define the objective of financial reporting, the elements of the balance sheet, and the related key accounting assumptions and principles. p. 43
2-2 Identify what constitutes a business transaction and recognize common balance sheet account titles used in business. p. 47
2-3 Apply transaction analysis to simple business transactions in terms of the accounting model: Assets = Liabilities + Stockholders' Equity. p. 49
2-4 Determine the impact of business transactions on the balance sheet using two basic tools: Journal entries and T-accounts. p. 54
2-5 Prepare a trial balance and simple classified balance sheet, and analyze the company using the current ratio. p. 64

2-6 Identify investing and financing transactions and demonstrate how they impact cash flows. p. 68


FOCUS COMPANY:
by the end of 2005. Then, in January 2006, Chipotle "went public." In its IPO or initial public offering, it issued stock to the public for the first time. That stock is listed on the New York Stock Exchange as CMG. McDonald's also sold its ownership in Chipotle for nearly $\$ 1.4$ billion-a handsome profit of over $\$ 1$ billion. Comparing its balance sheet from 2005 to 2011 highlights the company's amazing 264 percent growth since becoming a public company:

| (in millions of dollars) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Assets | Liabilities | $+$ | Stockholders' Equity |
| End of 2011 | \$1,425 | \$381 |  | \$1,044 |
| End of 2005 | 392 | 83 |  | 309 |
| Change | + \$1,033 | + \$298 |  | + \$ 735 |

This growth was stimulated in part by Ells's evolving vision that "fresh is not enough anymore." He has committed Chipotle to serving naturally raised pork, chicken, and beef; using no-trans-fat cooking oil; serving cheese and sour cream products that are free of synthetic bovine growth hormones; using certified organic beans and locally grown organic produce when in season; and serving preservative-free corn and flour tortillas. In an even more dramatic show of commitment to sustainability, in 2009, Chipotle built the first-ever free-standing

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www.chipotle.com
restaurant to receive the highest rating (LEED Platinum) from the U.S. Green Building Council, ${ }^{1}$ a start toward other sustainable renovations and projects. In 2011, the company created the Chipotle Cultivate Foundation to expand philanthropic work surrounding sustainable agriculture.

As it continues to evolve, Chipotle's recent annual report states its vision is now "to change the way people think about and eat fast food." The belief is that providing good food and service is good business.

## UNDERSTANDING THE BUSINESS

The "fast-casual" segment of the $\$ 1.7$ trillion restaurant industry generates more than $\$ 23$ billion in sales annually. ${ }^{2}$ What identifies a restaurant as fast-casual? Typically, customers still order at the register as in a fast-food restaurant, but there are usually no drivethru options and the food is made to order and served in modern and upscale surroundings. Checks typically range between $\$ 8$ and $\$ 16$. The largest fast-casual restaurant chain is Chipotle Mexican Grill, followed by Panera Bread Company.

Franchising is common in chain restaurants. The largest restaurant to use franchising is Subway, with over 39,000 restaurants-all franchised. Franchising involves selling the right to use or sell a product or service to another. This is an easy way for someone to start his or her own business because the franchisor (the seller, such as Panera Bread) often provides site location, design, marketing, and management training support in exchange for initial franchise fees and ongoing royalty fees usually based on weekly sales. At Panera Bread, for example, only 48 percent of the stores are company-owned.

Unlike most restaurant chains, however, Chipotle does not franchise the business. All restaurants are company-owned. Developing a new site, usually on rented property, costs about $\$ 800,000$. In 2011, Chipotle spent over $\$ 140$ million on new and renovated property and equipment. The creation of new restaurants to meet consumer demand for healthier food options explains most of the changes in Chipotle's assets and liabilities from year to year. To understand how the result of Chipotle Mexican Grill's growth strategy is communicated in the balance sheet, we must answer the following questions:

- What business activities cause changes in the balance sheet amounts from one period to the next?
- How do specific business activities affect each of the balance sheet amounts?
- How do companies keep track of the balance sheet amounts?

In this chapter, we focus on some typical asset acquisition activities (often called investing activities), along with related financing activities, such as borrowing funds from creditors or selling stock to investors to provide the cash necessary to acquire the assets. We examine those activities that affect only balance sheet amounts. Operating activities that affect both the income statement and the balance sheet are covered in Chapters 3 and 4. To begin, let's return to the basic concepts introduced in Chapter 1.

[^0]
## ORGANIZATION of the Chapter

- Concepts Emphasized in Chapter 2

What Business
Activities Cause
Changes in Financial Statement Amounts?

- Nature of Business Transactions
- Accounts
 Transactions

> | How Do | How Is the |
| :---: | :---: |
| Companies Keep | Balance Sheet |
| Track of Account | Prepared and |
| Balances? | Analyzed? |

- The Direction of Transaction Effects
- Analytical Tools
- Transaction Analysis Illustrated
- Classified Balance Sheet
- Ratio Analysis in Decision-Making
- Current Ratio


## OVERVIEW OF ACCOUNTING CONCEPTS

Because learning and remembering how the accounting process works is much easier if you know why it works a certain way, we begin by discussing key accounting terms and concepts. They are part of a conceptual framework developed over many years and synthesized by the Financial Accounting Standards Board (FASB) to provide a structure for developing accounting standards. Exhibit 2.1 provides an overview of the key concepts in the framework that will be discussed in each of the next four chapters. A clear understanding of these accounting concepts will be helpful as you study, and they will also help you in future chapters as we examine more complex business activities.

## Concepts Emphasized in Chapter 2

## Objective of Financial Reporting

The primary objective of financial reporting to external users is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders, and other creditors in making decisions about providing resources to the entity. The users of accounting information are all expected to have a reasonable understanding of accounting concepts and procedures-which may be one of the reasons you are studying accounting. Of course, as we discussed in Chapter 1, many other groups, such as suppliers and customers, also use external financial statements.

Most users are interested in information to help them assess the amount, timing, and uncertainty of a business's future cash inflows and outflows. For example, creditors and potential creditors need to assess an entity's ability to (1) pay interest on a loan over time and also (2) pay back the principal on the loan when it is due. Investors and potential investors want to assess the entity's ability to (1) pay dividends in the future and (2) be successful so that the stock price rises, enabling investors to sell their stock for more than they paid. Information about a company's economic resources, claims against its resources, and activities that change these items provides insight into cash flows and a company's financial strengths and weaknesses.

## LEARNING OBJECTIVE 2-1

Define the objective of financial reporting, the elements of the balance sheet, and the related key accounting assumptions and principles.

## PRIMARY OBJECTIVE OF FINANCIAL REPORTING TO EXTERNAL USERS

 is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders, and other creditors in making decisions about providing resources to the entity.
## EXHIBIT 2.1

Financial Accounting and Reporting Conceptual Framework

Objective of Financial Reporting to External Users: (in Ch. 2) To provide financial information about the reporting entity that is useful to existing and potential investors, lenders, and other creditors in making decisions about providing resources to the entity
$>$ Pervasive Cost-Benefit Constraint: Benefits of providing information should outweigh its costs.
Fundamental Qualitative Characteristics of Useful Information: (in Ch. 2)
Relevance (including materiality) and Faithful Representation
Attributes that Enhance Qualitative Characteristics:
Comparability (including consistency), Verifiability, Timeliness, and Understandability
Elements to Be Measured and Reported:
Assets, Liabilities, Stockholders' Equity, Investments by Owners, and Distributions to Owners (in Ch. 2) Revenues, Expenses, Gains, and Losses (in Ch. 3) Comprehensive Income (in Ch. 5)
Recognition, Measurement, and Disclosure Concepts:
Assumptions: Separate Entity, Continuity (Going Concern), and Stable Monetary Unit (in Ch. 2) Time Period (in Ch. 3)
Principles: Mixed-Attribute Measurement (in Ch. 2)
Revenue Realization and Expense Matching (in Ch. 3) Full Disclosure (in Ch. 5)

## Qualitative Characteristics of Useful Information

For accounting information to be useful, it must be relevant and be a faithful representation. Relevant information is capable of influencing decisions by allowing users to assess past activities and/or predict future activities. To be reported, the information should also be material in amount depending on the nature of the item and company. Faithful representation requires that the information be complete, neutral, and free from error. Comparability, verifiability, timeliness, and understandability are qualitative characteristics that enhance the usefulness of information that is relevant and faithfully represented. For example, our discussions of ratio analysis will emphasize the importance of comparing ratios for the same company over time, as well as with those of competitors. Such comparisons are valid only if the information is prepared on a consistent and comparable basis. These characteristics of useful information guide the FASB in deciding what financial information should be reported.

## Recognition and Measurement Concepts

Before we discuss accountants' precise definitions for the elements of the balance sheet, we should consider three assumptions and a measurement concept that underlie much of our application of these definitions. First we make the separate-entity assumption, which states that each business's activities must be accounted for separately from the activities of its owners, all other persons, and other entities. This means, for example, that, when an owner purchases property for personal use, the property is not an asset of the business. Second, under the continuity assumption (sometimes called the going-concern assumption), unless there is evidence to the contrary, we assume that the business will continue operating into the foreseeable future, long enough to meet its contractual commitments and plans. This means, for example, that if there was a high likelihood of bankruptcy, then its assets should be valued and reported on the balance sheet as if the company were to be liquidated (that is, discontinued, with all of its assets sold and all debts paid). Under the stable monetary unit assumption, each business entity accounts for and reports its financial results primarily in terms of the national monetary unit (e.g., dollars in the United States, yen in Japan, and euros in Germany), without any adjustment for changes in purchasing power (e.g., inflation).

Finally, accountants measure the elements of the balance sheet using what is called a mixed-attribute measurement model. Most balance sheet elements are recorded at their
cash-equivalent value on the date of the transaction. This is called the historical cost principle or cost principle. For example, assets are initially recorded at the cash paid plus the dollar value of all noncash considerations on the exchange date. We will discuss the conditions under which these values are adjusted to other amounts, such as their market value, starting in Chapter 6 of this text. With these assumptions in mind, we are now ready to discuss accountants' precise definitions of the elements of the balance sheet.

## Elements of the Balance Sheet

The four financial statements-balance sheet, income statement, statement of stockholders' (shareholders' or owners') equity, and statement of cash flows-along with the notes to the statements provide the structure for the information communicated to users. As we learned in Chapter 1, assets, liabilities, and stockholders' equity are the elements of a corporation's balance sheet. The conceptual framework defines them as follows.

Assets are probable future economic benefits owned or controlled by an entity as a result of past transactions or events. In other words, they are the economic resources the entity acquired to use in operating the company in the future. As shown in Chipotle's balance sheet presented in Exhibit 2.2, most companies list assets in order of liquidity, or how soon an asset is expected by management to be turned into cash or used. Notice that several of Chipotle's assets are categorized as current assets. Current assets are those resources that Chipotle will use or turn into cash within one year (the next 12 months). Chipotle's current assets include Cash, ShortTerm Investments, Accounts Receivable (due from customers and others), Supplies (to make the food), and Prepaid Expenses (for rent, insurance, and advertising paid in advance of use). For manufacturers that produce and sell goods and merchandisers who sell already completed goods, Inventory (for goods to be sold) would also be listed after Accounts Receivable. Inventory is always considered a current asset, regardless of how long it takes to produce and sell the inventory. These are typical titles used by most entities.

All other assets are considered long term (or noncurrent). That is, they are to be used or turned into cash after the coming year. For Chipotle, that includes Property and Equipment (land, buildings, and equipment) and Investments (in other companies). Intangibles (nonphysical assets such as trademarks and patents) may also be listed. Although Chipotle has intangibles, for simplicity in this chapter, intangible assets have been combined with Property and Equipment. Intangibles are discussed in detail in Chapter 8.

Liabilities are defined as probable future sacrifices of economic benefits arising from present obligations of a business as a result of past transactions or events. In other words, they are probable obligations to pay cash or provide goods or services arising from past transactions. Entities that a company owes money to are called creditors. Chipotle's balance sheet includes four liabilities: Accounts Payable (to suppliers), Accrued Expenses Payable (for wages, utilities, taxes, and interest on debt), Unearned Revenue (for unredeemed gift cards that have been purchased by customers), and Notes Payable (to banks and other creditors). These and other liabilities will be discussed in more detail in subsequent chapters.

Similar to how assets are reported in order of liquidity, liabilities are usually listed on the balance sheet in order of maturity (how soon an obligation is to be paid). Liabilities that Chipotle will need to pay or settle within the coming year (with cash, goods, other current assets, or services) are classified as current liabilities. Distinguishing current assets and current liabilities assists external users of the financial statements in assessing the amounts and timing of future cash flows.

Stockholders' equity (also called shareholders' equity or owners' equity) is the residual interest in the assets of the entity after subtracting liabilities. It is a combination of the financing provided by the owners and by business operations.

- Financing Provided by Owners is referred to as contributed capital. Owners invest in the business by providing cash and sometimes other assets and receive in exchange shares of stock as evidence of ownership. The largest investors in Chipotle Mexican Grill are financial institutions (mutual funds, pension funds, etc.). The directors and executive officers also own stock as do other corporate employees and the general public.

ASSETS are probable future economic benefits owned or controlled by an entity as a result of past transactions or events.

## CURRENT ASSETS

are assets that will be used or turned into cash within one year. Inventory is always considered a current asset regardless of the time needed to produce and sell it.


LIABILITIES are probable future sacrifices of economic benefits arising from present obligations of a business as a result of past transactions or events.

## CURRENT LIABILITIES are

 obligations that will be settled by providing cash, goods, other current assets, or services within the coming year.STOCKHOLDERS' EQUITY (SHAREHOLDERS' OR OWNERS' EQUITY) is the residual interest in assets of the entity after subtracting liabilities.


## RETAINED EARNINGS

are the cumulative earnings of a company that have not been distributed to the owners and are reinvested in the business.

- Financing Provided by Operations is referred to as earned capital or retained earnings. ${ }^{3}$ When companies earn profits, they can be distributed to owners as dividends or reinvested in the business. The portion of profits reinvested in the business is called retained earnings. Companies with a growth strategy often pay little or no dividends to retain funds for expansion. A look at Chipotle's balance sheet (Exhibit 2.2) indicates that its growth has been financed by substantial reinvestment of earnings ( $\$ 671.5$ million).


## PAUSE FOR FEEDBACK

We just learned the elements of the balance sheet (assets, liabilities, and stockholders' equity) and how assets and liabilities are usually classified (current or noncurrent). Current assets (including inventory) are expected to be used or turned into cash within the next 12 months and current liabilities are expected to be paid or satisfied within the next 12 months with cash, services, or other current assets.

[^1]
## SELF-STUDY QUIZ

The following is a list of items from a recent balance sheet of The Wendy's Company. Indicate on the line provided whether each of the following is usually categorized on the balance sheet as a current asset (CA), noncurrent asset (NCA), current liability CL ), noncurrent liability (NCL), or stockholders' equity (SE).
a. Retained Earnings
b. Prepaid Expenses
c. Accounts Payable $\qquad$ d. Inventories
e. Additional Paid-in Capital
$\square$ f. Properties (buildings and equipment)
After you have completed your answers, check them with the solutions at the bottom of the page.

## Unrecorded but Valuable Assets and Liabilities

g. Accounts Receivable
h. Long-Term Debt
i. Accrued Expenses Payable

FINANCIAL ANALYSIS

Many very valuable intangible assets, such as trademarks, patents, and copyrights that are developed inside a company (not purchased), are not reported on the balance sheet. For example, General Electric's balance sheet reveals no listing for the GE trademark because it was developed internally over time through research, development, and advertising (it was not purchased). Likewise, the Coca-Cola Company does not report any asset for its patented Coke formula, although it does report more than $\$ 2$ billion in various trademarks that it has purchased.

Nearly all companies have some form of off-balance-sheet financing-obligations not reported as liabilities on the balance sheet. For many companies, renting facilities or equipment can fall into this category, and can be quite significant. For example, Delta Air Lines included in a note to the financial statements in a recent annual report that over $\$ 10.8$ billion in future cash flows of aircraft rental leases were not reported on the balance sheet as debt, an amount equal to 24 percent of its total liabilities that were reported on the balance sheet. This also illustrates the importance of reading the notes, not just the financial statements, when analyzing a company's financial information and predicting future cash flows.

Now that we have reviewed the basic elements of the balance sheet and related recognition and measurement concepts as part of the conceptual framework, let's see what economic activities cause changes in the amounts reported on the balance sheet.

## What business activities Cause changes IN FINANCIAL STATEMENT AMOUNTS? <br> Nature of Business Transactions

Accounting focuses on certain events that have an economic impact on the entity. Those events that are recorded as part of the accounting process are called transactions. The first step in translating the results of business events to financial statement numbers is determining which events to include. As the definitions of assets and liabilities indicate, only economic resources and debts resulting from past transactions are recorded on the balance sheet. Transactions include two types of events:

1. External events: These are exchanges of assets, goods, or services by one party for assets, services, or promises to pay (liabilities) from one or more other parties. Examples include the purchase of a machine from a supplier, sale of merchandise to customers, borrowing cash from a bank, and investment of cash in the business by the owners.
[^2]LEARNING OBJECTIVE 2-2
Identify what constitutes a business transaction and recognize common balance sheet account titles used in business.

## A TRANSACTION is (1) an

 exchange of assets or services for assets, services, or promises to pay between a business and one or more external parties to a business or (2) a measurable internal event such as adjustments for the use of assets in operations.
## Solution to

SELF-STUDY QUIZ

An ACCOUNT is a standardized format that organizations use to accumulate the dollar effect of transactions on each financial statement item.
2. Internal events: These include certain events that are not exchanges between the business and other parties but nevertheless have a direct and measurable effect on the entity. Examples include using up insurance paid in advance and using buildings and equipment over several years.

Throughout this textbook, the word transaction is used in the broad sense to include both types of events.

Some important events that have a future economic impact on a company, however, are not reflected in the financial statements. In most cases, signing a contract is not considered to be an accounting transaction because it involves only the exchange of promises, not of assets such as cash, goods, services, or property. For example, assume that Chipotle signs an employment contract with a new regional manager. From an accounting perspective, no transaction has occurred because no exchange of assets, goods, or services has been made. Each party to the contract has exchanged promises-the manager agrees to work; Chipotle agrees to pay the manager for the work. For each day the new manager works, however, the exchange of services for pay results in a transaction that Chipotle must record. Because of their importance, longterm employment contracts, leases, and other commitments may need to be disclosed in notes to the financial statements.

## Accounts

To accumulate the dollar effect of transactions on each financial statement item, organizations use a standardized format called an account. The resulting balances are kept separate for financial statement purposes. To facilitate the recording of transactions, each company establishes a chart of accounts, a list of all account titles and their unique numbers. The accounts are usually organized by financial statement element, with asset accounts listed first, followed by liability, stockholders' equity, revenue, and expense accounts in that order. Exhibit 2.3 lists various account titles that are quite common and are used by most companies. The exhibit also provides special notes to help you in learning account titles. When you are completing assignments and are unsure of an account title, refer to this listing for help.

Every company creates its own chart of accounts to fit the nature of its business activities. For example, a small lawn care service may have an asset account titled Lawn Mowing


Equipment, but a large corporation such as Dell is unlikely to report such an account. These differences in accounts will become more apparent as we examine the balance sheets of various companies. Because each company has its own chart of accounts, you should not try to memorize a typical chart of accounts, but understand the nature of each typical account. Then when you see a company that uses a slightly different title, you will understand what it means. For example, some companies use the terms Trade Accounts Receivable (same as Accounts Receivable) or Merchandise Inventory (same as Inventory). In homework problems, you will either be given the account names or be expected to select appropriate names, similar to the ones in Exhibit 2.3. Once you select a name for an account, you must use that exact name in all transactions affecting that account.

The accounts you see in the financial statements of most large corporations are actually summations (or aggregations) of a number of specific accounts in their recordkeeping system. For example, Chipotle keeps separate accounts for food, beverage, and packaging supplies, but combines them under Supplies on the balance sheet. Equipment, buildings, and land are also combined into an account called Property and Equipment. Since our aim is to understand financial statements reported by actual entities, we will focus on aggregated accounts.

## HOW DO TRANSACTIONS AFFECT ACCOUNTS?

Managers' business decisions often result in transactions that affect the financial statements. For example, decisions to expand the number of stores, advertise a new product, change an employee benefit package, and invest excess cash would all affect the financial statements. Sometimes these decisions have unintended consequences as well. The decision to purchase additional inventory for cash in anticipation of a major sales initiative, for example, will increase inventory and decrease cash. But if there is no demand for the additional inventory, the lower cash balance will also reduce the company's ability to pay its other obligations.

Because business decisions often involve an element of risk, managers should understand exactly how transactions impact the financial statements. The process for determining the effects of transactions is called transaction analysis.

## Principles of Transaction Analysis

Transaction analysis is the process of studying a transaction to determine its economic effect on the entity in terms of the accounting equation (also known as the fundamental accounting model). We outline the process in this section of the chapter and create a visual tool representing the process (the transaction analysis model). The basic accounting equation and two principles are the foundation for this model. Recall from Chapter 1 that the basic accounting equation for a business that is organized as a corporation is as follows:

$$
\text { Assets }(\mathrm{A})=\text { Liabilities }(\mathrm{L})+\text { Stockholders' Equity (SE) }
$$

The two principles underlying the transaction analysis process follow:

- Every transaction affects at least two accounts; correctly identifying those accounts and the direction of the effect (whether an increase or a decrease) is critical.
- The accounting equation must remain in balance after each transaction.

Success in performing transaction analysis depends on a clear understanding of these principles. Study the following material well.

## Dual Effects

The idea that every transaction has at least two effects on the basic accounting equation is known as the dual effects concept. ${ }^{4}$ Most transactions with external parties involve an

LEARNING OBJECTIVE 2-3
Apply transaction analysis to simple business transactions in terms of the accounting model: Assets $=$ Liabilities + Stockholders' Equity.

TRANSACTION ANALYSIS
is the process of studying a transaction to determine its economic effect on the fundamental accounting model.

[^3]
exchange by which the business entity both receives something and gives up something in return. For example, suppose Chipotle purchased tomatoes for cash. In this exchange, Chipotle would receive food supplies (an increase in an asset) and in return would give up cash (a decrease in an asset).


In analyzing this transaction, we determined that the accounts affected were Supplies and Cash. However, most supplies are purchased on credit (that is, money is owed to suppliers). In that case, Chipotle would engage in two separate transactions at different points in time:

| Transaction | Chipotle Received | Chipotle Gave |
| :---: | :---: | :---: |
| Purchased tomatoes on credit | Supplies (asset account increased) | Accounts Payable <br> A promise to pay later (liability account increased) |
|  |  |  |

Eventual payment of
cash owed to the
suppliers

Accounts Payable
A promise was eliminated (liability account decreased)

Cash
(asset account decreased)


Not all important business activities result in a transaction that affects the financial statements. Most importantly, signing a contract involving the exchange of two promises to perform (e.g., you promise to work and I promise to pay you) does not result in an accounting transaction that is recorded. For example, if Chipotle sent an order for more tomatoes to its food supplier and the supplier accepted the order but did not fill it immediately, no transaction took place. As soon as the food is delivered to Chipotle, however, the supplier has given up its inventory in exchange for a promise from Chipotle to pay for the items in the near future, and Chipotle has exchanged its promise to pay for the supplies it receives. Because a promise has been exchanged for goods, a transaction has taken place. Both Chipotle and the supplier's statements will be affected.

## Balancing the Accounting Equation

Notice in the tomato purchase illustrations on the previous page that the accounting equation next to each transaction remained in balance. The accounting equation must remain in balance after each transaction. That is, total assets (resources) must equal total liabilities and stockholders' equity (claims to resources). If all correct accounts have been identified and the appropriate direction of the effect on each account has been determined, the equation should remain in balance.

> Systematic transaction analysis for investing and financing activities includes the following steps:
> Step 1: Ask $\rightarrow$ What was received and what was given?
> - Identify the account affected by title (e.g., Cash and Notes Payable). Remember: Make sure that at least two accounts change.
> - Classify them by type of account: Asset (A), Liability (L), or Stockholders' Equity (SE) (e.g., Cash is an asset).
> - Determine the direction of the effect: Did the account increase (+) or decrease (-)?

Step 2: Verify $\rightarrow$ Is the accounting equation in balance? $(\mathbf{A}=\mathbf{L}+\mathbf{S E})$

## Analyzing Chipotle's Transactions

To illustrate the use of the transaction analysis process, let's consider transactions of Chipotle that are also common to most businesses. Remember that this chapter presents transactions that affect only the balance sheet accounts. Assume that Chipotle engages in the following events during the first quarter of 2012, the first three months following the balance sheet in Exhibit 2.2. Account titles are from that balance sheet, and remember that, for simplicity, all amounts are in thousands:
(a) Chipotle issued $\mathbf{1 0 , 0 0 0}$ additional shares of common stock, receiving \$62,300 in cash from investors. Each share of common stock usually has a nominal (low) par value printed on the face of the certificate. Par value is a legal amount per share established by the board of directors; it has no relationship to the market price of the stock. Its significance is that it establishes the minimum amount that a stockholder must contribute. Chipotle's common stock has a par value of $\$ .01$ per share. When a corporation issues common (capital) stock, the amount received affects two separate accounts: The Common Stock account for the number of shares times the par value per share, and Additional Paid-in Capital (also called Paid-in Capital or Contributed Capital in Excess of Par) for the excess received above par.

PAR VALUE is a legal amount per share established by the board of directors; it represents the minimum amount a stockholder must contribute and has no relationship to the market price of the stock.

COMMON STOCK is the account that is equal to the number of shares issued by a corporation times the par value per share.

## ADDITIONAL PAID-IN

 CAPITAL (Paid-in Capital, Contributed Capital in Excess of Par) is the amount of capital contributed by the shareholders less the par value of the stock.

Step 2: Is the accounting equation in balance? Assets $\mathbf{\$ 6 2 , 3 0 0}=$ Liabilities $\mathbf{\$ 0}+$ Stockholders' Equity $\mathbf{\$ 6 2 , 3 0 0}$
(b) Chipotle borrowed $\$ 2,000$ from its local bank, signing a note to be paid in three years.

Step 1: What was received and what was given (account name, type of account, amount, and direction of effect)?

| Received: Cash (+A) \$2,000 |  |  |  | Given: A written promise to repay the loan: Notes Payable (+L) \$2,000 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  | $=$ | Liabilities |  | + | Stockholders' Equity |  |  |
| Cash | Short-term Investments | Property \& Equipment | Long-term Investments |  | Dividends Payable | Notes Payable |  | Common Stock | Additional Paid-in Capital | Retained Earnings |
| (a) $+62,300$ |  |  |  | = |  |  |  | +100 | +62,200 |  |
| (b) $+2,000$ |  |  |  | = |  | +2,000 |  |  |  |  |

Step 2: Is the accounting equation in balance? Assets $\mathbf{\$ 2 , 0 0 0}=$ Liabilities $\mathbf{\$ 2 , 0 0 0}+$ Stockholders' Equity $\mathbf{\$ 0}$
Companies that need cash to buy or build additional facilities often seek funds by selling stock to investors as in transaction (a) or by borrowing from creditors as in transaction $(b)$. Any transactions with stockholders (usually issuing additional stock and paying dividends) and transactions with banks (borrowing and repaying loans) are financing activities.
(c) Chipotle purchased new ovens, counters, refrigerators, and other equipment costing $\mathbf{\$ 6 3 , 1 0 0}$; paid $\mathbf{\$ 5 5 , 1 0 0}$ in cash and signed a note for the rest.

Step 1: What was received and what was given (account name, type of account, amount, and direction of effect)?
Received: Property \& Equipment (+A) \$63,100
Given: Cash $(-\mathrm{A}) \$ 55,100$
Notes Payable $(+\mathrm{L}) \$ 8,000$

| Assets |  |  |  | = | Liabilities |  | + | Stockholders' Equity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash | Short-term Investments | Property \& Equipment | Long-term Investments |  | Dividends Payable | Notes Payable |  | Common Stock | Additional Paid-in Capital | Retained Earnings |
| (a) $+62,300$ |  |  |  | = |  |  |  | +100 | +62,200 |  |
| (b) $+2,000$ |  |  |  | = |  | +2,000 |  |  |  |  |
| (c) $-55,100$ |  | +63,100 |  | $=$ |  | +8,000 |  |  |  |  |

Step 2: Is the accounting equation in balance? Assets $\mathbf{\$ 8 , 0 0 0}=$ Liabilities $\mathbf{\$ 8 , 0 0 0}+$ Stockholders' Equity $\mathbf{\$ 0}$
Purchasing and selling property and equipment and investments in the stock of other companies are investing activities. In the investing transaction (c), notice that more than two accounts were affected.
(d) Chipotle paid $\$ 400$ to the local bank on the amount borrowed in (b) above (ignore interest).

Step 1: What was received and what was given (account name, type of account, amount, and direction of effect)?
Received: Reduction in bank loan: Given: Cash (-A) \$400
Notes Payable (-L) \$400

| Assets |  |  |  | = | Liabilities |  | + | Stockholders' Equity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash | Short-term Investments |  <br> Equipment | Long-term Investments |  | Dividends Payable | Notes Payable |  | Common Stock | Additional Paid-in Capital | Retained Earnings |
| (a) $+62,300$ |  |  |  | = |  |  |  | +100 | +62,200 |  |
| (b) $+2,000$ |  |  |  | = |  | +2,000 |  |  |  |  |
| (c) $-55,100$ |  | +63,100 |  | = |  | +8,000 |  |  |  |  |
| (d) $\mathbf{- 4 0 0}$ |  |  |  | = |  | -400 |  |  |  |  |

Step 2: Is the accounting equation in balance? Assets $\mathbf{- \$ 4 0 0}=$ Liabilities $\mathbf{- \$ 4 0 0}+$ Stockholders' Equity $\mathbf{\$ 0}$
(e) Chipotle purchased the stock of other companies, paying $\mathbf{\$ 6 0 , 4 0 0}$ in cash. The company intends to hold $\$ 20,900$ of the stock as long-term investments and the rest as short-term investments.

Step 1: What was received and what was given (account name, type of account, amount, and direction of effect)?
Received: Short-term investments (+A) \$39,500 Given: Cash (-A) \$60,400
Long-term investments (+A) \$20,900

| Assets |  |  |  | $=$ | Liabilities |  | + | Stockholders' Equity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash | Short-term Investments | Property \& Equipment | Long-term Investments |  | Dividends Payable | Notes <br> Payable |  | Common Stock | Additional Paid-in Capital | Retained Earnings |
| (a) $+62,300$ |  |  |  | = |  |  |  | +100 | +62,200 |  |
| (b) $+2,000$ |  |  |  | = |  | +2,000 |  |  |  |  |
| (c) $-55,100$ |  | +63,100 |  | = |  | +8,000 |  |  |  |  |
| (d) -400 |  |  |  | = |  | -400 |  |  |  |  |
| (e) $-60,400$ | +39,500 |  | +20,900 | $=$ |  |  |  |  |  |  |

Step 2: Is the accounting equation in balance? Assets $\mathbf{\$ 0}=$ Liabilities $\mathbf{\$ 0}+$ Stockholders' Equity $\mathbf{\$ 0}$
( $f$ ) Chipotle does not pay dividends, but instead reinvests profits into growing the business. However, for illustration purposes, assume Chipotle's board of directors declared that the Company will pay $\mathbf{\$ 3 , 0 0 0}$ in cash as dividends to shareholders next quarter.

Step 1: What was received and what was given (account name, type of account, amount, and direction of effect)?


Given: Dividends Payable ( +L ) \$3,000

| Assets |  |  |  | = | Liabilities |  | + | Stockholders' Equity |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash | Short-term Investments | Property \& Equipment | Long-term Investments |  | Dividends Payable | Notes Payable |  | Common Stock | Additional Paid-in Capital | Retained Earnings |
| (a) $+62,300$ |  |  |  | = |  |  |  | +100 | +62,200 |  |
| (b) $+2,000$ |  |  |  | = |  | +2,000 |  |  |  |  |
| (c) $-55,100$ |  | +63,100 |  | = |  | +8,000 |  |  |  |  |
| (d) -400 |  |  |  | = |  | -400 |  |  |  |  |
| (e) $-60,400$ | +39,500 |  | +20,900 | = |  |  |  |  |  |  |
| (f) |  |  |  | = | +3,000 |  |  |  |  | -3,000 |
| -51,600 | +39,500 | +63,100 | +20,900 |  | +3,000 | +9,600 |  | +100 | +62,200 | -3,000 |

Step 2: Is the accounting equation in balance? Assets $\mathbf{\$ 0}=$ Liabilities $\mathbf{\$ 3 , 0 0 0}+$ Stockholders' Equity $\mathbf{-} \mathbf{\$ 3 , 0 0 0}$
Overall effects of $(a)-(f)$ : Assets $\$ 71,900=$ Liabilities $\$ 12,600$ + Stockholders' Equity $\$ \mathbf{5 9 , 3 0 0}$ $\$ 71,900=\$ 71,900$

## PAUSE FOR FEEDBACK

Transaction analysis involves identifying accounts (by title) affected in a transaction, recognizing that at least two accounts are affected, classifying the accounts (asset, liability, or stockholders' equity), and determining the direction of the effect on the account (increase or decrease). If all accounts and effects are correct, then the fundamental accounting equation $(A=L+S E)$ will remain in balance. Practice is the most effective way to develop your transaction analysis skills.

## SELF-STUDY QUIZ

Review the analysis in events (a) through $(f)$ above, complete the analysis of the following transactions, and indicate the effects in the chart below. Answer from the standpoint of the business.
(a) Paul Knepper contributes $\$ \mathbf{5 0 , 0 0 0}$ cash to establish Florida Flippers, Inc., a new scuba business organized as a corporation; in exchange, he receives $\mathbf{2 5 , 0 0 0}$ shares of stock with a par value of $\mathbf{\$ 0 . 1 0}$ per share.

Step 1: Identify and classify accounts and effects.
Received: ___ Given
Step 2: Is the accounting equation in balance? Yes or No?
(b) Florida Flippers buys a small building near the ocean for $\mathbf{\$ 2 5 0 , 0 0 0}$, paying $\mathbf{\$ 2 5 , 0 0 0}$ cash and signing a 10-year note payable for the rest.

Step 1: Identify and classify accounts and effects.

| Received: | Given: |
| :--- | :--- |
| Step 2: Is the accounting equation in balance? | Yes or No? ___ |



After you have completed your answers, check them with the solutions at the bottom of the page. If your answers did not agree with ours, we recommend that you go back to each event to make sure that you have completed each of the steps of transaction analysis.

## LEARNING OBJECTIVE 2-4

Determine the impact of business transactions on the balance sheet using two basic tools: Journal entries and T-accounts.

Solution to SELF-STUDY QUIZ

## HOW DO COMPANIES KEEP TRACK

## OF ACCOUNT BALANCES?

For most organizations, recording transaction effects and keeping track of account balances in the manner just presented is impractical. To handle the multitude of daily transactions that a business generates, companies establish accounting systems, usually computerized, that follow a cycle. Exhibit 2.4 presents the primary activities of the accounting cycle performed during the accounting period separately from those that occur at the end of the accounting period. In Chapters 2 and 3, we will illustrate transactions during Chipotle's first quarter of 2012. In
(a) Step 1: Received: Cash (+A) \$50,000; Given: Common Stock ( +SE ) \$2,500 and Additional Paid-in Capital (+SE) \$47,500.
Step 2: Yes. The equation remains in balance; Assets (on the left) and Stockholders' Equity (on the right) increase by the same amount, $\$ 50,000$.
(b) Step 1: Received: Building ( +A ) \$250,000; Given: Cash $(-\mathrm{A}) \$ 25,000$ and Notes Payable $(+\mathrm{L})$ \$225,000.
Step 2: Yes. Assets (on the left) increase by $\$ 225,000$ and Liabilities (on the right) increase by \$225,000.

|  | Assets |  | $=$ | Liabilities | + | Stockholders' Equity |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash | Building |  | Notes Payable |  | Common Stock | Additional Paid-in Capital |
| (a) | +50,000 |  | $=$ |  |  | +2,500 | +47,500 |
| (b) | -25,000 | $+250,000$ | $=$ | +225,000 |  |  |  |



Chapter 4, we will complete the accounting cycle by discussing and illustrating activities at the end of the period to adjust the records, prepare financial statements, and finally close the accounting records.

During the accounting period, transactions that result in exchanges between the company and other external parties are analyzed to determine the accounts and effects. The effects are recorded first in the general journal, a listing in chronological order of each transaction's effects. To determine account balances, the accounts are updated by posting the effects listed in the general journal to the respective accounts in the general ledger, a record of effects to and balances of each account.

These formal records are based on two very important tools used by accountants: journal entries and T-accounts. From the standpoint of accounting systems design, these analytical tools are a more efficient way to reflect the effects of transactions, determine account balances, and prepare financial statements. As future business managers, you should develop your understanding and use of these tools in financial analysis. For those studying accounting, this knowledge is the foundation for an understanding of the accounting system and future accounting coursework. After we explain how to perform transaction analysis using these tools, we illustrate their use in financial analysis.

## The Direction of Transaction Effects

As we saw earlier in this chapter, transaction effects increase and decrease assets, liabilities, and stockholders' equity accounts. To reflect these effects efficiently, we need to structure the transaction analysis model in a manner that shows the direction of the effects. As shown in Exhibit 2.5, each account is set up as a " T " with the following structure:

- Increases in asset accounts are on the left because assets are on the left side of the accounting equation ( $\mathrm{A}=\mathrm{L}+\mathrm{SE}$ ).
- Increases in liability and stockholders' equity accounts are on the right because they are on the right side of the accounting equation $(\mathrm{A}=\mathrm{L}+\mathrm{SE})$.
Also notice that:
- The term debit (dr for short) always refers to the left side of the T.
- The term credit (cr for short) always refers to the right side of the T.

The ACCOUNTING CYCLE is the process followed by entities to analyze and record transactions, adjust the records at the end of the period, prepare financial statements, and prepare the records for the next cycle.

DEBIT (dr) refers to the left side of a $T$-account.

CREDIT (cr) refers to the right side of a T-account.


As a consequence:

- Asset accounts increase on the left (debit) side and they normally have debit balances. (It would be highly unusual for an asset account, such as Inventory, to have a negative (credit) balance.)
- Liability and stockholders' equity accounts increase on the right (credit) side and they normally have credit balances.

In summary:

| Assets | Liabilities | + |
| :---: | :---: | :---: |
| Stockholders' Equity |  |  |
| + with Debits | + with Credits |  |

In Chapter 3, we will add revenue and expense account effects to Retained Earnings in our model. Until then, as you are learning to perform transaction analysis, you should refer to the transaction analysis model in Exhibit 2.5 often until you can construct it on your own without assistance.

Many students have trouble with accounting because they forget that the term debit is simply the left side of an account and the term credit is simply the right side of an account. Perhaps someone once told you that you were a credit to your school or your family. As a result, you may think that credits are good and debits are bad. Such is not the case. Just remember that debit is on the left and credit is on the right.

If you have identified the correct accounts and effects through transaction analysis, the accounting equation will remain in balance. The total dollar value of all debits will equal the total dollar value of all credits in a transaction. For an extra measure of assurance, add this equality check (Debits $=$ Credits) to the transaction analysis process.

## PAUSE FOR FEEDBACK

From Exhibit 2.5, we learned that each account can increase and decrease. In the transaction analysis model, the effect of a transaction on each element can be represented with a T with one side increasing and the other side decreasing. Asset accounts on the left side of the fundamental accounting equation increase their balances on the left side of the T. Liability and stockholders' equity accounts are on the right side of the fundamental accounting equation and increase their balance on the right side of the T . In accounting, the left side of the T is called the debit side and the right is called the credit side. Most accounts have a balance on the positive side.

## SELF-STUDY QUIZ

The following is a list of accounts from a balance sheet of The Wendy's Company. Indicate on the line provided whether each of the following usually has a debit (DR) or credit (CR) balance.


## Analytical Tools

## The Journal Entry

In a bookkeeping system, transactions are recorded in chronological order in a general journal (or simply, journal). After analyzing the business documents (such as purchase invoices, receipts, and cash register tapes) that describe a transaction, the bookkeeper enters the effects on the accounts in the journal using debits and credits. The journal entry, then, is an accounting method for expressing the effects of a transaction on accounts. It is written in a debits-equal-credits format. To illustrate, we refer back to event (a) in Chipotle's transaction analyis on page 51.
(a) Chipotle issued 10,000 additional shares of common stock, receiving $\$ 62,300$ in cash from investors. Par value of the stock is $\$ 0.01$ per share.
The journal entry for event (a) in the Chipotle's illustration is as follows:


Notice the following:

- It is useful to include a date or some form of reference for each transaction. The debited accounts are written first (on top) with the amounts recorded in the left column. The credited accounts are written below the debits and are usually indented in manual records; the credited amounts are written in the right column. The order of the debited accounts or credited accounts does not matter, as long as the debits are on top and the credits are on the bottom and indented to the right.
- Total debits $(\$ 62,300)$ equal total credits $(\$ 100+\$ 62,200=\$ 62,300)$.
- Three accounts are affected by this transaction. Any journal entry that affects more than two accounts is called a compound entry. Many transactions in this and subsequent chapters require a compound journal entry.
- As you can see in the illustration of a formal bookkeeping system in Exhibit 2.6, an additional line is written below the journal entry as an explanation of the transaction. For simplicity, explanations will not be included in this text.
While you are learning to perform transaction analysis, use the symbols A, L, and SE next to each account title, as in the preceding journal entry. Specifically identifying accounts as assets (A), liabilities (L), or stockholders' equity (SE) clarifies the transaction analysis and makes journal entries easier to write. For example, if Cash is to be increased, we write Cash ( +A ). Throughout subsequent chapters, we include the direction of the effect along with the symbol to


## EXHIBIT 2.6

Posting Transaction Effects from the Journal to the Ledger

help you understand the effects of each transaction on the financial statements. In transaction (a) on the previous page, we can see that assets are affected by $+\$ 62,300$ and stockholders' equity accounts are affected by $+\$ 62,300$. The accounting equation $\mathrm{A}=\mathrm{L}+\mathrm{SE}$ remains in balance.

A note of caution: Many students try to memorize journal entries without understanding or using the transaction analysis model. As more detailed transactions are presented in subsequent chapters, the task becomes increasingly more difficult. In the long run, memorizing, understanding, and using the transaction analysis model presented here will save you time and prevent confusion.

## The T-Account

By themselves, journal entries do not provide the balances in accounts. After the journal entries have been recorded, the bookkeeper posts (transfers) the dollar amounts to each account affected by the transaction to determine the new account balances. (In most computerized accounting systems, this happens automatically.)

As a group, the accounts are called a general ledger. In the manual accounting system used by some small organizations, the ledger is often a three-ring binder with a separate page for each account. In a computerized system, accounts are stored on a disk. See Exhibit 2.6 for an illustration of a journal page and the related ledger pages. Note that the cash effects from the journal entry have been posted to the Cash ledger page.

One very useful tool for summarizing the transaction effects and determining the balances for individual accounts is a T-account, a simplified representation of a ledger account. Exhibit 2.7 shows the T-accounts for Chipotle's Cash and Common Stock accounts based on Event (a). Notice that, for Cash, which is classified as an asset, increases are shown on the left and decreases appear on the right side of the T-account. For Common Stock, however, increases are shown on the right and decreases on the left since Common Stock is a stockholders' equity

account. Many small businesses still use handwritten or manually maintained accounts in this T-account format. Computerized systems retain the concept but not the format of the T-account.

In Exhibit 2.7, notice that the ending balance is indicated on the positive side with a double underline. To find the account balances, we can express the T-accounts as equations:

|  | Cash | Common Stock |
| :---: | :---: | :---: |
| Beginning balance | \$401,200 | \$ 300 |
| +"+" side | +62,300 | +100 |
| - "-" side | - 0 | - 0 |
| Ending balance | \$463,500 | \$ 400 |

A word on terminology: The words debit and credit may be used as verbs, nouns, and adjectives. For example, we can say that Chipotle's Cash account was debited (verb) when stock was issued to investors, meaning that the amount was entered on the left side of the T-account. Or we can say that a credit (noun) was entered on the right side of an account. Common Stock may be described as a credit account (adjective). These terms will be used instead of left and right throughout the rest of this textbook. The next section illustrates the steps to follow in analyzing the effects of transactions, recording the effects in journal entries, and determining account balances using T-accounts.

## Inferring Business Activities from T-Accounts

T-accounts are useful primarily for instructional and analytical purposes. In many cases, we will use T-accounts to determine what transactions a company engaged in during a period. For example, the primary transactions affecting Accounts Payable for a period are purchases of assets on account from suppliers and cash payments to suppliers. If we know the beginning and ending balances of Accounts Payable and all the amounts that were purchased on credit during a period, we can determine the amount of cash paid. A T-account analysis would include the following:

| - Accounts Payable (L) + |  |  |
| :--- | ---: | ---: |
| Cash payments to suppliers ? | 600 | Beg. bal. |
|  | $\underline{300}$ | Purchases on account |


| Solution: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Beginning Balance | + | Purchases on Account | - | Cash Payments to Suppliers | $=$ | Ending Balance |
| \$600 | + | \$1,500 | - | ? | = | \$ 300 |
|  |  | \$2,100 | - | ? | = | \$ 300 |
|  |  |  |  | ? | = | \$1,800 |

Debits $=$ Credits

Effects posted
Equation in balance

Debits $=$ Credits

Equation in balance

Effects posted

## Transaction Analysis Illustrated

In this section, we will use the quarterly investing and financing transactions for Chipotle Mexican Grill (events $[a]$ to $[f]$ ) that were analyzed earlier to demonstrate recording journal entries and posting effects to the relevant T -accounts. We also check that the accounting equation remains in balance and that debits equal credits. In the T-accounts, the amounts from Chipotle's December 31, 2011, balance sheet (Exhibit 2.2) have been inserted as the beginning balances.

Study this illustration carefully, including the explanations of transaction analysis. Careful study is essential to an understanding of (1) the accounting model, (2) transaction analysis, (3) the dual effects of each transaction, and (4) the dual-balancing system. The most effective way to learn these critical concepts, which are basic to material throughout the rest of the text, is to practice, practice, practice.
(a) Chipotle issued 10,000 additional shares of common stock (\$0.01 par value per share), receiving $\$ 62,300$ in cash from investors.


The effects reflected in the journal entry have been posted to the appropriate T-accounts. Notice that if an account was debited such as Cash, that effect was written in the debit column of the Cash T-account. Similarly, if an account was credited such as Common Stock, that effect was written in the credit column of the T-account. Also notice that the beginning balances for the first quarter of 2012 are taken from the December 31, 2011, balance sheet (Exhibit 2.2) and are indicated on the positive side of the account-assets have debit balances and liabilities and stockholders' equity accounts have credit balances.
(b) Chipotle borrowed $\$ \mathbf{2 , 0 0 0}$ from its local bank, signing a note to be paid in three years.

|  | Debit | Credit |
| :---: | :---: | :---: |
| (b) Cash (+A). | 2,000 |  |
| Notes Payable (+L) |  | 2,000 |


| Assets |  | Liabilities + |  | Stockholders' Equity |
| :---: | :---: | :---: | :---: | :---: |
| Cash | +2,000 | Notes Payable | +2,000 |  |
| + Cash (A) - |  | - Notes Payable (L) + |  |  |
| $\begin{array}{rr} \hline 1 / 1 / 12 & 401,200 \\ \text { (a) } & 62,300 \\ \text { (b) } & \mathbf{2 , 0 0 0} \end{array}$ |  |  | $\begin{array}{\|rrr} \hline 223,600 & 1 / 1 / 12 \\ \mathbf{2 , 0 0 0} & \text { (b) } \end{array}$ |  |

(c) Chipotle purchased new ovens, counters, refrigerators, and other equipment costing $\$ 63,100$; paid $\$ 55,100$ in cash and signed a note for the rest.

|  | Debit | Credit |
| :---: | :---: | :---: |
| (c) Property and Equipment (+A) | 63,100 |  |
| Cash (-A). |  | 55,100 |
| Notes Payable (+L) |  | 8,000 |


| Assets | $=$Liabilities <br> Property and Equipment $+63,100$ <br> Cash  <br>  <br> -55,100 |
| :--- | :--- |



Effects posted
(d) Chipotle paid \$400 to the local bank on the amount borrowed in (b) above (ignore interest).

|  | Debit | Credit |
| :---: | :---: | :---: |
| (d) Notes Payable (-L) | 400 |  |
| Cash (-A). |  | 400 |


| Assets |  |  | Liabilities |  |  | + | Stockholders' Equity | Equation in balance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash |  | -400 |  | Notes Payable | -400 |  |  |  |
| + Cash (A) - |  |  | - Notes Payable (L) + |  |  |  |  |  |
| $\begin{array}{rr} \hline 1 / 1 / 12 & 401,200 \\ \text { (a) } & 62,300 \\ \text { (b) } & 2,000 \end{array}$ | $\begin{array}{\|r} 55,100 \\ 400 \end{array}$ | (c) (d) | (d) | 400 | $\begin{array}{\|rr\|} \hline 223,600 & 1 / 1 / 12 \\ 2,000 & \text { (b) } \\ 8,000 & \text { (c) } \end{array}$ |  |  | Effects posted |

(e) Chipotle purchased the stock of other companies, paying $\$ 60,400$ in cash. The company intends to hold $\$ 20,900$ of the stock as long-term investments and the rest as shortterm investments.


Debits $=$ Credits

Effects posted

$$
\text { Debits }=\text { Credits }
$$

Equation in balance

Effects posted

Debits $=$ Credits


Effects posted
$(f)$ Chipotle does not pay dividends, but instead reinvests profits into growing the business. However, for illustration purposes, assume Chipotle's board of directors declared that the Company will pay $\$ 3,000$ in cash as dividends to shareholders next quarter.

Now we determine the balances in the T-accounts that changed during the quarter:


## PAUSEFOR FEEDBAGK

Accountants analyze and then record transactions in the general journal in chronological order in journal entry form. Debited accounts are written on top with amounts in the left column and credited accounts are written on the bottom with amounts in the right column. Then the effects are posted in the general ledger (similar to a T-account). Each page of the ledger represents a different account that has a debit (left) side and a credit (right) side. To post transaction effects, the amount for each account in a journal entry is written in the appropriate debit or credit column on the ledger page to obtain account balances. Refer to Exhibit 2.5 for the transaction analysis model.

## SELF-STUDY QUIZ

Record the following transactions and post the effects to the T-accounts. Because this is a new company, all T-accounts start with a beginning balance of $\$ 0$.
(a) Paul Knepper contributes $\mathbf{\$ 5 0 , 0 0 0}$ cash to establish Florida Flippers, Inc., a new scuba business organized as a corporation; he receives in exchange $\mathbf{2 5 , 0 0 0}$ shares of stock with a $\$ \mathbf{0 . 1 0}$ per share par value.

|  | Debit | Credit |
| :---: | :---: | :---: |
| (a) |  |  |
|  |  |  |
|  |  |  |

(b) Florida Flippers buys a small building near the ocean for $\mathbf{\$ 2 5 0 , 0 0 0}$, paying $\mathbf{\$ 2 5 , 0 0 0}$ in cash and signing a 10-year note payable for the rest.


After you have completed your answers, check them with the solutions at the bottom of the page.

## GUIDED HELP

For additional step-by-step video instruction on analyzing, recording, and posting transaction effects and classifying accounts, go to the URL or scan the QR code in the margin with your smartphone or iPad.

www.mhhe.com/libby8e
(a)
(a) Cash (+A)

50,000
$\begin{array}{lr}\text { Common Stock (+SE) . . . . . . . . . . . . } & 2,500 \quad \text { [25,000 shares } \times \$ 0.10 \text { par] } \\ \text { Additional Paid-in Capital (+SE). . . . . . } & 47,500\end{array}$
(b) Property and Equipment (+A). . . . . . . . . . . . 250,000

Cash (-A) . . . . . . . . . . . . . . . . . . . . . . . . $\quad 25,000$
Notes Payable (+L). . . . . . . . . . . . . . . . . . . 225,000


LEARNING OBJECTIVE 2-5
Prepare a trial balance and simple classified balance sheet, and analyze the company using the current ratio.

A TRIAL BALANCE is a list of all accounts with their balances to provide a check on the equality of the debits and credits.

## HOW IS THE BALANCE SHEET PREPARED AND ANALYZED?

Although no operating activities occurred yet (they will be illustrated in Chapter 3), it is possible to create a balance sheet based solely on the investing and financing activities recorded above. Usually, businesses will create a trial balance spreadsheet first for internal purposes before preparing statements for external users. A trial balance lists the names of the T-accounts in one column, usually in financial statement order (assets, liabilities, stockholders' equity, revenues, and expenses), with their ending debit or credit balances in the next two columns. Debit balances are indicated in the left column and credit balances are indicated in the right column. Then the two columns are totaled to provide a check on the equality of the debits and credits. Errors in a computer-generated trial balance may exist if wrong accounts and/or amounts are used in the journal entries. ${ }^{5}$

Chipotle's trial balance follows. The account balances that did not change are taken from the December 31, 2011, balance sheet in Exhibit 2.2. The accounts that did change due to the investing and financing transactions illustrated in this chapter are shaded; their balances are taken from the T -accounts summarized on page 62 .

CHIPOTLE MEXICAN GRILL-TRIAL BALANCE (based on investing and financing transactions during the first quarter ended March 31, 2012)

| (in thousands) | Debit | Credit |
| :--- | ---: | ---: |
| Cash | 349,600 |  |
| Short-term investments | 94,500 |  |
| Accounts receivable | 8,400 |  |
| Supplies | 8,900 |  |
| Prepaid expenses | 27,700 |  |
| Property and equipment (net) | 859,000 |  |
| Long-term investments | 149,100 |  |
| Accounts payable |  | 46,400 |
| Accrued expenses payable |  | 93,100 |
| Dividends payable |  | 3,000 |
| Unearned revenue |  | 18,000 |
| Notes payable |  | 233,200 |
| Common stock |  | 400 |
| Additional paid-in capital |  | 434,600 |
| Retained earnings |  | 668,500 |
|  |  |  |
| Total | $\mathbf{1 , 4 9 7 , 2 0 0}$ | $\mathbf{1 , 4 9 7 , 2 0 0}$ |

[^4]$\left.\begin{array}{lrr|}\hline & \begin{array}{c}\text { CHIPOTLE MEXICAN GRILL, INC. } \\ \text { Consolidated Balance Sheets }\end{array} \\ \text { (in thousands of dollars, except per share data) }\end{array}\right)$

## EXHIBIT 2.8

Chipotle Mexican Grill's First Quarter 2012 Balance Sheet (based on investing and financing activities only)

## Classified Balance Sheet

The balance sheet in Exhibit 2.8 was prepared from the trial balance on page 64. As a formal statement for external users, it needs a good heading (name of the company, title of the statement, date, and if the dollars are in thousands or millions). Notice in Exhibit 2.8 several additional features:

- The assets and liabilities are classified into two categories: current and noncurrent. Current assets are those to be used or turned into cash within the upcoming year, whereas noncurrent assets are those that will last longer than one year. Current liabilities are those obligations to be paid or settled within the next 12 months with current assets.
- Dollar signs are indicated at the top and bottom of the asset section and top and bottom of the liabilities and shareholders' equity section. More than that tends to look messy.
- The statement includes comparative data. That is, it compares the account balances at December 31, 2011, with those at March 31, 2012. When multiple periods are presented, the most recent balance sheet amounts are usually listed on the left.
- Unlike Chipotle, most companies do not provide a total liabilities line on the balance sheet. To determine total liabilities on those statements, add total current liabilities and each of the noncurrent liabilities.


## INTERNATIONAL

 PERSPECTIVE

## Understanding Foreign Financial Statements

Although IFRS differ from GAAP, they use the same system of analyzing, recording, and summarizing the results of business activities that you have learned in this chapter. One place where IFRS differ from GAAP is in the formatting of financial statements.

Financial statements prepared using GAAP and IFRS include the same elements (assets, liabilities, revenues, expenses, etc.). However, a single, consistent format has not been mandated. Consequently, various formats have evolved over time, with those in the U.S. differing from those typically used internationally. The formatting differences include:

|  | GAAP | IFRS |
| :--- | :---: | :--- |
| Balance Sheet Order | Assets: | Assets: |
|  | Current | Noncurrent |
| Similar accounts are shown, | Noncurrent | Current |
| but the order of liquidity | Liabilities: | Stockholders' Equity |
| (for assets) and the order of | Current | Liabilities: |
| maturity (for liabilities) differ | Noncurrent | Noncurrent |
|  | Stockholders' Equity | Current |

On the balance sheet, GAAP begins with current items whereas IFRS begins with noncurrent items. Consistent with this, assets are listed in decreasing order of liquidity under GAAP, but internationally are usually listed in increasing order of liquidity. IFRS similarly emphasize longer-term financing sources by listing equity before liabilities and, within liabilities, by listing noncurrent liabilities before current liabilities (decreasing time to maturity). The key to avoiding confusion is to be sure to pay attention to the subheadings in the statement. Any account under the heading "liabilities" must be a liability.

## Ratio Analysis in Decision-Making

Why do the classifications of current and noncurrent on the balance sheet matter? Users of financial information compute a number of ratios in analyzing a company's past performance and financial condition as input in predicting its future potential. How ratios change over time and how they compare to the ratios of the company's competitors or industry averages provide valuable information about a company's strategies for its operating, investing, and financing activities. We introduce here the first of many ratios that will be presented throughout the rest of this textbook, with a final summary of ratio analysis in Chapter 13.

## Current Ratio

## ? ANALYTICAL QUESTION

Does the company have the short-term resources to pay its short-term debt?
\% RATIO AND COMPARISONS

$$
\text { Current Ratio }=\frac{\text { Current Assets }}{\text { Current Liabilities }}
$$

The 2011 ratio for Chipotle is (dollars in thousands):

$$
\$ 501,200=3.182
$$

| COMPARISONS OVER TIME |  |  |
| :---: | :---: | :---: |
| Chipotle Mexican | Grill, Inc. |  |
| $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 9}$ |
| 3.182 | 3.301 | 2.912 |


| COMPARISONS WITH COMPETITORS |  |
| :---: | :---: |
| Panera Bread, Inc. | Fiesta Restaurant Group, Inc. |
| $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 1}$ |
| 1.482 | 0.691 |

## Vies for top fast- <br> casual restaurant

Owns Pollo Tropical
and Taco Cabana

## © INTERPRETATIONS

In General The current ratio is a very common ratio. Creditors and security analysts use the current ratio to measure the ability of the company to pay its short-term obligations with short-term assets. Generally, the higher the ratio, the more cushion a company has to pay its current obligations if future economic conditions take a downturn. While a ratio above 1.0 normally suggests good liquidity, today, many strong companies use sophisticated management techniques to minimize funds invested in current assets and, as a result, have current ratios below 1.0. Likewise, when compared to others in the industry, too high of a ratio may suggest inefficient use of resources.

Focus Company Analysis Over time, the current ratio for Chipotle shows a high level of liquidity, well above 1.0 , and the ratio has varied slightly around the 3.1 level since 2009. Chipotle has high growth strategies requiring cash to fund expansion.

Compared with competitors, Panera Bread, vying with Chipotle as the top fast-casual restaurant, also maintains a current ratio above 1.0 , and both companies report cash as the largest current asset. The ratio for Chipotle is much higher than for Fiesta Restaurant Group, which reports a current ratio below 1.0. Fiesta Restaurant Group owns and franchises two quick-service brands: Pollo Tropical, featuring a tropical and Caribbean-style menu, and Taco Cabana, offering Mexican fast-food. Fiesta expects growth, but franchising (that is, selling rights to others to operate restaurants under the company brands) does not require the cash flow levels needed for company-owned facilities. It is also likely that all of these companies have sophisticated cash management systems that enable them to maintain lower cash balances.

Reuters reports that the restaurant industry has an average current ratio of 1.19. Compared to the industry average, Chipotle and Panera Bread have sufficient current assets to pay short-term obligations (adequate liquidity), while Fiesta Restaurant Group has a ratio below 1.0, suggesting the company will rely on sufficient cash flows generated during the year to meet current obligations.

A Few Cautions The current ratio may be a misleading measure of liquidity if significant funds are tied up in assets that cannot be easily converted into cash. A company with a high current ratio might still have liquidity problems if the majority of its current assets consists of slow-moving inventory. Analysts also recognize that managers can manipulate the current ratio by engaging in certain transactions just before the close of the fiscal year. In most cases, for example, the current ratio can be improved by paying creditors immediately prior to the preparation of financial statements.

We just learned that the current ratio measures a company's ability to pay short-term obligations with short-term assets-a liquidity measure. It is computed by dividing current assets by current liabilities. A ratio above 1.0 is normally considered good, although some may need a higher ratio and others with good cash management systems can have a ratio below 1.0 (i.e., more current liabilities than current assets).

Selected Focus Companies' Current Ratios


## PAUSEFOR FEEDBAGK

## SELF-STUDY QUIZ

Yum! Brands, Inc., is the world's largest quick-service restaurant company that develops, franchises, and operates 37,000 units in more than 120 countries and territories through three restaurant concepts (KFC, Pizza Hut, and Taco Bell). The company reported the following balances on its recent balance sheets (in millions). Compute Yum! Brands's current ratio for the three years.

|  | (dollars in millions) |  |  |
| :--- | :---: | :---: | :--- |
|  | Current Assets | Current Liabilities | Current Ratio |
| December 31, 2011 | $\$ 2,321$ | $\$ 2,450$ |  |
| December 31,2010 | 2,313 | 2,448 | - |
| December 31, 2009 | 1,208 | 1,653 | - |

What do these results suggest about Yum! Brands's liquidity in the current year and over time?
After you have completed your answers, check them with the solutions at the bottom of the page.

## Investing and Financing Activities

## LEARNING OBJECTIVE 2-6

Identify investing and financing transactions and demonstrate how they impact cash flows.

As discussed in Chapter 1, companies report cash inflows and outflows over a period in their statement of cash flows, which is divided into three categories: operating, investing, and financing activities:

- Operating activities are covered in Chapter 3.
- Investing activities include buying and selling noncurrent assets and investments.
- Financing activities include borrowing and repaying debt, including short-term bank loans, issuing and repurchasing stock, and paying dividends.
Only transactions affecting cash are reported on the statement. An important step in constructing and analyzing the statement of cash flows is identifying the various transactions as operating (O), investing (I), or financing ( $\mathbf{F}$ ). Let's analyze the Cash T-account for Chipotle's transactions in this chapter. Refer to transactions (a)-(f) illustrated on pages 60 to 62, and remember, you must see cash in the transaction for it to affect the statement of cash flows.



## Solutions to

SELF-STUDY QUIZ

| Current Ratio: |  |  |  |  |  |
| :--- | ---: | :--- | ---: | :--- | :--- |
| December 31, 2011 | $\$ 2,321$ | $\div$ | $\$ 2,450$ | $=$ | 0.947 |
| December 31, 2010 | 2,313 | $\div$ | 2,448 | $=$ | 0.945 |
| December 31, 2009 | 1,208 | $\div$ | 1,653 | $=$ | 0.731 |

Yum! Brands's current ratio is below 1.0 over the three years, suggesting the company has a low level of liquidity-insufficient current assets to settle short-term obligations. However, as a cash-oriented business and with a strong cash management system, Yum! Brands's current ratio below 1.0 is not a concern.

## PAUSE FOR FEEDBACK

As we discussed, every transaction affecting cash can be classified either as an operating (discussed in Chapter 3), investing, or financing effect. Investing effects relate to purchasing/selling investments or property and equipment or lending funds to/receiving repayment from others. Financing effects relate to borrowing or repaying banks, issuing stock to investors, repurchasing stock from investors, or paying dividends to investors.

Apple, Inc.

## SELF-STUDY QUIZ

Indicate whether the following transactions from a recent annual statement of cash flows for Apple, Inc., were investing (I) or financing ( F ) activities and the direction of their effects on cash ( + for increases; - for decreases):

## Transactions

$\begin{array}{cc}\text { Type of Activity } & \text { Effect on Cash Flows } \\ (\mathrm{I} \text { or } \mathrm{F}) & (+ \text { or }-)\end{array}$

1. Purchased investments
2. Issued common stock
3. Acquired property, plant, and equipment
4. Sold investments
5. Purchased intangible assets (e.g., patents)

(+ or -)

$\qquad$

After you have completed your answers, check them with the solutions at the bottom of this page.

On April 1, 2014, three ambitious college students started Terrific Lawn Maintenance Corporation. A summary of transactions completed through April 7, 2014, for Terrific Lawn Maintenance Corporation follows:
a. Issued 500 shares of stock ( 1,500 shares in total) with a par value of $\$ 0.10$ per share to each of the three investors in exchange for $\$ 9,000$ cash.
b. Acquired rakes and other hand tools (equipment) with a list price of $\$ 690$ for $\$ 600$; paid the hardware store $\$ 200$ cash and signed a three-month note for the balance.
c. Ordered three lawn mowers and two edgers from XYZ Lawn Supply, Inc., for \$4,000.
d. Purchased four acres of land for the future site of a storage garage; paid cash, $\$ 5,000$.
$e$. Received the mowers and edgers that had been ordered, signing a note to pay XYZ Lawn Supply in full in 18 months.
f. Sold for $\$ 1,250$ one acre of land to the city for a park. Accepted a note from the city for payment by the end of the month.
g. One of the owners borrowed $\$ 3,000$ from a local bank for personal use.

## Required:

1. Set up T-accounts for Cash, Notes Receivable (from the city), Equipment (hand tools and mowing equipment), Land, Short-term Notes Payable (to the hardware store), Long-term Notes Payable, (to the equipment supply company), Common Stock, and Additional Paid-in Capital. Beginning balances are $\$ 0$; indicate these beginning balances in the T-accounts. Analyze each transaction using the process outlined in the chapter with the transaction analysis model, and prepare journal entries in chronological order. Enter the effects of the transactions in the appropriate T-accounts; identify each amount with its letter in the preceding list. Compute ending balances for each T-account.
2. $\mathrm{I}-\quad$ 2. $\mathrm{F}+\quad$ 3. $\mathrm{I}-\quad$ 4. $\mathrm{I}+\quad 5 . \mathrm{I}-$

| Assets <br> (many accounts) |  | Liabilities (many accounts) |  | Stockholde <br> Contributed Capital (2 accounts) <br> Common Stock and <br> Additional Paid-in Capital |  | s' Equity <br> Earned Capital (1 account) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $+$ <br> Debit | Credit | Debit | $+$ <br> Credit |  |  |  |  |
|  |  |  |  |  | Investment by owners | Debit Dividends declared | Credit <br> Net <br> income |

2. Use the balances in the T-accounts developed in the previous requirement to prepare a classified balance sheet for Terrific Lawn Maintenance Corporation at April 7, 2014.
3. Identify transactions $(a)-(g)$ as investing or financing activities affecting cash flows and the direction of each effect. Use +I for investing inflow, -I for investing outflow, +F for financing inflow, and -F for financing outflow.
Check your answers with the solution in the following section.
SUGGESTED SOLUTION

## 1. Transaction Analysis:

## Received:

a. Cash (+A) \$9,000

A
b. Equin
b. Equipment (+A) $\$ 600$

Short-term Notes Payable ( + L) \$400
c. Not a transaction-a promise to pay for a promise to deliver from the supplier
d. Land (+A) \$5,000 Cash (-A) \$5,000
e. Equipment (+A) $\$ 4,000 \quad$ Long-term Notes Payable (+L) $\$ 4,000$
f. Notes Receivable (+A) $\$ 1,250$ Land (-A) $\$ 1,250$ (1/4 of the $\$ 5,000$ cost of the land)
g. Not a transaction of the business-separate-entity assumption


[^5]
## T-Accounts:

| + Cash (A) - |  |  |  |
| ---: | ---: | ---: | ---: |
| 4/1/14 | 0 |  |  |
| (a) 9,000 | 200 | (b) |  |
|  |  | 5,000 | (d) |
|  | 800 |  |  |


| + Notes Receivable (A) - |  |  |
| ---: | ---: | ---: |
| 4/1/14 | 0 |  |
| (f) | 1,250 |  |
|  |  |  |
|  |  |  |


| + Equipment (A) - |  |  |
| :--- | ---: | ---: |
| 4/1/14 | 0 |  |
| (b) | 600 |  |
| (e) | 4,000 |  |
|  | $\underline{4,600}$ |  |


| + Land (A) - |  |  |  |
| ---: | ---: | ---: | ---: |
| 4/1/14 | 0 |  |  |
| (d) | 5,000 | 1,250 | (f) |
| 750 |  |  |  |
|  |  |  |  |


2. Classified Balance Sheet:

| TERRIFIC LAWN MAINTENANCE CORPORATION <br> Balance Sheet <br> April 7, 2014 |  |
| :---: | :---: |
| Assets |  |
| Current Assets: |  |
| Cash | \$ 3,800 |
| Notes receivable | 1,250 |
| Total current assets | 5,050 |
| Equipment | 4,600 |
| Land | 3,750 |
| Total assets | $\underline{\$ 13,400}$ |
| Liabilities and Stockholders' Equity |  |
| Current Liabilities: |  |
| Short-term notes payable | \$ 400 |
| Total current liabilities | 400 |
| Long-term notes payable | 4,000 |
| Total liabilities | 4,400 |
| Stockholders' Equity: |  |
| Common stock (\$0.10 par) | 150 |
| Additional paid-in capital | 8,850 |
| Total stockholders' equity | 9,000 |
| Total liabilities and stockholders' equity | \$13,400 |

## 3. Cash Flows:

| + Cash (A) - |  |  |  |
| ---: | ---: | ---: | ---: |
| $4 / 1 / 14$ | 0 |  |  |
| (a) | 9,000 | 200 | (b) |
|  | 5,000 | (d) |  |
|  |  |  |  |
|  |  |  |  |

Only transactions $(a),(b)$, and $(d)$ affect cash flows (as shown in the Cash T-account).
(a) +F for $\$ 9,000$
(b) -I for $\$ 200$
(d) -I for $\$ 5,000$

## CHAPTER TAKE-AWAYS

2-1. Define the objective of financial reporting, the elements of the balance sheet, and the related key accounting assumptions and principles. p. 43
Objective:

- The primary objective of financial reporting to external users is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders, and other creditors in making decisions about providing resources to the entity.
Qualitative characteristics of useful financial information:
- Relevance (including materiality) that allows users to assess past activities and/or predict future activities.
- Faithful representation requires information to be complete, neutral, and free from error.
- To enhance the qualitative characteristics, information should also be comparable (to other companies and over time), verifiable, timely, and understandable.
Key recognition, measurement, and disclosure concepts:
Assumptions-
- Separate-entity assumption-transactions of the business are accounted for separately from transactions of the owner.
- Continuity (going-concern) assumption-a business is expected to continue to operate into the foreseeable future.
- Stable monetary unit assumption-financial information is reported in the national monetary unit without adjustment for changes in purchasing power.


## Principles-

- Mixed-attribute measurement model-most balance sheet elements are recorded following the historical cost (or cost) principle-financial statement elements should be recorded at the cashequivalent cost on the date of the transaction; however, these values may be adjusted to other amounts such as market value depending on certain conditions.
Elements of the balance sheet:
- Assets-probable future economic benefits owned or controlled by the entity as a result of past transactions.
- Liabilities-probable future sacrifices of economic benefits arising from present obligations of a business as a result of past transactions.
- Stockholders' equity-residual interest of owners in the assets of the entity after settling liabilities; the financing provided by the owners (contributed capital) and by business operations (earned capital).
2-2. Identify what constitutes a business transaction and recognize common balance sheet account titles used in business. p. 47
- An exchange of cash, goods, or services for cash, goods, services, or promises between a business and one or more external parties to a business (not the exchange of a promise for a promise),
or
- A measurable internal event, such as adjustments for the use of assets in operations.

An account is a standardized format that organizations use to accumulate the dollar effects of transactions related to each financial statement item. Typical balance sheet account titles include the following:

- Assets: Cash, Accounts Receivable, Inventory, Prepaid Expenses, Investments, Property (buildings and land) and Equipment, and Intangibles (rights without physical substance).
- Liabilities: Accounts Payable, Notes Payable, Accrued Expenses Payable, Unearned Revenues, and Taxes Payable.
- Stockholders' Equity: Common Stock, Additional Paid-in Capital, and Retained Earnings.

2-3. Apply transaction analysis to simple business transactions in terms of the accounting model: Assets $=$ Liabilities + Stockholders' Equity. p. 49
To determine the economic effect of a transaction on an entity in terms of the accounting equation, each transaction must be analyzed to determine the accounts (at least two) that are affected. In an exchange, the company receives something and gives up something. If the accounts, direction of the effects, and amounts are correctly analyzed, the accounting equation will stay in balance. The transaction analysis model is:

| Assets (many accounts) |  | Liabilities (many accounts) |  | Stockholders' Equity Contributed Capital (2 accounts) Earned Capital (1 account) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $+$ <br> Debit | Credit | Debit | $+$ <br> Credit | Common Stock and Additional Paid-in Capital |  |  |
|  |  |  |  | by owners | Debit Dividends declared | Credit Net income (expanded in Ch. 3) |

Systematic transaction analysis includes (1) determining the accounts that were received and were given in the exchange, including the type of each account (A, L, or SE), amounts, and direction of the effect, and (2) determining that the accounting equation remains in balance.
2-4. Determine the impact of business transactions on the balance sheet using two basic tools: Journal entries and T-accounts. p. 54

- Journal entries express the effects of a transaction on accounts in a debits-equal-credits format. The accounts and amounts to be debited are listed first. Then the accounts and amounts to be credited are listed below the debits and indented, resulting in debit amounts on the left and credit amounts on the right. Each entry needs a reference (date, number, or letter).

|  | Debit | Credit |
| :---: | :---: | :---: |
| (a) Cash (+A) | 62,300 |  |
| Common Stock (+SE) |  | 100 |
| Additional Paid-in Capital (+SE) |  | 62,200 |

- T-accounts summarize the transaction effects for each account. These tools can be used to determine balances and draw inferences about a company's activities.


2-5. Prepare a trial balance and simple classified balance sheet, and analyze the company using the current ratio. p. 64

Classified balance sheets are structured as follows:

- Assets are categorized as current assets (those to be used or turned into cash within the year, with inventory always considered a current asset) and noncurrent assets, such as long-term investments, property and equipment, and intangible assets.
- Liabilities are categorized as current liabilities (those that will be paid with current assets) and long-term liabilities.
- Stockholders' equity accounts are listed as Common Stock (number of shares $\times$ par value per share) and Additional Paid-in Capital (amount received minus par value) first, followed by Retained Earnings (earnings reinvested in the business).
The current ratio (Current Assets $\div$ Current Liabilities) measures a company's liquidity, that is, the ability of the company to pay its short-term obligations with current assets.
2-6. Identify investing and financing transactions and demonstrate how they impact cash flows. p. 68
A statement of cash flows reports the sources and uses of cash for the period by the type of activity that generated the cash flow: operating, investing, and financing. Investing activities include purchasing and selling long-term assets and making loans and receiving principal repayments from others. Financing activities are borrowing and repaying to banks the principal on loans, issuing and repurchasing stock, and paying dividends.

In this chapter, we discussed the fundamental accounting model and transaction analysis. Journal entries and T-accounts were used to record the results of transaction analysis for investing and financing decisions that affect balance sheet accounts. In Chapter 3, we continue our detailed look at the financial statements, in particular the income statement. The purpose of Chapter 3 is to build on your knowledge by discussing the measurement of revenues and expenses and illustrating the transaction analysis of operating decisions.

## KEY RATIO

Current ratio measures the ability of the company to pay its short-term obligations with current assets. Although a ratio above 1.0 indicates sufficient current assets to meet obligations when they come due, many companies with sophisticated cash management systems have ratios below 1.0. (p. 66):

$$
\text { Current Ratio }=\frac{\text { Current Assets }}{\text { Current Liabilities }}
$$

| Balance Sheet |  |
| :--- | :---: |
| Current Assets | Current Liabilities |
| Cash | Accounts payable |
| Short-term investments | Accrued expenses payable |
| Accounts receivable | Short-term notes payable |
| Notes receivable | Unearned revenue |
| Inventory | Noncurrent Liabilities |
| Prepaid expenses | Long-term debt (notes payable) |
| Noncurrent Assets | Stockholders' Equity |
| Long-term investments | Common Stock |
| Property and equipment | Additional paid-in capital |
| Intangibles | Retained earnings |

Income Statement
To be presented in Chapter 3

## Statement of Cash Flows

## Notes

To be discussed in future chapters

Operating Activities
To be presented in Chapter 3
Investing Activities

+ Sales of noncurrent assets and investments for cash
- Purchases of noncurrent assets and investments for cash
- Loans to others
+ Receipt of loan principal payments from others
Financing Activities
+ Borrowing from banks
- Repayment of loan principal to banks
+ Issuance of stock
- Repurchasing stock
- Dividends paid


## KEY TERMS

Account p. 48
Accounting Cycle p. 54
Additional Paid-in Capital
(Paid-in Capital, Contributed
Capital in Excess of Par) p. 51
Assets p. 45
Common Stock p. 51
Continuity (Going-Concern)
Assumption p. 44
Credit p. 55

Current Assets p. 45
Current Liabilities p. 45
Debit p. 55
Faithful Representation p. 44
Journal Entry p. 57
Liabilities p. 45
Mixed-Attribute Measurement Model
Par Value p. 51
Primary Objective of Financial Reporting
to External Users p. 43

Relevant Information p. 44
Retained Earnings p. 46
Separate-Entity Assumption p. 44
Stable Monetary Unit Assumption p. 44
Stockholders' Equity (Shareholders' or Owners' Equity) p. 45
T-account p. 58
$\begin{array}{ll}\text { Transaction } & \text { p. } 47\end{array}$
Transaction Analysis p. 49
Trial Balance p. 64

1. What is the primary objective of financial reporting for external users?
2. Define the following:
a. Asset
d. Current liability
b. Current asset
e. Additional paid-in capital
c. Liability
f. Retained earnings
3. Explain what the following accounting terms mean:
a. Separate-entity assumption
c. Continuity assumption
b. Stable monetary unit assumption
d. Historical cost principle
4. Why are accounting assumptions necessary?
5. For accounting purposes, what is an account? Explain why accounts are used in an accounting system.
6. What is the fundamental accounting model?
7. Define a business transaction in the broad sense, and give an example of two different kinds of transactions.
8. Explain what debit and credit mean.
9. Briefly explain what is meant by transaction analysis. What are the two steps in transaction analysis?
10. What two accounting equalities must be maintained in transaction analysis?
11. What is a journal entry?
12. What is a T-account? What is its purpose?
13. How is the current ratio computed and interpreted?
14. What transactions are classified as investing activities in a statement of cash flows? What transactions are classified as financing activities?

## MULTIPLE-CHOICE QUESTIONS

1. If a publicly traded company is trying to maximize its perceived value to decision makers external to the corporation, the company is most likely to understate which of the following on its balance sheet?
a. Assets
c. Retained Earnings
b. Common Stock
d. Liabilities
2. Which of the following is not an asset?
a. Investments
c. Prepaid Expense
b. Land
d. Additional Paid-in Capital
3. Total liabilities on a balance sheet at the end of the year are $\$ 150,000$, retained earnings at the end of the year is $\$ 80,000$, net income for the year is $\$ 60,000$, common stock is $\$ 40,000$, and additional paid-in capital is $\$ 20,000$. What amount of total assets would be reported on the balance sheet at the end of the year?
a. $\$ 290,000$
b. $\$ 270,000$
c. $\$ 205,000$
d. $\$ 15,000$
4. The dual effects concept can best be described as follows:
a. When one records a transaction in the accounting system, at least two effects on the basic accounting equation will result.
b. When an exchange takes place between two parties, both parties must record the transaction.
c. When a transaction is recorded, both the balance sheet and the income statement must be impacted.
d. When a transaction is recorded, one account will always increase and one account will always decrease.
5. The T-account is a tool commonly used for analyzing which of the following?
a. Increases and decreases to a single account in the accounting system.
b. Debits and credits to a single account in the accounting system.
c. Changes in specific account balances over a time period.
d. All of the above describe how T-accounts are used by accountants.
6. Which of the following describes how assets are listed on the balance sheet?
a. In alphabetical order
b. In order of magnitude, lowest value to highest value
c. From most liquid to least liquid
d. From least liquid to most liquid
7. The Cash T-account has a beginning balance of $\$ 21,000$. During the year, $\$ 100,000$ was debited and $\$ 110,000$ was credited to the account. What is the ending balance of Cash?
a. $\$ 11,000$ debit balance
b. $\$ 11,000$ credit balance
c. $\$ 31,000$ credit balance
d. $\$ 31,000$ debit balance
8. Which of the following statements are true regarding the balance sheet?
9. One cannot determine the true fair market value of a company by reviewing its balance sheet.
10. Certain internally generated assets, such as a trademark, are not reported on a company's balance sheet.
11. A balance sheet shows only the ending balances, in a summarized format, of all balance sheet accounts in the accounting system as of a particular date.
a. None are true.
b. Statements 1 and 2 only are true.
c. Statements 2 and 3 only are true.
d. All statements are true.
12. At the end of a recent year, The Gap, Inc., reported total assets of $\$ 7,422$ million, current assets of $\$ 4,309$ million, total liabilities of $\$ 4,667$, current liabilities of $\$ 2,128$ million, and stockholders' equity of $\$ 2,755$ million. What is its current ratio and what does this suggest about the company?
a. The ratio of 1.59 suggests that The Gap has liquidity problems.
b. The ratio of 2.02 suggests that The Gap has sufficient liquidity.
c. The ratio of 1.59 suggests that The Gap has greater current assets than current liabilities.
d. The ratio of 2.02 suggests that The Gap is not able to pay its short-term obligations with current assets.
13. Which of the following is not a financing activity on the statement of cash flows?
a. When the company lends money.
b. When the company borrows money.
c. When the company pays dividends.
d. When the company issues stock to shareholders.

For more practice with multiple-choice questions, go to the text website at www.mhhe.com/libby8e.

## Matching Definitions with Terms

Match each definition with its related term by entering the appropriate letter in the space provided. There should be only one definition per term (that is, there are more definitions than terms).
Term Definition
(1) Continuity assumption
(2) Historical cost principle
(3) Credits
(4) Assets
(5) Account
A. = Liabilities + Stockholders' Equity.
B. Reports assets, liabilities, and stockholders' equity.
C. Accounts for a business separate from its owners.
D. Increase assets; decrease liabilities and stockholders' equity.
E. An exchange between an entity and other parties.
F. The concept that businesses will operate into the foreseeable future.
G. Decrease assets; increase liabilities and stockholders' equity.
H. The concept that assets should be recorded at the amount paid on the date of the transaction.
I. A standardized format used to accumulate data about each item reported on financial statements.

Matching Definitions with Terms
LO2-1, 2-2, 2-3, 2-4
Match each definition with its related term by entering the appropriate letter in the space provided. There should be only one definition per term (that is, there are more definitions than terms).
$\qquad$ Definition(1) Journal entry

- (2) A $=\mathrm{L}+\mathrm{SE}$, and Debits $=$ Credits
_ (3) Assets $=$ Liabilities + Stockholders' Equity(4) Liabilities

(5) Income statement, balance sheet, statement of stockholders' equity, and statement of cash flows
A. Accounting model.
B. Four periodic financial statements.
C. The two equalities in accounting that aid in providing accuracy.
D. The results of transaction analysis in accounting format.
E. The account that is debited when money is borrowed from a bank.
F. Probable future economic benefits owned by an entity.
G. Cumulative earnings of a company that are not distributed to the owners.
H. Every transaction has at least two effects.
I. Probable debts or obligations to be paid with assets or services.

M2-3 Identifying Events as Accounting Transactions
LO2-2 For each of the following events, which ones result in an exchange transaction for Dittman Company ( Y for yes and N for no)?
$\qquad$ (1) Six investors in Dittman Company sold their stock to another investor.
(2) The founding owner, Megan Dittman, purchased additional stock in another company.
(3) The company borrowed $\$ 2,500,000$ from a local bank.
(4) Dittman Company purchased a machine that it paid for by signing a note payable.
(5) The company lent $\$ 300,000$ to a supplier.
(6) Dittman Company ordered supplies from Staples to be delivered next week.

M2-4 Classifying Accounts on a Balance Sheet
LO2-2 The following are accounts of Rosa-Perez Company:
$\qquad$ (1) Accounts Payable
(9) Long-Term Investments
(2) Accounts Receivable
(10) Notes Payable (due in three years)
(3) Buildings
(11) Notes Receivable (due in six months)
(4) Cash
(5) Common Stock
(12) Prepaid Rent
(6) Land
(13) Retained Earnings
(7) Merchandise Inventory
(14) Supplies
(8) Income Taxes Payable
(15) Utilities Payable
(16) Wages Payable

In the space provided, classify each as it would be reported on a balance sheet. Use:
CA for current asset
CL for current liability
SE for stockholders' equity
NCA for noncurrent asset
NCL for noncurrent liability

## M2-5 Determining Financial Statement Effects of Several Transactions

LO2-3 For each of the following transactions of Dennen, Inc., for the month of January 2015, indicate the accounts, amounts, and direction of the effects on the accounting equation. A sample is provided.
a. (Sample) Borrowed $\$ 30,000$ from a local bank.
b. Lent $\$ 10,000$ to an affiliate; accepted a note due in one year.
c. Sold 100 additional shares of stock with a par value of $\$ 0.10$ per share to investors for $\$ 500$ cash.
d. Purchased $\$ 15,000$ of equipment, paying $\$ 5,000$ cash and signing a note for the rest due in one year.
e. Declared and paid $\$ 2,000$ in dividends to stockholders.
$\frac{\text { Assets }}{\text { a. Sample: Cash }+30,000}=\frac{\text { Liabilities }}{\text { Notes Payable }+30,000}+\frac{\text { Stockholders' Equity }}{}$
Identifying Increase and Decrease Effects on Balance Sheet Elements ..... M2-6
Complete the following table by entering either the word increases or decreases in each column.

|  | Debit | Credit |
| :--- | :--- | :--- |
| Assets | - | - |
| Liabilities | - | - |
| Stockholders' equity | - |  |

Identifying Debit and Credit Effects on Balance Sheet Elements ..... M2-7
Complete the following table by entering either the word debit or credit in each column. ..... LO2-4

|  | Increase | Decrease |
| :--- | :--- | :--- |
| Assets | - | - |
| Liabilities | - | - |
| Stockholders' equity | - |  |

Recording Simple Transactions ..... M2-8
For each transaction in M2-5 (including the sample), write the journal entry in the proper form. ..... LO2-4
Completing T-Accounts ..... M2-9
For each transaction in M2-5 (including the sample), post the effects to the appropriate T-accounts and LO2-4 determine ending account balances. Beginning balances are provided.


[^6]
## Preparing a Simple Classified Balance Sheet

Starting with the beginning balances in M2-9 and given the transactions in M2-5 (including the sample), assets and liabilities.

## Computing and Interpreting the Current Ratio

M2-12
Calculate the current ratio for Sal's Taco Company at the end of 2011 and 2012, based on the following data:

|  | Current Assets | Current Liabilities |
| :--- | :---: | :---: |
| End of 2011 | $\$ 280,000$ | $\$ 155,000$ |
| End of 2012 | $\$ 270,000$ | $\$ 250,000$ |



What does the result suggest about the company over time? What can you say about Sal's Taco Company's ratio when compared to Chipotle's 2011 ratio?

## M2-13 Identifying Transactions as Investing or Financing Activities on the Statement of Cash Flows

LO2-6 For the transactions in M2-5 (including the sample), identify each as an investing (I) activity or financing
 (F) activity on the statement of cash flows.

## EXERCISES

## E2-1 Matching Definitions with Terms

Match each definition with its related term by entering the appropriate letter in the space provided. There should be only one definition per term (that is, there are more definitions than terms).

Term
(1) Transaction
(2) Continuity assumption
(3) Balance sheet
(4) Liabilities
(5) Assets $=$ Liabilities + Stockholders' Equity
(6) Notes payable
(7) Common stock
(8) Historical cost principle
(9) Account
(10) Dual effects(11) Retained earnings
(12) Current assets
(13) Separate-entity assumption
(14) Par value
(15) Debits
(16) Accounts receivable
$\qquad$ (17) Stable monetary unit assumption
_ (18) Faithful representation
(19) Relevance

- (20) Stockholders' equity

Definition
A. Economic resources to be used or turned into cash within one year.
B. Reports assets, liabilities, and stockholders' equity.
C. Business transactions are accounted for separately from the transactions of the owners.
D. Increase assets; decrease liabilities and stockholders' equity.
E. An exchange between an entity and other parties.
F. The concept that businesses will operate into the foreseeable future.
G. Decrease assets; increase liabilities and stockholders' equity.
H. The concept that assets should be recorded at the amount paid on the exchange date.
I. A standardized format used to accumulate data about each item reported on financial statements.
J. Amounts owed from customers.
K. The fundamental accounting model.
L. Represents the shares issued at par value.
M. The account that is credited when money is borrowed from a bank.
N . The concept that states that accounting information should be measured and reported in the national monetary unit without adjustment for changes in purchasing power.
O. Cumulative earnings of a company that are not distributed to the owners.
P. Probable debts or obligations to be settled with assets or services.
Q. Every transaction has at least two effects on the accounting equation.
R. Financing provided by owners and by business operations.
S. The concept to exercise care not to overstate assets and revenues or understate liabilities and expenses.
T. Useful information has predictive and feedback value.
U. Relatively small amounts not likely to influence users' decisions are to be recorded in the most cost-beneficial way.
V. Probable economic resources expected to be used or turned into cash beyond the next 12 months.
W. Useful information should be complete, neutral, and free from error.
X. A legal amount per share.

## Identifying Account Titles

E2-2
The following are independent situations.
a. A new company is formed and sells 100 shares of $\$ 1$ per value stock for $\$ 12$ per share to investors.
b. A company purchases for $\$ 18,000$ cash a new delivery truck that has a list, or sticker, price of $\$ 21,000$.
c. A women's clothing retailer orders 30 new display stands for $\$ 300$ each for future delivery.
d. A company orders and receives 10 personal computers for office use for which it signs a note promising to pay $\$ 25,000$ within three months.
$e$. A construction company signs a contract to build a new $\$ 500,000$ warehouse for a corporate customer. At the signing, the corporation writes a check for $\$ 50,000$ to the construction company as the initial payment for the construction (receiving construction in progress). Answer from the standpoint of the corporation (not the construction company).
f. A publishing firm purchases for $\$ 40,000$ cash the copyright (an intangible asset) to a manuscript for an introductory accounting text.
g. A manufacturing firm pays stockholders a $\$ 100,000$ cash dividend.
$h$. A company purchases a piece of land for $\$ 50,000$ cash. An appraiser for the buyer values the land at \$52,500.
i. A manufacturing company acquires the patent (an intangible asset) on a new digital satellite system for television reception, paying $\$ 500,000$ cash and signing a $\$ 400,000$ note payable due in one year.
$j$. A local company is a sole proprietorship (one owner); its owner buys a car for $\$ 10,000$ for personal use. Answer from the local company's point of view.
k. A company purchases 100 shares of Apple Inc. common stock as an investment for $\$ 5,000$ cash.
l. A company borrows $\$ 1,000$ from a local bank and signs a six-month note for the loan.
$m$. A company pays $\$ 1,500$ principal on its note payable (ignore interest).

## Required:

1. Indicate the appropriate account titles, if any, affected in each of the preceding events. Consider what is received and what is given.
2. At what amount would you record the truck in $(b)$ ? The land in $(h)$ ? What measurement principle are you applying?
3. For $(c)$, what accounting concept did you apply? For ( $j$ ), what accounting concept did you apply?

## Classifying Accounts and Their Usual Balances

As described in a recent annual report, Verizon Wireless provides wireless voice and data services across one of the most extensive wireless networks in the United States. Verizon now serves more than 80 million customers, making it the largest wireless service provider in the United States in terms of the total number of customers. The following are accounts from a recent balance sheet for Verizon.
(1) Accounts Receivable
(6) Long-Term Investments
(2) Retained Earnings
(7) Plant, Property, and Equipment
(3) Taxes Payable
(8) Accounts Payable
(4) Prepaid Expenses
(9) Short-Term Investments
(5) Common Stock
(10) Long-Term Debt

## Required:

For each account, indicate whether the account is usually classified as a current asset (CA), noncurrent asset (NCA), current liability (CL), noncurrent liability (NCL), or stockholders' equity (SE), and whether the account usually has a debit or credit balance.

## Determining Financial Statement Effects of Several Transactions

The following events occurred for Johnson Company:

Verizon Communications,

L02-3
a. Received investment of $\$ 40,000$ cash by organizers and distributed 1,000 shares of $\$ 1$ par value common stock to them.
b. Purchased $\$ 15,000$ of equipment, paying $\$ 3,000$ in cash and signing a note for the rest.
c. Borrowed $\$ 10,000$ cash from a bank.
d. Loaned $\$ 800$ to an employee who signed a note.
$e$. Purchased $\$ 13,000$ of land; paid $\$ 4,000$ in cash and signed a mortgage note for the balance.

## E2-3

L02-2, 2-4 Inc.

## Required:

For each of the events (a) through (e), perform transaction analysis and indicate the account, amount, and direction of the effect ( + for increase and - for decrease) on the accounting equation. Check that the accounting equation remains in balance after each transaction. Use the following headings:
$\underline{\text { Event }}=\underline{\text { Liabilities }}+\underline{\text { Stockholders' Equity }}$

## E2-5 Determining Financial Statement Effects of Several Transactions

LO2-3 Nike, Inc., with headquarters in Beaverton, Oregon, is one of the world's leading manufacturers of athletic shoes and sports apparel. The following activities occurred during a recent year. The amounts are rounded to millions.
a. Purchased additional buildings for $\$ 172$ and equipment for $\$ 270$; paid $\$ 432$ in cash and signed a longterm note for the rest.
b. Issued 100 shares of $\$ 2$ par value common stock for $\$ 345$ cash.
c. Declared $\$ 145$ in dividends to be paid in the following year.
d. Purchased additional short-term investments for $\$ 7,616$ cash.
e. Several Nike investors sold their own stock to other investors on the stock exchange for $\$ 84$.
f. Sold \$4,313 in short-term investments for \$4,313 in cash.

## Required:

1. For each of the events (a) through ( $f$ ), perform transaction analysis and indicate the account, amount, and direction of the effect on the accounting equation. Check that the accounting equation remains in balance after each transaction. Use the following headings:
$\underline{\text { Event }}=\underline{\text { Liabilities }}+\underline{\text { Stockholders' Equity }}$
2. Explain your response to event (e).

## E2-6 Recording Investing and Financing Activities

Refer to E2-4.
Required:
For each of the events (a) through (e) in E2-4, prepare journal entries, checking that debits equal credits.

## E2-7 Recording Investing and Financing Activities

Refer to E2-5.

## Required:

1. For each of the events $(a)$ through $(f)$ in E2-5, prepare journal entries, checking that debits equal credits.
2. Explain your response to event (e).

## E2-8 Analyzing the Effects of Transactions in T-Accounts

LO2-4 Granger Service Company, Inc., was organized by Ted Granger and five other investors. The following activities occurred during the year:
a. Received $\$ 70,000$ cash from the investors; each was issued 8,400 shares of capital stock with a par value of $\$ 0.10$ per share.
b. Purchased equipment for use in the business at a cost of $\$ 18,000$; one-fourth was paid in cash and the company signed a note for the balance (due in six months).
c. Signed an agreement with a cleaning service to pay $\$ 120$ per week for cleaning the corporate offices next year.
d. Received an additional contribution from investors who provided $\$ 3,000$ in cash and land valued at $\$ 15,000$ in exchange for 1,000 shares of stock in the company.
$e$. Lent $\$ 2,500$ to one of the investors who signed a note due in six months.
$f$. Ted Granger borrowed $\$ 7,000$ for personal use from a local bank, signing a one-year note.

## Required:

1. Create T-accounts for the following accounts: Cash, Notes Receivable, Equipment, Land, Notes Payable, Common Stock, and Additional Paid-in Capital. Beginning balances are $\$ 0$. For each of the preceding transactions, record the effects of the transaction in the appropriate T-accounts. Include good referencing and totals for each T -account.
2. Using the balances in the T -accounts, fill in the following amounts for the accounting equation:

$$
\text { Assets } \$ \ldots \quad=\text { Liabilities } \$ \_\quad+\quad \text { Stockholders' Equity } \$
$$

3. Explain your response to events $(c)$ and $(f)$.

Inferring Investing and Financing Transactions and Preparing a Balance Sheet

E2-9
LO2-4, 2-5

During its first week of operations ending January 7, 2014, FastTrack Sports Inc. completed six transactions with the dollar effects indicated in the following schedule:

|  | Dollar Effect of Each of the Six Transactions |  |  |  |  |  | Ending <br> Accounts |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 |  |
| Cash | $\$ 15,000$ | $\$ 75,000$ | $\$(5,000)$ | $\$(4,000)$ | $\$(9,500)$ |  |  |
| Notes receivable (short-term) |  |  |  | 4,000 |  |  |  |
| Store fixtures |  |  |  |  | 9,500 |  |  |
| Land |  |  | 16,000 |  |  | $\$ 4,000$ |  |
| Notes payable (due in three months) |  | 75,000 | 11,000 |  |  | 4,000 |  |
| Common stock (15,000 shares) | 1,500 |  |  |  |  |  |  |
| Additional paid-in capital | 13,500 |  |  |  |  |  |  |

## Required:

1. Write a brief explanation of transactions (1) through (6). Explain any assumptions that you made.
2. Compute the ending balance in each account and prepare a classified balance sheet for FastTrack Sports Inc. on January 7, 2014.
Inferring Investing and Financing Transactions and Preparing a Balance Sheet
During its first month of operations in March 2014, Volz Cleaning, Inc., completed six transactions with the dollar effects indicated in the following schedule:

| Accounts | Dollar Effect of Each of the Six Transactions |  |  |  |  |  | Ending <br> Balance |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1}$ | 2 | 3 | 4 | 5 | 6 |  |
| Cash | $\$ 45,000$ | $\$(8,000)$ | $\$(2,000)$ | $\$(7,000)$ | $\$ 3,000$ | $\$(4,000)$ |  |
| Investments (short-term) |  |  |  | 7,000 | $(3,000)$ |  |  |
| Notes receivable (due in six months) |  |  | 2,000 |  |  |  |  |
| Computer equipment |  |  |  |  |  | $\$ 4,000$ |  |
| Delivery truck |  | 35,000 |  |  |  |  |  |
| Notes payable (due in 10 years) |  | 27,000 |  |  |  |  |  |
| Common stock (3,000 shares) | 6,000 |  |  |  |  |  |  |
| Additional paid-in capital | 39,000 |  |  |  |  |  |  |

## Required:

1. Write a brief explanation of transactions (1) through (6). Explain any assumptions that you made.
2. Compute the ending balance in each account and prepare a classified balance sheet for Volz Cleaning, Inc., at the end of March 2014.

## Recording Journal Entries

Nathanson Corporation was organized on May 1,2014. The following events occurred during the first month.
a. Received $\$ 70,000$ cash from the five investors who organized Nathanson Corporation. Each investor received 100 shares of $\$ 10$ par value common stock.
b. Ordered store fixtures costing $\$ 15,000$.
c. Borrowed $\$ 18,000$ cash and signed a note due in two years.
d. Purchased $\$ 11,000$ of equipment, paying $\$ 1,500$ in cash and signing a six-month note for the balance.
$e$. Lent $\$ 2,000$ to an employee who signed a note to repay the loan in three months.
$f$. Received and paid for the store fixtures ordered in (b).
Required:
Prepare journal entries for each transaction. (Remember that debits go on top and credits go on the bottom, indented.) Be sure to use good referencing and categorize each account as an asset (A), liability (L), or stockholders' equity (SE). If a transaction does not require a journal entry, explain the reason.

## E2-12 Recording Journal Entries

LO2-4 BMW Group, headquartered in Munich, Germany, manufactures several automotive brands including BMW Group, MINI, and Rolls-Royce. Financial information is reported in the euro ( $€$ ) monetary unit using International Financial Reporting Standards (IFRS) as applicable to the European Union. The following activities were adapted from the annual report of the BMW Group; amounts are in millions of euros.
a. Declared $€ 1,508$ in dividends to be paid next month.

b. Ordered $€ 2,598$ of equipment.
c. Paid $€ 852$ in dividends declared in prior months.
d. Borrowed $€ 5,899$ in cash from banks.
e. Sold equipment at its cost of $€ 53$ for cash.
$f$. Received the equipment ordered in event (b), paying $€ 2,250$ in cash and signing a note for the balance.
g. Purchased investments for $€ 2,616$ cash.

Required:
Prepare journal entries for each transaction. Be sure to use good referencing and categorize each account as an asset (A), liability (L), or stockholders' equity (SE). If a transaction does not require a journal entry, explain the reason.

## E2-13 Analyzing the Effects of Transactions Using T-Accounts and Interpreting the Current Ratio LO2-4, 2-5 as a Manager of the Company

Higgins Company has been operating for one year (2014). You are a member of the management team investigating expansion ideas that will require borrowing funds from banks. At the start of 2015, Higgins's T-account balances were as follows:

## Assets:

| Cash |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 5,000 | Short-Term Investments |  | Property and Equipment |  |
| 2,500 |  |  |  |  |

## Liabilities:


$\square$

## Stockholders' Equity:

| Common Stock |  |  |
| :--- | :--- | :---: |
|  | 500 |  |



## Required:

1. Using the data from these T-accounts, determine the amounts for the following on January 1, 2015:

Assets \$ $\qquad$ $=$ Liabilities $\$$ $\qquad$ + Stockholders' Equity \$ $\qquad$
2. Enter the following 2015 transactions in the T-accounts:
(a) Borrowed $\$ 4,000$ from a local bank, signing a note due in three years.
(b) Sold $\$ 1,500$ of the investments for $\$ 1,500$ cash.
(c) Sold one-half of the property and equipment for $\$ 1,500$ in cash.
(d) Declared and paid $\$ 800$ in cash dividends to stockholders.
3. Compute ending balances in the T-accounts to determine amounts for the following on December 31, 2015:

$$
\text { Assets } \$ \ldots \quad=\quad \text { Liabilities } \$ \ldots \quad \text { Stockholders' Equity } \$
$$

$\qquad$
4. Calculate the current ratio at December 31, 2015. If the industry average for the current ratio is 1.50 , what does your computation suggest to you about Higgins Company? Would you suggest that Higgins Company increase its short-term liabilities? Why or why not?

## Preparing a Balance Sheet

Refer to E2-13.

## Required:

From the ending balances in the T-accounts in E2-13, prepare a classified balance sheet at December 31, 2015, in good form.

## Analyzing the Effects of Transactions Using T-Accounts, Preparing a Balance Sheet, and Evaluating the Current Ratio over Time as a Bank Loan Officer

Strauderman Delivery Company, Inc., was organized in 2014 in Wisconsin. The following transactions occurred during year 2014:
a. Received $\$ 40,000$ cash from organizers in exchange for 10,000 shares of stock (par value of $\$ 1.00$ per share) in the new company.
b. Purchased land in Wisconsin for $\$ 16,000$, signing a one-year note (ignore interest).
c. Bought two used delivery trucks for operating purposes at the start of the year at a cost of $\$ 10,000$ each; paid $\$ 4,000$ cash and signed a note due in three years for the rest (ignore interest).
d. Paid $\$ 1,000$ cash to a truck repair shop for a new motor for one of the trucks. (Hint: Increase the account you used to record the purchase of the trucks since the productive life of the truck has been improved.)
$e$. Sold one-fourth of the land for $\$ 4,000$ to Pablo Development Corporation, which signed a six-month note.
f. Stockholder Melissa Strauderman paid $\$ 27,600$ cash for a vacant lot (land) in Canada for her personal use.

## Required:

1. Set up appropriate T-accounts with beginning balances of zero for Cash, Short-Term Notes Receivable, Land, Equipment, Short-Term Notes Payable, Long-Term Notes Payable, Common Stock, and Additional Paid-in Capital. Using the T-accounts, record the effects of transactions (a) through ( $f$ ) by Strauderman Delivery Company.
2. Prepare a trial balance at December 31, 2014.
3. Prepare a classified balance sheet for Strauderman Delivery Company at December 31, 2014.
4. At the end of the next two years, Strauderman Delivery Company reported the following amounts on its balance sheets:

|  | December 31, 2015 | December 31, 2016 |
| :--- | :---: | :---: |
| Current Assets | $\$ 52,000$ | $\$ 47,000$ |
| Long-Term Assets | 38,000 | 73,000 |
| Total Assets | $\mathbf{9 0 , 0 0 0}$ | $\mathbf{1 2 0 , 0 0 0}$ |
| Short-Term Notes Payable | 23,000 | 40,000 |
| Long-Term Notes Payable | $\mathbf{1 7 , 0 0 0}$ | $\underline{20,000}$ |
| Total Liabilities | $\mathbf{4 0 , 0 0 0}$ | $\mathbf{6 0 , 0 0 0}$ |
| Stockholders' Equity | $\mathbf{5 0 , 0 0 0}$ | $\mathbf{6 0 , 0 0 0}$ |

Compute the company's current ratio for 2014, 2015, and 2016. What is the trend and what does this suggest about the company?
5. At the beginning of year 2017, Strauderman Delivery Company applied to your bank for a $\$ 50,000$ short-term loan to expand the business. The vice president of the bank asked you to review the information and make a recommendation on lending the funds based solely on the results of the current ratio. What recommendation would you make to the bank's vice president about lending the money to Strauderman Delivery Company?
Explaining the Effects of Transactions on Balance Sheet Accounts Using T-Accounts


| Tools and Equipment (A) |  |  |  |
| :--- | :---: | :---: | :---: |
| $6 / 1 / 14$ 0   <br> a. 5,000 d. 900 <br>     <br> Common Stock (100,000 shares) (SE)    <br>  $6 / 1 / 14$ 0  <br>   a. 2,000 |  |  |  |

Required:
Explain events (a) through (d) that resulted in the entries in the T-accounts. That is, for each account, what transactions made it increase and/or decrease?

## E2-17 Inferring Typical Investing and Financing Activities in Accounts

LO2-4 The following T-accounts indicate the effects of normal business transactions:

| Equipment |  |  | Notes Receivable |  |  | Notes Payable |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1/1 | 500 |  | 1/1 | 150 |  |  | 100 | 1/1 |
|  | 250 | ? |  | ? | 225 | ? | 170 |  |
| 12/31 | 100 |  | 12/31 | 170 |  |  | 160 | 12/31 |

Required:

1. Describe the typical investing and financing transactions that affect each T-account. That is, what economic events occur to make each of these accounts increase and decrease?
2. For each T-account, compute the missing amounts.

## E2-18 Identifying Investing and Financing Activities Affecting Cash Flows

LO2-6 Foot Locker, Inc., is a large global retailer of athletic footwear and apparel selling directly to customers and through the Internet. It includes the Foot Locker family of stores, Champs Sports, Footaction, CCS,
Foot Locker, Inc. and Eastbay. The following are several of Foot Locker's investing and financing activities as reflected in a recent annual statement of cash flows.

a. Reduction of long-term debt.
b. Sale of short-term investments.
c. Issuance of common stock.
d. Capital expenditures (for property, plant, and equipment).
$e$. Dividends paid on common stock.
Required:
For each of these, indicate whether the activity is investing (I) or financing (F) and the direction of the effect on cash flows ( + for increases cash; - for decreases cash).

## E2-19 Identifying the Investing and Financing Activities Affecting Cash Flows

LO2-6 Starwood Hotels \& Resorts Worldwide, Inc., is one of the world's largest hotel and leisure companies.

## Starwood Hotels \& Resorts Worldwide, Inc.

 It conducts business both directly and through its subsidiaries, including the following hotel brands: Sheraton, Four Points, W, Aloft, The Luxury Collection, Le Meridien, Element, Westin, and St. Regis.* Information adapted from the company's recent annual statement of cash flows indicates the following investing and financing activities during that year (simplified, in millions of dollars):[^7]a. Additional borrowing from banks ..... \$ 47
b. Purchase of investments ..... 8
c. Sale of assets and investments (assume sold at cost) ..... 294
d. Issuance of stock ..... 70
$e$. Purchase and renovation of properties ..... 385
$f$. Payment of debt principal ..... 650
$g$. Receipt of principal payment on a note receivable ..... 5

## Required:

For each of these indicate whether the activity is investing (I) or financing (F) and the direction of the effects on cash flows ( + for increases cash; - for decreases cash).

## Finding Financial Information as a Potential Investor

E2-20
LO2-2, 2-5, 2-6 received the annual reports of several major companies.

## Required:

For each of the following, indicate where you would locate the information in an annual report. The information may be in more than one location.

1. Total current assets.
2. Amount of debt principal repaid during the year.
3. Summary of significant accounting policies.
4. Cash received from sales of noncurrent assets.
5. Amount of dividends paid during the year.
6. Short-term obligations.
7. Date of the statement of financial position.

To practice with more exercises, go to the text website at www.mhhe.com/libby8e.

PROBLEMS

## Identifying Accounts on a Classified Balance Sheet and Their Normal Debit or Credit Balances (AP2-1)

Exxon Mobil Corporation explores, produces, refines, markets, and supplies crude oil, natural gas, and petroleum products in the United States and around the world. The following are accounts from a recent balance sheet of Exxon Mobil Corporation:

|  | Balance Sheet Classification | Debit or Credit Balance |
| :---: | :---: | :---: |
| (1) Notes and Loans Payable (short-term) |  |  |
| (2) Materials and Supplies |  |  |
| (3) Common Stock |  |  |
| (4) Patents (an intangible asset) |  |  |
| (5) Income Taxes Payable |  |  |
| (6) Long-Term Debt |  |  |
| (7) Marketable Securities (short-term investments) |  |  |
| (8) Property, Plant, and Equipment |  |  |
| (9) Retained Earnings |  |  |
| (10) Notes and Accounts Receivable (short-term) |  |  |
| (11) Investments (long-term) |  |  |
| (12) Cash and Cash Equivalents |  |  |
| (13) Accounts Payable |  |  |
| (14) Crude Oil Products and Merchandise |  |  |
| (15) Additional Paid-in Capital |  |  |

## Required:

For each account, indicate how it normally should be categorized on a classified balance sheet. Use CA for current asset, NCA for noncurrent asset, CL for current liability, NCL for noncurrent liability, and SE for stockholders' equity. Also indicate whether the account normally has a debit or credit balance.

P2-2 Determining Financial Statement Effects of Various Transactions (AP2-2)

LO2-2, 2-3, 2-5

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East Hill Home Healthcare Services was organized on January 1, 2014, by four friends. Each organizer invested $\$ 10,000$ in the company and, in turn, was issued 8,000 shares of $\$ 1.00$ par value stock. To date, they are the only stockholders. At the end of 2015, the accounting records reflected total assets of $\$ 700,000$ ( $\$ 50,000$ cash; $\$ 500,000$ land; $\$ 50,000$ equipment; and $\$ 100,000$ buildings), total liabilities of $\$ 200,000$ (short-term notes payable $\$ 100,000$ and long-term notes payable $\$ 100,000$ ), and stockholders' equity of $\$ 500,000$ ( $\$ 20,000$ common stock, $\$ 80,000$ additional paid-in capital, and $\$ 400,000$ retained earnings). During the current year, 2016, the following summarized events occurred:
a. Sold 9,000 additional shares of stock to the original organizers for a total of $\$ 90,000$ cash.
b. Purchased a building for $\$ 60,000$, equipment for $\$ 15,000$, and four acres of land for $\$ 14,000$; paid $\$ 9,000$ in cash and signed a note for the balance (due in 15 years). (Hint: Five different accounts are affected.)
c. Sold one acre of land acquired in (b) for $\$ 3,500$ cash to another company.
d. Purchased short-term investments for $\$ 18,000$ cash.
$e$. One stockholder reported to the company that 300 shares of his East Hill stock had been sold and transferred to another stockholder for $\$ 3,000$ cash.
$f$. Lent one of the shareholders $\$ 5,000$ for moving costs, receiving a signed six-month note from the shareholder.

## Required:

1. Was East Hill Home Healthcare Services organized as a sole proprietorship, a partnership, or a corporation? Explain the basis for your answer.
2. During 2016, the records of the company were inadequate. You were asked to prepare the summary of the preceding transactions. To develop a quick assessment of their economic effects on East Hill Home Healthcare Services, you have decided to complete the tabulation that follows and to use plus $(+)$ for increases and minus ( - ) for decreases for each account. The first event is used as an example.

3. Did you include the transaction between the two stockholders-event ( $e$ )—in the tabulation? Why?
4. Based only on the completed tabulation, provide the following amounts (show computations):
a. Total assets at the end of the year.
b. Total liabilities at the end of the year.
c. Total stockholders' equity at the end of the year.
d. Cash balance at the end of the year.
$e$. Total current assets at the end of the year.
5. Compute the current ratio for 2016. What does this suggest about the company?

$e$. Issued an additional 2,000 shares of $\$ 0.50$ par value common stock for $\$ 11,000$ cash.
$f$. Borrowed $\$ 9,000$ cash from a local bank, payable in three months.
g. Purchased a patent (an intangible asset) for $\$ 3,000$ cash.
h. Built an addition to the factory for $\$ 24,000$; paid $\$ 8,000$ in cash and signed a three-year note for the balance.
i. Returned defective equipment to the manufacturer, receiving a cash refund of $\$ 1,000$.

## Required:

1. Create T-accounts for each of the accounts on the balance sheet and enter the balances at the end of 2014 as beginning balances for 2015.
2. Record each of the events for 2015 in T -accounts (including referencing) and determine the ending balances.
3. Explain your response to event (d).
4. Prepare a trial balance at December 31, 2015.
5. Prepare a classified balance sheet at December 31, 2015.
6. Compute the current ratio for 2015. What does this suggest about Cougar Plastics?

Identifying Effects of Transactions on the Statement of Cash Flows (AP2-4)
Refer to P2-3.

## Required:

Using the events (a) through (i) in P2-3, indicate whether each is an investing (I) or financing (F) activity for the year and the direction of the effect on cash flows (+ for increase and - for decrease). If there is no effect on cash flows, write NE.

## Recording Transactions, Preparing Journal Entries, Posting to T-Accounts, Preparing the Balance Sheet, and Evaluating the Current Ratio

Dell Inc., headquartered in Austin, Texas, is the global leader in selling computer products and services. The following is Dell's (simplified) balance sheet from a recent year (fiscal year ending on Friday nearest January 31).

| DELL INC. <br> Balance Sheet at February 3, 2012 (dollars in millions) |  |
| :---: | :---: |
| ASSETS |  |
| Current assets: |  |
| Cash | \$13,852 |
| Short-term investments | 966 |
| Receivables and other assets | 9,803 |
| Inventories | 1,404 |
| Other | 3,423 |
| Total current assets | 29,448 |
| Property, plant, and equipment | 2,124 |
| Long-term investments | 3,404 |
| Other noncurrent assets | 9,557 |
| Total assets | $\underline{\underline{\$ 44,533}}$ |
| LIABILITIES AND STOCKHOLDERS' EQUITY |  |
| Current Liabilities: |  |
| Accounts payable | \$11,656 |
| Other short-term obligations | 10,345 |
| Total current liabilities | 22,001 |
| Long-term liabilities | 13,615 |
| Total liabilities | 35,616 |
| Stockholders' equity: |  |
| Common stock (\$0.01 par value) | 34 |
| Additional paid-in capital | 12,153 |
| Retained earnings | 28,236 |
| Other stockholders' equity items | (31,506) |
| Total stockholders' equity | 8,917 |
| Total stockholders' equity and liabilities | $\underline{\underline{\text { 444,533 }}}$ |

P2-4
L02-6


P2-5
LO2-2, 2-4, 2-5

## Dell



Assume that the following transactions (in millions) occurred during the remainder of 2012 (ending on February 1, 2013):
a. Borrowed $\$ 50$ from banks due in two years.
b. Lent $\$ 300$ to affiliates, who signed a six-month note.
c. Purchased additional investments for $\$ 13,000$ cash; one-fifth were long term and the rest were short term.
d. Purchased property, plant, and equipment; paid $\$ 875$ in cash and $\$ 1,410$ with additional long-term bank loans.
$e$. Issued 1,000 additional shares of stock for $\$ 400$ in cash.
f. Sold short-term investments costing $\$ 11,000$ for $\$ 11,000$ cash.
$g$. Dell does not actually pay dividends; it reinvests its earnings into the company for growth purposes. Assume instead for this problem that Dell declared and paid \$60 in dividends during 2012.
Required:

1. Prepare a journal entry for each transaction. Use the account titles in the Dell balance sheet.
2. Create T-accounts for each balance sheet account and include the February 3, 2012, balances. Post each journal entry to the appropriate T-accounts.
3. Prepare a balance sheet from the T-account ending balances for Dell at February 1, 2013, based on these transactions.
4. Compute Dell's current ratio for 2012 (year ending on February 1, 2013). What does this suggest about the company?

## P2-6 Identifying the Investing and Financing Activities Affecting the Statement of Cash Flows

Refer to P2-5.
Dell Required:
For each of the activities $(a)-(g)$, indicate whether the activity is investing (I) or financing (F) and the direction and amount of the effect on cash flows (+ for increases; - for decreases).

## ALTERNATE PROBLEMS

AP2-1 Identifying Accounts on a Classified Balance Sheet and Their Normal Debit or LO2-1, 2-2, 2-4 Credit Balances (P2-1)

According to a recent Form 10-K report of Mattel, Inc., the company "designs, manufactures, and markets a broad variety of toy products worldwide." Mattel's brands include Barbie, Hot Wheels, FisherPrice toys, and American Girl brand dolls and accessories. The following are several of the accounts from a recent balance sheet:

|  | Balance Sheet Classification | Debit or Credit Balance |
| :---: | :---: | :---: |
| (1) Prepaid Expenses |  |  |
| (2) Inventories |  |  |
| (3) Accounts Receivable |  |  |
| (4) Long-Term Debt |  |  |
| (5) Cash and Equivalents |  |  |
| (6) Goodwill (an intangible asset) |  |  |
| (7) Accounts Payable |  |  |
| (8) Income Taxes Payable |  |  |
| (9) Property, Plant, and Equipment |  |  |
| (10) Retained Earnings |  |  |
| (11) Additional Paid-in Capital |  |  |
| (12) Short-Term Borrowings |  |  |
| (13) Accrued Liabilities |  |  |
| (14) Common Stock |  |  |

## Required:

Indicate how each account normally should be categorized on a classified balance sheet. Use CA for current asset, NCA for noncurrent asset, CL for current liability, NCL for noncurrent liability, and SE for stockholders' equity. Also indicate whether the account normally has a debit or credit balance.

## Determining Financial Statement Effects of Various Transactions (P2-2)

Adamson Incorporated is a small manufacturing company that makes model trains to sell to toy stores. It has a small service department that repairs customers' trains for a fee. The company has been in business for five years. At December 31, 2014 (the company's fiscal year-end), the accounting records reflected total assets of $\$ 500,000$ (cash, $\$ 120,000$; equipment, $\$ 70,000$; buildings, $\$ 310,000$ ), total liabilities of $\$ 200,000$ (short-term notes payable, $\$ 140,000$; long-term notes payable, $\$ 60,000$ ), and total stockholders' equity of $\$ 300,000$ [common stock (par value $\$ 1.00$ per share), $\$ 20,000$ : additional paid-in capital, $\$ 200,000$; retained earnings, $\$ 80,000$ ]. During the current year, 2015, the following summarized events occurred:
a. Borrowed $\$ 110,000$ cash from the bank and signed a $10-$ year note.
b. Purchased equipment for $\$ 30,000$, paying $\$ 3,000$ in cash and signing a note due in six months for the balance.
c. Issued an additional 10,000 shares of capital stock for $\$ 100,000$ cash.
d. Purchased a delivery truck (equipment) for $\$ 10,000$; paid $\$ 5,000$ cash and signed a short-term note payable for the remainder.
$e$. Lent $\$ 2,000$ cash to the company president, Clark Adamson, who signed a note with terms showing the principal plus interest due in one year.
$f$. Built an addition on the factory for $\$ 200,000$ and paid cash to the contractor.
$g$. Purchased $\$ 85,000$ in long-term investments.
h. Returned a $\$ 3,000$ piece of equipment purchased in $(b)$ because it proved to be defective; received a reduction of its short-term note payable.
i. A stockholder sold $\$ 5,000$ of his capital stock in Adamson Incorporated to his neighbor.

## Required:

1. Was Adamson Incorporated organized as a sole proprietorship, a partnership, or a corporation? Explain the basis for your answer.
2. During 2015, the records of the company were inadequate. You were asked to prepare the summary of the preceding transactions. To develop a quick assessment of their economic effects on Adamson Incorporated, you have decided to complete the tabulation that follows and to use plus ( + ) for increases and minus ( - ) for decreases for each account. The first transaction is used as an example.

| ASSETS |  |  |  |  | $=$ | LIABILITIES |  | + | STOCKHOLDERS' EQUITY |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash | Notes Receivable | Long-Term Investments | Equipment | Buildings |  | Short-Term <br> Notes Payable | Long-Term Notes Payable |  | Common Stock | Additional Paid-in Capital | Retained <br> Earnings |
| Beg. 120,000 <br> (a) $+110,000$ |  |  | 70,000 | 310,000 | = | 140,000 | $\begin{array}{r} 60,000 \\ +110,000 \end{array}$ |  | 20,000 | 200,000 | 80,000 |

3. Did you include event $(i)$ in the tabulation? Why?
4. Based on beginning balances plus the completed tabulation, provide the following amounts (show computations):
a. Total assets at the end of the year.
b. Total liabilities at the end of the year.
$c$. Total stockholders' equity at the end of the year.
d. Cash balance at the end of the year.
$e$. Total current assets at the end of the year.
5. Compute the current ratio for 2015 . What does this suggest about the company?

## Recording Transactions in T-Accounts, Preparing the Balance Sheet, and Evaluating the Current Ratio (P2-3)

Ethan Allen Interiors, Inc., is a leading manufacturer and retailer of home furnishings in the United States and abroad. The following is adapted from Ethan Allen's June 30, 2011, annual financial report. Amounts are in thousands.

AP2-2
LO2-2, 2-3, 2-5


| Cash and cash equivalents | $\$ 78,519$ |
| :--- | ---: |
| Short-term investments | 12,909 |
| Accounts receivable | 15,036 |
| Inventories | 141,692 |
| Prepaid expenses and |  |
| $\quad$ other current assets | 20,372 |
| Property, plant, and equipment | 294,853 |
| Intangibles | 45,128 |
| Other assets | 19,816 |


| Accounts payable | $\$ 26,958$ |
| :--- | ---: |
| Accrued expenses payable | 127,639 |
| Long-term debt (includes the |  |
| $\quad$ current portion of $\$ 19)$ | 165,032 |
| Other long-term liabilities | 27,009 |
| Common stock $(\$ 0.01$ par value) | 484 |
| Additional paid-in capital | 359,728 |
| Retained earnings, | 501,908 |
| Other stockholders' equity items | $(580,433)$ |

Assume that the following events occurred in the first quarter ended September 30, 2011:
a. Issued 1,600 additional shares of stock for $\$ 1,020$ in cash.
b. Purchased $\$ 3,400$ in additional intangibles for cash.
c. Ordered $\$ 43,500$ in wood and other raw materials for the manufacturing plants.
d. Sold equipment at its cost for $\$ 4,020$ cash.
e. Purchased $\$ 2,980$ in short-term investments for cash.
f. Purchased property, plant, and equipment; paid $\$ 1,830$ in cash and signed additional long-term notes for \$9,400.
g. Sold at cost other assets for $\$ 310$ cash.
h. Declared and paid $\$ 300$ in dividends.

## Required:

1. Create T-accounts for each of the accounts on the balance sheet; enter the balances at June 30, 2011.
2. Record each of the transactions for the first quarter ended September 30, 2011, in the T-accounts (including referencing) and determine the ending balances.
3. Explain your response to event (c).
4. Prepare a trial balance at September 30, 2011.
5. Prepare a classified balance sheet at September 30, 2011.
6. Compute the current ratio for the quarter ended September 30, 2011. What does this suggest about Ethan Allen Interiors, Inc.?

## AP2-4 Identifying Effects of Transactions on the Statement of Cash Flows (P2-4)

Refer to AP2-3.
Required:
Using the events (a) through ( $h$ ) in AP2-3, indicate whether each transaction is an investing (I) or financing (F) activity for the quarter and the direction and amount of the effect on cash flows ( + for increase and - for decrease). If there is no effect on cash flows, write NE.

## CASES AND PROJECTS

## Annual Report Cases

CP2-1

## Finding Financial Information

LO2-1, 2-2, 2-5, 2-6
Required:

1. Is the company a corporation, a partnership, or a sole proprietorship? How do you know?
2. The company shows on the balance sheet that inventories are worth $\$ 378,426,000$. Does this amount represent the expected selling price? Why or why not?
3. List the types of current obligations this company has. You need not provide the amounts.
4. Compute the company's current ratio and explain its meaning.
5. How much cash did the company spend on purchasing property and equipment each year (capital expenditures)? Where did you find the information?

## Finding Financial Information

Refer to the financial statements of Urban Outfitters in Appendix C at the end of this book.

## Required:

1. Use the company's balance sheet to determine the amounts in the accounting equation $(\mathrm{A}=\mathrm{L}+\mathrm{SE})$ as of January 31, 2012.
2. If the company were liquidated at the end of the current year (January 31, 2012), are the shareholders guaranteed to receive $\$ 1,066,268,000$ ?
3 . What are the company's noncurrent liabilities?
3. What is the company's current ratio?
4. Did the company have a cash inflow or outflow from investing activities? Of how much?

## Comparing Companies within an Industry

Refer to the financial statements of American Eagle Outfitters in Appendix B, Urban Outfitters in Appendix C, and the Industry Ratio Report in Appendix D at the end of this book.

## Required:

1. Compute the current ratio for both companies. Compared to the industry average (from the Industry Ratio Report), are these two companies more or less able to satisfy short-term obligations with current assets? How is the current ratio influenced by these companies' choice to rent space instead of buying it?
2. In the most recent year, how much cash, if any, was spent buying back (repurchasing) each company's own common stock?
3. How much, if any, did each company pay in dividends for the most recent year?
4. What account title or titles does each company use to report any land, buildings, and equipment it may have?

## Financial Reporting and Analysis Cases

## Broadening Financial Research Skills: Locating Financial Information on the SEC's Database

The Securities and Exchange Commission (SEC) regulates companies that issue stock on the stock market. It receives financial reports from public companies electronically under a system called EDGAR (Electronic Data Gathering and Retrieval Service). Using the Internet, anyone may search the database for the reports that have been filed.

Using your Web browser, access the EDGAR database at www.sec.gov. To search the database, type in "chipotle" for the company name in the search window at the top of the page, and press enter.

## Required:

To look at SEC filings, type in "10-Q" in the space indicating "Filing Type" and press enter. Skim down the left side until you locate the Form 10-Q (quarterly report) filed July 20, 2012. Click on the "Documents" for that report, click on the 10-Q document (first item), and skim to the Table of Contents.

1. Click on "Financial Statements" and skim to the "Condensed Consolidated Balance Sheets."
$a$. What was the amount of Chipotle's total assets for the most recent quarter reported?
b. Did current liabilities increase or decrease since December 31, 2011?
c. Compute the current ratio. How does it compare to the ratio indicated for Chipotle Mexican Grill in the chapter? What does this suggest about the company?

## CP2-2

LO2-1, 2-2, 2-5, 2-6


URBAN OUTFITTERS INC


## CP2-3

LO2-2, 2-5, 2-6
AMERICAN EAGLE OUTFITTERS,INC.


UREAN OUTFITTERS INC.

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## CP2-4

LO2-2, 2-5, 2-6

2. Skim to the Chipotle "Consolidated Statements of Cash Flow."
a. What amount did Chipotle spend on property and equipment for the quarter ended June 30, 2012?
$b$. What was the total amount of cash flows from financing activities?

## CP2-5 Using Financial Reports: Evaluating the Reliability of a Balance Sheet

LO2-1, 2-5 Frances Sabatier asked a local bank for a $\$ 50,000$ loan to expand her small company. The bank asked Frances to submit a financial statement of the business to supplement the loan application. Frances prepared the following balance sheet.

| FS COMPUTING <br> Balance Sheet <br> June 30, 2015 |  |
| :--- | ---: |
| Assets | $\$ 9,000$ |
| Cash and investments | 30,000 |
| Inventory | 46,000 |
| Equipment | $\underline{300,000}$ |
| Personal residence (monthly payments, \$2,800) | $\underline{\underline{\$ 405,000}}$ |
| Remaining assets |  |
| Total assets | $\underline{\$ 32,000}$ |
| Liabilities | $\underline{38,000}$ |
| Short-term debt to suppliers | $\underline{100,000}$ |
| Long-term debt on equipment | $\underline{\underline{\$ 405,000}}$ |
| Total debt |  |
| Stockholders' Equity |  |
| Total liabilities and stockholders' equity |  |

## Required:

The balance sheet has several flaws. However, there is at least one major deficiency. Identify it and explain its significance.

## CP2-6 Using Financial Reports: Analyzing the Balance Sheet

LO2-2, 2-4, 2-5
Dell
Recent balance sheets are provided for Dell, Inc., a leading producer and marketer of a broad range of personal computers, mobility products, software, and related tools and services.

Required:

1. Is Dell a corporation, sole proprietorship, or partnership? Explain the basis of your answer.

2. Use the company's balance sheet (consolidated statement of financial position) to determine the amounts in the accounting equation $(\mathrm{A}=\mathrm{L}+\mathrm{SE})$ at the end of the most recent year.
3. Calculate the company's current ratio on February 3, 2012. Interpret the ratio that you calculated. What other information would make your interpretation more useful?
4. Prepare the journal entry the company will make in 2012 when it pays its fiscal year 2011 accounts payable (fiscal year 2011 ends on February 3, 2012).
5. Does the company appear to have been profitable over its years in business? On what account are you basing your answer? Assuming no dividends were paid, how much was net income (or net loss) in the most recent year? If it is impossible to determine without an income statement, state so.

| DELL INC. <br> Consolidated Statements of Financial Position (dollars in millions) |  |  |
| :---: | :---: | :---: |
|  | February 3, 2012 | January 28, 2011 |
| ASSETS |  |  |
| Current assets |  |  |
| Cash and cash equivalents | \$ 13,852 | \$ 13,913 |
| Short-term investments | 966 | 452 |
| Accounts receivable | 9,803 | 10,136 |
| Inventories | 1,404 | 1,301 |
| Other | 3,423 | 3,219 |
| Total current assets | 29,448 | 29,021 |
| Property, plant and equipment, net | 2,124 | 1,953 |
| Investments | 3,404 | 704 |
| Intangibles | 7,695 | 5,860 |
| Other noncurrent assets | 1,862 | 1,061 |
|  | \$ 44,533 | \$38,599 |
| LIABILITIES AND STOCKHOLDERS' EQUITY |  |  |
| Current liabilities |  |  |
| Short-term debt | \$ 2,867 | \$ 851 |
| Accounts payable | 11,656 | 11,293 |
| Accrued and other liabilities | 3,934 | 4,181 |
| Deferred service revenue | 3,544 | 3,158 |
| Total current liabilities | 22,001 | 19,483 |
| Long-term debt | 6,387 | 5,146 |
| Long-term deferred service revenue | 3,836 | 3,518 |
| Other noncurrent liabilities | 3,392 | 2,686 |
| Total liabilities | 35,616 | 30,833 |
| Stockholders' equity |  |  |
| Contributed capital | 12,187 | 11,797 |
| Retained earnings | 28,236 | 24,744 |
| Other | $(31,506)$ | $(28,775)$ |
| Total stockholders' equity | 8,917 | 7,766 |
|  | \$ 44,533 | \$ 38,599 |

## Critical Thinking Cases

## Making a Decision as a Financial Analyst: Preparing and Analyzing a Balance Sheet

Your best friend from home writes you a letter about an investment opportunity that has come her way. A company is raising money by issuing shares of stock and wants her to invest $\$ 20,000$ (her recent inheritance from her great-aunt's estate). Your friend has never invested in a company before and, knowing that you are a financial analyst, asks that you look over the balance sheet and send her some advice. An unaudited balance sheet, in only moderately good form, is enclosed with the letter.

| DEWEY, CHEETUM, AND HOWE, INC. <br> Balance Sheet |  |
| :--- | ---: |
| For the Year Ending December 31, 2015 |  |

There is only one disclosure note, and it states that the building was purchased for $\$ 65,000$, has been depreciated by $\$ 5,000$ on the books, and still carries a mortgage (shown in the liability section). The note also states that, in the opinion of the company president, the building is "easily worth $\$ 98,000$."

## Required:

1. Draft a new balance sheet for your friend, correcting any errors you note. (If any of the account balances need to be corrected, you may need to adjust the retained earnings balance correspondingly.) If there are no errors or omissions, so state.
2. Write a letter to your friend explaining the changes you made to the balance sheet, if any, and offer your comments on the company's apparent financial condition based only on this information. Suggest other information your friend might want to review before coming to a final decision on whether to invest.

## CP2-8 Evaluating an Ethical Dilemma: Analyzing Management Incentives

In July 2004, the U.S. government filed civil and criminal charges against four former executives of
U.S. Foodservice, Inc.


CP2-9
LO2-2, 2-5, 2-6
 Netherlands-based Ahold's subsidiary U.S. Foodservice, Inc., an operator of supermarkets such as Bi-Lo and Giant Food Stores. Two of the four executives have pleaded guilty, and the other two were indicted. The alleged widespread fraud included recording completely fictitious revenues for false promotions and persuading vendors to confirm to auditors the false promotional payments. U.S. Attorney David Kelley suggested the fraud was motivated by the greed of the executives to reap fat bonuses if the company met certain financial goals. The auditors did not uncover the fraud.

## Required:

1. Describe the parties who were harmed or helped by this fraud.
2. Explain how greed may have contributed to the fraud.
3. Why do you think the independent auditors failed to catch the fraud?

## Financial Reporting and Analysis Team Project

## Team Project: Analysis of Balance Sheets and Ratios

As a team, select an industry to analyze. Yahoo!Finance provides lists of industries at biz.yahoo.com/p/ industries.html. Click on an industry for a list of companies in that industry. Alternatively, go to Google Finance at www.google.com/finance, search for a company you are interested in, and you will be presented with a list including that company and its competitors. Each team member should acquire the annual report or $10-\mathrm{K}$ for one publicly traded company in the industry, with each member selecting a different company (the SEC EDGAR service at www.sec.gov or the company's investor relations website itself are good sources).

## Required:

On an individual basis, each team member should write a short report answering the following questions about the selected company. Discuss any patterns across the companies that you as a team observe. Then, as a team, write a short report comparing and contrasting your companies.

1. For the most recent year, what are the top three asset accounts by size? What percentage is each of total assets? (Calculated as Asset A $\div$ Total Assets)
2. What are the major investing and financing activities (by dollar size) for the most recent year? (Look at the Statement of Cash Flows.)
3. Ratio Analysis:
a. What does the current ratio measure in general?
b. Compute the current ratio for each of the last three years. (You may find prior years' information in the section of the annual report or 10-K called "Selected Financial Information," or you may search for prior years' annual reports.)
c. What do your results suggest about the company?
$d$. If available, find the industry ratio for the most recent year, compare it to your results, and discuss why you believe your company differs or is similar to the industry ratio.

## Accounting for the Establishment of a New Business (the Accounting Cycle)

Penny Cassidy has decided to start her business, Penny's Pool Service \& Supply, Inc. (PPSS). There is much to do when starting a new business. Here are some transactions that have occurred in the business in March 2013.
a. Received $\$ 25,000$ cash and a large delivery van with a value of $\$ 36,000$ from Penny, who was given 4,000 shares of $\$ 0.05$ par value common stock in exchange.
b. Purchased land with a small office and warehouse by paying $\$ 10,000$ cash and signing a 10 -year mortgage note payable to the local bank for $\$ 80,000$. The land has a value of $\$ 18,000$ and the building's value is $\$ 72,000$. Use separate accounts for land and buildings.
c. Purchased a new computer from Dell for $\$ 2,500$ cash and office furniture for $\$ 4,000$, signing a shortterm note payable in six months.
d. Hired a receptionist for the office at a salary of \$1,500 per month, starting in April 2013.
$e$. Paid $\$ 1,000$ on the note payable to the bank at the end of March 2013 (ignore interest).
f. Purchased short-term investments in the stock of other companies for $\$ 5,000$ cash.
g. Ordered $\$ 10,000$ in inventory from Pool Corporation, Inc., a pool supply wholesaler, to be received in April 2013.

## Required:

1. For each of the events, prepare journal entries if a transaction of the business exists, checking that debits equal credits. If a transaction does not exist, explain why there is no transaction for the business.
2. Create T-accounts, and post each of the transactions to determine balances at March 31, 2013. Because this is a new business, beginning balances are $\$ 0$.
3. Prepare a trial balance on March 31, 2013, to check that debits equal credits after the transactions are posted to the T-accounts.
4. From the trial balance, prepare a classified balance sheet (with current assets and current liabilities sections) at March 31, 2013 (before the beginning of operations in April).
5. For each of the events, indicate if it is an investing activity (I) or financing activity (F), and the direction ( + for increases; - for decreases) and amount of the effect on cash flows using the following structure. Write NE if there is no effect on cash flows.

6. Calculate the current ratio at March 31, 2013. What does this ratio indicate about the ability of PPSS to pay its current liabilities?

[^0]:    ${ }^{1}$ See http://www.greenbeanchicago.com/wind-turbine-green-flyash-restaurant-chipotle/ and https://www.usgbc.org/ShowFile.aspx?Document|D=6953 for more information.
    ${ }^{2}$ Sources: http://mexican-taco-fast-food-restaurant.franchise-business-tips.com/industry and http://www.fastcasual.com/infographic.php?id=4.

[^1]:    ${ }^{3}$ Retained earnings can increase only from profitable operations, but they decrease when a firm has a loss or pays dividends.

[^2]:    $a . \mathrm{SE} ; b . \mathrm{CA} ; c . \mathrm{CL} ; d . \mathrm{CA} ; e . \mathrm{SE} ; f . \mathrm{NCA} ; g . \mathrm{CA} ; h . \mathrm{NCL} ; i . \mathrm{CL}$

[^3]:    ${ }^{4}$ From this concept, accountants have developed what is known as the double-entry system of recordkeeping.

[^4]:    ${ }^{5}$ In homework assignments, if you have an error in your trial balance (the two column totals are not equal), errors can be traced and should be corrected before adjusting the records. To find errors, reverse your steps. Check that:

    - You copied the ending balances in all of the T-accounts (both amount and whether a debit or credit) correctly to the trial balance.
    - You computed the ending balances in the T-accounts correctly.
    - You posted the transaction effects correctly from the journal entries to the T-accounts (amount, account, and whether a debit or credit).
    - You prepared the journal entries correctly (amount, account, and whether a debit or credit).

[^5]:    (g) No transaction

[^6]:    Preparing a Trial Balance
    Complete M2-9, and then prepare a trial balance for Dennen, Inc., as of January 31, 2015.

[^7]:    *Sheraton, Four Points, W, Aloft, The Luxury Collection, Le Meridien, Element, Westin, St. Regis and their respective logos are the trademarks of Starwood Hotels \& Resorts Worldwide, Inc., or its affiliates.

