chapter

1

Accounting: The Language of Business

Cisco Systems helps customers discover and deliver all that is possible on the Internet.

www.prenhall.com/horngren

Learning Objectives

After studying this chapter, you should be able to

1. *Explain how accounting information assists in making decisions.*
2. *Describe the components of the balance sheet.*
3. *Analyze business transactions and relate them to changes in the balance sheet.*
4. *Classify operating, investing, and financing activities in a cash flow statement.*
5. *Compare the features of proprietorships, partnerships, and corporations.*
6. *Describe auditing and how it enhances the value of financial information.*
7. *Distinguish between public and private accounting.*
8. *Evaluate the role of ethics in the accounting process.*

The Internet or World Wide Web is booming, providing electronic connections among individuals, companies, organizations, and governments. One study revealed that the Internet economy grew to $523.9 billion in 1999, and now directly supports 2.5 million workers. So many activities have moved to the Internet that it is the centerpiece of what is called the "new economy." In this new economy there are newly created companies that have emerged to meet new business needs and to meet old business needs in new ways. Amazon.com is an example of the latter, a Web-based company that began selling books exclusively via electronic contact with customers and delivered books directly and quickly. Cisco Systems is an example of the former. Cisco is a company that emerged to make the Internet possible and has grown as the size and scope of the Internet has grown.

Cisco is the worldwide leader in networking for the Internet. The Internet is simply the sum of all the computers that comprise it, connected together in a manner that allows efficient communication. That is where Cisco comes in, efficient connections and communication. The company's router products connect computers and computer networks around the globe and help form the backbone infrastructure for the Internet. Cisco shipped its first products in 1986 and has seen its annual revenues explode to almost $19 billion in 2000. Revenues in 2000 were up 50% from the prior year and there is no sign of slowing growth. The company constantly acquires smaller firms to fuel its growth. How to keep track of it all? Accounting systems crunch all the transaction details. Analysts, accountants, and staff must design, develop, and operate these systems. Because Cisco is a publicly held company with stockholders, the accounting systems and people must be prepared to generate financial reports quickly and accurately for use by decision makers around the globe.

Cisco does not just build hardware to carry and direct electronic signals. It builds complete integrated systems to support companies in their quest for inexpensive reliable systems. Charles Schwab, the innovator in low-cost security transactions, has 1.9 million brokerage accounts on line and is adding thousands each day. Half of its trades now occur on the Web. Cisco partnered with Schwab to develop this capability. Cisco has an Alliance with IBM to develop and implement networking applications for all manner of clients. Because IBM and Cisco are separate companies, they need a good accounting system to figure how they are doing in their alliance and to figure out how to split their profits.

As we embark on your journey into the world of financial accounting, we explore what it takes for a company like Cisco to manage its financial activities with ease and how investors utilize this accounting information to better understand Cisco. Keep this in mind: The same basic accounting needs and procedures that support the new economy support businesses big and small, old and new, worldwide.

BUSINESS FIRST

Did you ever wonder how McDonald's, which started as a small Pasadena, California, hamburger stand, became a 27,000-location restaurant chain with stores in 119 countries? The first McDonald's employed three carhops to serve hot dogs and shakes to drive-in customers in Pasadena in 1937. In 1940, the two McDonald brothers, Dick and Mac, added a larger drive-in in San Bernardino where 20 carhops served a 25-item menu of sandwiches and ribs. Business was good, and the brothers shared $50,000 per year in profits (and in 1940 $50,000 would buy as much as $550,000 today).

How did accounting affect these entrepreneurs? When they analyzed their sales and costs, they found that 80% of their business came from hamburgers. Other sandwiches and ribs might taste good, but they generated little business. So the McDonald brothers streamlined their product line and focused on low prices, high volume, and a small standardized menu. They cut 25 items to 9, and slashed the price of a burger from $.30 to $.15. Sales and profits soared. This simple menu and value pricing served McDonald's well for years.

A few people noticed this money machine besides the nightly customers. Carnation Corporation noticed it was selling the McDonald brothers frozen milk shake mix in enormous quantities. The company figured that anyone selling that many shakes was on to something, so Carnation tried to buy the right to open additional McDonald's stores. Dick and Mac declined. Then, in 1954, Ray Kroc entered the picture.

Ray Kroc sold five-spindle "multi-mixers," machines that made five milk shakes simultaneously. You guessed it: He sold so many of these machines to the McDonald brothers that he eventually decided to visit the burger stand that made so many shakes. Kroc spent a day watching the McDonald's operation. He saw an opportunity to sell more shake machines as the company opened more stores, but within days he decided the real golden opportunity was in selling the McDonald's formula to entrepreneurs who wanted to open similar burger stands around the country. A persistent man, Kroc convinced the McDonald brothers to allow him to sell franchises. Kroc's golden opportunity became the golden arches, and a small California burger stand became one of the world's strongest marketing engines. Today McDonald's has become one of the most recognized brand names in the world, mostly by sticking to the strategy worked out years ago using accounting information.

accounting The process of identifying, recording, summarizing, and reporting economic information to decision makers.

This book is an introduction to financial accounting. **Accounting** is a process of identifying, recording, summarizing, and reporting economic information to decision makers. **Financial accounting** focuses on the specific needs of decision makers external to the organization such as stockholders, suppliers, banks, and government agencies. You probably expect to see a bunch of rules and procedures about how to record and report financial information. Well, you are correct. You will see all those. However, our philosophy about financial accounting goes beyond rules and procedures. To use your financial accounting training effectively you must also understand the underlying business transactions that give rise to the economic information and why the information is helpful in making the financial decisions.

financial accounting The field of accounting that serves external decision makers, such as stockholders, suppliers, banks, and government agencies.

We hope that you want to know how businesses work. When you understand that McDonald's sales information by product helped its management make decisions about what products to sell, you will see why we track sales and profitability by product line. Both outside investors and internal managers need this information.

Objective 1
Explain how accounting information assists in making decisions.

Our goal is to help you understand business transactions; and to know how they create accounting information and how decision makers both inside the company (managers) and outside the company (investors) use this information in deciding how, when, and what to buy or sell. In the process you get to know some of the world's premier companies. You may wonder about what it costs to develop a theme park such as Disney World. Are these parks worth that kind of huge investment? How many people visit these Disney destinations each year? Can Disney keep track of them all, and are there enough visitors to make the parks profitable? If investors consider purchasing Disney stock, what do they need to know to decide that the current price is a good one? We cannot answer

Exhibit 1-1

Dow Industrials

Assets and Owners' Equity as of Spring 2000 ($ in billions)

Symbol	Company	Total Assets	Total Owners' Equity
AA	Aluminum Company of America	$30.8	$11.0
AXP	American Express	148.5	10.5
T	AT&T	243.5	110.1
BA	Boeing	37.5	12.0
CAT	Caterpillar	27.9	5.5
C	Citigroup	716.9	49.7
KO	Coca-Cola	23.3	9.2
DIS	Disney	44.7	23.8
DD	DuPont	40.2	13.0
EK	Eastman Kodak	14.4	3.9
XOM	ExxonMobil	146.6	66.9
GE	General Electric	424.0	45.9
GM	General Motors	291.3	29.0
HWP	Hewlett-Packard	1.2	1.0
HD	Home Depot	20.2	13.9
HON	Honeywell	24.9	9.5
INTC	Intel	48.5	36.6
IBM	International Business Machines	82.9	18.9
IP	International Paper	30.3	10.3
JNJ	Johnson & Johnson	29.2	16.2
JPM	JP Morgan	266.3	11.1
MCD	McDonald's	21.2	9.0
MRK	Merck	37.4	12.7
MSFT	Microsoft	50.4	40.7
MMM	Minnesota Mining & Manufacturing	14.9	6.4
MO	Philip Morris	59.8	15.1
PG	Procter & Gamble	35.2	10.6
SBC	SBC Communications	91.2	28.4
UTX	United Technologies	24.3	6.8
WMT	Wal-Mart	73.4	28.1

every such question you might ask, but we explore some exciting aspects of business and use business examples to illustrate the uses of accounting information.

In pursuing actual business examples, we consider details about many of the 30 companies in the Dow Jones Industrial Average (the Dow), the most commonly reported stock market index in the world. Both Disney and McDonald's are among these 30 companies along with many other large, familiar companies listed in Exhibit 1-1. We also consider some younger and faster growing companies such as Cisco, Apple, Timberland, and The Gap. For now, we start with the basics.

THE NATURE OF ACCOUNTING

Accounting organizes and summarizes economic information so that decision makers can use it. The information is presented in reports called financial statements. To prepare these statements, accountants analyze, record, quantify, accumulate, summarize, classify, report, and interpret economic events and their financial effects on the organization.

The series of steps involved in initially recording information and converting it into financial statements is called the accounting system. Accountants analyze the information needed by managers and other decision makers and create the accounting system that best meets those needs. Bookkeepers and computers then perform the routine tasks of collecting and compiling economic information. The real value of any accounting system lies in the information it provides.

Consider the accounting system at your school. It collects information about tuition charges and payments and tracks the status of each student. Your school must be able to bill individuals whose balances are unpaid. It must be able to schedule courses and hire faculty to meet the course demands of students. It must ensure that tuition and other cash inflows are sufficient to pay the faculty and keep the buildings warm (or cool) and well lit. If your experience is like most students, you can find some flaws with your school's accounting system. Perhaps there are too many waiting lines at registration or too many complicated procedures in filing for financial aid. If you are lucky, you have experienced electronic registration for courses and made all your tuition payments in response to bills received in the mail. The right information system can streamline your life.

Every business maintains an accounting system, from the store where you bought this book to the company that issued the credit card you used. Mastercard and Visa maintain very fast, very complicated accounting systems. At any moment, thousands of credit card transactions are occurring around the globe, and accounting systems are keeping track of them all. When you use your charge card, it is read electronically and linked to the cash register, which transmits the transaction amount over phone lines to the card company's central computer. The computer verifies that your charges are within acceptable limits and approves or denies the transaction. At the same time the computer also conducts some fairly careful security checks. For example, if your credit card were being used simultaneously to buy groceries in Ithaca and to make long distance phone calls in Korea, the credit card computer might sense that something is wrong and require you to call a customer service representative before the charges were approved. Without reliable accounting systems, credit cards simply could not exist.

Accounting as an Aid to Decision Making

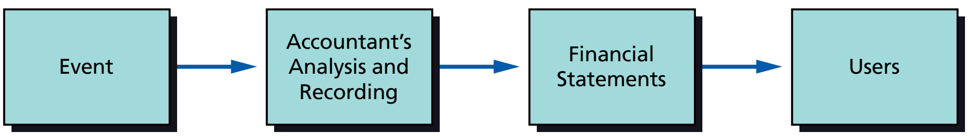
Accounting information is useful to anyone who must make decisions that have economic consequences. Such decision makers include managers, owners, investors, and politicians. For example,

- When the engineering department of Apple Computer developed the iMac, an accountant developed a report on the potential profitability of the product, including estimated sales and estimated production and selling costs. Managers used the report to help decide whether to produce and market the product.

- Jill runs a small consulting firm and has five employees who service clients. In deciding who to promote (and who to fire), Jill produces reports each month of the productivity of each employee and compares productivity to the salary and other costs associated with the employees' work for the month.
- An investor considering buying stock in either General Motors or Volvo would consult published accounting reports to compare the most recent financial results of the companies. The information in the reports helps the buyer decide which company would be the better investment choice.
- A senator debating a new low-income housing plan needs to know how the proposed plan will affect the country's budget. Accounting information shows how much the plan will cost and where the money will come from.
- A lender considering a loan to a company that wants to expand would examine the historical performance of the company and projections the company provided about how the borrowed funds are to be used to produce new business.

Accounting helps decision making by showing where and when money has been spent and commitments have been made, by evaluating performance, and by indicating the financial implications of choosing one plan instead of another. Accounting also helps predict the future effects of decisions, and it helps direct attention to current problems, imperfections, and inefficiencies, as well as opportunities.

Consider some basic relationships in the decision-making process:



Our focus includes all four boxes. All financial accounting courses cover analysis and recording and preparing financial statements. We pay more attention to the underlying business process and to the way in which the financial reports help decision makers to take action.

Financial and Management Accounting

The financial statements discussed in this book are common to all areas of accounting. "Financial accounting" is often distinguished from "management accounting." The major distinction between them is their use by two different classes of decision makers. The field of financial accounting serves external decision makers, such as stockholders, suppliers, banks, and government agencies. **Management accounting** serves internal decision makers, such as top executives, department heads, college deans, hospital administrators, and people at other management levels within an organization.[1] The two fields of accounting share many of the same procedures for analyzing and recording the effect of individual transactions.

management accounting The field of accounting that serves internal decision makers, such as top executives, department heads, college deans, hospital administrators, and people at other management levels within an organization.

The primary questions concerning a firm's financial success that decision makers want answered are:

What is the financial picture of the organization on a given day?

How well did it do during a given period?

The accountant answers these questions with three major financial statements: balance sheet, income statement, and statement of cash flows. The balance sheet focuses on

[1] *For a book-length presentation of the field, see Charles T. Horngren, Gary L. Sundem, and William O. Stratton, Introduction to Management Accounting, 11th ed. (Upper Saddle River, NJ: Prentice Hall, 1999), the companion volume to this textbook.*

BUSINESS FIRST

Communicating to Shareholders

The annual report is the traditional, primary communication to shareholders. It includes financial statements and other information. In 1995, the *New York Times* assessed and graded one component of such reports, the "letters to shareholders" in which the company's chief executive officer (CEO) discusses the years results. They gave First Chicago, a major bank, a D for the following explanation of a 14% decline in performance: ". . . trading results were significantly lower, due largely to very difficult market conditions." In other words, times were hard because times were hard.

In contrast, Intel suffered a $475 million loss because of a problem with one of their Pentium computer chips that made an infrequent, but predictable, mistake in certain calculations. Chairman Gordon Moore reported that "1994 was the best of times—and the worst of times. We received a crash course in consumer relations." This forthright discussion of the problem and management's actions earned Intel an A from the *New York Times*.

The annual report is also a marketing piece, with colorful pictures and often a striking cover. The 1999 annual report covers for IBM and Coca Cola are interesting examples of powerful images that need no words. The company name is not on either cover.

The annual report is being transformed in today's economy. While the information contained inside is important, the printed copy takes a long time to produce and is not always widely available. The Web has helped to solve that. Today, most companies have a Web site where they provide direct access to the annual report as a downloadable file. They typically produce various abbreviated financial summaries. The Securities Exchange Commission (SEC) has its own Web site where investors can electronically access all documents filed with the SEC.

Sources: Patrice Samuels, Annual Reports: Upfront and Unstarched, *New York Times,* April 9, 1995, p. f5; Coca Cola and IBM 1999 annual reports.

the financial picture as of a given day. The other financial statements focus on the performance over time.

annual report A combination of financial statements, management discussion and analysis, and graphs and charts that is provided annually to investors.

The most common source of financial information used by investors and managers is the annual report. The **annual report** is a document prepared by management and distributed to current and potential investors to inform them about the company's past performance and future prospects. Firms distribute their annual report to stockholders automatically. Interested investors may request the report by calling the investor relations department of the company.

You may want to skim over Cisco System's annual report in appendix A to see how firms use photographs extensively to communicate their message. Also, in addition to the financial statements, annual reports include:

1. A letter from corporate management
2. A discussion and analysis of recent economic events by management
3. Footnotes that explain many elements of the financial statements in more detail
4. The report of the independent auditors
5. A statement of management's responsibility for preparation of the financial statements
6. Other corporate information

Although all of the annual report is important, we concentrate on the principal financial statements and how accountants collect and report this information.

THE BALANCE SHEET

One of the major financial statements prepared by the accounting system is the **balance sheet,** which shows the financial status of a company at a particular instant in time. The balance sheet has two counterbalancing sections. The left side lists assets, which represent the resources of the firm (everything the firm owns and controls—from cash to buildings, etc.). The right side lists liabilities and owners' equity, which represent the sources of resources used to acquire the assets. Liabilities and owners' equity might be thought of as claims against the resources.

Although balance sheet is a widely used term, it is not as descriptive as its newer substitute terms: **statement of financial position** or **statement of financial condition.** Nevertheless, old terms die hard, so balance sheet is used in this book.

balance sheet (statement of financial position, statement of financial condition) A financial statement that shows the financial status of a business entity at a particular instant in time.

Objective 2
Describe the components of the balance sheet.

To illustrate the balance sheet, suppose George Smith, a salaried employee of a local bicycle company, quits his job and opens his own bicycle shop. Smith has heard about the troubles of new businesses that lack money, so he invests plenty: $400,000. Then Smith, acting for the business (which he names Biwheels Company), borrows $100,000 from a local bank for business purposes. That gives Biwheels $500,000 in assets, all currently in the form of cash. The opening balance sheet of this new business enterprise follows:

Biwheels Company
Balance Sheet December 31, 20X1

Assets		Liabilities and Owners' Equity	
Cash	$500,000	Liabilities (note payable)	$100,000
	—	Smith, capital	400,000
Total assets	$500,000	Total liabilities and owners' equity	$500,000

The elements in this balance sheet show the financial status of the Biwheels Company as of December 31, 20X1. The company's assets at this point in time ($500,000) are listed on the left. They are balanced on the right by an equal amount of liability and owners' equity ($100,000 liability owed to the bank plus $400,000 paid in by Smith). The double underscores (double ruling) under the column totals are used to denote final numbers.

Because the balance sheet shows the financial status at a particular point in time, it is always dated. Also, the left and right sides are always kept in balance (thus the name balance sheet). The elements in the balance sheet form the **balance sheet equation:**

balance sheet equation Assets = Liabilities + Owners' equity

Assets = Liabilities + Owners' equity

The terms in this equation are specifically defined as follows:

Assets are economic resources that are expected to increase or cause future cash inflows or reduce or prevent future cash outflows. Examples are cash, inventories, and equipment.

assets Economic resources that are expected to benefit future cash inflows or help reduce future cash outflows.

Liabilities are economic obligations of the organization to outsiders, or claims against its assets by outsiders. An example is a debt to a bank. When a company takes out a loan or other type of liability, a promissory note that states the terms of repayment is usually exchanged. Accountants use the term **notes payable** to describe the existence of promissory notes.

liabilities Economic obligations of the organization to outsiders, or claims against its assets by outsiders.

notes payable Promissory notes that are evidence of a debt and state the terms of payment.

Owners' equity is the residual interest in, or remaining claims against, the organization's assets after deducting liabilities. When the business is first started, the owners' equity is measured by the total amount invested by the owners. As illustrated by "Smith, capital" in the Biwheels Company example, the accountant often uses the term capital instead of owners' equity to designate an owner's investment in the business. The residual, or "leftover," nature of owners' equity is often emphasized by reexpressing the balance sheet equation as follows:

owners' equity The residual interest in the organization's assets after deducting liabilities.

Owners' equity = Assets + Liabilities

BALANCE SHEET TRANSACTIONS

entity An organization or a section of an organization that stands apart from other organizations and individuals as a separate economic unit.

transaction Any event that both affects the financial position of an entity and can be reliably recorded in money terms.

Objective 3
Analyze business transactions and relate them to changes in the balance sheet.

Balance sheets are affected by every transaction that a company, or an entity, has. An **entity** is an organization or a section of an organization that stands apart from other organizations and individuals as a separate economic unit. A **transaction** is any event that both affects the financial position of an entity and can be reliably recorded in money terms. Each transaction has counterbalancing entries on the balance sheet so that the total assets always equal the total liabilities and owners' equity. That is, the equality of the balance sheet equation is maintained for every transaction. An accountant who prepares a balance sheet that does not balance has made a mistake somewhere because the balance sheet must balance.

Let us take a look at some transactions of Biwheels Company to see how typical transactions affect the balance sheet.

Transaction 1, Initial Investment. The first Biwheels transaction was the investment by the owner on December 31, 20X1. Smith deposited $400,000 in a business bank account entitled Biwheels Company. The accounting equation is affected as follows:

	Assets	=	Liabilities	+	Owners' Equity
	Cash				*Smith, Capital*
(1)	+$400,000	=			+$400,000 (Owner investment)

This transaction increases both the assets, specifically Cash, and the owners' equity of the business, specifically Smith, Capital. Liabilities are unaffected. Why? Because Smith's business has no obligation to an outside party because of this transaction. A parenthetical note, "Owner investment," is used to identify the reason for the transaction's effect on owners' equity. The total amounts on the left side of the equation are equal to the total amounts on the right side, as they should be.

Transaction 2, Loan From Bank. On January 2, 20X2, Biwheels Company borrows from a bank, signing a promissory note for $100,000. The $100,000 is added to the business's cash. The effect of this loan transaction on the accounting equation is:

	Assets	=	Liabilities	+	Owners' Equity
	Cash		*Note Payable*		*Smith, Capital*
(1)	+$400,000	=			+$400,000
(2)	+ 100,000	=	+$100,000		
Bal.	500,000	=	100,000		400,000
	$500,000		$500,000		

The loan increases the asset, Cash, and increases the liability, Note Payable, by the same amount, $100,000. After the transaction is completed, Biwheels has assets of $500,000, liabilities of $100,000, and owners' equity of $400,000. As always, the sums of the individual account balances (abbreviated Bal.) on each side of the equation are equal.

Transaction 3, Acquire Inventory for Cash. On January 2, 20X2, Biwheels acquires bicycles from a manufacturer for $150,000 cash.

	Assets		=	Liabilities	+	Owners' Equity
	Cash	*Merchandise Inventory*		*Note Payable*		*Smith, Capital*
Bal.	$500,000		=	$100,000		$400,000
(3)	−150,000	+150,000	=			
Bal.	350,000	150,000	=	100,000		400,000
	$500,000			$500,000		

This transaction, the cash purchase of inventory, increases one asset, Merchandise Inventory, and decreases another asset, Cash, by the same amount. **Inventory** refers to goods held by the company for the purpose of sale to customers. The form of the assets changed, but the total amount of assets is unchanged. Moreover, the right-side items are completely unchanged.

inventory Goods held by a company for the purpose of sale to customers.

Biwheels can prepare a balance sheet at any point in time, even after every transaction. The balance sheet for January 2, after the first three transactions, would look like this:

Biwheels Company
Balance Sheet January 2, 20X2

Assets		Liabilities and Owners' Equity	
Cash	$350,000	Liabilities (note payable)	$100,000
Merchandise inventory	150,000	Smith, capital	400,000
Total assets	$500,000	Total liabilities and owners' equity	$500,000

Transaction Analysis

Accountants record transactions in an organization's accounts. An **account** is a summary record of the changes in a particular asset, liability, or owners' equity, and the account balance is the total of all entries to the account to date. The analysis of transactions is the heart of accounting. For each transaction, the accountant determines (1) which specific accounts are affected, (2) whether the account balances are increased or decreased, and (3) the amount of the change in each account balance.

account A summary record of the changes in a particular asset, liability, or owners' equity.

Exhibit 1-2 shows how a series of transactions may be analyzed using the balance sheet equation. The transactions are numbered for easy reference. Please examine how the first three transactions that were discussed earlier are analyzed in Exhibit 1-2.

Consider how each of the following additional transactions is analyzed:

4. January 3. Biwheels buys bicycles for $10,000 from a manufacturer. The manufacturer requires $4,000 by January 10 and the balance in 30 days.
5. January 4. Biwheels acquires assorted store equipment for a total of $15,000. A cash down payment of $4,000 is made. The remaining balance must be paid in 60 days.
6. January 5. Biwheels sells a store showcase to a business neighbor after Smith decides he dislikes it. Its selling price, $1,000, happens to be exactly equal to its cost. The neighbor agrees to pay within 30 days.

Exhibit 1-2

Biwheels Company

Analysis of Transactions for December 31, 20X1–January 12, 20X2

Description of Transactions	Assets				=	Liabilities + Owners' Equity		
	Cash	+ *Accounts Receivable*	+ *Merchandise Inventory*	+ *Store Equipment*	=	*Note Payable*	+ *Accounts Payable*	+ *Smith, Capital*
(1) Initial investment	+$400,000				=			+ $400,000
(2) Loan from bank	+ 100,000				=	+$100,000		
(3) Acquire inventory for cash	− 150,000		+150,000		=			
(4) Acquire inventory on credit			+ 10,000		=		+10,000	
(5) Acquire store equipment for cash plus credit	− 4,000			+15,000	=		+11,000	
(6) Sale of equipment		+1,000		− 1,000	=			
(7) Return of inventory acquired on January 3			− 800		=		− 800	
(8) Payments to creditors	− 4,000				=		− 4,000	
(9) Collections from debtors	+ 700	− 700						
Balance, January 12, 20X2	$342,700	+ 300	+ 159,200	+ 14,000	=	100,000	+ 16,200	+ 400,000
	$516,200					$516,200		

7. January 6. Biwheels returns some inventory (which had been acquired on January 3 for $800) to the manufacturer for full credit (an $800 reduction of the amount that Biwheels owes the manufacturer).

8. January 10. Biwheels pays $4,000 to the manufacturer described in transaction 4.

9. January 12. Biwheels collects $700 of the $1,000 owed by the business neighbor for transaction 6.

10. January 12. Smith remodels his home for $35,000, paying by check from his personal bank account.

Use the format in Exhibit 1-2 to analyze each transaction. Try to do your own analysis of each transaction before looking at the entries shown for it in the exhibit. For example, you could cover the numerical entries with a sheet of paper or a ruler and then proceed through each transaction, one by one.

take five

Transaction 10 does not appear in Exhibit 1-2. Why not?

Transaction 4, Purchase on Credit. Most purchases by various types of companies throughout the world are made on a credit basis instead of a cash basis. An authorized signature of the buyer is usually good enough to assure payment. No formal promissory note

Transaction 10 is a personal transaction by Smith and does not involve Biwheels as a business.

is necessary. This practice is known as buying on **open account.** The money owed is shown on the buyer's balance sheet as an account payable. Thus an **account payable** is a liability that results from a purchase of goods or services on open account. As Exhibit 1-2 shows for this merchandise purchase on account, the merchandise inventory (an asset account) of Biwheels is increased and an account payable (a liability account) is also increased in the amount of $10,000 to keep the equation in balance.

open account Buying or selling on credit, usually by just an "authorized signature" of the buyer.

account payable A liability that results from a purchase of goods or services on open account.

	Assets		=	**Liabilities**		+	**Owner's Equity**
	Cash	*Merchandise Inventory*		*Note Payable*	*Accounts Payable*		*Smith, Capital*
Bal.	$350,000	$150,000	=	$100,000			$400,000
(4)		+10,000	=		+10,000		
Bal.	350,000	160,000	=	100,000	10,000	+	400,000
	$510,000			$510,000			

Transaction 5, Purchase for Cash Plus Credit. This transaction illustrates a **compound entry** because it affects more than two balance sheet accounts (two asset accounts and one liability account in this case). Store equipment is increased by the full amount of its cost regardless of whether payment is made in full now, in full later, or partially now and partially later. Therefore Biwheels' Store Equipment (an asset account) is increased by $15,000, Cash (an asset account) is decreased by $4,000, and Accounts Payable (a liability account) is increased by the difference, $11,000.

compound entry A transaction that affects more than two accounts.

	Assets			=	**Liabilities**		+	**Owners' Equity**
	Cash	*Merchandise Inventory*	*Store Equipment*		*Note Payable*	*Accounts Payable*		*Smith, Capital*
Bal.	$350,000	$160,000		=	$100,000	$10,000		$400,000
(5)	−4,000		+15,000	=		+11,000		
Bal.	346,000	160,000	15,000	=	100,000	21,000		400,000
	$521,000				$521,000			

Transaction 6, Sale on Credit. This transaction is similar to a purchase on credit except that Biwheels is now the seller. Thus, Biwheels is owed money. The cash payment that has been promised counts as an asset. Accounts Receivable (an asset account) of $1,000 is thus created, and Store Equipment (an asset account) is decreased by $1,000. In this case, the transaction affects asset accounts only. One increases and one decreases with no change in total assets. Liabilities and owners' equity are unchanged.

	Assets				=	**Liabilities**		+	**Owners' Equity**
	Cash	*Accounts Receivable*	*Merchandise Inventory*	*Store Equipment*		*Note Payable*	*Accounts Payable*		*Smith, Capital*
Bal.	$346,000		$160,000	$15,000	=	$100,000	$21,000		$400,000
(6)		+1,000		−1,000	=				
Bal.	346,000	1,000	160,000	14,000	=	100,000	21,000		400,000
	$521,000					$521,000			

Transaction 7, Return of Inventory to Supplier. When a company returns merchandise to its suppliers for credit, its merchandise inventory account is reduced and its liabilities are reduced. In this instance, the amount of the decrease on each side of the equation is $800.

	Assets				=	Liabilities		+	Owners' Equity
	Cash	*Accounts Receivable*	*Merchandise Inventory*	*Store Equipment*		*Note Payable*	*Accounts Payable*		*Smith, Capital*
Bal.	$346,000	$1,000	$160,000	$14,000	=	$100,000	$21,000		$400,000
			−800		=		−800		
Bal.	346,000	1,000	159,200	14,000	=	100,000	20,200		400,000
			$520,200				$520,200		

creditor A person or entity to whom money is owed.

Transaction 8, Payments to Creditors. A **creditor** is one to whom money is owed. For Biwheels, the manufacturer who supplied the bikes on credit is an example of a creditor. Payments to the manufacturer decrease both assets (Cash) and liabilities (Accounts Payable) by $4,000.

	Assets				=	Liabilities		+	Owners' Equity
	Cash	*Accounts Receivable*	*Merchandise Inventory*	*Store Equipment*		*Note Payable*	*Accounts Payable*		*Smith, Capital*
Bal.	$346,000	$1,000	$159,200	$14,000	=	$100,000	$20,200		$400,000
(8)	−4,000				=		−4,000		
Bal.	342,000	1,000	159,200	14,000	=	100,000	16,200		400,000
			$516,200				$516,200		

debtor A person or entity that owes money to another.

Transaction 9, Collections from Debtors. A **debtor** is one who owes money. Biwheels' business neighbor is a debtor, and Biwheels is the creditor. Collections from the neighbor increase one of Biwheels' assets (Cash) and decrease another asset (Accounts Receivable) by $700.

	Assets				=	Liabilities		+	Owners' Equity
	Cash	*Accounts Receivable*	*Merchandise Inventory*	*Store Equipment*		*Note Payable*	*Accounts Payable*		*Smith, Capital*
Bal.	$342,000	$1,000	$159,200	$14,000	=	$100,000	$16,200		$400,000
(9)	+700	−700			=				
Bal.	342,700	300	159,200	14,000	=	100,000	16,200		400,000
			$516,200				$516,200		

Preparing the Balance Sheet

A cumulative total may be drawn at any date for each account in Exhibit 1-2. The following balance sheet uses the totals at the bottom of Exhibit 1-2. Observe once again that a balance sheet represents the financial impact of all transactions up to a specific point in time, here January 12, 20X2.

Biwheels Company
Balance Sheet January 12, 20X2

Assets		Liabilities and Owner's Equity	
Cash	$342,700	Note payable	$100,000
Accounts receivable	300	Accounts payable	16,000
Merchandise inventory	159,200	Total liabilities	$116,200
Store equipment	14,000	Smith, capital	400,000
Total	$516,200	Total	$516,200

As noted earlier, Biwheels could prepare a new balance sheet after each transaction. Obviously, such a practice would be awkward and unnecessary. Therefore balance sheets are usually produced once a month.

Examples of Actual Corporate Balance Sheets

To become more familiar with the balance sheet and its equation, consider the condensed balance sheet information for Cisco Systems and for DuPont shown in Exhibit 1-3. The

Exhibit 1-3

Comparative Consolidated Condensed Balance Sheets
(Dollars in millions, except per share)

	DuPont December 31 1999	Cisco July 31 1999
Assets		
Current Assets		
Cash and cash equivalents	$ 1,466	$ 827
Marketable securities	116	1,189
Accounts and notes receivable	5,318	1,242
Inventories	5,057	652
Other	696	705
Total current assets	12,653	4,615
Net property, plant and equipment	14,871	801
Investment	1,459	7,032
Other assets	11,794	2,277
Total	$40,777	$14,725
Liabilities and Stockholders' Equity		
Current Liabilities		
Accounts payable	$ 2,780	$ 361
Short-term borrowings and capital lease obligations	4,941	—
Income taxes	359	630
Other accrued liabilities	3,148	2,012
Total current liabilities	11,228	3,003
Long-Term Borrowings and Capital Lease Obligations	6,625	—
Other Liabilities	7,872	—
Deferred Income Taxes	1,660	—
Total liabilities	27,385	3,003
Minority Interests	517	44
Total Stockholders' Equity	12,875	14,725
Total	$40,777	$14,725

DuPont 1999 balance sheet shows that property, plant, and equipment comprise the major assets for this chemical company, accounting for more than half of total assets. In contrast, on its balance sheet for 2000, Cisco has only $801 million of similar assets, which is less than 10% of its total assets. The two companies also differ in the financing of their activities. DuPont relies on debt for about two-thirds of its total financing while Cisco has only 21% debt.

Appendix A at the end of this book contains a complete set of the actual 2000 financial statements of Cisco. As you proceed from chapter to chapter, you should examine the pertinent parts of these financial statements. In this way, you will become increasingly comfortable with actual financial reports. For example, the general format and some major items in Cisco's balance sheet (appendix A) should be familiar by now. Details will gradually become more understandable as each chapter explains the nature of the various major financial statements and examines their components.

Introduction to Statement of Cash Flows

Objective 4
Classify operating, investing, and financing activities in a cash flow statement.

While the balance sheet provides very important information about the company's status at a point in time, it is also important to know what happens over time. One way to do this is to trace the flow of cash during the period. Companies do three basic things; they invest in assets to conduct business, they raise money to finance these assets, and they use the assets and the money they raise to operate their business. These activities lead naturally to a system for classifying cash flows as an operating, investing, and financing activity. Companies then prepare a cash flow statement to report this information.

The creation of the statement of cash flows is simple. First, list the activities that increased cash (i.e., cash inflows) and those that decreased cash (i.e., cash outflows). Second, place each cash inflow and outflow into one of the three categories according to the type of activity that caused it: operating activities, investing activities, or financing activities.

Operating activities include the sale and the purchase or production of goods and services, including collecting payments from customers, paying suppliers or employees, and paying for items such as rent, taxes, and interest. Investing activities include acquiring and selling assets and securities held for long-term investment purposes. Financing activities include obtaining resources from owners and creditors and repaying amounts borrowed. When The Gap sells you clothing, it is an operating cash flow. When The Gap buys a new storefront in New York City to open a new store, it is an investing activity. When The Gap issues additional common stock to investors to raise money to finance growth and the new store, it is a financing activity.

Consider our Biwheels example from its inception in December 20X1 through the end of January 12, 20X2. Part I of Exhibit 1-4 lists the transactions that affect cash, and part II shows the statement of cash flows. Notice that at the bottom of the statement the changes in cash during this period are added to the beginning balance to give the January 12, 20X2 balance in the cash account of $342,700.

The statement of cash flows gives a direct picture of where cash came from and where it went. The dominant reason that Biwheels' cash increased by $342,700 is that the company obtained $500,000 of new financing. No cash came in from operating activities. In fact, a total of $154,000 was paid to support operating activities. It is not unusual to have large cash outflows for operating activities in the early periods of a company's life or when an entity is growing quickly. Cash payments for inventories and prepayments for operating expenses often exceed receipts. In the Biwheels example, no sales have yet occurred, so all operating cash flows were outflows.

Exhibit 1-4

Biwheels Company

Statement of Cash Flows for the Period Ended January 12, 20X2

PART I: TRANSACTIONS AFFECTING CASH

Transaction	Amount	Type of Activity
(1) Initial investment	$ 400,000	Financing
(2) Loan from bank	100,000	Financing
(3) Acquire inventory for cash	(150,000)	Operating
(5) Acquire store equipment for cash	(4,000)	Investing
(8) Payments to trade creditors	(4,000)	Operating
(9) Sale of store equipment	700	Investing

PART II: STATEMENT OF CASH FLOWS

Cash Flows from Operating Activities	
Cash payments to suppliers	$(154,000)
Net cash used for operating activities	$(154,000)
Cash Flows from Investing Activities	
Cash payments for purchases of equipment	$ (4,000)
Cash receipts from sales of equipment	700
Net cash used for investing activities	$ (3,300)
Cash Flows from Financing Activities	
Proceeds from initial investment	$ 400,000
Proceeds from bank loan	100,000
Net cash provided by financing activities	$ 500,000
Net increase in cash	$ 342,700
Cash balance, December 1, 20X1	0
Cash balance, January 31, 20X2	$ 342,700

TYPES OF OWNERSHIP

Objective 5
Compare the features of proprietorships, partnerships, and corporations.

Although there are countless different types of companies, there are only three basic forms of ownership structures for business entities: sole proprietorships, partnerships, and corporations.

Sole Proprietorships

A **sole proprietorship** is a separate organization with a single owner. Most often the owner is also the manager. Therefore, sole proprietorships tend to be small retail establishments and individual professional businesses such as those of dentists, physicians, and attorneys. From an accounting viewpoint, each sole proprietorship is a separate entity that is distinct from the proprietor. Thus, the cash in the dentist's business account is an asset of the dental practice, whereas the cash in the dentist's personal account is not.

sole proprietorship A separate organization with a single owner.

Partnerships

A **partnership** is an organization that joins two or more individuals who act as co-owners. Many retail establishments are partnerships, and dentists, physicians, attorneys, and accountants often conduct their activities as partnerships. Partnerships can be gigantic. The largest international accounting firms have thousands of partners. Again, from an accounting viewpoint, each partnership is an individual entity that is separate from the personal activities of each partner.

partnership A form of organization that joins two or more individuals together as co-owners.

Corporations

corporation A business organization that is created by individual state laws.

limited liability A feature of the corporate form of organization whereby corporate creditors ordinarily have claims against the corporate assets only. The owners' personal assets are not subject to the creditors' grasp.

publicly owned A corporation in which shares in the ownership are sold to the public.

privately owned A corporation owned by a family, a small group of shareholders, or a single individual, in which shares of ownership are not publicly sold.

Corporations are business organizations created under state law in the United States. The most notable characteristic of a corporation is **limited liability** of the owners, which means that corporate creditors (such as banks or suppliers) ordinarily have claims against the corporate assets only. Individuals form a corporation by applying to the state for approval of the company's articles of incorporation, which include information on shares of ownership. Most large corporations are **publicly owned** in that shares in the ownership are sold to the public. The owners of the corporation are then identified as shareholders (or stockholders). Large publicly owned corporations often have thousands of shareholders. Some corporations are **privately owned** by families, small groups of shareholders, or a single individual, with shares of ownership not publicly sold.

In the United States, the laws governing the creation of a corporation vary from state to state. In spite of its small size, Delaware is the state in which many corporations are legally created because its rules are less restrictive than are those of most other states. In addition, its legal and incorporating fees are low and its legal system and the judges who hear business cases are experienced and efficient at resolving disputes and lawsuits. The exact rights and privileges of a corporation vary from state to state and from country to country.

Internationally, organizational forms similar to corporations are common. In the United Kingdom they are frequently indicated by the word "limited" (Ltd.) in the name. In many countries whose laws trace back to Spain, the initials S.A. refer to a "society anonymous" meaning that multiple unidentified owners stand behind the company. Not surprisingly, countries in the former Soviet Union are formulating legal systems that permit corporate-style companies. They are also creating markets where the owners of these companies can buy and sell their ownership interests.

Whereas the owners of proprietorships and partnerships are typically active managers of the business as well, corporate managers often own only a small part of the public corporation. Because the corporate form is the form in which the majority of U.S. business is conducted, we use corporate accounting practice almost exclusively.

A Note on Nonprofit Organizations

The major focus of this book is on profit-seeking organizations, such as business firms. However, the fundamental accounting principles also apply to nonprofit, that is, not-for-profit, organizations. Managers and accountants in hospitals, universities, government agencies, and other nonprofit organizations use financial statements. Money must be raised and spent, budgets must be prepared, and financial performance must be judged.

Advantages and Disadvantages of the Corporate Form

The corporate form of organization has many advantages. Limited liability is foremost. If a corporation drifts into financial trouble, its creditors cannot look for repayment beyond the corporation itself. In other words, the owners' personal assets are not subject to the creditors' grasp. In contrast, the owners of proprietorships and partnerships typically have unlimited liability, which means that business creditors can look to the owners' personal assets for repayment. For example, if Biwheels were a partnership, each partner would bear a personal liability for full payment of the $100,000 bank loan.

capital stock certificate (stock certificate) Formal evidence of ownership shares in a corporation.

Another advantage of the corporation is easy transfer of ownership. In selling shares in its ownership, the corporation usually issues **capital stock certificates** (often called simply **stock certificates**) as formal evidence of ownership. These shares may be sold and resold among present and potential owners. Numerous stock exchanges exist in the

United States and worldwide where long established rules for trading facilitate daily buying and selling of shares. About 1 billion shares are bought and sold on an average day on the New York Stock Exchange (NYSE) alone. Further, trading is not limited to U.S. markets. Shares of many large U.S. firms are also traded on international exchanges such as those in Tokyo and London. Many Japanese and British firms have shares traded on the NYSE. Examples include Nissan, Toyota, and Honda from Japan, BPAmoco, and Glaxo Wellcome from the United Kingdom.

take five

Biwheels is organized as a sole proprietorship. What would be the biggest advantage for Mr. Smith in converting it to a corporation?

In contrast to proprietorships and partnerships, corporations have the advantage of ease in raising ownership capital from hundreds or thousands of potential stockholders. AT&T has over 4.2 million stockholders, owning a total of more than 3 billion shares of stock. More than 11 million shares trade hands daily as investors buy and sell this popular stock.

The corporation also has the advantage of continuity of existence. The life of a corporation is indefinite in the sense that it continues even if its ownership changes. In contrast, proprietorships and partnerships officially terminate on the death or complete withdrawal of an owner.

The effects of the form of ownership on income taxes may vary significantly. For example, a corporation is taxed as a separate entity (as a corporation). However, no income taxes are levied on a proprietorship (as a proprietorship) or on a partnership (as a partnership). Instead the income earned by proprietorships and partnerships is attributed to the owners as personal taxpayers. In short, the income tax laws regard corporations as taxable entities, but proprietorships or partnerships as not taxable entities. Whether the corporate form provides tax advantages or disadvantages depends heavily on the personal tax situations of the owners.

Regardless of the economic and legal advantages or disadvantages of each type of organization, some small-business owners incorporate simply for prestige. That is, they feel more important if they can refer to "my corporation" and if they can refer to themselves as "chairman of the board" or "president" instead of "business owner" or "partner."

Although there are fewer corporations in the United States than there are proprietorships or partnerships, the corporation has far more economic significance. Therefore, this book emphasizes the corporate form of ownership.

Accounting for Owners' Equity

The basic accounting concepts that underlie the owners' equity section of the balance sheet are the same for all three forms of ownership. However, owners' equities for proprietorships and partnerships are often identified by the word **capital.** In contrast, owners' equity for a corporation is usually called **stockholders' equity** or **shareholders' equity.** Examine the possibilities for the Biwheels Company that are shown in the accompanying table.

capital A term used to identify owners' equities for proprietorships and partnerships.

stockholders' equity (shareholders' equity) Owners' equity of a corporation. The excess of assets over liabilities of a corporation.

As a sole proprietorship Mr. Smith is personally liable for all of the liabilities of Biwheels. If it were a corporation his liability would be limited to his investment.

BUSINESS FIRST

The Dow Jones Industrial Average

Newscasters often report on the performance of the stock market by saying, "Today the Dow gained 100 points" or "The Dow closed at 11,000." The Dow Jones Industrial Average is one of many indices used to describe performance of stock markets around the world. All indices are designed to provide a picture of what is happening on average to the value of securities owned by investors. Although the details vary a bit from one to another, most indices calculate the ongoing value of an assumed investment. For example, the Dow began as the average value of an investment in one share of each of 12 stocks and was first published in 1896 by Charles Dow. To calculate it you simply added the prices of the 12 stocks and divided by 12. It began at 40.94 but fell to an all-time low of 28.48 in August of that year. The calculation today is more complex due to several factors that you will better understand at the end of this course than today.

Since 1928, the number of stocks in the Dow has been constant at 30, but there have been 38 changes in the composition of the Dow. These changes reflect the dynamic nature of American industry. The original DOW had several auto and petroleum companies to capture the massive importance of these industries. Today only ExxonMobil and General Motors remain. McDonald's replaced American Tobacco in 1985, Wal-Mart replaced Woolworth in 1997, and Home Depot replaced Sears in 1999. Technology companies have only appeared in the Dow in significant numbers recently with Hewlett-Packard, Microsoft, and Intel all added since 1997. Dow's goal was to create an average of a small number of companies that gave a good indication about how all investments were doing. At the time, calculations were difficult and having just 30 stocks eased calculation and permitted timely reporting. Today, indices commonly have hundreds or thousands of companies included and the index values are recalculated instantly throughout the day and reported electronically to brokerage houses and individual computers around the world. Today you can find many indices reported including the Standard and Poor's Five Hundred, the Nasdaq, and so forth. Each is intended to give a quick picture of the average result for investors in a particular group of companies.

Exhibit 1-5

Owners' Equity for Different Organizations

OWNERS' EQUITY FOR A PROPRIETORSHIP (ASSUME GEORGE SMITH IS THE SOLE OWNER)	
George Smith, capital	$400,000
OWNERS' EQUITY FOR A PARTNERSHIP (ASSUME SMITH HAS TWO PARTNERS)	
George Smith, capital	$320,000
Alex Handl, capital	40,000
Susan Eastman, capital	40,000
Total partners' capital	$400,000
OWNERS' EQUITY FOR A CORPORATION	
Stockholders' equity:	
Paid-in capital:	
Capital stock, 10,000 shares issued at par value of $10 per share	$100,000
Paid-in capital in excess of par value of capital stock	300,000
Total paid-in capital	$400,000

The accounts for the proprietorship and the partnership show owners' equity as straightforward records of the capital invested by the owners. For a corporation, though, the total capital investment by its owners, both at the start of the company and thereafter, is called **paid-in capital.** It is recorded in two parts: capital stock at par value and paid-in capital in excess of par value.

paid-in capital The total capital investment in a corporation by its owners both at and subsequent to the inception of business.

The Meaning of Par Value

Most states require stock certificates to have some dollar amount printed on them. This amount is determined by the board of directors and is usually called **par value** or **stated value.** Typically, the stock is sold at a price that is higher than its par value. The difference between the total amount received for the stock and the par value is called **paid-in capital in excess of par value.** This distinction is of little economic importance and we introduce it here only because you will frequently encounter it in actual financial statements.

par value (stated value) The nominal dollar amount printed on stock certificates.

paid-in capital in excess of par value When issuing stock, the difference between the total amount received and the par value.

Let us take a closer look at par value by altering our Biwheels example. We now assume that Biwheels is a corporation and that 10,000 shares of its stock have been sold for $40 per share. The par value is $10 per share, and therefore the paid-in capital in excess of par value is $30 per share. Thus, the total ownership claim of $400,000 arising from the investment is split between two equity claims, one for $100,000 capital stock, at par and one for $300,000 paid-in capital in excess of par or additional paid-in capital.

The following formulas show these components of the total paid-in capital account:

$$\text{Total paid-in capital} = \text{Capital stock at par} + \text{Paid-in capital in excess of par}$$
$$\$400{,}000 = \$100{,}000 + \$300{,}000$$

$$\text{Capital stock at par} = \text{Number of shares issued} \times \text{Par value per share}$$
$$\$100{,}000 = 10{,}000 \times \$10$$

$$\text{Paid-in capital in excess of par} = \text{Total paid-in capital} - \text{Capital stock at par}$$
$$\$300{,}000 = \$400{,}000 - \$100{,}000$$

$$\text{Total paid-in capital} = \text{Number of shares issued} \times \text{Average issue price per share}$$
$$\$400{,}000 = 10{,}000 \times \$40$$

Exhibit 1-6 shows par value and paid-in capital for McDonald's and Gap Inc. in panel A. Panel B shows the relationship between par value and market value of common stock. As you see, there is no relationship.

Shares of AT&T have a par value of $1, while those of Gap have a par value of $.05, and those of McDonald's have a $.01 par value. AT&T refers to its shares as common shares while Gap and McDonald's use the phrase common stock. Whether called common shares or **common stock,** the meaning is the same as that of capital stock in the earlier discussion. Although it would be nice to stick to one phrase at every point in this textbook, the reality is that the world is full of different words for some accounting items. One of our goals is to help you to prepare yourself for reading and understanding actual financial statements and reports. Therefore, we use many of the various synonyms you are likely to come across when reading financial statements. Another of our goals is to identify distinctions that are important and those that are not. For example, there are different par values for these companies, but these values bear no relation to the companies' market prices, as illustrated in panel B of Exhibit 1-6.

common stock Stock representing the class of owners having a "residual" ownership of a corporation.

The extremely small amount of par value as compared with the additional paid-in capital is common in practice and illustrates the insignificance of par value in today's business world. McDonald's uses the frequently encountered term, "additional paid-in capital," as a short synonym for "paid-in capital in excess of par value of common

Exhibit 1-6

Owners' Equity: McDonald's and Gap

PANEL A: COMPARATIVE BALANCE SHEET AND DATA

Gap Inc. ($000 Except par value)	January 29 2000	January 30 1999
Shareholders' Equity		
Common stock $.05 par value	$ 50,386	$ 49,875
Additional paid-in-capital	669,490	349,037
Retained earnings	4,172,796	3,121,360
Accumulated other comprehensive (Loss)	(6,759)	(12,518)
Other	(2,652,850)	(1,934,075)
Total Shareholders' Equity	$2,233,045	$1,573,679

McDonald's (in millions, except per share data)	December 31 1999	1998
Shareholders' Equity		
Common Stock $.01 par value	$16.6	$ 16.6
Additional Paid-in Capital	1,288.3	989.2
Retained Earnings	15,562.8	13,879.6
Accumulated Other Comprehensive Income	(886.8)	(522.5)
Other	(6,341.8)	(4,898.2)
Total Shareholders' Equity	$ 9,639.1	$ 9,464.7

PANEL B: COMPARATIVE PAR AND MARKET VALUES

	AT&T	Gap	McDonald's
Par value	$ 1.00	$ .05	$ .01
Market (7/2000)	$33.00	$38.00	$31.00

stock." Finally, note that the number of "shares authorized" is the maximum number of shares that the company can issue as designated by the company's articles of incorporation.

McDonald's shows "retained earnings" and "other" as part of owners' equity. These values arise from various sources with the passage of time. Our current focus is on the first two lines—common stock and additional paid-in capital. These amounts can be described accurately with a simple term, total paid-in capital. An important point about paid-in capital is that it shows amounts that owners actively contributed to the firm.

Individuals buy shares of stock as investments. Sometimes they purchase the stock from the company and the previous discussion describes what happens. The company records cash received and records the par value of shares issued with the excess shown as an increase in paid-in capital. However, the majority of stock transactions involving purchase and sale of stock occur between individuals. When Mary sells 100 shares of DuPont to Carlos, the transaction has no effect on DuPont. Mary may have a gain if the shares are sold for more than she paid for them. She will have a loss on the sale otherwise, but this affects DuPont only in terms of keeping track of its owners. When the shares change hands, Mary will be replaced by Carlos on the corporate records as an owner, and Carlos will begin to receive the dividends on the shares and will be allowed to vote on corporate issues.

STOCKHOLDERS AND THE BOARD OF DIRECTORS

In partnerships, the managerial tasks may be shared by the owners. In corporations, the ultimate responsibility for management is delegated by the stockholders to the board of directors, as indicated in the following diagram:

An advantage of the corporate form of organization is that it separates ownership and management. Stockholders invest resources but do not need to devote time to managing, and managers can be selected for their managerial skills, not their ability to invest large sums in the firm. The board of directors is the link between stockholders and the actual managers. The board's duty is to ensure that managers act in the interests of shareholders.

The board of directors is elected by the shareholders, but the slate of candidates is often selected by management. Sometimes, the chairman of the board is also the top manager and the major shareholder. For example, for over 30 years Henry Ford II was the major stockholder, the chairman of the board, and the CEO of the Ford Motor Company. Other top company managers, such as the president, financial vice president, and marketing vice president, are routinely elected to the board of directors of the company they manage. Therefore, the interests of both stockholders and managers are usually represented on the board of directors.

Membership on a board of directors is often extended to CEOs and presidents of other corporations, to university presidents and professors, and to attorneys. For example, the 9-member board of Oracle in 2000 included three members of Oracle management, a professor, Jack Kemp—former senator and presidential aspirant, the chairman of Lucent Technologies, a venture capitalist, and two other CEOs. Although boards once had 15 to 20 members, many companies are moving toward having smaller boards of directors that include fewer members of the company's management team.

CREDIBILITY AND THE ROLE OF AUDITING

Objective 6
Describe auditing and how it enhances the value of financial information.

If someone told you that smoking cigarettes was not related to the risk of lung cancer, your reaction would be based on when the conversation occurred, on who the speaker was, and on your own knowledge at the time. For instance, when Europeans arrived in North America and first witnessed the act of smoking tobacco, no one knew what lung cancer was, and no one linked disease to behavior. By the middle of the twentieth century, people understood that what you did to your body could easily make you sick, but there was not enough evidence about the health risks of smoking. Were people who smoked more likely to have lung cancer? By the mid-1990s, evidence showed that the answer to this question was most certainly yes, although it was not until 1997 that executives of tobacco companies acknowledged a link. Some people continue to consider the additional risk of cancer small and continue to smoke.

This little history lesson emphasizes that peoples' statements are often affected by the position of the speaker. Tobacco executives cannot say that tobacco causes cancer for to do so would acknowledge prior lies and invite lawsuits. Smokers cannot say that tobacco is really dangerous because to do so would call into question their own behavior. As listeners we discount certain claims because we know the motives of the person or organization making the claim.

Corporate managers provide financial statements to both internal and external decision makers. They may have incentives to make the company's performance look better than it really is. Perhaps doing so will make it easier to raise money to open new stores, or increase the managers' compensation. Managers often believe that company conditions are better than they really are because managers are optimistic about the good decisions they have made and the plans they are implementing. The problem we face as investors is that we must rely on managers to tell the truth, because we cannot see personally what is going on in the firm.

auditor A person who examines the information used by managers to prepare the financial statements and attests to the credibility of those statements.

One way to solve this credibility problem is to introduce an honorable, expert third party. In the area of financial statements this third party is called the auditor. The **auditor** examines the information that managers use to prepare the financial statements and provides assurances about the credibility of those statements. On seeing the auditor's assurance that the financial statements provide a fair and accurate picture of a company's economic circumstances, investors can feel more comfortable about using the information to guide their investing activity. Another way to ensure truthful reporting by managers is by handing out stiff legal penalties for lying. A manager who knowingly misstates performance is subject to both fines and jail sentences under U.S. law.

The Certified Public Accountant

The desire for third-party assurance about the credibility of financial statements gave rise naturally to a profession dedicated to that purpose. Providing credibility requires individuals who have both the technical knowledge to assess financial statements and the reputation for integrity and independence that assures they will honestly tell investors and other interested parties if management has not produced fair financial statements. Enter the certified public accountant (CPA).

certified public accountant (CPA) In the United States, a person earns this designation by a combination of education, qualifying experience, and the passing of a 2-day written national examination.

Certified public accountants in the United States earn their certification by a combination of education, qualifying experience, and passing a 2-day written national examination. The examination is administered and graded by a national organization, the American Institute of Certified Public Accountants (AICPA). The institute is the principal professional association in the private sector that regulates the quality of the public accounting profession. Other English-speaking nations have similar arrangements but use the term *chartered accountant (CA)* instead of CPA.

The CPA examination covers four major topical areas: auditing, accounting theory, business law, and accounting practice. The last is a series of accounting problems covering a wide variety of topics, including income taxes, cost accounting, and accounting for nonprofit institutions.

Although the AICPA prepares and grades the CPA examination on a national basis, the individual states have their own regulations concerning the qualifications for taking and passing the examination and for earning the right to practice as a CPA. These regulations are determined and enforced by state boards of accountancy.

The Auditor's Opinion

audit An examination of transactions and financial statements made in accordance with generally accepted auditing standards.

To assess management's financial disclosure, public accountants conduct an **audit,** which is an examination of transactions and financial statements made in accordance with generally accepted auditing standards developed primarily by the AICPA. This audit includes miscellaneous tests of the accounting records, internal control systems, and other auditing

Exhibit 1-7

Report of Independent Auditors

The Board of Directors and Shareholders McDonald's Corporation

We have audited the accompanying consolidated balance sheet of McDonald's Corporation as of December 31, 1999 and 1998, and the related consolidated statements of income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 1999. These financial statements are the responsibility of McDonald's Corporation management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of McDonald's Corporation at December 31, 1999 and 1998, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 1999, in conformity with accounting principles generally accepted in the United States.

Ernst & Young LLP
Chicago, Illinois
January 26, 2000

procedures as deemed necessary. The examination is described in the **auditor's opinion** (also called an **independent opinion**) that is included with the financial statements in a corporation's annual report. Standard phrasing is used for auditors' opinions, as illustrated by the January 26, 2000 opinion rendered by a large CPA firm, Ernst & Young, for McDonald's Corporation which appears in Exhibit 1-7.

This book explores the meaning of such phrases as "present fairly" and "generally accepted accounting principles." For now, reflect on the fact that auditors do not prepare a company's financial statements. Instead, the auditor's opinion is the public accountant's stamp of approval on financial statements prepared by management.

auditor's opinion (independent opinion) A report describing the auditor's examination of transactions and financial statements. It is included with the financial statements in an annual report issued by the corporation.

THE ACCOUNTING PROFESSION

Objective 7 Distinguish between public and private accounting

There are many ways to classify accountants, but the easiest and most common way is to divide them into public and private accountants. **Public accountants** are those whose services are offered to the general public on a fee basis. Such services include auditing, preparing income taxes, and management consulting. All other accountants would be **private accountants.** This category consists not only of those individuals who work for businesses but also of those who work for government agencies, including the Internal Revenue Service (IRS), and other nonprofit organizations.

public accountants Accountants who offer services to the general public on a fee basis including auditing, tax work, and management consulting.

Public Accounting Firms

Public accounting firms vary in their size and in the type of accounting services they perform. There are small proprietorships, where auditing may represent as little as 10% or

public accounting
The field of accounting where services are offered to the general public on a fee basis.

private accountants
Accountants who work for businesses, as well as government agencies, and other nonprofit organizations.

less of annual billings. Billings are the total amounts charged to clients for services rendered to them. The bulk of the work of these small proprietorships is usually income taxes and "write-up" work (the actual bookkeeping services for clients who are not equipped to do their own accounting).

There are also a handful of gigantic firms that have more than 2,000 partners with offices located throughout the world. Such enormous firms are necessary because their clients also tend to be enormous. For instance, one large CPA firm reported that its annual audit of one client takes the equivalent of 72 accountants working a full year. Another client has 300 separate corporate entities in 40 countries that must ultimately be consolidated into one set of overall financial statements.

The five largest public international accounting firms are known collectively as the "Big-Five":

- Arthur Andersen
- Deloitte & Touche
- Ernst & Young
- KPMG Peat Marwick
- PricewaterhouseCoopers

Objective 8
Evaluate the role of ethics in the accounting process.

Many of these firms trace their origins to England and Scotland during the colonial period when audit firms came to the United States to oversee investments in the colonies. Of the companies listed on the NYSE, 97% are clients of the Big-Five. These accounting firms have annual billings in excess of a billion dollars each. A large part of the billings is attributable to auditing services. The top partners in big accounting firms are compensated on about the same scale as their corporate counterparts. Huge accounting firms tend to receive more publicity than other firms. However, please remember that there are thousands of other able accounting firms, varying in size from sole practitioners to giant international partnerships.

Professional Ethics

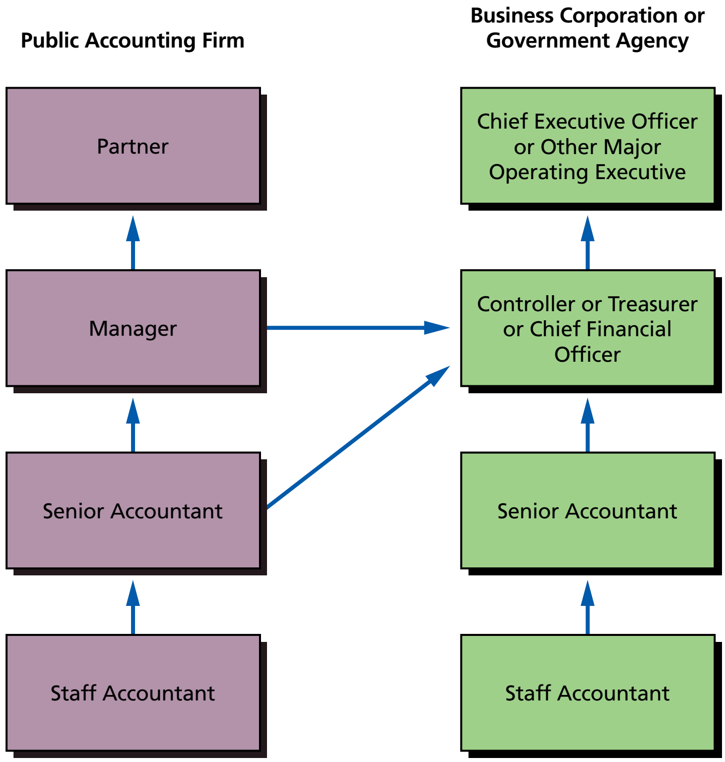
Members of the AICPA must abide by a code of professional conduct. Surveys of public attitudes toward CPAs have consistently ranked the accounting profession as having high ethical standards. The code of professional conduct is especially concerned with integrity and independence. For example, independent auditors are forbidden to own shares of their client corporations. Moreover, the auditors must satisfy themselves that their clients' financial statements are properly prepared.

Many public accounting firms have practices that involve providing audit services but also providing tax and consulting services to clients. People have worried for many years about how auditors can remain independent if they or their partners stand to reap substantial fees from the continuing relationship or from investing in stock in their clients. One rule to minimize this risk prohibits professional staff and partners from investing in the shares of client firms. In a recent SEC investigation, one of the Big Five was found to have many partners who were violating this rule. The firm has been forced to resign from several audits and has suffered significant embarrassment and loss of public confidence.

The emphasis on ethics extends beyond public accounting. For example, members of the Institute of Management Accountants are expected to abide by that organization's code of ethics for management accountants. Auditors and management accountants have professional responsibilities concerning competence, confidentiality, integrity, and objectivity. Professional accounting organizations and state regulatory bodies have procedures for reviewing behavior alleged to violate codes of professional conduct.

Other Opportunities for Accountants

In the accompanying diagram, the long arrows indicate how accountants often move from public accounting firms to positions in business or government. Obviously, these movements can occur at any level or in any direction.



Accounting cuts across all management functions, including purchasing, manufacturing, wholesaling, retailing, and a variety of marketing and transportation activities. It provides an excellent opportunity for gaining broad knowledge. The people responsible for collecting and interpreting financial information about the company develop detailed knowledge about what is occurring and close relationships with key decision makers. Senior accountants or controllers in a corporation are often picked as production or marketing executives. Why? Because they may have impressed other executives as having acquired general management skills.

Accounting is ranked as the most important business school course for future managers. *Business Week* recently reported that "more CEOs [chief executive officers] started out in finance or accounting than in any other area." It is easy to see why accounting is called the language of business.

SUMMARY PROBLEMS FOR YOUR REVIEW

Problem One

Analyze the following additional transactions of Biwheels Company. Begin with the balances shown for January 12, 20X2, in Exhibit 1-2 on p. ••. Prepare an ending balance sheet for Biwheels Company (e.g., on January 16 after these additional transactions).

Exhibit 1-8

Biwheels Company

Analysis of Additional January Transactions

Description of Transaction	Assets							=	Liabilities + Owners' Equity				
	Cash	+	*Accounts Receivable*	+	*Merchandise Inventory*	+	*Store Equipment*	=	*Note Payable*	+	*Accounts Payable*	+	*Smith, Capital*
Balance, January 12, 20X2	$342,700	+	$ 300	+	$159,200	+	$14,000	=	$100,000	+	$ 16,200	+	$400,000
(i) Payment on bank loan	−10,000							=	−10,000				
(ii) Personal; no effect													
(iii) Acquire inventory, half for cash	−25,000			+	50,000			=			+25,000		
(iv) Collection of receivable	+ 200		−200										
Balance, January 16													$307,900
Balance, January 16	$307,900	+	$ 100	+	$209,200	+	$14,000	=	$ 90,000	+	$ 41,200	+	$400,000
	$531,200							=	$531,200				

i. Biwheels pays $10,000 on the bank loan (ignore interest).

ii. Smith buys furniture for his home for $5,000, using his family charge account at Macy's.

iii. Biwheels buys merchandise inventory for $50,000. Half the amount is paid in cash, and half is owed on open account.

iv. Biwheels collects $200 more from its business debtor.

Solution to Problem One

See Exhibits 1-8 and 1-9. Note that transaction ii is ignored because it is wholly personal. However, visualize how Smith's personal balance sheet would be affected. His assets, Home Furniture, would rise by $5,000 and his liabilities, Accounts Payable, would also rise by $5,000.

Problem Two

"If I purchase 100 shares of the outstanding stock of General Motors Corporation (or Biwheels Company), I invest my money directly in that corporation. General Motors must record that event." Do you agree? Explain.

Exhibit 1-9

Biwheels Company

Balance Sheet January 16, 20X2

Assets		Liabilities and Owner's Equity	
		Liabilities:	
Cash	$307,900	Note payable	$ 90,000
Accounts receivable	100	Accounts payable	41,200
Merchandise inventory	209,200	Total liabilities	$131,200
Store equipment	14,000	Smith, capital	400,000
Total	$531,200	Total	$531,200

Solution to Problem Two

Money is invested directly in a corporation when the corporation originally issues the stock. For example, 100,000 shares of stock may be issued at $80 per share, bringing in $8 million to the corporation. This is a transaction between the corporation and the stockholders. It affects the corporate financial position:

Cash $8,00,000 Stockholders' equity $8,00,000

Subsequently, 100 shares of that stock may be sold by an original stockholder (Michael Jordan) to another individual (Meg Ryan) for $130 per share. This is a private transaction; no cash is received by the corporation. Of course, the corporation records the fact that 100 shares originally owned by Jordan are now owned by Ryan, but the corporate financial position is unchanged. Accounting focuses on the business entity; subsequently, private dealings of the owners have no effect on the financial position of the entity, although the corporation records the owners' identities.

Problem Three

"One individual can be an owner, an employee, and a creditor of a corporation." Do you agree? Explain.

Solution to Problem Three

The corporation enters contracts, hires employees, buys buildings, and conducts other business. The chairman of the board, the president, the other officers, and all the workers are employees of the corporation. Thus Katharine Graham could own some of the capital stock of the *Washington Post* and also be an employee (CEO). Because money owed to employees for salaries is a liability, she could be an owner, an employee, and a creditor. Similarly, an employee of a telephone company who is a stockholder of the company could also be receiving telephone services from the same company. She is an owner, employee, customer, and debtor of the company.

Problem Four

Refer to the financial statements reproduced in appendix A to respond to the following questions.

1. As of what date is the consolidated balance sheet prepared?
2. What are total assets for the 2 years shown in the consolidated balance sheets? What elements explain the difference in the asset levels for the 2 years?
3. What is the par value of the common stock?
4. How many share of common stock are authorized and how many shares are outstanding at the latest year-end?

Solution to Problem Four

1. Two balance sheets are presented. One is dated as of July 29, 2000 and the other is dated as of July 31, 1999. The more recent one is in the left column. The first sentence in note 2, "Summary of Significant Accounting Policies," explains that the company uses a fiscal year for either 52 or 53 weeks that end on the last Saturday in July. Thus fiscal 2000 refers to the year ending July 29, 2000.
2. Total assets more than doubled from $14,893,000,000 in 1999 to $32,870,000,000 in 2000. Note that the numbers in the annual report are expressed "in millions" as indicated in the parenthetical note under the words "Consolidated Balance Sheets" at the top of the page. All asset accounts increased from 1999 to 2000 but

the biggest percentage gains were in Cash and cash equivalents (up from \$913 million to \$4,234 million or 464%) and in Goodwill and purchased intangible assets (up from \$460 to \$4,087 or 888%). The percentage increases are calculated as the final value divided by the beginning value times 100. Thus, \$4,234 ÷ \$913 × 100 = 464%. The largest absolute increase was in Investments, which grew by \$6,656 million.

3. The par value is \$0.001 per share as indicated in the Shareholders' equity section of the balance sheet.
4. Cisco has authorized 20,000,000,000 shares. At the end of fiscal 2000, 7,138,000,000 shares are issued and outstanding. Note that the reference to numbers "in millions" included numbers of shares. Only the par value is not expressed in millions.

Highlights to Remember

1. Explain how accounting information assists in making decisions.
Financial statements provide information for decision making to managers, creditors, and owners of all types of organizations. The balance sheet (or statement of financial position) provides a "snapshot" of the financial position of an organization at any instant. That is, it answers the basic question, Where are we?
2. Describe the components of the balance sheet.
The balance sheet equation is Assets = Liabilities + Owners' Equity. This equation must always be in balance. The balance sheet presents the balances of the components of Assets, Liabilities, and Owners' Equity at a specific point in time.
3. Analyze business transactions and relate them to changes in the balance sheet.
Transaction analysis is the heart of accounting. A transaction is any event that both affects the financial position of an entity and can be reliably recorded in money terms. For each transaction, an accountant must determine what accounts are affected and the amount involved.
4. Classify operating, investing, and financing activities in a cash flow statement.
The cash flow statement summarizes the changes during a period in the cash balance for the firm. The changes are classified as to whether they relate to an operating activity, financing activity, or investing activity. Operating activities relate to the purchase, production and sale of goods, and services on an ongoing basis. Financing activities relate to raising capital via issuance of capital stock or borrowing. Investing is the use of capital to acquire assets such as buildings and equipment.
5. Compare the features of proprietorships, partnerships, and corporations.
Corporations are the most important form of business ownership because so much business is conducted by corporations. The ownership equity of a corporation is usually called stockholders' equity. It initially takes the form of common stock at par, or stated, value plus additional paid-in capital.
6. Describe auditing and how it enhances the value of financial information.
Separation of ownership from management in corporations creates a demand for auditing, a third-party examination of financial statements. Auditors evaluate the record-keeping system of the firm and test specific transactions and account balances to assure that the balances fairly reflect the financial position of the company.
7. Distinguish between public and private accounting.
Public accounting involves providing services, especially audit services, to client companies. The public accounting profession gives credibility to audits by specifying qualifications for certified public accountants, including ethical standards, and by developing generally accepted auditing standards to ensure thoroughness of audits. Private

accounting refers to performing accounting functions as an employee of a firm. The treasurer of Cisco and a cost analyst at Boeing are both engaged in private accounting. Because accountants work with managers in all management functions, accounting positions are fertile training grounds for future top managers.

8. Evaluate the role of ethics in the accounting process.
Ethical behavior is critically important in professional activities such as accounting. In public accounting, the value of an audit is directly linked to the credibility of the auditor as an ethical, independent professional who is qualified to evaluate the financial statements of the firm and is also reliably committed to disclosing problems or concerns uncovered in the evaluation.

Accounting Vocabulary

account, p.
accounting, p.
account payable, p.
annual report, p.
assets, p.
audit, p.
auditor, p.
auditor's opinion, p.
balance sheet, p.
balance sheet equation, p.
capital, p.
capital stock certificate, p.
certified public accountant (CPA), p.
common stock, p.
compound entry, p.
corporation, p.
creditor, p.
debtor, p.
entity, p.
financial accounting, p.
independent opinion, p.
inventory, p.
liabilities, p.
limited liability, p.
management accounting, p.
notes payable, p.
open account, p.
owners' equity, p.
paid-in capital, p.
paid-in capital in excess of par value, p.
partnership, p.
par value, p.
private accountants, p.
privately owned, p.
public accountants, p.
public accounting, p.
publicly owned, p.
shareholders' equity, p.
sole proprietorship, p.
stated value, p.
statement of financial condition, p.
statement of financial position, p.
stock certificate, p.
stockholders' equity, p.
transaction, p.

Assignment Material

The assignment material for each chapter is divided into Questions, Exercises, and Problems. The assignment material contains problems based on fictitious companies and problems based on real-life situations. We hope our use of actual companies and news events enhances your interest in accounting.

We identify problems based on real companies by highlighting the name in blue. These problems underscore a major objective of this book: to increase your ability to read, understand, and use published financial reports and news articles. In later chapters, these problems provide the principal means of reviewing not only the immediate chapter but also the previous chapters. Note that the last four problems in each chapter are (1) a problem based on Cisco Systems whose financial statements are in appendix A, (2) a financial statement research problem, (3) a Collaborative Learning Exercise, and (4) an Internet-based problem.

Questions

1-1 Describe *accounting*.

1-2 "It's easier to learn accounting if you avoid real-world examples." Do you agree? Explain.

1-3 Give three examples of decisions that are likely to be influenced by financial statements.

1-4 Give three examples of users of financial statements.

1-5 Briefly distinguish between *financial accounting* and *management accounting*.

1-6 Give two synonyms for *balance sheet*.

1-7 "The balance sheet may be out of balance after some transactions, but it is never out of balance at the end of an accounting period." Do you agree? Explain.

1-8 "When a company buys inventory for cash, total assets do not change. However, when it buys inventory on open account, total assets increases." Explain.

1-9 Explain the difference between a *note payable* and an *account payable*.

1-10 Give two synonyms for *owners' equity*.

1-11 Explain the meaning of *limited liability*.

1-12 Why does this book emphasize the corporation instead of the proprietorship or the partnership?

1-13 "International companies with Ltd. or S.A. after their name are essentially the same in organizational form as U.S. companies with Corp. after their name." Do you agree? Explain.

1-14 "The accounting systems described in this book apply to corporations and are not appropriate for nonprofit organizations." Do you agree? Explain.

1-15 "The idea of par value is insignificant." Explain.

1-16 Explain the relationship between the board of directors and top management of a company.

1-17 What is a CPA and how does someone become one?

Cognitive Exercises

1-18 The Auditor's Opinion

In reviewing the annual report of a company that you might invest in, you noted that you did not recognize the name of the audit firm that signed the audit opinion. What questions would this raise in your mind and how might you resolve them?

1-19 The Corporation

Some historians were arguing over the most important innovation in the history of business. Most thought of things and processes such as the railroad, the automobile, the printing press, the telephone, television, or more recently, the computer chip, fiberoptic cable, or even the Internet. One person argued that the really important innovation was the corporation and business law. How would this person argue for this idea?

1-20 Double-Entry Accounting

The accounting process in use today is typically called "double-entry" bookkeeping. Discuss the meaning and possible importance of this name.

1-21 Accountants as Historians

Critics sometimes refer to accountants as historians, and do not mean it kindly. In what sense are accountants historians and do you believe this is a compliment or a criticism?

Exercises

1-22 Describing Underlying Transactions

LaTech Company, which was recently formed, is engaging in some preliminary transactions before beginning full-scale operations for retailing laptop computers. The balances of each item in the company's accounting equation are given next for May 10 and for each of the next nine business days.

	Cash	Accounts Receivable	Computer Inventory	Store Fixtures	Accounts Payable	Owners' Equity
May 10	$ 6,000	$ 4,000	$18,000	$ 3,000	$ 4,000	$27,000
11	12,000	4,000	18,000	3,000	4,000	33,000
12	12,000	4,000	18,000	7,000	4,000	37,000
15	9,000	4,000	21,000	7,000	4,000	37,000
16	9,000	4,000	26,000	7,000	9,000	37,000
17	12,000	1,000	26,000	7,000	9,000	37,000
18	7,000	1,000	26,000	13,000	10,000	37,000
19	5,000	1,000	26,000	13,000	8,000	37,000
22	5,000	1,000	25,600	13,000	7,600	37,000
23	2,000	1,000	25,600	13,000	7,600	34,000

State briefly what you think took place on each of these nine days, assuming that only one transaction occurred each day. **Required**

1-23 Describing Underlying Transactions

The balances of each item in Monterrey Company's accounting equation are given next for August 31 and for each of the next nine business days.

State briefly what you think took place on each of these nine days, assuming that only one transaction occurred each day.

	Cash	Accounts Receivable	Computer Inventory	Store Fixtures	Accounts Payable	Owners' Equity
Aug. 31	$2,000	$ 8,000	$ 9,000	$ 7,500	$ 5,500	$21,000
Sept. 1	4,000	6,000	9,000	7,500	5,500	21,000
2	4,000	6,000	9,000	10,000	8,000	21,000
3	1,000	6,000	9,000	10,000	8,000	18,000
4	2,000	10,000	4,000	10,000	8,000	18,000
5	2,000	10,000	11,000	10,000	8,000	25,000
8	1,500	10,000	11,000	10,000	7,500	25,000
9	1,000	10,000	11,000	13,000	10,000	25,000
10	1,000	10,000	11,000	12,700	9,700	25,000
11	4,000	7,000	11,000	12,700	9,700	25,000

1-24 Prepare Balance Sheet

Albany Corporation's balance sheet at March 30, 20X1, contained only the following items (arranged here in random order):

Cash	$10,000	Accounts payable	$ 8,000
Notes payable	10,000	Furniture and fixtures	3,000
Merchandise inventory	40,000	Long-term debt payable	12,000
Paid-in capital	80,000	Building	20,000
Land	6,000	Notes receivable	2,000
Accounts receivable	14,000	Machinery and equipment	15,000

On March 31, 20X1, these transactions and events took place:

1. Purchased merchandise on account, $3,000.
2. Sold at cost for $1,000 cash some furniture that was not needed.
3. Issued additional capital stock for machinery and equipment valued at $12,000.

4. Purchased land for $25,000, of which $5,000 was paid in cash, the remaining being represented by a 5-year note (long-term debt).
5. The building was valued by professional appraisers at $45,000.

Required Prepare in good form a balance sheet for March 31, 20X1, showing supporting computations for all new amounts.

1-25 Prepare Balance Sheet

Broadway Corporation's balance sheet at November 29, 20X1 contained only the following items (arranged here in random order):

Paid-in capital	$19,000	Machinery and equipment	$ 20,000
Notes payable	20,000	Furniture and fixtures	8,000
Cash	22,000	Notes receivable	8,000
Accounts receivable	10,000	Accounts payable	16,000
Merchandise inventory	29,000	Building	230,000
Land	41,000	Long-term debt payable	142,000

On the following day, November 30, these transactions and events occurred:

1. Purchased machinery and equipment for $14,000, paying $3,000 in cash and signing a 90-day note for the balance.
2. Paid $6,000 on accounts payable.
3. Sold on account some land that was not needed for $6,000, which was the Broadway Corporation's acquisition cost of the land.
4. The remaining land was valued at $240,000 by professional appraisers.
5. Issued capital stock as payment for $23,000 of the long-term debt, that is, debt due beyond 1 year.

Required Prepare in good form a balance sheet for November 30, 20X1, showing supporting computations for all new amounts.

1-26 Balance Sheet

General Electric (GE) is one of the largest companies in the world with sales of nearly $61 billion. The company's balance sheet on January 1, 2000, had total assets of $405 billion and stockholders' equity (called shareowners' equity by GE) of $43 billion.

Required

1. Compute GE's total liabilities on January 1, 2000.
2. As of January 1, 2000, GE had issued 3,715,018,000 shares of common stock. The par value was $.16 per share. Compute the balance in the account, "Common stock, par value" on GE's balance sheet.

Problems

1-27 Prepare Balance Sheet

Sophia Brentano is a realtor. She buys and sells properties on her own account, and she also earns commissions as a real estate agent for buyers and sellers. Her business was organized on November 24, 20X1, as a sole proprietorship. Brentano also owns her own personal residence. Consider the following on November 30, 20X1:

1. Brentano owes $95,000 on a mortgage on some undeveloped land, which was acquired by her business for a total price of $180,000.

2. Brentano had spent $15,000 cash for a Century 21 real estate franchise. Century 21 is a national affiliation of independent real estate brokers. This franchise is an asset.
3. Brentano owes $100,000 on a personal mortgage on her residence, which was acquired on November 20, 20X1, for a total price of $180,000.
4. Brentano owes $3,800 on a personal charge account with Nordstrom's Department Store.
5. On November 28, Brentano hired Benjamin Goldstein as her first employee. He was to begin work on December 1. Brentano was pleased because Goldstein was one of the best real estate salesmen in the area. On November 29, Goldstein was killed in an automobile accident.
6. Business furniture was acquired for $17,000 on November 25, for $6,000 on open account plus $11,000 of business cash. On November 26, Brentano sold a $1,000 business chair for $1,000 to her next-door business neighbor on open account.
7. Brentano's balance at November 30 in her business checking account after all transactions was $9,000.

Prepare a balance sheet as of November 30, 20X1, for Sophia Brentano, realtor. **Required**

1-28 Analysis of Transactions

Use the format of Exhibit 1-2 to analyze the following transactions for April of Crystal Cleaners. Then prepare a balance sheet as of April 30, 20X1. Crystal was founded on April 1.

1. Issued 1,000 shares of $1 par common stock for cash, $40,000.
2. Issued 500 shares of $1 par common stock for equipment, $20,000.
3. Borrowed cash, signing a note payable for $35,000.
4. Purchased equipment for cash, $30,000.
5. Purchased office furniture on account, $10,000.
6. Disbursed cash on account (to reduce the account payable), $4,000.
7. Sold equipment on account at cost, $8,000.
8. Discovered that the most prominent competitor in the area was bankrupt and was closing its doors on April 30.
9. Collected cash on account, $3,000. See transaction 7.

1-29 Analysis of Transactions

Walgreen Company is a well-known drugstore chain. A condensed balance sheet for August 31, 1999 follows ($ in millions):

Assets		Liabilities and Stockholders' Equity	
Cash	$ 142		
Accounts receivable	487	Accounts payable	$1,130
Inventories	2,463	Other liabilities	1,293
Property and other assets	2,815	Stockholders' equity	3,484
Total	$5,907	Total	$5,907

Use a format similar to Exhibit 1-2 to analyze the following transactions for the first 2 days of September ($ amounts are in millions). Then prepare a balance sheet as of September 2. **Required**

1. Issued 1,000,000 shares of common stock to employees for cash, $30.

2. Issued 1,500,000 shares of common stock for the acquisition of special equipment from a supplier, $45.
3. Borrowed cash, signing a note payable for $12.
4. Purchased equipment for cash, $135.
5. Purchased inventories on account, $90.
6. Disbursed cash on account (to reduce the accounts payable), $35.
7. Sold display equipment to retailer on account at cost, $1.
8. Collected cash on account, $8.

1-30 Analysis of Transactions

Nike, Inc. had the following condensed balance sheet on May 31, 1999 ($ in millions):

Assets		Liabilities and Owners' Equity	
Cash	$ 198		
Accounts receivable	1,613		
Inventories	1,199		
Equipment and		Total liabilities	$1,913
other assets	2,238	Owners' equity	3,335
Total assets	$5,248	Total liabilities and	
		owners' equity	$5,248

Consider the following transactions that occurred during the first 3 days of June ($ in thousands):

1. Inventories were acquired for cash, $16.
2. Inventories were acquired on open account, $19.
3. Unsatisfactory shoes acquired on open account in March were returned for full credit, $4.
4. Equipment of $12 was acquired for a cash down payment of $3 plus a 2-year promissory note of $9.
5. To encourage wider displays, special store equipment was sold on account to New York area stores for $40. The equipment had cost $40 in the preceding month.
6. Jodie Foster produced, directed, and starred in a movie. As a favor to a Nike executive, she agreed to display Nike shoes in a basketball scene. No fee was paid by Nike.
7. Cash was disbursed on account (to reduce accounts payable), $17.
8. Collected cash on account, $18.
9. Borrowed cash from a bank, $50.
10. Sold additional common stock for cash to new investors, $90.
11. The president of the company sold 5,000 shares of his personal holdings of Nike stock through his stockbroker.

Required

1. By using a format similar to Exhibit 1-2 (p. [redacted]), prepare an analysis showing the effects of the June transactions on the financial position of Nike.
2. Prepare a balance sheet as of June 3.

1-31 Analysis of Transactions

Consider the following January transactions:

1. XYZ Corporation is formed on January 1, 20X1, by three persons, Xiao, Yergen, and Zimbel. XYZ will be a wholesale distributor of PC software. Each of the

three investors is issued 10,000 shares of common stock ($1 par value) for $10 cash per share. Use two stockholders' equity accounts: Capital Stock (at par) and Additional Paid-in Capital.

2. Merchandise inventory of $80,000 is acquired for cash.
3. Merchandise inventory of $85,000 is acquired on open account.
4. Unsatisfactory merchandise that cost $11,000 in transaction 3 is returned for full credit.
5. Equipment of $40,000 is acquired for a cash down payment of $10,000 plus a 3-month promissory note of $30,000.
6. As a favor, XYZ sells equipment of $4,000 to a business neighbor on open account. The equipment had cost $4,000.
7. XYZ pays $20,000 on the account described in transaction 3.
8. XYZ collects $2,000 from the business neighbor. See transaction 6.
9. XYZ buys merchandise inventory of $100,000. One-half of the amount is paid in cash, and one-half is owed on open account.
10. Zimbel sells half of his common stock to Quigley for $12 per share.

Required

1. By using a format similar to Exhibit 1-2, prepare an analysis showing the effects of January transactions on the financial position of XYZ Corporation.
2. Prepare a balance sheet as of January 31, 20X1.

1-32 Analysis of Transactions

You began a business as a wholesaler of woolen goods. The following events have occurred:

1. On March 1, 20X1, you invested $60,000 cash in your new sole proprietorship, which you call Yukon Products.
2. Acquired $10,000 inventory for cash.
3. Acquired $8,000 inventory on open account.
4. Acquired equipment for $15,000 in exchange for a $5,000 cash down payment and a $10,000 promissory note.
5. A large retail store, which you had hoped would be a big customer, discontinued operations.
6. You take gloves home for your family. The gloves were carried in Yukon's inventory at $600. (Regard this as a borrowing by you from Yukon Products.)
7. Gloves that cost $300 in transaction 2 were of the wrong style. You returned them and obtained a full cash refund.
8. Gloves that cost $800 in transaction 3 were of the wrong color. You returned them and obtained gloves of the correct color in exchange.
9. Caps that cost $500 in transaction 3 had an unacceptable quality. You returned them and obtained full credit on your account.
10. Paid $1,000 on promissory note.
11. You use your personal cash savings of $5,000 to acquire some equipment for Yukon. You consider this as an additional investment in your business.
12. Paid $3,000 on open account.
13. Two scarf manufacturers who are suppliers for Yukon announced a 7% rise in prices, effective in 60 days.
14. You use your personal cash savings of $1,000 to acquire a new TV set for your family.

15. You exchange equipment that cost $4,000 in transaction 4 with another wholesaler. However, the equipment received, which is almost new, is smaller and is worth only $1,500. Therefore, the other wholesaler also agrees to pay you $500 in cash now and an additional $2,000 in cash in 60 days. (No gain or loss is recognized on this transaction.)

Required

1. By using Exhibit 1-2 (p. 00) as a guide, prepare an analysis of Yukon's transactions for March. Confine your analysis to the effects on the financial position of Yukon Products.
2. Prepare a balance sheet for Yukon Products as of March 31, 20X1.

1-33 Personal and Professional Entities

Jose Gomez, a recent graduate of a law school, was penniless on December 25, 20X1.

1. On December 26, Gomez inherited an enormous sum of money.
2. On December 27, he placed $40,000 in a business checking account for his unincorporated law practice.
3. On December 28, he purchased a home for a down payment of $100,000 plus a home mortgage payable of $250,000.
4. On December 28, Gomez agreed to rent a law office. He provided a $1,000 cash damage deposit (from his business cash), which will be fully refundable when he vacates the premises. This deposit is a business asset. Rental payments are to be made in advance on the first business day of each month. (The first payment of $700 is not to be made until January 2, 20X2.)
5. On December 28, Gomez purchased a computer for his law practice for $2,000 cash plus a $2,000 promissory note due in 90 days.
6. On December 28, he also purchased legal supplies for $1,000 on open account.
7. On December 28, Gomez purchased office furniture for his practice for $4,000 cash.
8. On December 29, Gomez hired a legal assistant receptionist for $380 per week. She was to report to work on January 2.
9. On December 30, Gomez's law practice lent $2,000 of cash in return for a 1-year note from Genie Kulp, a local candy store owner. Kulp had indicated that she would spread the news about the new lawyer.

Required

1. Use the format demonstrated in Exhibit 1-2 (p. 00) to analyze the transactions of Jose Gomez, lawyer. To avoid crowding, put your numbers in thousands of dollars. Do not restrict yourself to the account titles in Exhibit 1-2.
2. Prepare a balance sheet as of December 31, 20X1.

1-34 Bank Balance Sheet

Consider the following balance sheet accounts of Citigroup Inc. (in millions of $):

Assets		Liabilities and Stockholders' Equity	
Cash	$ 14,158	Deposits	$261,091
Investment securities	371,338	Other liabilities	406,160
Loans receivable	237,527	Total liabilities	667,251
Other assets	93,914	Stockholders' equity	49,686
Total assets	$716,937	Total liabilities and stockholders' equity	716,937

This balance sheet illustrates how it gathers and uses money. More than 80% of the total assets are in the form of investments and loans, and more than 35% of the total liabilities and stockholders' equity are in the form of deposits, a major liability. That is, these financial institutions are in the business of raising funds from depositors and, in turn, lending those funds to businesses, homeowners, and others. The stockholders' equity is usually tiny in comparison with the deposits (only about 7% in this case).

Required

1. What Citigroup accounts would be affected if you deposited $1,000?
2. Why are deposits listed as liabilities?
3. What accounts would be affected if the bank loaned John Solvang $50,000 for home renovations?
4. What accounts would be affected if Isabel Ramos withdrew $4,000 from her savings account?

1-35 Balance Sheet

KLM Royal Dutch Airlines is an international airline with a home base at Schiphol Airport in Amsterdam. It is the world's first scheduled airline still operating under its original name. It has more than 26,000 employees, 80% of them located in the Netherlands. On March 31, 2000, KLM's noncash assets were $9,046 million. Total assets were $10,549 million, and total liabilities were $8,105 million. Dollar amounts are translated from the Netherlands' monetary unit, the guilder.

Required

1. Compute the following:
   a. KLM's cash on March 31, 2000.
   b. KLM's stockholders' equity on March 31, 2000.
2. Explain the easiest way to determine KLM's total liabilities and stockholders' equity from the information given in this problem.

1-36 Presenting Paid-In Capital

Consider excerpts from two balance sheets (amounts in millions):

CITIGROUP	
Common stock ($.01 par value; authorized shares: 6.0 billion), issued shares 3, 612, 385, 458	$36
Additional paid-in capital	10,036

IBM	
Common stock, par value $.20 per share—shares authorized: 4,687,500,000; shares issued: 1,876,665,245 shares (includes capital in excess of par value)	$7,752,000

1. How would the presentation of Citigroup stockholders' equity accounts be affected if 1 billion more shares were issued for $70 cash per share?
2. How would the presentation of IBM's stockholders' equity accounts be affected if 1 million more shares were issued for $100 cash per share? Be specific.

1-37 Presenting Paid-In Capital

Honeywell, Inc., maker of thermostats and a variety of complex control systems, presented the following in its balance sheet shortly before it was purchased by GE in 2000.

Common stock—$1.00 par value, 957,599,006 shares issued	?
Additional paid-in capital	$2,318,000,000

What amount should be shown on the common stock line? What was the average price per share paid by the original investors for the Honeywell common stock? How do your answers compare with the $50 market price of the stock? Comment briefly.

1-38 Presenting Paid-In Capital

Honda Motor Company is the largest producer of motorcycles in the world, as well as a major auto manufacturer. The following items were presented in its balance sheet of March 31, 1997:

Common stock—¥50 par value, 974 million shares issued and outstanding	?
Additional paid-in capital (in millions of yen)	¥171,910

Note: ¥ is the symbol for Japanese yen.

1. What amount should be shown on the common stock line?
2. What was the average price per share paid by the original investors for the Honda common stock?
3. How do your answers compare with the ¥580 market price of the stock? Comment briefly.

1-39 Prepare Balance Sheet

Amazon is the world's leading e-retailer. Amazon's December 31, 1999 balance sheet included the following items ($ in millions):

Property, plant, and equipment	$ 317
Accounts payable	463
Capital stock	3
Cash	?
Total stockholders' equity	?
Long-term debt	1,466
Total assets	2,472
Other assets	1,564
Other stockholders' equity	?
Other liabilities	$ 276

Required

Prepare a condensed balance sheet, including amounts for

1. Cash.
2. Additional and total stockholders' equity.
3. Total liabilities.

1-40 Prepare Balance Sheet

May Department Stores, headquartered in St. Louis, operates Lord & Taylor, Filene's, and six other department store chains. Its balance sheet of January 29, 2000 contained the following items ($ in millions):

Long-term debt payable	$ 3,560
Cash	(1)
Total shareholders' equity	(2)
Total liabilities	(3)
Accounts receivable	2,173
Common stock	163
Inventories	2,817
Accounts payable	1,030
Property, plant, and equipment	4,769
Additional shareholders' equity	3,914
Other assets	1,160
Other liabilities	2,268
Total assets	$10,935

Prepare a condensed balance sheet, including amounts for

Required

1. Cash. What do you think of its relative size?
2. Total shareholders' equity.
3. Total liabilities.

1-41 Accounting and Ethics

A survey of high school seniors and college freshmen by the AICPA showed that accountants are given high marks for their ethics. Professional associations for both internal accountants and external auditors place much emphasis on their standards of ethical conduct. Discuss why maintaining a reputation for ethical conduct is important for (1) accountants within an organization, and (2) external auditors. What can accountants do to foster a reputation for high ethical standards and conduct?

1-42 Gap Annual Report

This and similar problems in succeeding chapters focus on the financial statements of an actual company. Gap, Inc., operates nearly 2,000 retail stores in the United States and abroad.

As each homework problem is solved, readers gradually strengthen their understanding of actual financial statements in their entirety.

Refer to Gap's balance sheet in appendix A at the end of the book and answer the following questions:

1. How much cash did Gap have on February 1, 1997? (Include cash equivalent as part of cash.)
2. What were the total assets on February 1, 1997 and on February 3, 1996?
3. Write the company's accounting equation as of February 1, 1997, by filling in the dollar amounts: Assets = Liabilities + Stockholders' equity.

Consider long-term obligations under capital leases and deferred income taxes to be liabilities.

1-43 Financial Statement Research

Select the financial statements of any company, and focus on the balance sheet.

Required

1. Identify the amount of cash (including cash equivalents, if any) shown on the most recent balance sheet.
2. What were the total assets shown on the most recent balance sheet, and the total liabilities plus stockholders' equity? How do these two amounts compare?
3. Compute total liabilities and total stockholders' equity. (Assume that all items on the right side of the balance sheet that are not explicitly listed as stockholders' equity are liabilities.) Compare the size of the liabilities to stockholders' equity, and comment on the comparison. Write the company's accounting equation as of the most recent balance sheet date, by filling in the dollar amounts.

1-44 The Cisco Annual Report

This and similar problems in succeeding chapters focus on the financial statements of an actual company. Cisco is the worldwide leader in networking for the Internet. As each of these homework problems is solved, readers gradually strengthen their understanding of actual financial statements in their entirety.

Refer to Cisco's balance sheet in appendix A at the end of the book and answer the following questions:

1. How much cash did Cisco have on July 29, 2000? (Include cash equivalent as part of cash.)
2. What were the total assets on July 29, 2000 and on July 31, 1999?
3. Write the company's accounting equation as of July 29, 2000, by filling in the dollar amounts: Assets = Liabilities + Stockholders' equity.

Consider minority interests and deferred income taxes to be liabilities.

COLLABORATIVE LEARNING EXERCISE

1-45 Understanding Transactions

Form groups of three to five students each. Each group should choose one of the companies included in the Dow Jones Industrial Average (see Exhibit 1-1), and find its most recent balance sheet. (You might try the company's home page on the Internet; the majority of Dow companies include their financial statements on their Web site.) Ignore much of the detail on the balance sheet, focusing on the following accounts: cash, inventory, notes payable, accounts payable, and total stockholders' equity.

Divide the following six assumed transactions among the members of the group:

1. Sold 1 million shares of common stock for a total of $10 million (ignore par value).
2. Bought inventory for cash of $3 million.
3. Borrowed $5 million from the bank, receiving the $5 million in cash.
4. Bought inventory for $6 on open account.
5. Paid $4 million to suppliers for inventory bought on open account.
6. Bought equipment for $8 million cash.

Required

1. The student responsible for each transaction should explain to the group how the transaction would affect the company's balance sheet, using the accounts listed earlier.
2. By using the most recent published balance sheet as a starting point, prepare a balance sheet for the company assuming that the preceding six transactions are the only transactions since the date of the latest balance sheet.

1-46 Internet Case

Go to http://www.prenhall.com/horngren to locate the Cisco annual report. Click on *Investor Relations*. Then, locate the *View Annual Report* button, and select it to view the latest annual report.

Answer the following questions concerning Cisco:

1. Select *Letter to Shareholders* from the menu. Does Cisco intend to grow during the coming year? What is fueling Cisco's growth?
2. Select *Corporate Profile* from the menu. In how many countries does Cisco operate? How many employees work at Cisco?
3. Move on to *Management' Discussion and Analysis*. What has been the trend for net sales? Net income? What does management have to say about the trends? Which region of the world contributed the most to sales?
4. What does management say about its accounts receivable and inventories assets? Are the trends favorable?

5. What "risk factors" does Cisco face? How might these factors affect future business?
6. Select the *Report of Independent Accountants*. Who is responsible for the preparation, integrity, and fair presentation of Cisco's financial statements? What is the auditor's responsibility?