Chapter 1: Introduction to Accounting and Business

*... "Just like fans at a football game, the owners of a business want their business to "**win**" against their competitors in the marketplace. While having our football team win can be a source of pride, winning in the marketplace goes beyond pride and has many tangible benefits. Companies that are winners are better able to serve customers, to provide good jobs for employees, and to make more money for the owners".*

"*Accounting is language of business*".
Source: Warren Reeve Duchac Accounting, 23e

In this chapter, we will discuss what a business is, how it operates, and the role that accounting plays first. Then the development of accounting principles and practices, the accounting equation and definition of each element of the equation are intended for discussion. Finally, we will describe and illustrate how business transactions can be recorded, and the financial statements of a proprietorship.

1.1. The Nature of a Business

A business is an organization in which basic resources (inputs), such as materials and labor, are assembled and processed to provide goods or services (outputs) to customers. The objective of most businesses is to earn a ***profit***. Profit is the difference between the amounts received from customers for goods or services and the amounts paid for the inputs used to provide the goods or services. In this course, we focus on businesses operating to earn a profit. However many of the same concepts and principles also apply to not-for-profit organizations such as hospitals, churches and government agencies.

1.2. Types of Business Organizations

Three types of businesses operated for profit include service, merchandising, and manufacturing businesses. Each type of business and some examples are described below.

- **Service businesses** provide services rather than products to customers.
  - Ethiopian Air Lines (transportation services),
  - Adika Company (entertainment services),
  - Hotels, Lodges, Schools, Medical services, etc
- **Merchandising businesses** sell products they purchase from other businesses to customers.
  - Wholesalers (general merchandise)
  - Retailers, Agents, etc
- **Manufacturing businesses** change basic inputs into products that are sold to customers.
  - General Motors Corporation (cars, trucks),
  - Dell Inc. (personal computers),
  - Sugar factory, Furniture factory, etc.

Form of Business Entity

The following Table 2 shows the form of business entities with their characteristics:

Form of Business Entity	Characteristics
1. **Proprietorship** is owned by one individual.	· Easy and cheap to organize. · Resources are limited to those of the owner. · Used by small businesses.
2. **Partnership** is owned by two or more individuals.	· Combines the skills and resources of more than one person.
3. **Corporation** is organized statutes as a separate legal taxable entity.	· Ownership is divided into shares called stock. · Can obtain large amounts of resources by issuing stock. · Used by large businesses.

Table 2: Form of Business Entity

The three types of businesses we discussed earlier - service, merchandising, and manufacturing - may be organized as proprietorships, partnerships, or corporations.

1.3. The Role of Accounting in Business

What is the role of accounting in business? The simplest answer is that accounting provides information for managers to use in operating the business. In addition, accounting provides information to other users in assessing the economic performance and condition of the business.

Thus, ***accounting*** can be defined as an information system that provides reports to users about the economic activities and condition of a business. You may think of accounting as the "*language of business*." This is because accounting is the means by which businesses' financial information is communicated to users.

The process by which accounting provides information to users is as follows:

- Identify users.
- Assess users' information needs.
- Design the accounting information system to meet users' needs.
- Record economic data about business activities and events.
- Prepare accounting reports for users.

As illustrated in Figure 1, users of accounting information can be divided into two groups: internal users and external users.

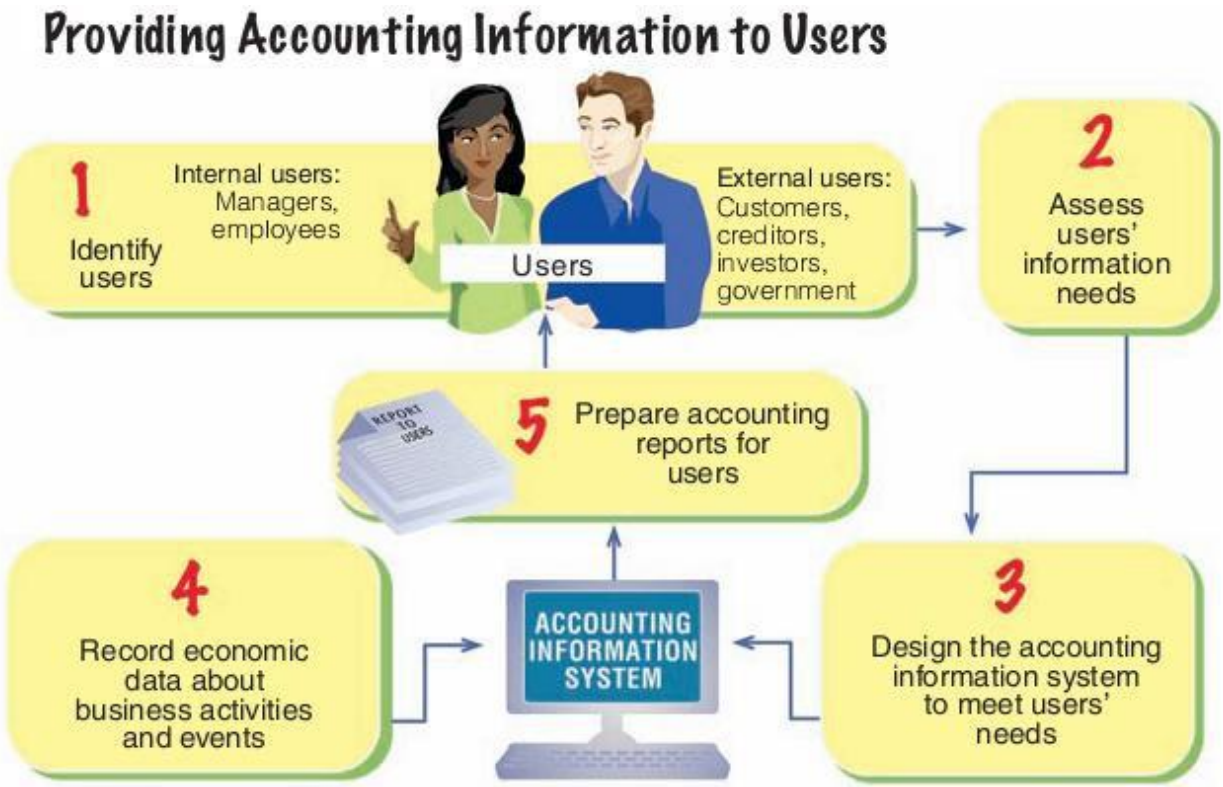


Figure 1: Users of Accounting Information

Internal users of accounting information include managers and employees. These users are directly involved in managing and operating the business. The area of accounting that provides internal users with information is called ***managerial accounting or management accounting***. The objective of managerial accounting is to provide relevant and timely information for managers' and employees' decision-making needs.

Often times, such information is sensitive and is not distributed outside the business. Examples of sensitive information might include information about customers, prices, and plans to expand the business. Managerial accountants employed by a business are employed in private accounting.

External users of accounting information include customers, creditors, and the government. These users are not directly involved in managing and operating the business. The area of accounting that provides external users with information is called ***financial accounting***. The objective of financial accounting is to provide relevant and timely information for the decision-making needs of users outside of the business. For example, financial reports on the operations and condition of the business are useful for banks and other creditors in deciding whether to lend money to the business.

General-purpose financial statements are one type of financial accounting report that is distributed to external users. The term general-purpose refers to the wide range of decision- making needs that these reports are designed to serve.

Role of Ethics in Accounting and Business

The objective of accounting is to provide relevant, timely information for user decision making. Accountants must behave in an ethical manner so that the information they provide will be trustworthy and, thus, useful for decision making. Managers and employees must also behave in an ethical manner in managing and operating a business. Otherwise, no one will be willing to invest in or loan money to the business.

Ethics are moral principles that guide the conduct of individuals. Unfortunately, business managers and accountants sometimes behave in an unethical manner. A number of managers of the companies [Enron, WorldCom, Arthur Anderson, Xerox Corporation, etc]* engaged in accounting or business fraud. These ethical violations led to fines, firings, and lawsuits. In some cases, managers were criminally prosecuted, convicted, and sent to prison.

What went wrong for the managers and companies listed above? The answer normally involved one or both of the following two factors:

- *Failure of Individual Character.*

An ethical manager and accountant are honest and fair. However, managers and accountants often face pressures from supervisors to meet company and investor expectations. In many of the cases, managers and accountants justified small ethical violations to avoid such pressures. However, these small violations became big violations as the company's financial problems became worse.

- *Culture of Greed and Ethical Indifference.*

By their behavior and attitude, senior managers set the company culture. In most of the companies listed above, the senior managers created a culture of greed and indifference to the truth.

*

- **Enron** · fraudulently inflated its financial results · Bankruptcy. Senior executives criminally convicted. Over $60 billion in stock market losses.
- **WorldCom** · Misstated financial results by nearly $9 billion · Bankruptcy. Criminal conviction of CEO and CFO. Over $100 billion in stock market losses. Directors forced to pay $18 million.
- **Xerox Corporation** · Recognized $3 billion in revenue prior to when it should have been · $10 million fine to SEC. Six executives forced to pay $22 million.

Guideline for Ethical Conduct

1. Identify an ethical decision by using your personal ethical standards of honesty and fairness.
2. Identify the consequences of the decision and its effect on others.
3. Consider your obligations and responsibilities to those that will be affected by your decision.
4. Make a decision that is ethical and fair to those affected by it.

1.4. The Profession of Accounting

Numerous career opportunities are available for students majoring in accounting. Currently, the demand for accountants exceeds the number of new graduates entering the job market. This is partly due to the increased regulation of business caused by the accounting and business frauds

discussed above. Also, more and more businesses have come to recognize the importance and value of accounting information.

As indicated earlier, accountants employed by a business are said to be employed in private accounting. ***Private accountants*** have a variety of possible career options within a company. Some of these career options are shown in Table 1. Accountants who provide audit services, called auditors, verify the accuracy of financial records, accounts, and systems. As shown in Table 1, several private accounting careers have certification options.

Accountants and their staff who provide services on a fee basis are said to be employed in public accounting. In ***public accounting***, an accountant may practice as an individual or as a member of a public accounting firm. Public accountants who have met a state's education, experience, and examination requirements may become Certified Public Accountants (CPAs). CPAs generally perform general accounting, audit, or tax services. CPAs have slightly better starting salaries than private accountants. Career statistics indicate, however, that these salary differences tend to disappear over time. Because all functions within a business use accounting information, experience in private or public accounting provides a solid foundation for a career. Many positions in industry and in government agencies are held by individuals with accounting backgrounds.

Accounting Career Track	**Description**	**Career Options**
Private Accounting	Accountants employed by companies, government and not-for-profit entities.	• Bookkeeper • Payroll clerk • General accountant • Budget analyst • Cost accountant • Internal auditor • Information technology auditor
Public Accounting	Accountants employed individually or within a public accounting firm in tax or audit services.	• Local firms • National firm

Table 1: Accounting Career Paths

1.5. Accounting Principles and Practices (IFRS)

International Financial Reporting Standards (IFRS) are Standards and Interpretations adopted by the International Accounting Standards Board (IASB). They comprise:

(a) International Financial Reporting Standards;
(b) International Accounting Standards; and
(c) Interpretations developed by the International Financial Reporting Interpretations Committee (IFRIC) or the former Standing Interpretations Committee (SIC).

1.6. Overview of financial reporting requirements in Ethiopia and AABE

1.7. The Accounting Equation

The resources owned by a business are its **assets**. Examples of assets include cash, land, buildings, equipment, etc. The rights or claims to the assets are divided into two types: (1) the rights of creditors and (2) the rights of owners. The rights of creditors are the debts of the business and are called **liabilities**. The rights of the owners are called **owner's equity**. The following equation shows the relationship among assets, liabilities, and owner's equity:

Assets = Liabilities + Ow n er's Eq u ity

This equation is called the **accounting equation**. Liabilities usually are shown before owner's equity in the accounting equation because creditors have first rights to the assets. Given any two amounts, the accounting equation may be solved for the third unknown amount. To illustrate, if the assets owned by a business amount to $100,000 and the liabilities amount to $30,000, the owner's equity is equal to $70,000, as shown below.

Assets = Liabilities + Owner's Equity
$100,000 = $30,000 + OE
$100,000 - $30,000 = OE
$70,000 = OE

1.8. Business Transactions and the Accounting Equation - Illustration

Assume that on November 1, 2013, Ali Yusuf begins a business that will be known as NetSolutions. The first phase of Ali's business plan is to operate NetSolutions as a service business that provides assistance to individuals and small businesses in developing Web pages and in configuring and installing application software in Jig-jiga city. Ali expects this initial phase of the business to last one to two years. During this period, Ali will gather information on the software and hardware needs of customers. During the second phase of the business plan, Ali plans to expand NetSolutions into a personalized retailer of software and hardware for individuals and small businesses. Each transaction or group of similar transactions during NetSolutions' first month of operations is described as follows. The effect of each transaction on the accounting equation is then shown.

a) Ali Yusuf deposits Br 25,000 in AIB S.C bank account in the name of Net-Solutions. The effect of this transaction is to increase the asset cash (on the left side of the equation) by Br 25,000. To balance the equation, the owner's equity (on the right side of the equation) is increased by the same amount. The equity of the owner is referred to by using the owner's

name and "Capital," such as "Ali Yusuf, Capital." The effect of this transaction on NetSolutions' accounting equation is shown below.

	Assets	=	**Owner's Equity**
	Cash	=	Ali Yusuf, Capital
a.	+ 25,000		+ 25,000 initial investment

b) NetSolutions exchanged Br 20,000 cash for land. The land is located in a new business park with convenient access to transportation facilities. Ali Yusuf plans to rent office space and equipment during the first phase of the business plan. During the second phase, Ali plans to build an office and a warehouse on the land. The purchase of the land changes the makeup of the assets but does not change the total assets. The items in the equation prior to this transaction and the effect of the transaction are shown next, as well as the new amounts, or *balances*, of the items.

	Assets		=	**Owner's Equity**
	Cash	+ Land	=	Ali Yusuf, Capital
Bal.	Br 25,000			Br 25,000
b.	-20,000	+ 20,000		-
Bal.	Br 5,000	Br 20,000		Br 25,000

c) During the month, NetSolutions entered into a credit transaction, buying supplies for Br 1,350 and agreeing to pay the supplier in the near future. This type of transaction is called a purchase *on account*. The liability created is called an *account payable*. Items such as supplies that will be used in the business in the future are called prepaid expenses, which are assets. The effect of this transaction is to in-crease assets and liabilities by Br 1,350, as follows:

	Assets			=	**Liabilities**	**Owner's Equity**
	Cash	+ Supplies	+ Land	=	Account Payable	+ Ali Yusuf, Capital
Bal.	Br 5,000		Br 20,000			Br 25,000
c.	-	+ 1,350	-		+ 1,350	-
Bal.	Br 5,000	Br 1,350	Br 20,000		Br 1,350	Br 25,000

d) During its first month of operations, NetSolutions provided services to customers, earning fees of Br 7,500 and receiving the amount in cash. The receipt of cash increases NetSolutions' assets and also increases Ali Yusuf's equity in the business. Thus, this transaction is recorded as an increase in Cash and Fees Earned of Br 7,500 as shown below.

	Assets			=	**Liabilities**	**Owner's Equity**
	Cash	+ Supplies	+ Land	=	Account Payable	+ Ali Yusuf, Capital
Bal.	Br 5,000	Br 1,350	Br 20,000		Br 1,350	Br 25,000
d.	+ 7,500	-	-		-	+ 7,500 Fees earned
Bal.	Br 12,500	Br 1,350	Br 20,000		Br 1,350	Br 32,500

e) NetSolutions paid the following expenses during the month: wages, Br 2,125; rent, Br 800; utilities, Br 450; and miscellaneous, Br 275. Miscellaneous expenses include small amounts paid for such items as postage, coffee, and magazine subscriptions. The effect of this group of transactions is the opposite of the effect of revenues. These transactions reduce cash and owner's equity. Like fees earned, the expenses are recorded to the right of Ali Yusuf, Capital. However, since expenses reduce owner's equity, the expenses are entered as negative amounts.

	Assets			=	Liabilities	Owner's Equity
	Cash	+ Supplies	+ Land	=	Account Payable	+ Ali Yusuf, Capital
Bal.	Br 12,500	Br 1,350	Br 20,000		Br 1,350	Br 32,500
						- 2,125 wages exp.
						- 800 rent exp.
						- 450 utilities exp
e.	- 3,650	-	-		-	- 275 misc.exp.
Bal.	Br 8,850	Br 1,350	Br 20,000		Br 1,350	Br 28,850

f) NetSolutions pays Br 950 to creditors during the month. When you pay your monthly credit card bill, you decrease the cash in your checking account and also decrease the amount you owe to the credit card company. Likewise, when NetSolutions pays Br 950 to creditors, it reduces both assets and liabilities, as shown below.

	Assets			=	Liabilities	Owner's Equity
	Cash	+ Supplies	+ Land	=	Account Payable	+ Ali Yusuf, Capital
Bal.	Br 8,850	Br 1,350	Br 20,000		Br 1,350	Br 28,850
f.	- 950	-	-		- 950	-
Bal.	Br 7,900	Br 1,350	Br 20,000		Br 400	Br 28,850

g) At the end of the month, the cost of the supplies on hand (not yet used) is Br 550. The remainder of the supplies Br 800 (Br 1,350 - Br 550) was used in the operations of the business and is treated as an expense. This decrease of Br 800 in supplies and owner's equity is shown as follows:

	Assets			=	Liabilities	Owner's Equity
	Cash	+ Supplies	+ Land	=	Account Payable	+ Ali Yusuf, Capital
Bal.	Br 7,900	Br 1,350	Br 20,000		Br 400	Br 28,850
g.	-	-800	-		-	- 800 supplies exp.
Bal.	Br 7,900	Br 550	Br 20,000		Br 400	Br 28,050

h) At the end of the month, Ali Yusuf withdraws Br 2,000 in cash from the business for personal use. This transaction is the exact opposite of an investment in the business by the owner. You should be careful not to confuse withdrawals by the owner with expenses. Withdrawals *do not* represent assets or services used in the process of earning revenues. Instead, withdrawals are considered a distribution of capital to the owner. Owner withdrawals are identified by the owner's name followed by *Drawing or Withdrawal*. For example, Ali Yusuf's withdrawal would be identified as "Ali Yusuf, Drawing".

Like expenses, withdrawals are recorded in a separate column to the right of Ali Yusuf, Capital. The effect of the Br 2,000 withdrawal is shown as follows:

	Assets			=	Liabilities	Owner's Equity
	Cash	+ Supplies	+ Land	=	Account Payable	+ Ali Yusuf, Capital
Bal.	Br 7,900	Br 550	Br 20,000		Br 400	Br 28,850
h.	- 2,000	-	-		-	- 2,000 A.Y., Drawing
Bal.	Br 5,900	Br 550	Br 20,000		Br 400	Br 26,050

Summary

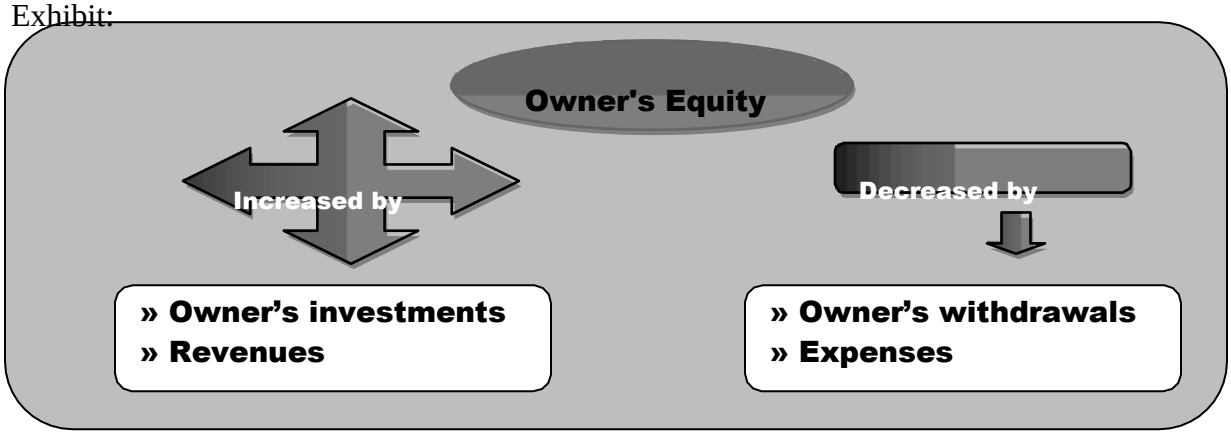
The transactions of NetSolutions are summarized as follows. They are identified by letter, and the balance of each item is shown after each transaction.

	Assets			=	Liabilities	Owner's Equity
	Cash	+ Supplies	+ Land	=	Account Payable	+ Ali Yusuf, Capital
a.	+ 25,000					+ 25,000 initial investment
b.	- 20,000		+ 20,000			-
Bal.	5,000		20,000			25,000
c.	-	+ 1,350	-		+ 1,350	-
Bal.	5,000	1,350	20,000		1,350	25,000
d.	+ 7,500	-	-		-	+ 7,500 Fees earned
Bal.	12,500	1,350	20,000		1,350	32,500
						- 2,125 wages exp.
						- 800 rent exp.
						- 450 utilities exp
e.	- 3,650	-	-		-	- 275 misc.exp.
Bal.	8,850	1,350	20,000		1,350	28,850
f.	- 950	-	-		- 950	-
Bal.	7,900	1,350	20,000		400	28,850
g.	-	-800	-		-	- 800 supplies exp.
Bal.	7,900	550	20,000		400	28,050
h.	- 2,000	-	-		-	- 2,000 A.Y., Drawing
Bal.	**Br 5,900**	**Br 550**	**Br 20,000**		**Br 400**	**Br 26,050**

In reviewing the preceding summary, you should note the following, which apply to all types of businesses:

1. The effect of every transaction is an increase or a decrease in one or more of the accounting equation elements.
2. The two sides of the accounting equation are always equal.
3. The owner's equity is increased by amounts invested by the owner and is decreased by withdrawals by the owner. In addition, the owner's equity is increased by revenues and is decreased by expenses.

The effects of these four types of transactions on owner's equity are illustrated in following
Exhibit:



Financial Statements

After transactions have been recorded and summarized, reports are prepared for users. The accounting reports that provide this information are called financial statements. The principal financial statements of a proprietorship are the income statement, the statement of owner's equity, the balance sheet, and the statement of cash flows. The order in which the statements are normally prepared and the nature of the data presented in each statement are as follows:

1. **Income statement** - A summary of the revenue and expenses for a specific period of time, such as a month or a year.
2. **Statement of owner's equity** - A summary of the changes in the owner's equity that have occurred during a specific period of time, such as a month or a year.
3. **Balance sheet** - A list of the assets, liabilities, and owner's equity as of a specific date, usually at the close of the last day of a month or a year.
4. **Statement of cash flows** - A summary of the cash receipts and cash payments for a specific period of time, such as a month or a year.

All financial statements should be identified by:

- the name of the business,
- the title of the statement, and
- the date or period of time.

The data presented in the *income statement*, the *statement of owner's equity*, and the *statement of cash flows* are fo***r a period of time***. The data presented in the *balance sheet* are ***for a specific date***. You should note the use of *indents, captions, dollar/birr signs*, and *rulings* in the financial statements. They help the reader by emphasizing the sections of the statements.

Illustration of Financial Statements for NetSolutions

Income statement

The income statement reports the revenues and expenses for a period of time, based on the *matching concept*. This concept is applied by matching the expenses with the revenue generated during a period by those expenses. The income statement also reports the excess of the revenue over the expenses incurred. This excess of the revenue over the expenses is called *net income* or *net profit*. If the expenses exceed the revenue, the excess is a *net loss*. The effects of revenue earned and expenses incurred during the month for NetSolutions were shown in the equation as separate increases and decreases in each item. Net income for a period has the effect of increasing owner's equity (capital) for the period, whereas a net loss has the effect of decreasing owner's equity (capital) for the period.

The revenue, expenses, and the net income of Br 3,050 for NetSolutions are reported in following the income statement. The order in which the expenses are listed in the income statement varies among businesses. One method is to list them in order of size, beginning with the larger items. Miscellaneous expense is usually shown as the last item, regardless of the amount.

NetSolutions Income Statement For the Month Ended November 30, 2013		
Fees earned		Br 7,500
Expenses:		
Wages expense	Br 2,125	
Rent expense	800	
Supplies expense	800	
Utilities expense	450	
Miscellaneous expense	275	
Total expenses		4,450
Net income		**Br 3,050**

Statement of Owner's Equity

The statement of owner's equity reports the changes in the owner's equity for a period of time. It is prepared after the income statement because the net income or net loss for the period must be reported in this statement. Similarly, it is prepared before the balance sheet, since the amount of owner's equity at the end of the period must be reported on the balance sheet. Because of this, the statement of owner's equity is often viewed as *the connecting link between the income statement and balance sheet*.

Three types of transactions affected owner's equity for NetSolutions during November: (1) the original investment of Br 25,000, (2) the revenue and expenses that resulted in net income of Br 3,050 for the month, and (3) a withdrawal of Br 2,000 by the owner. This information is summarized in the following statement of owner's equity.

NetSolutions Statement of Owner's Equity For the Month Ended November 30, 2013		
Ali Yusuf, capital, November 1, 2013		Br 0
Investment on November 1, 2013	Br 25,000	
Net income for November	3,050	
	Br 28,050	
Less withdrawals	2,000	
Increase in owner's equity		26,050
Ali Yusuf, capital, November 30, 2013		**Br 26,050**

Balance Sheet

The following balance sheet reports the amounts of NetSolutions' assets, liabilities, and owner's equity at the end of November. The asset and liability amounts are taken from the last line of the summary of transactions presented earlier. Ali Yusuf, Capital as of November 30, 2013, is taken from the statement of owner's equity. The form of balance sheet shown below is called the account form because it resembles the *basic format of the accounting equation*, with assets on the left side and the liabilities and owner's equity sections on the right side. We illustrate an alternative form of balance sheet, called the *report form*, in a later chapter. It presents the liabilities and owner's equity sections below the assets section.

The assets section of the balance sheet normally presents assets in the order that they will be converted into cash or used in operations. Cash is presented first, followed by receivables, supplies, prepaid insurance, and other assets. The assets of a more permanent nature are shown next, such as land, buildings, and equipment. In the liabilities section of the balance sheet, accounts payable is the only liability. When there are two or more categories of liabilities, each should be listed and the total amount of liabilities presented.

NetSolutions
Balance Sheet
November 30, 2013

Assets		**Liabilities**	
Cash	Br 5,900	Accounts payable	Br 400
Supplies	550	**Owner's Equity**	
Land	20,000	Ali Yusuf, capital	26,050
Total assets	**Br 26,450**	**Total liabilities and owner's Equity**	**Br 26,450**

Statement of Cash Flows

The statement of cash flows consists of *three sections*, as we see in NetSolutions' statement of cash flows: (1) operating activities, (2) investing activities, and (3) financing activities. Each of these sections is briefly described below.

Cash Flows from Operating Activities - this section reports a summary of cash receipts and cash payments from operations. The net cash flow from operating activities will normally differ from the amount of net income for the period. NetSolutions reported net cash flows from operating activities of Br 2,900 and net income of Br 3,050. This difference occurs because revenues and expenses may not be recorded at the same time that cash is received from customers or paid to creditors.

Cash Flows from Investing Activities - this section reports the cash transactions for the acquisition and sale of relatively permanent assets. NetSolutions paid Br 20,000 for the purchase of land during November.

Cash Flows from Financing Activities - this section reports the cash transactions related to cash investments by the owner, borrowings, and cash withdrawals by the owner. Ali Yusuf invested Br 25,000 in the business and withdrew Br 2,000 during November. Preparing the statement of cash flows requires that each of the November cash transactions for NetSolutions be classified as *operating, investing, or financing activities*. Using the summary of transactions in illustration above, the November cash transactions for NetSolutions can be classified as follows:

Transaction	Amount	Cash Flow Activity
a.	Br 25,000	Financing (Investment by Ali Yusuf)
b.	- 20,000	Investing (Purchase of land)
d.	+ 7,500	Operating (Fees earned)
e.	- 3,650	Operating (Payment of expenses)
f.	- 950	Operating (Payment of account payable)
h.	- 2,000	Financing (Withdrawal by Ali Yusuf)

Transactions (c) and (g) are not listed above since they did not involve a cash receipt or payment. In addition, the payment of accounts payable in transaction (f) is classified as an operating

activity since the account payable arose from the purchase of supplies, which are used in operations. Using the preceding classifications of November cash transactions, the statement of cash flows is prepared as shown below for NetSolutions:

NetSolutions **Statement of Cash Flows** **For the Month Ended November 30, 2013**		
Cash flows from operating activities:		
Cash received from customers	Br 7,500	
Deduct cash payments for expenses and payments to creditors	4,600	
Net cash flow from operating activities		Br 2,900
Cash flows from investing activities:		
Cash payments for purchase of land		(20,000)
Cash flows from financing activities:		
Cash received as owner's investment	Br 25,000	
Deduct cash withdrawal by owner	2,000	
Net cash flow from financing activities		23,000
Net cash flow and November 30, 2013, cash balance		**Br 5,900**

The ending cash balance shown on the statement of cash flows also appears on the balance sheet as of the end of the period. To illustrate, the ending cash of Br 5,900 reported on the November statement of cash flows in above also appears as the amount of cash on hand in the November 30, 2013, balance sheet. Since November is NetSolutions' first period of operations, the net cash flow for November and the November 30, 2013, cash balance is the same amount, Br 5,900. In subsequent periods, NetSolutions will report in its statement of cash flows a beginning cash balance, an increase or a decrease in cash for the period, and an ending cash balance. For example, assume that for December NetSolutions has a decrease in cash of Br 3,835. The last three lines of NetSolutions' statement of cash flows for December appear as follows:

Decrease in cash	Br 3,835
Cash as of December 1, 2013	5,900
Cash as of December 31, 2013	**Br 2,065**

Note: Depending upon the method of preparing the cash flows from operating activities section of the statement of cash flows, net income (or net loss) may also appear on the statement of cash flows. This interrelationship or method of preparing the statement of cash flows, called the "*indirect method*".

Interrelationships among Financial Statements

As mentioned earlier, financial statements are prepared in the *order* of the *income statement, statement of owner's equity, balance sheet, and statement of cash flows*. Preparing them in this order is important because the financial statements are *interrelated*. Using the financial statements of NetSolutions as an example, these interrelationships are discussed as follows:

1. The income statement and the statement of owner's equity are interrelated. The *net income or net loss* appears on the income statement and also on the statement of owner's equity as either an addition (net income) to or deduction (net loss) from the beginning owner's equity and any additional investments by the owner during the period. For instance, NetSolutions'

net income of Br 3,050 for November is added to Ali Yusuf's investment of Br 25,000 in the statement of owner's equity.

2. The statement of owner's equity and the balance sheet are interrelated. The owner's capital at the end of the period on the statement of owner's equity also appears on the balance sheet as owner's capital. For instance, Ali Yusuf, Capital of Br 26,050 as of November 30, 2013 on the statement of owner's equity also appears on the November 30, 2013, balance sheet.
3. The balance sheet and the statement of cash flows are interrelated. The cash on the balance sheet also appears as the end-of-period cash on the statement of cash flows. For instance, the cash of Br 5,900 reported on NetSolutions' balance sheet as of November 30, 2013, is also reported on NetSolutions' November statement of cash flows as the end-of-period cash.

The preceding interrelationships are important in analyzing financial statements and the impact of transactions on a business. In addition, these interrelationships serve as a check on whether the financial statements have been prepared correctly. For example, if the ending cash on the statement of cash flows doesn't agree with the balance sheet cash, then an error has occurred.

To summarize,

- *Accounting is an information system that provides reports to stakeholders about the economic activities and condition of a business.*
- *All business transactions can be stated in terms of changes in the elements of the accounting equation.*
- *Financial statements are used to evaluate the current financial condition of a business and to predict its future operating results and cash flows. For example, bank loan officers use a business's financial statements in deciding whether to grant a loan to the business. Once the loan is granted, the borrower may be required to maintain a certain level of assets in excess of liabilities. The business's financial statements are used to monitor this level.*

Exercises 1

JJ-Attorney is a sole proprietorship owned and operated by John Jameson. On July 1, 2013, JJ-Attorney has the following assets and liabilities: cash, $1,000; accounts receivable, $3,200; supplies, $850; land, $10,000; accounts payable, $1,530. Office space and office equipment are currently being rented, pending the construction of an office complex on land purchased last year. Business transactions during July are summarized as follows:

a. Received cash from clients for services, $3,928.
b. Paid creditors on account, $1,055.
c. Received cash from John Jameson as an additional investment, $3,700.
d. Paid office rent for the month, $1,200.
e. Charged clients for legal services on account, $2,025.
f. Purchased office supplies on account, $245.
g. Received cash from clients on account, $3,000.
h. Received invoice for paralegal services from client for July (to be paid on Aug 10), $1,635.
i. Paid the following expenses: wages expense, $850; answering service expense, $250; utilities expense, $325; and miscellaneous expense, $75.
j. Determined that the cost of office supplies on hand was $980; therefore, the cost of supplies used during the month was $115.
k. Jameson withdrew $1,000 in cash from the business for personal use.

Instructions

1. Determine the amount of owner's equity (John Jameson's capital) as of July 1, 2013.
2. State the assets, liabilities, and owner's equity as of July 1 in equation form similar to that shown in this chapter. In tabular form below the equation, indicate the in-creases and decreases resulting from each transaction and the new balances after each transaction.
3. Prepare an income statement for July, a statement of owner's equity for July, and a balance sheet as of July 31, 2013.
4. Prepare a statement of cash flows for July.

Discussion

1. What is the objective of most businesses?
2. What is the difference between a manufacturing business and a service business? Is a restaurant a manufacturing business, a service business, or both?
3. Who are normally included as the stakeholders of a business?
4. What is the role of accounting in business?
5. Land with an assessed value of $250,000 for property tax purposes is acquired by a business for $375,000. Seven years later, the plot of land has an assessed value of $400,000 and the business receives an offer of $725,000 for it. Should the monetary amount assigned to the land in the business records now be increased?
6. Assuming that the land acquired in (5) was sold for $725,000, how would the various elements of the accounting equation is affected?
7. A business had revenues of $420,000 and operating expenses of $565,000. Did the business (a) incur a net loss or (b) realize net income?
8. A business had revenues of $919,500 and operating expenses of $738,600. Did the business (a) incur a net loss or (b) realize net income?
9. What particular item of financial or operating data appears on both the income statement and the statement of owner's equity?
10. What item appears on both the balance sheet and the statement of owner's equity?
11. What item appears on both the balance sheet and the statement of cash flows?

Exercises 2

1. D. William is the owner and operator of ABC, a motivational consulting business. At the end of its accounting period, December 31, 2007, ABC has assets of $617,000 and liabilities of $382,000. Using the accounting equation, determine the following amounts:
   a. Owner's equity, as of December 31, 2007.
   b. Owner's equity, as of December 31, 2008, assuming that assets increased by $114,000 and liabilities decreased by $29,000 during 2008.
2. K. Hagan is the owner and operator of XYZ, a café and restaurant business. At the end of its accounting period, December 31, 2009, XYZ has assets of $336,000 and liabilities of $172,500. Using the accounting equation, determine the following amounts:
   a. Owner's equity, as of December 31, 2009.
   b. Owner's equity, as of December 31, 2010, assuming that assets increased by $75,000 and liabilities increased by $15,000 during 2010.
3. The assets and liabilities of Smart Travel Service at December 31, 2011, the end of its calendar year, and its revenue and expenses for the year are listed below. The capital of the owner, Lola Sultan was $75,000 at January 1, 2011, the beginning of the year.

Accounts payable ……... $15,300
Accounts receivable ……..24,350
Additional investment…….. 20,000
Cash ……..70,800
Fees earned ……378,200
Land ……100,000
Lola Sultan, drawing …….....$12,000
Miscellaneous expense ……..... 3,150
Office expense ……...91,350
Supplies ……5,350
Wages expense …….181,500

Required: Prepare

a. an income statement for the year ended December 31, 2011.
b. a statement of owner's equity for the year ended December 31, 2011.
c. balance sheet as of December 31, 2011.

4. Describe how the following business transactions affect the three elements of the accounting equation.
   a. Purchased supplies on account.
   b. Purchased supplies for cash.
   c. Paid for utilities used in the business.
   d. Received cash for services performed.
   e. Invested cash in business.
5. From the following list of selected items taken from the records of Maya Appliance Service as of a specific date, identify those that would appear on the income statement & balance sheet:
   a) Accounts Payable
   b) Accounts Receivable
   c) Cash
   d) Fees Earned
   e) Ismail Maya, Capital
   f) Ismail Maya, Drawing
   g) Land
   h) Supplies
   i) Supplies Expense
   j) Utilities Expense
   k) Wages Expense
   l) Wages Payable

Solutions for Exercises 1

1. A = L + OE ====> A - L = OE

{($1,000 + $3,200 + $850 + $10,000) - $1,530} = OE

$15,050 - $1,530

= OE

$13,520 = OE (John Jameson, Capital**)**

2.

	Assets				=	Liabilities	Owner's Equity
	Cash	+ A/Rec.	+ Supplies	+ Land	=	A/Payable	+ John Jameson, Capital
Bal.	1,000	3,200	850	10,000		1,530	13,520 beg. bal.
a.	+ 3,928	-	-	-		-	+ 3,928 fees earned
Bal.	4,928	3,200	850	10,000			
	1,530	17,448	b.	- 1,055	-	-	-
	- 1,055	-					
Bal.	3,873	3,200	850	10,000		475	17,448
c.	+3,700	-	-	-		-	+ 3,700 additional investment
Bal.	7,573	3,200	850	10,000		475	21,148
d.	- 1,200	-	-	-		-	- 1,200 rent expense
Bal.	6,373	3,200	850	10,000		475	19,948
e.	-	+ 2,025	-	-		-	+ 2,025 fees earned
Bal.	6,373	5,225	850	10,000		475	
	21,973	f.	-	-	+ 245	-	+
	245	-					
Bal.	6,373	5,225	1,095	10,000		720	21,973
g.	+3,000	- 3,000	-	-		-	-
Bal.	9,373	2,225	1,095	10,000		720	
21,973							
h.	-	-	-	-		+1,635	- 1,635 paralegal expense
Bal.	9,373	2,225	1,095	10,000		2,355	20,338
i.							- 850 wages expense
							- 325 utilities expense
							- 250 answering service exp.
	- 1,500	-	-	-		-	- 75 misc.
	expense						
Bal.	7,873	2,225	1,095	10,000		2,355	18,838
j.	-	-	- 115	-		-	- 115 supplies expense
Bal.	7,873	2,225	980	10,000		2,355	18,723
k.	- 1,000	-	-	-		-	- 1,000 J. Jameson, Drawing
Bal.	**6,873**	**2,225**	**980**	**10,000**		**2,355**	**17,723**

Chapter 2: Accounting Cycle for Service-Giving Business

Analysing and Recording Transactions Using Accounts

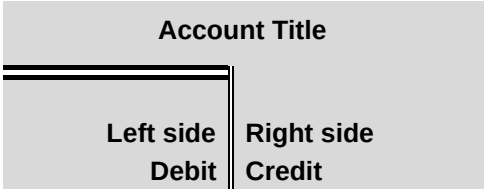
In Chapter 1, we recorded the November transactions for NetSolutions using the accounting equation format. However, this format is not efficient or practical for companies that have to record and summarize thousands or millions of transactions daily. As a result, accounting systems are designed to show the increases and decreases in each financial statement item as a separate record. This record is called an **account**.

To illustrate, the *Cash column* of Exhibit 2.1 of NetSolutions records the increases and decreases in cash. Likewise, the other columns in Exhibit 2.1 record the increases and decreases in Supplies; Land; Accounts Payable; Ali Yusuf, Capital. As we illustrate next, each of these columns can be organized into a separate account that more efficiently records and summarizes transactions.

	Assets			= **Liabilities**	**Owner's Equity**
	Cash	+ Supplies	+ Land =	Account Payable	+ Ali Yusuf, Capital
a.	+ 25,000				+ 25,000 initial investment
b.	- 20,000		+ 20,000		-
Bal.	5,000		20,000		25,000
c.	-	+ 1,350	-	+ 1,350	-
				1,350	
Bal.	5,000	1,350	20,000		25,000
d.	+ 7,500	-	-	-	+ 7,500 Fees earned
Bal.	12,500	1,350	20,000	1,350	32,500
					- 2,125 wages exp.
					- 800 rent exp.
					- 450 utilities exp
e.	- 3,650	-	-	-	- 275 misc.exp.
Bal.	8,850	1,350	20,000	1,350	28,850
f.	- 950	-	-	950	-
				- 400	
Bal.	7,900	1,350	20,000		28,850
g.	-	-800	-	-	- 800 supplies exp.
Bal.	7,900	550	20,000	400	28,050
h.	- 2,000	-	-	-	- 2,000 A.Y., Drawing
Bal.	**Br 5,900**	**Br 550**	**Br 20,000**	**Br 400**	**Br 26,050**

Exhibit 2.1: NetSolutions' summary of November transactions.

An account, in its simplest form, has three parts. First, each account has a **title**, which is the name of the item recorded in the account. Second, each account has a space for recording **increases** in the amount of the item. Third, each account has a space for recording **decreases** in the amount of the item. The account form presented below is called a T-account because it resembles the letter T. The left side of the account is called the *debit side*, and the right side is called the *credit side*.



» The terms debit and credit are derived from the *Latin debere* and *credere*.
» Debits and credits are sometimes abbreviated as **Dr** and **Cr**.

Amounts entered on the left side of an account, regardless of the account title, are called **debits** to the account. When debits are entered in an account, the account is said to be *debited*. Amounts entered on the right side of an account are called **credits**, and the account is said to be *credited*.

Note that many times when accountants analyze complex transactions, they use T accounts to simplify the thought process. In the same way, you will find T accounts a useful device in this and later accounting courses.

The cash account shown below illustrates how NetSolutions' November cash transactions shown in the first column of Exhibit 2.1 would be recorded in an account. Transactions involving receipts of cash are listed on the debit side of the account. The transactions involving cash payments are listed on the credit side.

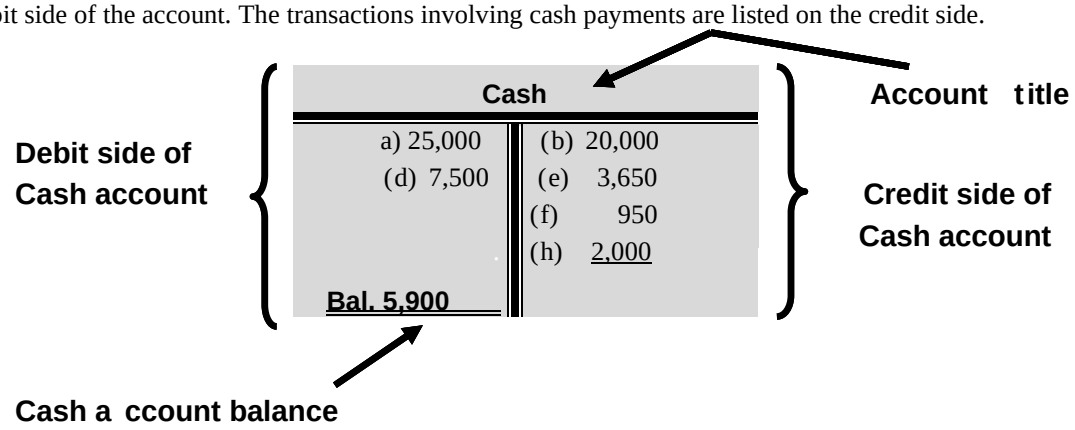


Chart of Accounts

A group of accounts for a business entity is called a ***ledger***. A list of the accounts in the ledger is called a ***chart of accounts***. The accounts are normally listed in the order in which they appear in the financial statements. The balance sheet accounts are usually listed first, in the order of assets, liabilities, and owner's equity. The income statement accounts are then listed in the order of revenues and expenses. Each of these major account classifications is briefly described below.

Classification of Accounts

Accounts may be classified into two major root categories: *balance sheet and income statement accounts*.

(1) *Balance sheet accounts*

Balance sheet accounts refer to accounts that appear on the balance sheet. They include assets, liabilities and owner's equity accounts. These accounts (except drawing and income summary accounts) are also called ***permanent*** or ***real*** accounts. They are so named because their balances will not be closed at the end of each accounting period rather are carried forward from period to period so long as business activities continue.

Assets - include any tangible and intangible items that have monetary value to and owned by a business. Assets are further divided into *current* and *non-current*.

(a) ***Current assets*** **-** include cash and other assets that are expected to be ***converted*** into cash, ***sold*** or ***consumed*** within a very short period of time usually one year or less. Examples include:

- » ***Cash*** **-** coins and paper money on hand or deposited at bank.
- » ***Accounts Receivable*** **-** claims against customers (debtors) for goods and services sold on credit. They are based on oral promise or good faith rather than supported by written evidences.
- » ***Notes Receivable*** **-** claims against customers supported by written evidences.
- » ***Merchandise Inventory*** - finished goods held for resale.
- » ***Prepaid Expenses*** (assets) - include consumable items such as supplies and advance payments for such items as insurance (Prepaid Insurance) and rent (Prepaid Rent).

(b) ***Non-current assets*** **-** also called *fixed* or *plant assets* refer to assets with the potential to provide benefit to the business for relatively long period of time, at least more than a year. They include *land, buildings,*

vehicles, machinery, equipment, patent, furniture, fixtures and long-term receivables. All non-current assets held for use in operations, except land held for purposes other than agriculture, lose their usefulness with the passage of time or as a result of usage. Such decline in usefulness is called ***depreciation or amortization*** and is a business expense identified as Depreciation or Amortization Expense.

Liabilities - refer to obligations of a business to pay cash, perform service or deliver goods to its creditor. Liabilities are often identified on the balance sheet by titles that include the word ***payable***. Liabilities are further divided into *current* and *non-current*.

(a) ***Current liabilities*** **-** refer to obligations that must be paid/settled within one year or less. They include *Accounts Payable, Notes Payable, Salary Payable, Income/Sales Taxes Payable, Unearned Revenue and Rent Payable*.

(b) ***Non-current liabilities*** - also called *long-term liabilities* refer to obligations that are expected to be settled over an extended period of time usually more than a year. Examples include *Mortgage Notes Payable and Bonds Payable.* A part of a long-term debt which is due within a year or less is reclassified and reported as current liability.

Owner's Equity - refers to residual claim of the owner against the assets of a business. For sole-proprietorship and partnership forms of businesses, owner's equity accounts include:

(a) ***Capital*** **-** used to accumulate investments made by the owner/partner and profit earned by the business but not withdrawn by the owner/partner. Capital account is identified by the name of the owner/partner and the word *capital*. E.g. Ali Y., Capital.

(b) ***Drawing*** **-** used to accumulate money or other assets taken out of the business by the owner/partner for personal consumption. Drawing decreases capital of a business. Like capital, drawing account is identified by the name of the owner/partner and the word drawing. E.g. Ali Y., Drawing.

(c) ***Income Summary*** **-** used to summarize effects of revenues and expenses on the capital of business.

(2) *Income statement accounts*

Income statement accounts refer to accounts that appear on the income statement. They include revenue and expense accounts. These accounts are used to temporarily accumulate effects of revenue and expense transactions on capital of a business. These accounts, together with drawing and income summary accounts, are also called ***temporary*** or ***nominal*** accounts. They are so named because their balances will be closed to zero by the end of an accounting period thus will not be carried forward from period to period. By the end of the accounting period, balances of such accounts are summarized and transferred to the capital account. Thus, these accounts exist for only one accounting period.

(a) ***Revenues*** **-** refer to ***gross*** increases in owner's equity as a result of inflows of cash or any other assets in exchange for inventories sold, services rendered, properties leased, money lend or any other activity performed by the business to generate income. Revenues include:

» ***Sales*** **-** Revenues from sales of inventories
» ***Fees Earned*** **-** Revenues from performing services
» ***Rent/Royalty Income*** **-** Revenues from letting others use one's own properties such as building and machinery
» ***Interest Income*** **-** Revenues from lending money

(b) ***Expenses*** **-** refer to expired cost of goods and services consumed in generating revenues or carrying out the day-to-day affairs of a business. Expenses include: » ***Cost of Goods Sold*** **-** expired cost of inventories sold to customers
» ***Salary/Wages Expense*** **-** cost of services received from employees
» ***Utilities Expenses*** **-** cost of utility services consumed, such as telephone, electricity and water services.
» ***Depreciation Expense*** **-** expired cost of tangible non-current assets as a result of usage or passage of time.

A chart of accounts is designed to meet the information needs of a company's managers and other users of its financial statements. The accounts within the chart of accounts are numbered for use as references. A flexible

numbering system is normally used, so that new accounts can be added without affecting other account numbers. Exhibit 2.2 below shows
NetSolutions' chart of accounts. Additional accounts will be introduced in later chapters. In Exhibit 2.2, each account number has two digits. The first digit indicates the major classification of the ledger in which the account is located. Accounts beginning with 1 represent assets; 2, liabilities; 3, owner's equity; 4, revenue; and 5, expenses. The second digit indicates the location of the account within its class. You should note that each of the columns in Exhibit 2.1 has been assigned an account number in the chart of accounts shown in Exhibit 2.2. In addition, Accounts Receivable, Prepaid Insurance, Office Equipment, and Unearned Rent have been added.

Balance Sheet Accounts	**Income Statement Accounts**
1. Assets	**4. Revenue**
11 Cash	41 Fees Earned
12 Accounts Receivable	**5. Expenses**
14 Supplies	51 Wages Expense
15 Prepaid Insurance	52 Rent Expense
17 Land	54 Utilities Expense
18 Office Equipment	55 Supplies Expense
2. Liabilities	59 Miscellaneous Expense
21 Accounts Payable	
23 Unearned Rent **3.**	
Owner's Equity	
31 Ali Yusuf, Capital	
32 Ali Yusuf, Drawing	
33 Income Summary	

Exhibit 2.2: Analysis and Recording of Transactions Using Accounts

Rules of Debit and Credit

Rules of Debit and Credit are conventions/principles (part of the ***GAAP***) for recording increases and decreases in an account. According to these principles:

Rule 1: *Increases in an asset account are recorded on the debit side while decreases are recorded on the credit side.*

Rule 2: *Increases in a liability account are recorded on the credit side while decreases are recorded on the debit side.*

Rule 3: *Increases in an owner's equity account are recorded on the credit side while decreases are recorded on the debit side.*

Rule 4: *For revenues represent increases in owner's equity, increases in a revenue account are recorded on the credit side while decreases, if any, are recorded on the debit side.*

Rule 5: *For expenses and drawings represent decreases in owner's equity, increases in expense and drawing accounts are recorded in the debit side while decreases, if any, are recorded in the credit side.*

Normal Balance of an Account

Account balance refers to the difference between total increase and total decrease recorded in an account. Total increase recorded in an account is usually greater than the total decrease recorded in the same account. Thus, the usual (normal) balance of an account is positive. This implies that the normal balance of an ***asset,*** an ***expense*** or a ***drawing*** account is ***debit*** while that of a ***liability***, ***capital*** or ***revenue*** account is ***credit***. Abnormal balance in an account may arise as a result of

- » *Recording errors - for any account*
- » *Bank overdraft (over-drawing bank account) - for cash at bank account*
- » *Over-collection - for receivable accounts*
- » *Overpayment - for payable accounts*
- » *Reversing entries - for revenue and expense accounts*

The following table summarizes the rules of debit and credit and the normal balances of accounts.

Account Type	Increases	Decreases	Normal balance
Balance Sheet Accounts Asset			
	Debit	Credit	Debit
Liability	Credit	Debit	Credit
Owner's Equity Capital			
	Credit	Debit	Credit
Drawing	Debit	Credit	Debit
Income Summary	Credit	Debit	Credit (income) Debit (loss)
Income Statement Accounts			
Revenue	Credit	Debit	Credit
Expense	Debit	Credit	Debit

Ledgers

Definition - Ledger refers to a kind of folder/ring binder used to arrange and put in one place all accounts used by a business. Accounts are placed in the ledger in sequence and each account may take one or more pages of the ledger. **Types -** two types of ledgers: *general* and *subsidiary*.

- ✓ ***General ledger -*** a ledger that contains all accounts that appear on the balance sheet and income statement of a business. General ledger accounts are called ***controlling accounts*** because they show the total balance of a certain element of the financial statements such as Accounts Receivable and Accounts Payable regardless of the amount of money expected to be collected from each credit customer and the amount of money payable to each creditor, respectively. Controlling accounts are assigned with and identified by their respective account numbers. According they are placed in the general ledger according to their numerical orders.
- ✓ ***Subsidiary ledger -*** a ledger that contains accounts showing details of controlling accounts. For example, Accounts Receivable Ledger, also called customers' ledger, contains ***accounts*** of ***individual*** credit customers showing the amount of money due from each credit customer. Subsidiary ledger accounts are identified by the name of the credit customer or creditor and are accordingly arranged alphabetically.

Note that a business may set up both general and subsidiary ledgers not only for Accounts Receivable and Accounts Payable but also for any account for which the business wants to have detailed information about.

Journals

Definition - Journal, also called the ***book of original entry***, refers to a business document where effects of business transactions on specific elements of the financial statements are recorded in or copied from source documents. In ***Chapter-1***, we have seen how to record and summarize effects of business transactions on asset, liability and owner's equity items using the accounting equation format. Such system, however, is not practicable or is not cost and time-effective when a business has thousands of transactions to record and several asset, liability, capital, revenue and expense items. Directly recording business transactions in the accounts is not also wise and may result in recording errors which may be easily avoided by using journals. Thus, organizations design and use the journal to initially record business transactions.

Transactions are recorded in the journal ***chronologically*** (i.e. in order of their occurrence) based on the ***rules*** of ***debits*** and ***credits*** and the ***double-entry accounting system***. Doubleentry accounting refers to the system of recording the dual, called debit and credit, effects of business transactions. As a result, recording transactions initially in the journal helps, among other things, to

» *Ensure that all effects of a business transaction are recorded*
» *Have in one place a complete information about a recorded transaction* » *Easily identify recording errors, and* » *Have an historical record of transactions.*

Types - two types of journals: *general* and *special*.

- ✓ ***General journal -*** a two-column form used to record any kind of business transaction (see sample below).

✓ ***Special journal*** **-** a journal designed to record frequently occurring identical transactions.

An organization may use only general journal or both general and special journals depending up on the volume and similarities of its business transactions.

Accounting Cycle

Definition - Accounting cycle refers to the procedures (steps) for gathering business transactions, processing and converting them into useful accounting information that will be communicated to users to serve as a basis for investment, credit and similar economic decisions.

Procedures/Steps in the Accounting Cycle

The accounting cycle consists of the following specific procedures:

- **a)** *Analyzing business documents and transactions*
- **b)** *Journalizing business transactions*
- **c)** *Posting journal entries to accounts*
- **d)** *Preparing unadjusted trial balance*
- **e)** *Journalizing and posting adjusting entries*
- **f)** *Preparing adjusted trial balance*
- **g)** *Preparing financial statements*
- **h)** *Journalizing and posting closing entries*
- **i)** *Preparing post-closing trial balance*
- **j)** *Journalizing and posting reversing entries (optional)*

The aforementioned procedures are discussed in the following major sections.

Journalizing

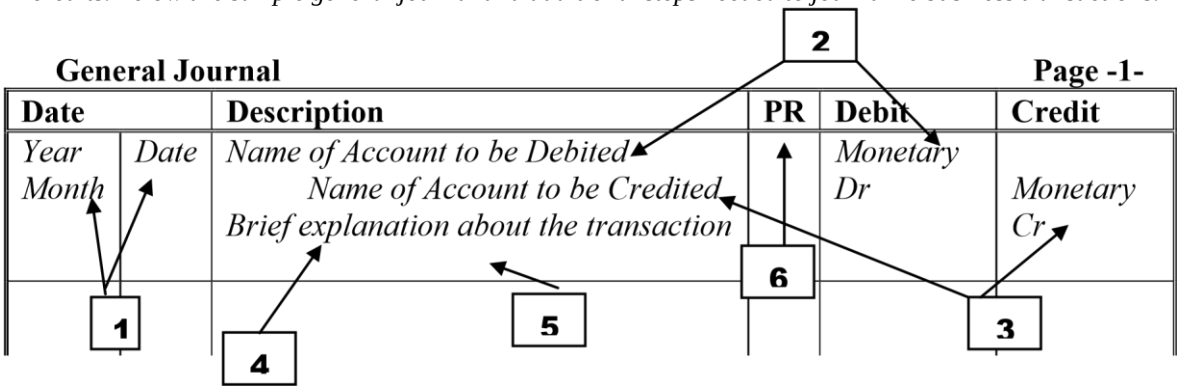
Definition - Journalizing refers to the process of recording business transactions in journals.

Steps - The following steps may be carried out to journalize business transactions:

(1) *Collect source documents - Source documents show that a transaction has really occurred and give complete information about the transaction such as date of the transaction, parties and amount of money involved, terms of payment, etc.*

(2) *Analyze transactions - This involves determining specific accounts affected (cash, fees earned, etc) by the transaction, classification of the accounts affected (asset, liability, etc), direction of the effect (increase or decrease), monetary amount of the effect ($400, $100, etc) and how to record the increase and decrease (debit or credit).*

(3) *Journalize - Record the dual effects of transactions in chronological order using the rules of debits and credits. Below are sample general journal and additional steps needed to journalize business transactions.*



Note the following when journalizing transactions.

(1) Write the year, month and date of the transaction in the ***date column***. The year and month need not be repeated for subsequent entries until a new page or a new month/year begins while the date may be repeated in as much as the number of independent entries to be recorded.

(2) Write the name of the account to be debited on the first line customarily placed at the extreme left of the ***description column***. Enter the corresponding debit amount on the same line in the extreme left of the ***debit column***. An entry which includes more than one debit or more than one credit is called a ***compound journal entry***. Regardless of how many debits or credits are contained in a compound journal entry, ***all the debits*** are entered ***before any credit.***

(3) Write the name of the account to be credited on the line below the debit entry somehow ***indented*** i.e. placed about 1 inch into the right side of the ***description column***. Enter the corresponding credit amount on the same line in the extreme left of the ***credit column.***

(4) Write a brief explanation of the transaction on the line immediately below the last account credited. This explanation includes any data needed to identify the transaction, such as the name of the customer or supplier. The explanation needs not to be indented.

(5) Leave a blank line below each entry. This spacing causes each journal entry to stand out clearly as a separate unit and makes the journal easier to read.

(6) Leave the ***PR*** (which stands for posting reference) column blank at the time of making the journal entry. When the debits and credits are later transferred to accounts in the ledger, the identification numbers of the accounts which the entries are posted to will be listed in this column to *provide a cross reference* with the ledger.

Whether a transaction results in single or compound entry, equal dollar amounts of debits and credits should be recorded.

Illustration - Journal Entries

M.D Clinic has been practicing as a cardiologist for three years. During April, 2013, Sister Hibo completed the following transactions in her practice of cardiology.

April 1. Paid office rent for April, $800.
April 3. Purchased equipment on account, $2,100.
April 5. Received cash on account from patients, $3,150.
April 8. Purchased X-ray film and other supplies on account, $245.
April 9. One of the items of equipment purchased on April 3 was defective. It was returned with the permission of the supplier, who agreed to reduce the account for the amount charged for the item, $325
April 12. Paid cash to creditors on account, $1,250
April 17. Paid cash for renewal of a six-month property insurance policy, $370
April 20. Discovered that the balances of the cash account and the accounts payable account as of April 1 was overstated by $200; a payment of that amount to a creditor in March had not been recorded. Journalize the $200 payment as of April 20.
April 24. Paid cash for laboratory analysis, $545
April 27. Paid cash from business bank account for personal and family expenses, $1,250
April 30. Recorded the cash received in payment of services (on a cash basis) to patients during April, $1,720
April 30. Paid salaries of receptionist and nurses, $1,725
April 30. Paid various utility expenses, $360
April 30. Recorded fees charged to patients on account for services performed in April, $5,145.
April 30. Paid miscellaneous expenses, $132.

Sister Hibo's account titles, numbers, and balances as of April 1 (all normal balances) are listed as follows: Cash, 11, $4,123; Accounts Receivable, 12, $6,725; Supplies, 13, $290; Prepaid Insurance, 14, $465; Equipment, 18, $19,745; Accounts Payable, 22, $765; Sister Hibo, Capital, 31, $30,583; Sister Hibo, Drawing, 32; Professional Fees, 41; Salary Expense, 51; Rent Expense, 53; Laboratory Expense, 55; Utilities Expense, 56; Miscellaneous Expense, 59.

Instructions:

1. Journalize each transaction in a two-column journal.

2. Open a ledger of standard four-column accounts for Sister Hibo as of April 1. Enter the balances in the appropriate balance columns and place a check mark (√) in the posting reference column. (Hint: Verify the equality of the debit and credit balances in the ledger before proceeding with the next instruction.)
3. Post the journal to the ledger, extending the month-end balances to the appropriate balance columns after each posting.
4. Prepare an unadjusted trial balance as of April 30.

Solutions: (1) Journalize

The process of recording a transaction in the journal is called journalizing. This form of recording a transaction is called a journal entry.

The journal entries for M.D Clinic transactions are:

General Journal **Page 1**

Date		Description	PR	Debit		Credit	
2013	1	Rent Expense	53	800	00		
April		Cash	11			800	00
		Paid office rent for April.					
	3	Equipment	18	2,100	00		
		Accounts Payable	22			2,100	00
		Purchased equipment on account.					
	5	Cash	11	3,150	00		
		Accounts Receivable	12			3,150	00
		Received cash on account.					
	8	Supplies	13	245	00		
		Accounts Payable	22			245	00
		Purchased supplies on account.					
	9	Accounts Payable	22	325	00		
		Equipment	18			325	00
		Returned defective equipment.					
	12	Accounts Payable	22	1,250	00		
		Cash	11			1,250	00
		Paid creditors on account.					
	17	Prepaid Insurance	14	370	00		
		Cash	11			370	00
		Renewed 6-month property policy.					
	20	Accounts Payable	22	200	00		
		Cash	11			200	00
		Recorded March payment to creditor.					

General Journal **Page 2**

Date		Description	PR	Debit		Credit	
2013 April	24	Laboratory Expense	55	545	00		
		Cash	11			545	00
		Paid for laboratory analysis.					
	27	Sister Hibo, Drawing	32	1,250	00		
		Cash	11			1,250	00
		Sister Hibo withdrew cash for personal use.					
	30	Cash	11	1,720	00		
		Professional Fees	41			1,720	00
		Received fees from patients.					
	30	Salary Expense	51	1,725	00		
		Cash	11			1,725	00
		Paid salaries.					
	30	Utilities Expense	56	360	00		
		Cash	11			360	00
		Paid utilities.					
	30	Accounts Receivable	12	5,145	00		
		Professional Fees	41			5,145	00
		Recorded fees earned on account.					
	30	Miscellaneous Expense	59	132	00		
		Cash	11			132	00
		Paid expenses.					

Posting Journal Entries to Accounts

As we discussed in the preceding section, a transaction is first recorded in a journal. Periodically, the journal entries are transferred to the accounts in the ledger. The ledger is a history of transactions by account. The process of transferring the debits and credits from the journal entries to the accounts is called ***posting***.

In practice, businesses use a variety of formats for recording journal entries. A business may use one all-purpose journal, sometimes called a ***two-column journal***, or it may use several journals. In the latter case, each journal is used to record different types of transactions, such as cash receipts or cash payments. The journals may be part of either a manual accounting system or a computerized accounting system.

As a review of the analysis and recording of transactions and to illustrate posting in a manual accounting system, we will use the December transactions of M.D Clinic. The first transaction in April occurred on April 1.

(2) & (3) Posting

Account: **Cash** Account No. **11**

Date		Items	PR	Debit		Credit		Balance			
								Debit		Credit	
2013	1	Balance	√					4,123	00		
April	1		1			800	00	3,323	00		
	5		1	3,150	00			6,473	00		
	12		1			1,250	00	5,223	00		
	17		1			370	00	4,853	00		
	20		1			200	00	4,653	00		
	24		2			545	00	4,108	00		
	27		2			1,250	00	2,858	00		
	30		2	1,720	00			4,578	00		
	30		2			1,725	00	2,853	00		
	30		2			360	00	2,493	00		
	30		2			132	00	**2,361**	**00**		

Account: **Accounts Receivable** Account No. **12**

Date		Items	PR	Debit		Credit		Balance			
								Debit		Credit	
2013	1	Balance	√					6,725	00		
April	5		1			3,150	00	3,575	00		
	30		2	5,145	00			**8,720**	**00**		

Account: **Supplies** Account No. **13**

Date		Items	PR	Debit		Credit		Balance			
								Debit		Credit	
2013	1	Balance	√					290	00		
April	8		1	245	00			**535**	**00**		

Account: **Prepaid Insurance** Account No. **14**

Date		Items	PR	Debit		Credit		Balance			
								Debit		Credit	
2013	1	Balance	√					465	00		
April	17		1	370	00			**835**	**00**		

Account: **Equipment** Account No. **18**

Date	Items	PR	Debit	Credit	Balance

								Debit		Credit	
2013 April	1	Balance	√					19,745	00		
	3		1	2,100	00			21,845	00		
	9					325	00	**21,520**	**00**		

Account: **Accounts Payable** Account No. **22**

Date		Items	PR	Debit		Credit		Balance			
								Debit		Credit	
2013 April	1	Balance	√							765	00
	3		1			2,100	00			2,865	00
	8		1			245	00			3,110	00
	9		1	325	00					2,785	00
	12		1	1,250	00					1,535	00
	20		1	200	00					**1,335**	**00**

Account: **Sister Hibo, Capital** Account No. **31**

Date		Items	PR	Debit		Credit		Balance			
								Debit		Credit	
2013 April	1	Balance	√							**30,583**	**00**

Account: **Sister Hibo, Drawing** Account No. **32**

Date		Items	PR	Debit		Cre lit		Balance			
								Debit		Credit	
2013 April	27		2	1,250	00			**1,250**	**00**		

Account: **Professional Fees** Account No. **41**

Date		Items	PR	Debit		Credit		Balance			
								Debit		Credit	
2013 April	30		2			1,720	00			1,720	00
	30		2			5,145	00			**6,865**	**00**

Account: **Salary Expense** Account No. **51**

Date	Items	PR	Debit	Cre lit	Balance	
					Debit	Credit

2013 April	30		2	1,725	00			**1,725**	**00**		

Account: **Rent Expense** Account No. **53**

Date		Items	PR	Debit		Cre lit		Balance			
								Debit		Credit	
2013 April	1		1	800	00			**800**	**00**		

Account: **Laboratory Expense** Account No. **55**

Date		Items	PR	Debit		Cre lit		Balance			
								Debit		Credit	
2013 April	24		2	545	00			**545**	**00**		

Account: **Utilities Expense** Account No. **56**

Date		Items	PR	Debit		Cre lit		Balance			
								Debit		Credit	
2013 April	30		2	360	00			**360**	**00**		

Account: **Miscellaneous Expense** Account No. **59**

Date		Items	PR	Debit		Cre lit		Balance			
								Debit		Credit	
2013 April	30		2	132	00			**132**	**00**		

Trial Balance

How can you be sure that you have not made an error in posting the debits and credits to the ledger? One way is to determine the *equality of the debits and credits in the ledger*. This equality should be proved at the end of each accounting period, if not more often. Such a proof, called a **trial balance**, may be in the form of a computer printout or in the form shown below. The trial balance shown below is prepared by first listing the name of the company (*M.D Clinic*), its title (*Unadjusted Trial Balance*), and the date it is prepared (April 30, 2013). The trial balance is titled an "***Unadjusted Trial Balance"***. This is to distinguish it from other trial balances that we will be preparing later. These other trial balances include an *adjusted trial balance* and a *post-closing trial balance*.

The account balances in Unadjusted Trial Balance are taken from the ledger shown above. Thus, before the trial balance can be prepared, each account balance in the ledger must be determined. When the standard account form is used, the balance of each account appears in the balance column on the same line as the last posting to the account.

(4) Trial Balance

M.D Clinic Unadjusted Trial Balance April 30, 2013					
Acc. No.	**Account**	**Debit**		**Credit**	
11	Cash	2,361	00		
12	Accounts Receivable	8,720	00		
13	Supplies	535	00		
14	Prepaid Insurance	835	00		
18	Equipment	21,520	00		
22	Accounts Payable			1,335	00
31	Sister Hibo, Capital			30,583	00
32	Sister Hibo, Drawing	1,250	00		
41	Professional Fees			6,865	00
51	Salary Expense	1,725	00		
53	Rent Expense	800	00		
55	Laboratory Expense	545	00		
56	Utilities Expense	360	00		
59	Miscellaneous Expense	132	00		
		38,783	**00**	**38,783**	**00**

Note! The trial balance does not provide complete proof of the accuracy of the ledger. It indicates only that the debits and the credits are equal. This proof is of value, however, because errors often affect the equality of debits and credits. If the two totals of a trial balance are not equal, an error has occurred. In the next section, we will discuss procedures for discovering and correcting errors.

Discovery and Correction of Errors

Errors may sometimes occur in journalizing and posting transactions. In some cases, however, an error might not be significant enough to affect the decisions of management or others. In such cases, the ***materiality concept*** implies that the error may be treated in the easiest possible way. For example, an error of a few dollars in recording an asset as an expense for a business with millions of dollars in assets would be considered immaterial, and a correction would not be necessary. In the remaining paragraphs, we assume that errors discovered are material and should be corrected.

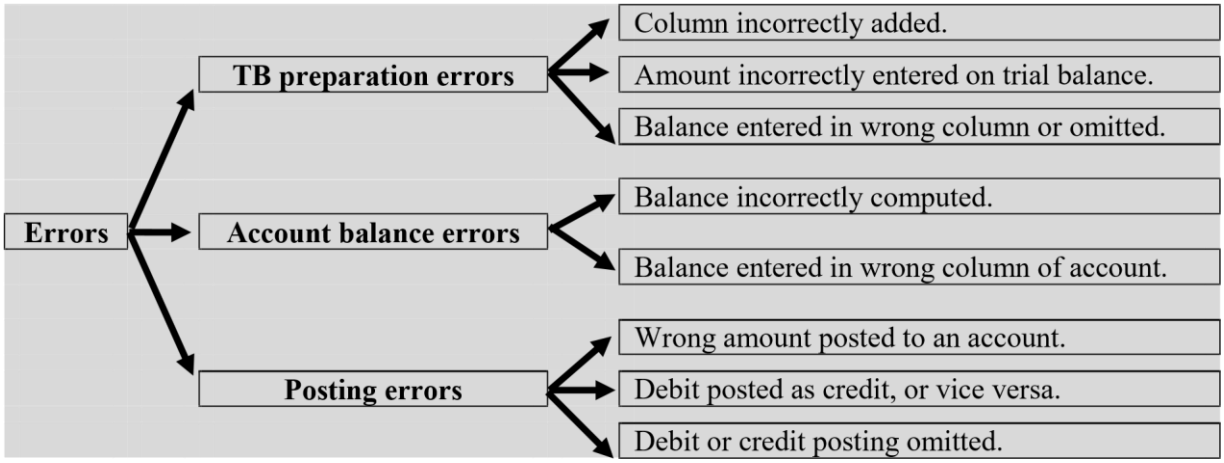
Discovery of Errors

As mentioned previously, preparing the trial balance is one of the primary ways to discover errors in the ledger. However, it indicates only that the debits and credits are equal. If the two totals of the trial balance are not equal, it is probably due to one or more of the errors described below. Among the types of errors that will not cause the trial balance totals to be unequal are the following:

- Failure to record a transaction or to post a transaction.
- Recording the same erroneous amount for both the Dr and the Cr parts of a transaction.
- Recording the same transaction more than once.

- Posting a part of a transaction correctly as a Dr or Cr but to the wrong account.

It is obvious that care should be used in recording transactions in the journal and in posting to the accounts. The need for accuracy in determining account balances and reporting them on the trial balance is also evident. Errors in the accounts may be discovered in various ways: *(1) through audit procedures, (2) by looking at the trial balance, or (3) by chance*. If the two trial balance totals are not equal, the amount of the difference between the totals should be determined before searching for the error.



The amount of the difference between the two totals of a trial balance sometimes gives a clue as to the nature of the error or where it occurred. For example, a difference of 10, 100, or 1,000 between two totals is often the result of an error in addition. A difference between totals can also be due to omitting a debit or a credit posting. If the difference can be evenly divided by 2, the error may be due to the posting of a debit as a credit, or vice versa. For example, if the debit total is $20,640 and the credit total is $20,236, the difference of $404 may indicate that a credit posting of $404 was omitted or that a credit of $202 was incorrectly posted as a debit.

Two other common types of errors are known as transpositions and slides. A transposition occurs when the order of the digits is changed mistakenly, such as writing $542 as $452 or $524. In a slide, the entire number is mistakenly moved one or more spaces to the right or the left, such as writing $542.00 as $54.20 or $5,420.00. If an error of either type has occurred and there are no other errors, the difference between the two trial balance totals can be evenly divided by 9.

If an error is not revealed by the trial balance, the steps in the accounting process must be retraced, beginning with the last step and working back to the entries in the journal. Usually, errors causing the trial balance totals to be unequal will be discovered before all of the steps are retraced.

Correction of Errors

The procedures used to correct an error vary according to the nature of the error, when the error is discovered, and whether a manual or computerized accounting system is used. Oftentimes, an error is discovered as it is being journalized or posted. In such cases, the error is simply corrected. For example, computerized accounting systems automatically verify for each journal entry whether the total debits equal the total credits. If the totals are not equal, an error report is created and the computer program will not proceed until the journal entry is corrected.

Occasionally, however, an error is not discovered until after a journal entry has been recorded and posted to the accounts. Correcting this type of error is more complex. To illustrate, assume that on May 5 a $12,500 purchase of office equipment on account was incorrectly journalized and posted as a debit to Supplies and a credit to Accounts Payable for $12,500. This posting of the incorrect entry is shown in the following T accounts:

Incorrect:

Supplies	
$12,500	

Accounts Payable	
	$12,500

Before making a correcting entry, it is best to determine the debit(s) and credit(s) that should have been recorded. These are shown in the following T accounts:

Correct:

Office Equipment	
$12,500	

Accounts Payable	
	$12,500

Comparing the two sets of T accounts shows that the incorrect debit to Supplies may be corrected by debiting Office Equipment for $12,500 and crediting Supplies for $12,500. The following correcting entry is then journalized and posted:

Entry to Correct Error:

General Journal **Page 10**

Date		Description	PR	Debit		Credit	
2013 May	5	Office Equipment		12,500	00		
		Supplies				12,500	00
		To correct erroneous debit to Supplies on May 5.					

Example Exercise

The following errors took place in journalizing and posting transactions:

a. A withdrawal of $6,000 by Cheri Ramey, owner of the business, was recorded as a debit to Office Salaries Expense and a credit to Cash.
b. Utilities Expense of $4,500 paid for the current month was recorded as a debit to Miscellaneous Expense and a credit to Accounts Payable.

Instruction: Journalize the entries to correct the errors. Omit explanations.

Self-Examination Questions

1. A debit may signify a(n):
   A. increase in an asset account. C. increase in a liability account.
   B. decrease in an asset account. D. increase in the owner's capital.
2. The type of account with a normal credit balance is:
   A. an asset. C. a revenue.
   B. drawing. D. an expense.
3. A debit balance in which of the following accounts would indicate a likely error?
   A. Accounts Receivable C. Fees Earned

B. Cash D. Miscellaneous Expense

4. The receipt of cash from customers in payment of their accounts would be recorded by: A. a debit to Cash and a credit to Accounts Receivable.
   B. a debit to Accounts Receivable and a credit to Cash.
   C. a debit to Cash and a credit to Accounts Payable.
   D. a debit to Accounts Payable and a credit to Cash.
5. The form listing the titles and balances of the accounts in the ledger on a given date is:
   A. income statement. C. statement of owner's equity.
   B. balance sheet. D. trial balance.

Practice Exercises

1. Prepare a journal entry for the purchase of office equipment on November 23 for $13,750, paying $5,000 cash and the remainder on account.
2. Prepare a journal entry for the purchase of office supplies on March 13 for $6,500, paying $1,300 cash and the remainder on account.
3. Prepare a journal entry on February 2 for fees earned on account, $6,300.
4. Prepare a journal entry on January 21 for cash received for services rendered, $1,250.
5. Prepare a journal entry on October 31 for the withdrawal of $4,500 by Amy Sykes for personal use.

Discussion Questions

1. What is the difference between an account and a ledger?
2. Do the terms debit and credit signify increase or decrease or can they signify either? Explain.
3. Explain why the rules of debit and credit are the same for liability accounts and owner's equity accounts.
4. What is the effect (increase or decrease) of a debit to an expense account (a) in terms of owner's equity and (b) in terms of expense?
5. What is the effect (increase or decrease) of a credit to a revenue account (a) in terms of owner's equity and (b) in terms of revenue?

Problems

1. For each of the following errors, considered individually, indicate whether the error would cause the trial balance totals to be unequal. If the error would cause the trial balance total to be unequal, indicate whether the debit or credit total is higher and by how much.
   a) The receipt of cash on account of $1,312 was recorded as a debit to Cash for $1,012 and a credit to Accounts Receivable for $1,312.
   b) The payment of cash for the purchase of office equipment of $4,500 was debited to Land for $4,500 and credited to Cash for $4,500.
   c) The payment of $1,420 on account was debited to Accounts Payable for $142 and credited to Cash for $1,420.

2. The following errors took place in journalizing and posting transactions:
   a) The payment of $3,125 from a customer on account was recorded as a debit to Cash and a credit to Accounts Payable.
   b) Advertising expense of $1,500 paid for the current month was recorded as a debit to Miscellaneous Expense and a credit to Advertising Expense.

c) The purchase of supplies of $2,690 on account was recorded as a debit to Office Equipment and a credit to Supplies.

d) The receipt of $3,750 for services rendered was recorded as a debit to Accounts Receivable and a credit to Fees Earned.

Journalize the entries to correct the errors. Omit explanations.

3. The Bora Company has the following accounts in its ledger: Cash; Accounts Receivable; Supplies; Office Equipment; Accounts Payable; Alfonso Finley, Capital; Alfonso Finley, Drawing; Fees Earned; Rent Expense; Advertising Expense; Utilities Expense; Miscellaneous Expense.

Journalize the following selected transactions for October 2013 in a two-column journal.

Omit journal entry explanations.

Oct. 1. Paid rent for the month, $2,500.
3. Paid advertising expense, $1,100.
4. Paid cash for supplies, $725.
6. Purchased office equipment on account, $7,500.
10. Received cash from customers on account, $3,600.
12. Paid creditor on account, $600.
20. Withdrew cash for personal use, $1,000.
27. Paid cash for repairs to office equipment, $500.
30. Paid telephone bill for the month, $195.
31. Fees earned and billed to customers for the month, $20,150.
31. Paid electricity bill for the month, $315.

4. Identify the errors in the following trial balance. All accounts have normal balances.

Hybrid Company
Unadjusted Trial Balance
For the Month Ending October 31, 2013

	Debit	Credit
Cash	22,500	
Accounts Receivable		49,200
Prepaid Insurance	10,800	
Equipment	150,000	
Accounts Payable	5,550	
Salaries Payable		3,750
Nolan Towns, Capital		129,600
Nolan Towns, Drawing		18,000
Service Revenue		236,100
Salary Expense	98,430	
Advertising Expense		21,600

Miscellaneous Expense	4,470	
	458,250	**458,250**

5. Hanna K., an architect, opened an office on July 1, 2013. During the month, she completed the following transactions connected with her professional practice:
   a) Transferred cash from a personal bank account to an account to be used for the business, $25,000.
   b) Paid July rent for office and workroom, $2,000.
   c) Purchased used automobile for $16,500, paying $1,500 cash and giving a note payable for the remainder.
   d) Purchased office and computer equipment on account, $6,500.
   e) Paid cash for supplies, $975.
   f) Paid cash for annual insurance policies, $1,200.
   g) Received cash from client for plans delivered, $3,750.
   h) Paid cash for miscellaneous expenses, $240.
   i) Paid cash to creditors on account, $2,500.
   j) Paid installment due on note payable, $450.
   k) Received invoice for blueprint service, due in August, $750.
   l) Recorded fee earned on plans delivered, payment to be received in August, $3,150.
   m) Paid salary of assistant, $1,500.
   n) Paid gas, oil, and repairs on automobile for July, $280.

Instructions:

1. Record the above transactions directly in the following T accounts, without journalizing: Cash; Accounts Receivable; Supplies; Prepaid Insurance; Automobiles; Equipment; Notes Payable; Accounts Payable; Hanna K, Capital; Professional Fees; Rent Expense; Salary Expense; Automobile Expense; Blueprint Expense; Miscellaneous Expense. To the left of the amount entered in the accounts, place the appropriate letter to identify the transaction.
2. Determine account balances of the T accounts. Accounts containing a single entry only (such as Prepaid Insurance) do not need a balance.
3. Prepare an unadjusted trial balance for Hanna K, Architect, as of July 31, 2013.

The Adjusting Process

Nature and Characteristics

Definition - Adjusting process refers to the procedure of updating account balances by recording transactions which are not usually recorded in the previous steps of the accounting process. It is done at the end of an accounting period so as to determine the correct balances of accounts needed to prepare financial statements. The journal entries required to update account balances by the end of an accounting period are called ***adjusting entries***.

Bases of Adjusting Entries - Adjusting entries are done mainly based on the following generally accepted accounting principles (GAAP):

(a) ***Accounting Period (Periodicity) Principle -*** This principle says that the indeterminate life of business organization is divided into distinct smaller and equal (comparable) periods such as months, quarters or years called ***accounting periods.*** This is done in order to report financial information on a timely and regular manner. Although business organizations may prepare financial statements covering different periods, the periodicity principle requires that set

of financial statements should be prepared at least once in a year. Financial statements prepared for accounting period less than one year are referred to as ***interim financial statements***.

A 12-month (annual) accounting period adopted by a business enterprise is called ***fiscal year***. An annual accounting period may start at any month but ends after 12 months. Business organizations usually adopted an accounting period that coincides with the calendar year i.e. an accounting period starting on January 1 and ending on December 31.

It is not unusual for business organization to buy goods and services that can be consumed over a period of time more than one year. For the periodicity principle requires business organization to prepare financial statements at least on an annual basis, it is necessary to allocate the cost of such goods and services among different accounting periods so as to know the expired costs of these goods and services (called expenses) due to usage in a given accounting period or due to passage of time. This is done through the adjusting process.

(b) ***Accrual Concept*** - This principle requires, among other things, that revenues and expenses should be recorded in the accounting period in which goods and services are sold and delivered to customer and goods and services are consumed, respectively, without regard to when cash is collected from the revenues and when cash is paid for the expenses. This method of recording and reporting revenues and expenses is called ***accrual basis of accounting***. Under the accrual basis of accounting, net income (loss) will be the difference between revenues earned and expenses incurred in a given accounting period. The accrual basis of accounting requires that, by the end of an accounting period, revenues earned but not collected in cash and expenses incurred but not paid in cash should be identified and recorded. This too is done through the adjusting process.

Another alternative way for recording and reporting revenues and expenses is the ***cash basis of accounting***. According to this basis of accounting, revenues are recorded and reported only when collected in cash and expenses are recorded and reported only when paid in cash. Under this accounting basis, net income (loss) for a given accounting is determined by comparing revenues collected in cash and expenses paid in cash in that particular accounting period.

Example 1: An enterprise has provided services to its customer in March. When should the enterprise recognize the revenue under (1) cash basis and (2) accrual basis, if the customer paid for the services in (a) February, (b) March or (c) April?

(c) ***Revenue Recognition Principle –*** This principle states that revenues are recorded when two main criteria are met:

- *The revenue generating activities collectively called the earning process is substantially completed, which generally means that goods are sold and delivered or services are performed to customers and*
- *An exchange has taken place i.e. the business has received a definite amount of cash or any other assets such as receivables – buyer's promise to pay – in exchange for the goods and services delivered.*

(d) ***Matching Principle*** - In order to accurately determine net income (loss) for a given accounting period, a business entity must determine all expenses it incurred to generate revenues and deduct them from (match them against) the revenues earned in the same period. As a result expenses including expired costs which were not recorded in previous procedures of the accounting process should be identified and recorded by the end of an accounting period through the adjusting process.

Deferrals and Accruals

Not all accounts balances need adjustment at the end of an accounting period. Items that need adjusting entries by the end of an accounting period are broadly divided into deferrals and accruals.

(1) **Deferrals –** refer to goods and services collected or paid in advance of benefit given or received. Deferrals are further divided into ***prepaid expenses*** and ***unearned revenues***.

(a) ***Prepaid Expenses*** **-** are goods and services paid for before they are used. Examples of prepaid expenses include prepaid insurance, prepaid rent. In the broadest sense, prepaid expenses also include buildings and office machinery.

At the time of acquisition, costs of these items represent asset and as time passes or when the assets are consumed in part or in total, the costs are charged into expenses. Expired costs of prepaid assets are not recorded on daily basis. The common practice is to record them by the end of an accounting period through adjusting entries. At the time of acquisition, prepaid items may be recorded either as assets or as expenses.

» ***Prepaid expense initially recorded as Assets –*** Under this approach, the following entries are needed to record events affecting these items.

At the time of acquisition:

Prepaid Rent……	xx	
Cash…….		xx

At the end of an accounting period – to record the expired cost (expense)

Rent Expense……	xx	
Prepaid Rent…….		xx

At the beginning of the next accounting period

No entry is needed because the unexpired balance is in the asset account as it was initially recorded.

» ***Prepaid expenses initially recorded as Expenses –*** Instead of being debited to an asset account, prepaid items may be debited to an expense account at the time of acquisition. Charging prepaid items to expense account at the time of purchase does not, however, imply that these items are expenses. It rather is an alternative way of recording these items. It is the passage of time and/or usage that determine the charging of the cost of these items to expense account. The following journal entries are needed to record events affecting these items.

At the time of acquisition

Rent Expense……	xx	
Cash…….		xx

At the end of an accounting period – to record the unexpired cost (asset)

Prepaid Rent ……	xx	
Rent Expense ……		xx

At the beginning of the next accounting period – to return the unexpired balance back to the account wherein it was initially recorded, an entry called reversing entry, is made as follows

Rent Expense …….	xx	
Prepaid Rent ……		xx

Note that reversing entries are the exact opposites of adjusting entries which involve the same dollar amounts of debits and credits and account names.

Example 1: On August 1, 2012, ABC Stationery paid $2,400 cash for one year insurance coverage for its inventory items. The enterprise's accounting period ends on December 31.

Required: *Prepare all the journal entries necessary to handle the above transaction under the approaches of recording prepaid items: as asset or as expense.*

Comparison of the Approaches – Whether to use the asset or expense approach depends on the accounting philosophy of the organization. Although these approaches account for prepaid items in different ways, the final balances of the related expense and asset accounts are the same.

(b) ***Plant Assets –*** In broader terms plant assets are examples of prepaid expenses in that they represent benefits that will be consumed and charged into expenses over a long period of time. Unlike other prepaid expenses, which may be initially recorded as asset or expense, acquisition of plant assets is recorded as a debit to only asset accounts. The expired cost of plant assets as a result of usage and/or passage of time is called ***depreciation expense***.

Like other expired costs related to prepaid items, depreciation expense is recorded at the end of an accounting period through the adjusting process. Depreciation is commonly computed by dividing the difference between the original cost and salvage value (secondhand market value of an old asset) of the plant asset by its estimated useful (economic) life.

The following journal entry is made to record expired cost of plant assets:

Depreciation Expense……	xx	
Accumulated Depreciation……		xx

Note that expired cost of plant assets is not recorded as a direct reduction from the related plant asset accounts rather it is recorded in an account called accumulated depreciation. This is a contra plant asset account whose balance will be deducted from the original cost of the related plant asset so as to determine the unexpired cost of the plant asset called ***book value***.

Example: On January 1, 2002, ABC Stationery purchased office machinery for $50,000 cash. The machinery has an estimated economic life of 10 years and salvage value of $5,000 at the end of its useful life. The enterprise's accounting period ends on December 31.

Required: *Determine and record depreciation expense for the year ended December 31, 2002 and calculate the book value of the machinery on the same date.*

(c) ***Unearned Revenues –*** refer to assets collected before goods and services are delivered to customers. Unearned revenues represent liabilities because the business entity has either to refund or deliver goods and services to the customers in the future.

At the time acquisition, the assets collected represent liability and as time passes or when the business delivers the necessary goods and services in part or in total, the liabilities will be transferred to revenue account. Advance collections earned through time or delivery of goods and services are not recorded on daily basis. The common practice is to record them by the end of an accounting period through adjusting entries. At the time of collection, unearned revenues may be recorded either as liability or as revenue.

» ***Unearned revenues initially recorded as Liabilities –*** Under this approach, the following entries are needed to record events affecting these items. *At the time of collection*

Cash……..	xx	
Unearned Rent…….		xx

At the end of an accounting period – to record revenue earned

Unearned Rent…..……	xx	
Rent Income…….		xx

At the beginning of the next accounting period

No entry is needed because the unearned rent balance is in the liability account as it was initially recorded.

» ***Unearned revenue initially recorded as Revenues –*** Instead of being credited to a liability account, unearned revenues may be credited to a revenue account at the time of collection. Crediting revenue account for advance collections does not, however, imply that the collections represent earned revenues. It rather is an alternative way of recording these items. It is the passage of time and/or delivery of goods and services that

determine revenue recognition. The following journal entries are needed to record events affecting these items. *At the time of collection*

Cash……. xx
Rent Income……. xx

At the end of an accounting period – to record the unearned portion

Rent Income…….…… xx
Unearned Rent……. xx

At the beginning of the next accounting period – to return the unearned revenue balance back to the account wherein it was initially recorded, an entry called reversing entry, is made as follows

Unearned Rent..…… xx
Rent Income..…… xx

Example: On August 1, 2012, ABC Rental Company collected $24,000 cash for one year rent on a building it leased to different organizations for business purposes. The company's accounting period ends on December 31.

Required: *Prepare all the journal entries necessary to handle the above transaction under the approaches of recording unearned revenues:* a) *as liability* b) *as revenue*

Comparison of the Approaches – Though these approaches account for unearned revenues in different ways, the final balances of the related revenue and liability accounts are the same.

(2) **Accruals –** refer to revenues already earned and expenses already incurred but not yet recorded and not yet collected in cash and paid in cash, respectively. Thus, accruals are divided into ***accrued revenues*** and ***accrued expenses***.

(a) ***Accrued revenues –*** are revenues earned but not yet collected in cash and recorded. Accrued revenues represent assets. The following entries are usually needed to handle transactions related to accrued revenues:

At the end of current accounting period

Rent Receivable…… xx
Rent Income……. xx

At the beginning of next accounting period

Rent Income …… xx
Rent Receivable …….. xx

Example: On September 1, 2012, ABC Travel Agency entered into a contract with Ethiopian Airlines to sell passenger tickets for commission. The contract entitled ABC to semiannually collect $4 commission on each ticket sold. Until the end of the current year, December 31, 2012, ABC sold 4,000 tickets for which no commission is collected to date.

Required: *Prepare all the journal entries necessary to handle the above transaction.*

(b) ***Accrued expenses –*** represent value of goods and services consumed but not yet paid in cash and recorded. Accrued expenses represent liabilities for goods and services already consumed. The following entries are usually needed to handle transactions related to accrued expenses:

At the end of current accounting period

Rent Expense…… xx
Rent Payable……. xx

At the beginning of next accounting period

Rent Payable…… xx
Rent Expense……. xx

Example: Since its establishment on August 1, 2012, ABC Stationery has been consuming different utility services. Bills from the utility companies are not expected to arrive by the end of the current accounting period. Past experience indicates that the value of utility services consumed till the end of the current accounting period, December 31, 2012, total $4,500.
Required: *Prepare all the journal entries necessary to handle the above transaction.*

Worksheet

Definition

Worksheet is a multi-columnar sheet of paper used to gather, arrange and summarize data needed for preparation of

- ✓ Financial statements, and
- ✓ Adjusting and closing entries.

Purpose

Worksheet, similar to a rough paper, is used by accountants to facilitate and minimize errors during preparation of financial statements and adjusting and closing entries. The worksheet helps organization to try preparation of adjusting entries and financial statements before they are directly entered into the permanent records i.e. journals and ledgers, and put them on the financial statements for distribution to external users. Unlike the financial statements, worksheet is for internal use only. It is not for distribution to outsiders. Thus, the use of worksheet is optional.

Steps

The following procedures may be used to prepare and complete the five-column worksheet:

1) **Unadjusted trial balance –** Copy names and balances of all accounts from the general ledger to the unadjusted trial balance column of the worksheet.
2) **Adjustment –** Enter adjusting entries in the adjustment column of the worksheet.
3) **Adjusted trial balance –** Determine and enter adjusted account balances in the adjusted trial balance column. Determine totals of debits and totals of credits.
4) **Income statement –** Transfer adjusted balances of income statement accounts to the income statement column. Note that net income appears on the debit column while net loss appears on the credit column of the income statement main column of the worksheet.
5) **Balance sheet –** Transfer adjusted balances of balance sheet accounts to the balance sheet column. Note that net income appears on the credit column while net loss appears on the debit column of the balance sheet main column of the worksheet.

Preparation of Financial Statements

Business organizations commonly prepare the following basic financial statements to be distributed to external users.

(a) *Income Statement*
(b) *Statement of Changes in Owner's Equity*
(c) *Statement of Cash Flows*
(d) *Balance Sheet*

Accounting Period-end Entries

1. **Journalizing and Posting Adjusting Entries –** Dated at the end of an accounting period, adjusting entries are needed to update balances of accounts in the general ledger.
2. **Journalizing and Posting Closing Entries –** Dated as of the last date of an accounting period, closing entries are needed to summarize and transfer effects of ***temporary accounts*** on the capital of a business. The balance of drawing account is directly transferred to the capital account while balances of revenue and expense accounts are first summarized in and closed to another temporary account called ***Income Summary*** which is ultimately closed to the capital account. Closing entries make temporary accounts ready for recording revenue, expense and drawing transactions of the next accounting period.

The following steps may be followed in the closing process:

(a) Close all revenue accounts to Income Summary Account

Fees Earned …….	xx	
Rent Income ……	xx	
Income Summary……..		xxx

(b) Close all expense accounts to Income Summary Account

Income Summary ……	xxx	
Salary Expense …….		xx
Rent Expense ……		xx
Miscellaneous Expenses ……..		xx

(c) Close debit or credit balance of Income Summary to Capital Account

Income Summary (credit balance) …….	xx	
Ali Yusuf, Capital ……..		xx

(d) Close drawing account to Capital Account

Ali Yusuf, Capital …….	xx	
Ali Yusuf, Drawing …….		xx

3. **Preparing Post-closing Trial Balance –** This, containing only real/permanent accounts (balance sheet accounts), are prepared to check whether each ledger is in balance after journaling and posting closing entries.

Example: consider the following NetSolutions' Adjusted Trial Balance:

NetSolutions
Adjusted Trial Balance
December 31, 2013

	Debit	Credit
Cash	$ 2,065.00	
Accounts Receivable	2,720.00	
Supplies	760.00	
Prepaid Insurance	2,300.00	
Land	20,000.00	
Office Equipment	1,800.00	
Accumulated Depreciation		$ 50.00
Accounts Payable		900.00
Wages Payable		250.00
Unearned Rent		240.00
Ali Yusuf, Capital		25,000.00
Ali Yusuf, Drawing	4,000.00	
Fees Earned		16,840.00
Rent Revenue		120.00
Wages Expense	4,525.00	
Rent Expense	1,600.00	
Utilities Expense	985.00	

Supplies Expense	2,040.00	
Insurance Expense	100.00	
Depreciation Expense	50.00	
Miscellaneous Expense **Total**	455.00	
	$43,400.00	**$43,400.00**

4. **Journalizing and Posting Reversing Entries –** Reversing entries are the exact opposites (reverse) of adjusting entries. They involve account titles and debit and credit amounts the same as that of adjusting entries. Prepared as of the first day of the next accounting period, reversing entries help to simplify and facilitate analyses and recording of transactions in subsequent accounting period. Note that all adjusting entries are not reversed at the beginning of the next accounting period. ***The general principle is that an adjusting entry which increases balance sheet accounts (non-contra account) should be reversed*** if it is the policy of an organization to prepare reversing entries.

Chapter 3: Accounting Cycle for Merchandising Business

In this chapter, we will focus on the accounting principles and concepts for merchandising businesses. We begin our discussion by highlighting the basic differences between the activities of merchandise and service businesses. We then describe and illustrate financial statements for merchandising businesses and purchases and sales transactions.

3.1 Nature and Characteristics of Merchandising Business

How do the activities of an attorney and an architect, which are service businesses, differ from those of retailers and wholesalers, which are merchandising businesses? These differences are best illustrated by focusing on the **revenues** and **expenses** in the following condensed income statements:

Service Business	
Fees earned	$xxx
Operating expenses	xxx
Net income	$xxx
.	

Merchandising Business	
Sales	$xxx
Cost of merchandise sold	xxx
Gross profit	$xxx
Operating expenses	$ xxx
Net income	$xxx

The revenue activities of a service business involve providing services to customers. On the income statement for a service business, the revenues from services are reported as fees earned. The operating expenses incurred in providing the services are subtracted from the fees earned to arrive at net income.

In contrast, the revenue activities of a merchandising business involve the buying and selling of merchandise. A merchandising business must first purchase merchandise to sell to its customers. When this merchandise is sold, the revenue is reported as sales, and its cost is recognized as an expense called the **cost of merchandise sold**. The cost of merchandise sold is subtracted from sales to arrive at **gross profit**. This amount is called gross profit because it is the profit before deducting operating expenses.

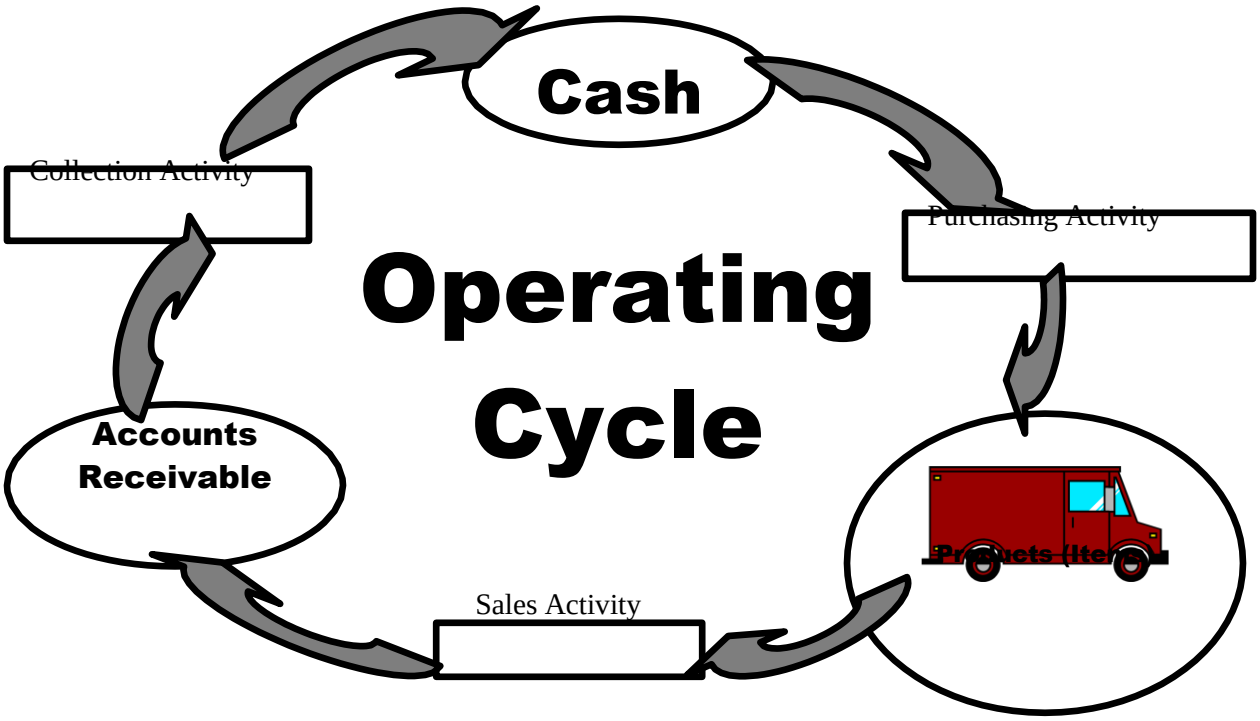
Merchandise on hand (not sold) at the end of an accounting period is called **merchandise inventory**. Merchandise inventory is reported as a current asset on the balance sheet.

- Sales **MINUS** Cost of Merchandise Sold **EQUAL** to Gross Profit
- Gross Profit **MINUS** Operating Expenses **EQUAL** to Net Income/loss

In the remainder of this chapter, we illustrate merchandiser financial statements and transactions that affect the income statement (sales, cost of merchandise sold, and gross profit) and the balance sheet (merchandise inventory).

The Operating Cycle

The operations of a merchandising business involve the purchase of merchandise for sale (purchasing activity), the sale and distribution of the products to customers (sales activity), and the receipt of cash from customers (collection activity). This overall process is referred to as the **operating cycle**. Thus, the operating cycle begins with spending cash, and it ends with receiving cash from customers. The operating cycle for a merchandising business is shown below.



Operating cycles differ, depending upon the nature of the business and its operations. For example, the operating cycles for sugar, distillery, and lumber industries are much longer than the operating cycles of the automobile, consumer electronics, and home furnishings industries. Likewise, the operating cycles for retailers are usually shorter than for manufacturers because retailers purchase goods in a form ready for sale to the customer. Of course, some retailers will have shorter operating cycles than others because of the nature of their products. For example, a jewelry store or an automobile dealer normally has a longer operating cycle than a consumer electronics store or a grocery store.

Businesses with longer operating cycles normally have higher profit margins on their products than businesses with shorter operating cycles. For example, it is not unusual for jewelry stores to price their jewelry at 30%–50% above cost. In contrast, grocery stores operate on very small profit margins, often below 5%. Grocery stores make up the difference by selling their products more quickly.

3.2 Accounting for Purchases of Merchandises

Most large retailers and many small merchandising businesses use computerized perpetual inventory systems. Purchases can be made for cash or on account. Under the perpetual inventory system, cash purchases of merchandise are recorded as follows:

Example 1: On January 3, 2014, IQ Company purchased merchandise for cash from Brain Company, $2,510.

Date		Description	PR	Dr	Cr
2014	03	Merchandise Inventory		2,510	
Jan.		Cash			2,510
		Purchased inventory from Brain Co.			

Purchases of merchandise on account are recorded as follows:
Example 2: On January 4, 2014, Alpha Company purchased merchandise from Omega Company on account, $9,250.

Date		Description	PR	Dr	Cr
2014	04	Merchandise Inventory		9,250	
Jan.		Accounts Payable			9,250
		Purchased inventory on account from Omega Co.			

Purchases Discounts - Purchases discounts taken by the buyer for early payment of an invoice reduce the cost of the merchandise purchased. Most businesses design their accounting systems so that all available discounts are taken. Even if the buyer has to borrow to make the payment within a discount period, it is normally to the buyer's advantage to do so.

Purchases Returns and Allowances - When merchandise is returned (purchases return) or a price adjustment is requested (purchases allowance), the buyer (debtor) usually sends the seller a letter or a **debit memorandum**. A debit memorandum informs the seller of the amount the buyer proposes to debit to the account payable due the seller. It also states the reasons for the return or the request for a price reduction.

The buyer may use a copy of the debit memorandum as the basis for recording the return or allowance or wait for approval from the seller (creditor). In either case, the buyer must debit Accounts Payable and credit Merchandise Inventory. To illustrate, let ABC Merchandise Company records the return of the merchandise indicated in its debit memo in below figure as follows:

3.3 Accounting for Sales of Merchandises

Dual Nature of Merchandise Transactions

Each merchandising transaction affects a buyer and a seller. In the illustration shown below, the same transactions would be recorded by both the seller and the buyer. In this example, the seller is **Scully Company** and the buyer is **Burton Company**.

Transaction	Scully Company (Seller)		Burton Co. (Buyer)	
July 1. Scully Company sold merchandise on account to Burton Co., $7,500, terms FOB shipping point, n/45. The cost of the merchandise sold was $4,500.	Accounts Receivable—Burton Co.	7,500	Merchandise Inventory	7,500
	Sales	7,500	Accounts Payable—Scully Co.	7,500
	Cost of Merchandise Sold	4,500		
	Merchandise Inventory	4,500		
July 2. Burton Co. paid freight of $150 on July 1 purchase from Scully Company.	No entry.		Merchandise Inventory	150
			Cash	150
July 5. Scully Company sold merchandise on account to Burton Co., $5,000, terms FOB destination, n/30. The cost of the merchandise sold was $3,500.	Accounts Receivable—Burton Co.	5,000	Merchandise Inventory	5,000s
	Sales	5,000	Accounts Payable—Scully Co.	5,000
	Cost of Merchandise Sold	3,500		
	Merchandise Inventory	3,500		
July 7. Scully Company paid freight of $250 for delivery of merchandise sold to Burton Co. on July 5.	Delivery Expense	250	No entry.	
	Cash	250		
July 13. Scully Company issued Burton Co. a credit memo for merchandise returned, $1,000. The merchandise had been purchased by Burton Co. on account on July 5. The cost of the merchandise returned was $700.	Sales Returns and Allowances	1,000	Accounts Payable—Scully Co.	1,000
	Accounts Receivable—Burton Co.	1,000	Merchandise Inventory	1,000
	Merchandise Inventory	700		
	Cost of Merchandise Sold	700		
July 15. Scully Company received payment from Burton Co. for purchase of July 5.	Cash	4,000	Accounts Payable—Scully Co.	4,000
	Accounts Receivable—Burton Co.	4,000	Cash	4,000
July 18. Scully Company sold merchandise on account to Burton Co., $12,000, terms FOB shipping point, 2/10, n/eom. Scully Company prepaid freight of $500, which was added to the invoice. The cost of the merchandise sold was $7,200.	Accounts Receivable—Burton Co.	12,000	Merchandise Inventory	12,500
	Sales	12,000	Accounts Payable—Scully Co.	12,500
	Accounts Receivable—Burton Co.	500		
	Cash	500		
	Cost of Merchandise Sold	7,200		
	Merchandise Inventory	7,200		
July 28. Scully Company received payment from Burton Co. for purchase of July 18, less discount (2% × $12,000).	Cash	12,260	Accounts Payable—Scully Co.	12,500
	Sales Discounts	240	Merchandise Inventory	240
	Accounts Receivable—Burton Co.	12,500	Cash	12,260

3.4. Merchandise transactions using perpetual and periodic inventory systems

3.5. Chart of Accounts for a Merchandising Business

The Periodic Inventory System

So far, we have emphasized the perpetual inventory system of accounting for purchases and sales of merchandise. Not all merchandise businesses, however, use the perpetual inventory system. For example, some small merchandise businesses, such as locally owned hardware stores, use manual accounting systems. Because a manual perpetual inventory system is time consuming and costly to maintain, the periodic inventory system may be used in these cases.

In this section, we describe and illustrate the use of the periodic inventory system for recording merchandise transactions.

Cost of Merchandise Sold Using the Periodic Inventory System

Using the periodic inventory system, the revenues from sales are recorded when sales are made in the same manner as in the perpetual inventory system. However, no attempt is made on the date of sale to record the cost of the merchandise sold. Instead, cost of merchandise sold is determined as illustrated below:

Merchandise inventory, January 1, 2009			$ 59,700
Purchases		$521,980	
Less: Purchases returns and allowances	$9,100		
Purchases discounts	2,525	11,625	
Net purchases		$510,355	
Add transportation in		17,400	
Cost of merchandise purchased			527,755
Merchandise available for sale			$587,455
Less merchandise inventory, December 31, 2009			62,150
Cost of merchandise sold			$525,305

Chart of Accounts under the Periodic Inventory System

The chart of accounts under a periodic inventory system is shown in following table. The accounts used to record transactions under the periodic inventory system are high-lighted. We describe and illustrate how these accounts are used to record transactions under the periodic inventory system next.

Chart of Accounts under the Periodic Inventory System

Balance Sheet Accounts		Income Statement Accounts	
	100 Assets		400 Revenues
110	Cash	410	Sales
111	Notes Receivable	411	Sales Returns and Allowances
112	Accounts Receivable	412	Sales Discounts
115	Merchandise Inventory		
116	Office Supplies		500 Costs and Expenses
117	Prepaid Insurance	510	Purchases
120	Land	511	Purchases Returns and Allowances
123	Store Equipment		
124	Accumulated Depreciation—Store Equipment	512	Purchases Discounts
		513	Transportation In
125	Office Equipment	520	Sales Salaries Expense
126	Accumulated Depreciation—Office Equipment	521	Advertising Expense
		522	Depreciation Expense—Store Equipment
	200 Liabilities	523	Delivery Expense
210	Accounts Payable	529	Miscellaneous Selling Expense
211	Salaries Payable	530	Office Salaries Expense
212	Unearned Rent	531	Rent Expense
215	Notes Payable	532	Depreciation Expense—Office Equipment
	300 Owner's Equity	533	Insurance Expense
310	Chris Clark, Capital	534	Office Supplies Expense
311	Chris Clark, Drawing	539	Misc. Administrative Expense
312	Income Summary		
			600 Other Income
		610	Rent Revenue
			700 Other Expense
		710	Interest Expense

Recording Merchandise Transactions under the Periodic Inventory System

Using the periodic inventory system, purchases of inventory are recorded in a *purchases account* rather than in a merchandise inventory account. No attempt is made to keep a detailed record of the amount of inventory on hand at any given time. Instead, at the end of the period, a physical count of merchandise inventory is taken.

This physical count is then used to determine the cost of merchandise sold as shown above. The *purchases account* is debited for the amount of the invoice before considering any purchases discounts. Purchases discounts are normally recorded in a separate *purchases discounts account*. The balance of this account is reported as a deduction from the amount initially recorded in Purchases for the period. Thus, the purchases discounts account is viewed as a contra (or offsetting) account to Purchases.

Purchases returns and allowances are recorded in a similar manner as purchases discounts. A separate *purchases returns and allowances account* is used to keep a record of the amount of

returns and allowances during a period. Purchases returns and allowances are reported as a deduction from the amount initially recorded as Purchases. Like Purchases Discounts, the purchases returns and allowances account is a contra (or off-setting) account to Purchases.

When merchandise is purchased FOB shipping point, the buyer is responsible for paying the freight charges. Under the periodic inventory system, freight charges paid when purchasing merchandise FOB shipping point are debited to *Transportation In*, *Freight In*, or a similarly titled account.

The preceding periodic inventory accounts and their effect on the cost of merchandise purchased are summarized below.

Account	Entry to Increase (Decrease)	Normal Balance	Effect on Cost of Merchandise Purchased
Purchases	Debit	Debit	Increases
Purchases Discounts	Credit	Credit	Decreases
Purchases Returns and Allowances	Credit	Credit	Decreases
Transportation In	Debit	Debit	Increases

Below table illustrates the recording of merchandise transactions using the periodic system and how each transaction would have been recorded using the perpetual system.

Transactions Using the Periodic and Perpetual Inventory Systems

Transaction	Periodic Inventory System			Perpetual Inventory System		
June 5. Purchased $30,000 of merchandise on account, terms 2/10, n/30.	Purchases	30,000		Merchandise Inventory	30,000	
	Accounts Payable		30,000	Accounts Payable		30,000
June 8. Returned merchandise purchased on account on June 5, $500.	Accounts Payable	500		Accounts Payable	500	
	Purchases Returns and Allowances		500	Merchandise Inventory		500
June 15. Paid for purchase of June 5, less return of $500 and discount of $590 [($30,000 − 500) × 2%].	Accounts Payable	29,500		Accounts Payable	29,500	
	Cash		28,910	Cash		28,910
	Purchases Discounts		590	Merchandise Inventory		590
June 18. Sold merchandise on account, $12,500, 1/10, n/30. The cost of the merchandise sold was $9,000.	Accounts Receivable	12,500		Accounts Receivable	12,500	
	Sales		12,500	Sales		12,500
				Cost of Merchandise Sold	9,000	
				Merchandise Inventory		9,000
June 21. Received merchandise returned on account, $4,000. The cost of the merchandise returned was $2,800.	Sales Returns and Allowances	4,000		Sales Returns and Allowances	4,000	
	Accounts Receivable		4,000	Accounts Receivable		4,000
				Merchandise Inventory	2,800	
				Cost of Merchandise Sold		2,800
June 22. Purchased merchandise, $15,000, terms FOB shipping point, 2/15, n/30, with prepaid transportation charges of $750 added to the invoice.	Purchases	15,000		Merchandise Inventory	15,750	
	Transportation In	750		Accounts Payable		15,750
	Accounts Payable		15,750			
June 28. Received $8,415 as payment on account from June 18 sale less return of June 21 and less discount of $85 [($12,500 − $4,000) × 1%].	Cash	8,415		Cash	8,415	
	Sales Discounts	85		Sales Discounts	85	
	Accounts Receivable		8,500	Accounts Receivable		8,500
June 29. Received $19,600 from cash sales. The cost of the merchandise sold was $13,800.	Cash	19,600		Cash	19,600	
	Sales		19,600	Sales		19,600
				Cost of Merchandise Sold	13,800	
				Merchandise Inventory		13,800

3.6 Financial Statements for a Merchandising Business

Multiple-Step Income Statement

This form of income statement contains several sections, subsections, and subtotals. Sales are the total amount charged customers for merchandise sold, including cash sales and sales on account. Both sales returns and allowances and sales discounts are subtracted in arriving at net sales.

Sales returns and allowances are granted by the seller to customers for damaged or defective merchandise. For example, rather than have buyer return merchandise, a seller may offer a $500 allowance to the customer as compensation for damaged merchandise. Sales returns and allowances are recorded when the merchandise is returned or when the allowance is granted by the seller.

Sales discounts are granted by the seller to customers for early payment of amounts owed. For example, a seller may offer a customer a 2% discount on a sale of $10,000 if the customer pays within 10 days. If the customer pays within the 10-day period, the seller receives cash of $9,800 and the buyer receives a discount of $200 ($10,000 x 2%). Sales discounts are recorded when the customer pays the bill.

Net sales are determined by subtracting sales returns and allowances and sales discounts from sales. Rather than reporting sales, sales returns and allowances, and sales discounts as shown below, many companies report only net sales.

Cost of merchandise sold is the cost of the merchandise sold to customers. To illustrate the determination of the cost of merchandise sold, assume that ABC Merchandise Company purchased $340,000 of merchandise during the last half of 2008. If the inventory at December 31, 2008, the end of the year, is $59,700, the cost of the merchandise sold during 2008 is $280,300.

Purchases	$340,000
Less merchandise inventory, December 31, 2008	59,700
Cost of merchandise sold	$280,300

As we discussed in the preceding paragraphs, sellers may offer customers sales discounts for early payment of their bills. Such discounts are referred to as purchases discounts by the buyer. Purchase discounts reduce the cost of merchandise. A buyer may return merchandise to the seller (a purchase return), or the buyer may receive a reduction in the initial price at which the merchandise was purchased (a purchase allowance).

ABC Merchandise Company
Income Statement
For the Year Ended December 31, 2009

Revenue from sales:			
Sales		$720,185.00	
Less: Sales returns and allowances	$ 6,140.00		
Sales discounts	5,790.00	11,930.00	
Net sales			$708,255.00
Cost of merchandise sold			525,305.00
Gross profit			$182,950.00
Operating expenses:			
Selling expenses:			
Sales salaries expense	$53,430.00		
Advertising expense	10,860.00		
Depr. expense—store equipment	3,100.00		
Delivery expense	2,800.00		
Miscellaneous selling expense	630.00		
Total selling expenses		$ 70,820.00	
Administrative expenses:			
Office salaries expense	$21,020.00		
Rent expense	8,100.00		
Depr. expense—office equipment	2,490.00		
Insurance expense	1,910.00		
Office supplies expense	610.00		
Misc. administrative expense	760.00		
Total administrative expenses		34,890.00	
Total operating expenses			105,710.00
Income from operations			$ 77,240.00
Other income and expense:			
Rent revenue		$ 600.00	
Interest expense		(2,440.00)	(1,840.00)
Net income			$ 75,400.00

Like purchase discounts, purchases returns and allowances reduce the cost of merchandise purchased during a period. In addition, transportation costs paid by the buyer for merchandise also increase the cost of merchandise purchased.

The **cost of merchandise sold** was determined by deducting the merchandise on hand at the end of the period from the merchandise available for sale during the period. The merchandise on hand at the end of the period is determined by taking a physical count of inventory on hand. This method of determining the cost of merchandise sold and the amount of merchandise on hand is called the *periodic system* of accounting for merchandise inventory.

Under the periodic system, the inventory records do not show the amount available for sale or the amount sold during the period. In contrast, under the *perpetual system* of accounting for merchandise inventory, each purchase and sale of merchandise is recorded in the inventory and the cost of merchandise sold accounts. As a result, the amount of merchandise available for sale and the amount sold are continuously (perpetually) disclosed in the inventory records.

Most large retailers and many small merchandising businesses use computerized perpetual inventory systems. Such systems normally use bar codes, such as the one on the back of this textbook. An optical scanner reads the bar code to record merchandise purchased and sold. Merchandise businesses using a perpetual inventory system report the cost of merchandise sold as a single line on the income statement, as shown above for ABC Merchandise Company. Merchandise businesses using the periodic inventory system report the cost of merchandise sold by using the format shown below.

Merchandise inventory, January 1, 2009			$ 59,700
Purchases		$521,980	
Less: Purchases returns and allowances	$9,100		
Purchases discounts	2,525	11,625	
Net purchases		$510,355	
Add transportation in		17,400	
Cost of merchandise purchased			527,755
Merchandise available for sale			$587,455
Less merchandise inventory, December 31, 2009			62,150
Cost of merchandise sold			$525,305

- Perpetual inventory system is widely used.

Gross profit is determined by subtracting the cost of merchandise sold from net sales.
Operating income, sometimes called *income from operations*, is determined by subtracting operating expenses from gross profit. Most merchandising businesses classify operating expenses as either *selling expenses* or *administrative expenses*. Expenses that are incurred directly in the selling of merchandise are selling expenses. They include such expenses as salespersons' salaries, store supplies used, depreciation of store equipment, delivery expense, and advertising. Expenses incurred in the administration or general operations of the business are administrative expenses or general expenses. Examples of these expenses are office salaries,

depreciation of office equipment, and office supplies used. *Credit card expense* is also normally classified as an administrative expense.
Although selling and administrative expenses may be reported separately, many companies report operating expenses as a single item.

Other income and expense is reported on income statement. Revenue from sources other than the primary operating activity of a business is classified as *other income*. In a merchandising business, these items include income from interest, rent, and gains resulting from the sale of fixed assets.

Expenses that cannot be traced directly to operations are identified as other expense. Interest expense that results from financing activities and losses incurred in the disposal of fixed assets are some examples of these items.

Other income and other expense are offset against each other on the income statement, as shown above. If the total of other income exceeds the total of other expense, the difference is added to income from operations to determine net income. If the reverse is true, the difference is subtracted from income from operations.

- **Exercise**

Based upon the following data, determine the cost of merchandise sold for May. Follow the format used above.

Merchandise inventory, May 1 . . . . . $121,200
Merchandise inventory, May 31 142,000
Purchases 985,000
Purchases returns and allowances . . . . . …. 23,500
Purchases discounts 21,000
Transportation in . . . . . …. 11,300

Single-Step Income Statement
An alternate form of income statement is the single-step income statement. As shown below, the income statement for ABC Merchandise Company deducts the total of all expenses in one step from the total of all revenues. *The single-step form emphasizes total revenues and total expenses* as the factors that determine net income. A criticism of the single-step form is that such amounts as gross profit and income from operations are not readily available for analysis.

ABC Merchandise Company
Income Statement
For the Year Ended December 31, 2009

Revenues:		
Net sales		$708,255.00
Rent revenue		6,000.00
Total revenues		$708,855.00
Expenses:		
Cost of merchandise sold	$525,305.00	
Selling expenses	70,820.00	
Administrative expenses	34,890.00	
Interest expense	2,440.00	
Total expenses		633,455.00
Net income		$ 75,400.00

Statement of Owner's Equity

The statement of owner's equity for ABC Merchandise Company is shown below. This statement is prepared in the same manner that we described previously for a service business.

ABC Merchandise Company
Statement of Owner's Equity
For the Year Ended December 31, 2009

Chris Clark, capital, January 1, 2009		$153,800.00
Net income for year	$75,400.00	
Less withdrawals	18,000.00	
Increase in owner's equity		57,400.00
Chris Clark, capital, December 31, 2009		$211,200.00

Balance Sheet

As we discussed and illustrated in previous chapters, the balance sheet may be presented with assets on the left-hand side and the liabilities and owner's equity on the right-hand side. This form of the balance sheet is called the ***account form.*** The balance sheet may also be presented in a downward sequence in three sections. This form of balance sheet is called the ***report form***. The report form of balance sheet for ABC Merchandise Company is shown below. In this balance sheet, note that merchandise inventory at the end of the period is reported as a current asset and that the current portion of the note payable is $5,000.

ABC Merchandise Company
Balance Sheet
December 31, 2009

Assets			
Current assets:			
Cash		$52,950.00	
Accounts receivable		91,080.00	
Merchandise inventory		62,150.00	
Office supplies		4,800.00	
Prepaid insurance		2,650.00	
Total current assets			$209,310.00
Property, plant, and equipment:			
Land		$20,000.00	
Store equipment	$27,100.00		
Less accumulated depreciation	5,700.00	21,400.00	
Office equipment	$15,570.00		
Less accumulated depreciation	4,720.00	10,850.00	
Total property, plant, and equipment			52,250.00
Total assets			$261,560.00
Liabilities			
Current liabilities:			
Accounts payable		$22,420.00	
Note payable (current portion)		5,000.00	
Salaries payable		1,140.00	
Unearned rent		1,800.00	
Total current liabilities			$ 30,360.00
Long-term liabilities:			
Note payable (final payment due 2019)			20,000.00
Total liabilities			$ 50,360.00
Owner's Equity			
Chris Clark, capital			211,200.00
Total liabilities and owner's equity			$261,560.00

3.7. Adjusting and closing entries for a merchandising business

Adjusting Process under the Periodic Inventory System

The adjusting process is the same under the periodic and perpetual inventory systems except for the inventory shrinkage adjustment. Under both the periodic and perpetual inventory systems the ending merchandise inventory is determined by a physical count.

Under the perpetual inventory system the ending inventory physical count is then compared to the amounts in the inventory ledger and the amount of inventory shrinkage is determined. This inventory shrinkage is recorded as a debit to *Cost of Merchandise Sold* and a credit to *Merchandise Inventory*.

Under the periodic inventory system, a separate inventory ledger is not maintained during the year. Instead, purchases of inventory are recorded in the purchases account. As a result, the inventory shrinkage cannot be directly determined, but is included indirectly in the cost of merchandise sold computation shown above. This is done at the end of the year when the merchandise inventory account is increased or decreased to the ending physical merchandise inventory, which we will describe later.

A primary disadvantage of the periodic inventory system is that the amount of inventory shrinkage is not separately determined.

Chapter 4: Accounting Systems

An *accounting system* is the methods and procedures for collecting, classifying, summarizing, and reporting a business's financial and operating information. Most accounting systems, however, are more complex. As a business grows and changes, its accounting system also changes in a three-step process. This three-step process is as follows:

Step 1: *Analyze* user information needs.
Step 2: *Design* the system to meet the user needs.
Step 3: *Implement* the system.

Once a system has been implemented, *feedback*, or input, from users is used to analyze and improve the system. Internal controls and information processing methods are essential in an accounting system. ***Internal controls*** are the policies and procedures that protect assets from misuse, ensure that business information is accurate, and ensure that laws and regulations are being followed.

Processing methods are the means by which the system collects, summarizes, and reports accounting information. These methods may be either *manual* or *computerized*. In the following sections, manual accounting systems that use special journals and subsidiary ledgers are described and illustrated. This is followed by a discussion of computerized accounting systems.

4.1. Manual and Computerized Accounting Systems

Manual Accounting Systems

Accounting systems are manual or computerized. Understanding a manual accounting system is useful in identifying relationships between accounting data and reports. Also, most computerized systems use principles from manual systems. In prior chapters, the transactions were manually recorded in an all-purpose (two-column) journal. The journal entries were then posted individually to the accounts in the ledger. Such a system is simple to use and easy to understand when there are a small number of transactions. However, when a business has a large number of *similar* transactions, using an all-purpose journal is inefficient and impractical.

For example, in a given day, a company might earn fees on account from 20 customers. Recording each fee earned by debiting Accounts Receivable and crediting Fees Earned would be inefficient. Also, a record of the amount each customer owes must be kept. In such cases, *subsidiary ledgers* and *special journals* are useful.

4.2. Subsidiary Ledgers and Controlling Accounts

Subsidiary Ledgers: An accounting system should be designed to provide information on the
amounts due from various customers (accounts receivable) and amounts owed to various creditors (accounts payable). A separate account for each customer and creditor could be added to the ledger. However, as the number of customers and creditors increases, the ledger would become awkward (difficult to handle or manage).

A large number of individual accounts with a common characteristic can be grouped together in a separate ledger called a subsidiary ledger. The primary ledger, which contains all of the balance sheet and income statement accounts, is then called the general ledger. Each subsidiary

ledger is represented in the general ledger by a summarizing account, called a controlling account. The sum of the balances of the accounts in a subsidiary ledger must equal the balance of the related controlling account. Thus, a subsidiary ledger is a secondary ledger that supports a controlling account in the general ledger.

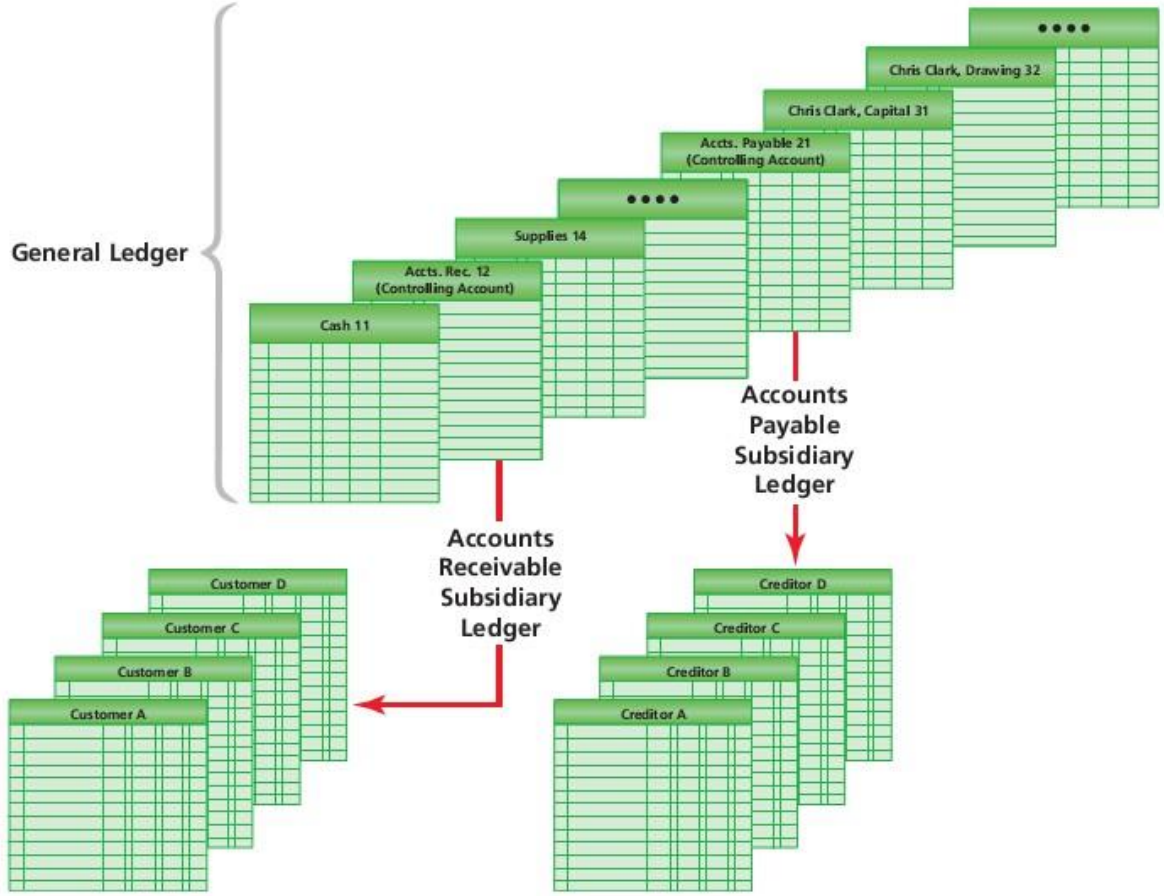
Two of the most common subsidiary ledgers are as follows:

- Accounts receivable subsidiary ledger
- Accounts payable subsidiary ledger

The accounts receivable subsidiary ledger, or customers ledger, lists the individual customer accounts in alphabetical order. The controlling account in the general ledger that summarizes the debits and credits to the individual customer accounts is Accounts Receivable.

The accounts payable subsidiary ledger, or creditors ledger, lists individual creditor accounts in alphabetical order. The related controlling account in the general ledger is Accounts Payable. The relationship between the general ledger and the accounts receivable and accounts payable subsidiary ledgers is illustrated below:

General Ledger and Subsidiary Ledgers

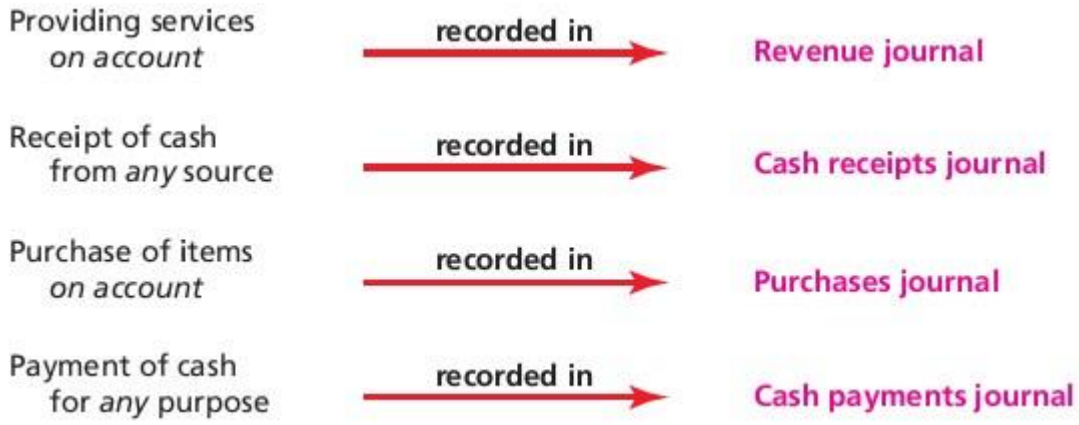


4.3. Special Journals

Special journals are a method of summarizing transactions. One method of processing data more efficiently in a manual accounting system is to expand the all-purpose two-column journal to a multicolumn journal. Each column in a multicolumn journal is used only for recording transactions that affect a certain account. For example, a special column could be used only for recording debits to the cash account. Likewise, another special column could be used only for recording credits to the cash account. The addition of the two special columns would eliminate the writing of Cash in the journal for every receipt and every payment of cash. Also, there would be no need to post each individual debit and credit to the cash account. Instead, the *Cash Dr.* and *Cash Cr.* columns could be totaled periodically and only the totals posted. In a similar way, special columns could be added for recording credits to Fees Earned, debits and credits to Accounts Receivable and Accounts Payable, and for other entries that are repeated.

An all-purpose multicolumn journal may be adequate for a small business that has many transactions of a similar nature. However, a journal that has many columns for recording many different types of transactions is impractical for larger businesses. The next logical extension of the accounting system is to replace the single multi-column journal with several special journals. Each special journal is designed to be used for recording a single kind of transaction that occurs frequently. For example, since most businesses have many transactions in which cash is paid out, they will likely use a special journal for recording cash payments. Likewise, they will use another special journal for recording cash receipts. Special journals are a method of summarizing transactions, which is a basic feature of any accounting system.

The format and number of special journals that a business uses depends on the nature of the business. A business that gives credit might use a special journal designed for recording only revenue from services provided on credit. In contrast, a business that does not give credit would have no need for such a journal. The transactions that occur most often in a small service business and the special journals in which they are recorded are as follows:



The all-purpose two-column journal, called the general journal or simply the journal, can be used for entries that do not fit into any of the special journals. For example, adjusting and closing entries are recorded in the general journal. The following types of transactions, special journals, and subsidiary ledgers are described and illustrated:

Transaction	Special Journal	Subsidiary Ledger
Fees earned on account	Revenue journal	Accounts receivable subsidiary ledger
Cash receipts	Cash receipts journal	Accounts receivable subsidiary ledger
Purchases on account	Purchases journal	Accounts payable subsidiary ledger
Cash payments	Cash payments journal	Accounts payable subsidiary ledger

As shown above, transactions that are recorded in the revenue and cash receipts journals will affect the accounts receivable subsidiary ledger. Likewise, transactions that are recorded in the purchases and cash payments journals will affect the accounts payable subsidiary ledger.

Computerized Accounting Systems

Computerized accounting systems are widely used by even the smallest of companies. Computerized accounting systems have the following three main advantages over manual systems:

- Computerized systems simplify the record-keeping process in that transactions are recorded in electronic forms and, at the same time, posted electronically to general and subsidiary ledger accounts.
- Computerized systems are generally more accurate than manual systems.
- Computerized systems provide management with current account balance information to support decision making, since account balances are posted as the trans-actions occur.

The computer does not make journalizing, posting, and mathematical errors. For example, a computerized accounting system will not process a transaction unless the total debits for the transaction equal the total credits for a transaction. Instead, an error screen will notify the user that the transaction data must be corrected. Likewise, the computer will not make posting or mathematical errors.

The discovery and correction of errors, however, is important in a computerized system. Errors that can occur in a computerized system include the following:

- Failing to record a transaction.
- Recording a transaction more than once.
- Recording a transaction in incorrect accounts.
- Entering an incorrect number in both the debit and credit parts of the transaction.

The preceding errors are often discovered by reviewing the computerized trial balance for any account balances that are unusual or unreasonable. For example, a credit balance for Supplies indicates that an error has occurred. In addition, errors are often discovered when parties affected by the incorrect transaction complain. For example, an employee would likely complain about a missed or incorrect payroll check.

Incorrectly recorded transactions can be corrected in computerized accounting systems by deleting the incorrect entries and replacing them with correct entries. When a transaction is deleted in a computerized system, the postings to the accounts are automatically deleted. This also removes the effect of the incorrect entry from the accounts. Alternatively, correcting entries may also be used as described in Chapter 2.

The popular accounting software for small, medium and large sized businesses used in a computerized accounting system are:

- QuickBooks® and
- Peachtree Accounting.

End Chapter Review Questions: Check your understanding!

1. Why would a company maintain separate accounts receivable ledgers for each customer, as opposed to maintaining a single accounts receivable ledger for all customers?
2. What are the major advantages of the use of special journals?
3. Assuming the use of a two-column general journal, a purchases journal, and a cash payments journal and indicate the journal in which each of the following transactions should be recorded:
    a. Purchase of office supplies on account.
    b. Purchase of supplies for cash.
    c. Purchase of store equipment on account.
    d. Payment of cash on account to creditor.
    e. Payment of cash for office supplies.
4. What is an electronic form, and how is it used in a computerized accounting system?
5. Do computerized systems use controlling accounts to verify the accuracy of the subsidiary accounts?
6. What happens to the special journal in a computerized accounting system that uses electronic forms?

Chapter 6: Cash and Receivables

What exactly is *cash*? This may seem like a foolish question until one considers the possibilities. Cash includes coins and currency. But what about items like un-deposited checks, certificates of deposit (CD), and similar items? Generalizing, cash includes those items that are acceptable to a bank for deposit and are free from restrictions (i.e., available for use in satisfying current debts). Cash typically includes coins, currency (paper money), checks, money orders, and funds on deposit with a bank.

Items like postdated checks, certificates of deposit (CD), IOUs, stamps, and travel advances are not classified as cash. These would customarily be classified in accounts such as receivables, short-term investments, supplies, or prepaid expenses. The existence of *compensating balances* (amounts that must be left on deposit and not withdrawn) should be disclosed and, if significant, reported separately from cash.

Also receiving separate treatment is "sinking funds" (monies that must be set aside to satisfy debts) and restricted foreign currency holdings (that cannot easily be transferred or converted into another currency). These unique categories of funds may be reported in the long-term investments category. Some companies will report "cash and *cash equivalents*", (*cash equivalents are defined as short term, highly liquid investments with original maturities of 90 days or less*).

Cash equivalents arise when companies place their cash in very short-term financial instruments that are deemed to be highly secure and will convert back into cash within 90 days (e.g., short-term government-issued treasury bills). These financial instruments are usually very marketable in the event the company has an immediate need for cash.

Businesses usually have several bank accounts. For example, a business might have one bank account for general cash payments and another for payroll. A separate ledger account is normally used for each bank account. For example, a bank account at Commercial Bank of Ethiopia could be identified in the ledger as Cash in Bank - CBE; a bank account at Awash International Bank could be identified in the ledger as Cash in Bank - AIB. To simplify, we will assume in this chapter that a company has only one bank account, which is identified in the ledger as Cash. Cash is the asset most likely to be stolen or used improperly in a business. For this reason, businesses must carefully control cash and cash transactions.

5.1. Internal Control over Cash

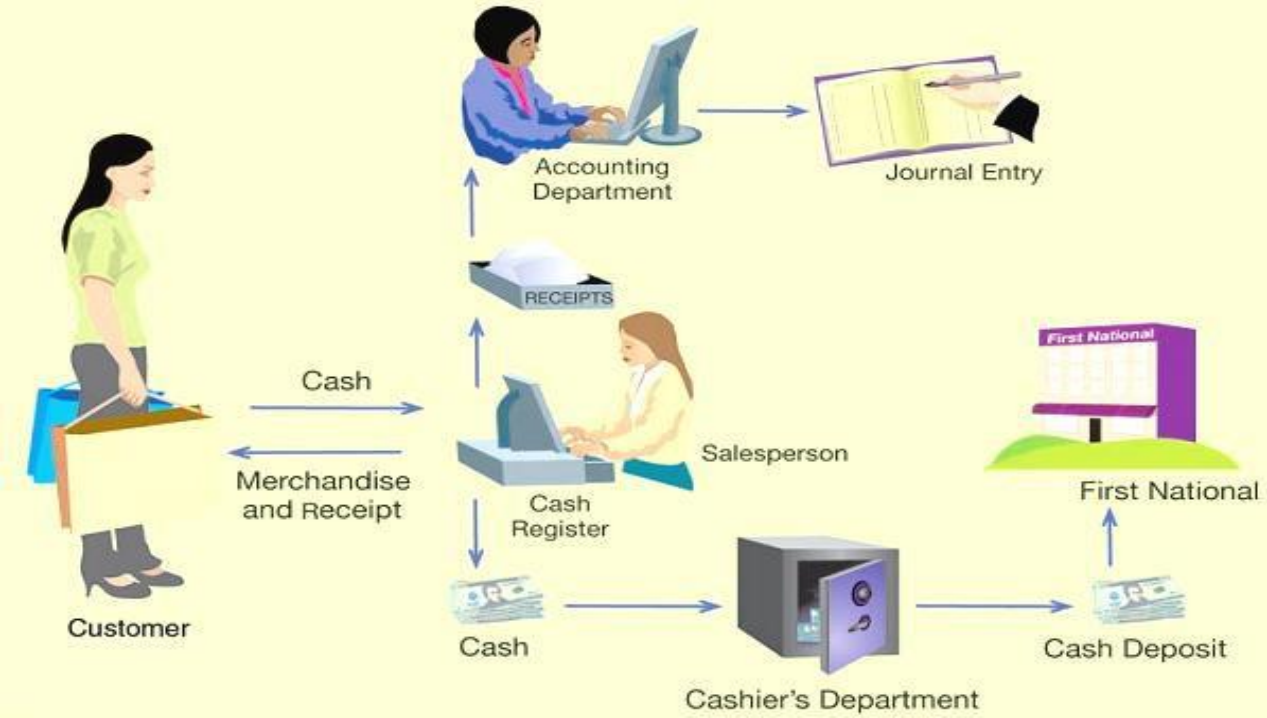
Cash control - Internal control for cash is based on the same general control features introduced for other accounts; access to cash should be limited to a few authorized personnel, incompatible duties should be separated, and accountability features (like pre-numbered checks, etc.) should be developed.

Control of Cash Receipts

To protect cash from theft and misuse, a business must control cash from the time it is received until it is deposited in a bank. Businesses normally receive cash from two main sources.

- Customers purchasing products or services
- Customers making payments on account

Cash Received from Cash Sales - An important control to protect cash received in over-the- counter sales is a cash register. The use of a cash register to control cash is shown below.



A cash register controls cash as follows:

1. At the beginning of every work shift, each cash register clerk is given a cash drawer containing a predetermined amount of cash. This amount is used for making change for customers and is sometimes called a *change fund*.
2. When a salesperson enters the amount of a sale, the cash register displays the amount to the customer. This allows the customer to verify that the clerk has charged the correct amount. The customer also receives a cash receipt.
3. At the end of the shift, the clerk and the supervisor count the cash in the clerk's cash drawer. The amount of cash in each drawer should equal the beginning amount of cash plus the cash sales for the day.
4. The supervisor takes the cash to the Cashier's Department where it is placed in a safe.
5. The supervisor forwards the clerk's cash register receipts to the Accounting Department.
6. The cashier prepares a bank deposit ticket.
7. The cashier deposits the cash in the bank, or the cash is picked up by an armored (shatterproof) car service.
8. The Accounting Department summarizes the cash receipts and records the day's cash sales.
9. When cash is deposited in the bank, the bank normally stamps a duplicate copy of the deposit ticket with the amount received. This bank receipt is returned to the Accounting Department, where it is compared to the total amount that should have been deposited. This control helps ensure that all the cash is deposited and that no cash is lost or stolen on the way to the bank. Any shortages are thus promptly detected.

Salespersons may make errors in making change for customers or in ringing up cash sales. As a result, the amount of cash on hand may differ from the amount of cash sales. Such differences are recorded in ***cash short and over account***.

To illustrate, assume the following cash register data for May 3:

Cash register total for cash sales ……. $35,690
Cash receipts from cash sales ……35,668

The cash sales, receipts, and shortage of $22 ($35,690 - $35,668) would be recorded as follows:

May	3	Cash		35,668	
		Cash Short and Over		22	
		Sales			35,690

If there had been cash over, *Cash Short and Over* would have been credited for the overage. At the end of the accounting period, a debit balance in *Cash Short and Over* is included in 'Miscellaneous expense' on the income statement. A credit balance is included in the Other income section. If a salesperson consistently has large cash short and over amounts, the supervisor may require the clerk to take additional training.

Cash Received in the Mail - Cash is received in the mail when customers pay their bills. This cash is usually in the form of checks and money orders. Most companies design their invoices so that customers return a portion of the invoice, called a *remittance advice*, with their payment. Remittance advices may be used to control cash received in the mail as follows:

1. An employee opens the incoming mail and compares the amount of cash received with the amount shown on the remittance advice. If a customer does not return a remittance advice, the employee prepares one. The remittance advice serves as a record of the cash initially received. It also helps ensure that the posting to the customer's account is for the amount of cash received.
2. The employee opening the mail stamps checks and money orders "For Deposit Only" in the bank account of the business.
3. The remittance advices and their summary totals are delivered to the Accounting Department.
4. All cash and money orders are delivered to the Cashier's Department.
5. The cashier prepares a bank deposit ticket.
6. The cashier deposits the cash in the bank, or the cash is picked up by an armored car service.
7. An accounting clerk records the cash received and posts the amounts to the customer accounts.
8. When cash is deposited in the bank, the bank normally stamps a duplicate copy of the deposit ticket with the amount received. This bank receipt is returned to the Accounting Department, where it is compared to the total amount that should have been deposited. This control helps ensure that all cash is deposited and that no cash is lost or stolen on the way to the bank. Any shortages are thus promptly detected.

Separating the duties of the Cashier's Department, which handles cash, and the Accounting Department, which records cash, is a control. If Accounting Department employees both handle and record cash, an employee could steal cash and change the accounting records to hide the theft.

Cash Received by EFT - Cash may also be received from customers through electronic funds transfer (EFT). For example, customers may authorize automatic electronic transfers from their checking accounts to pay monthly bills for such items as cell phone, Internet, and electric services. In such cases, the company sends the customer's bank a signed form from the customer authorizing the monthly electronic transfers. Each month, the company notifies the customer's bank of the amount of the transfer and the date the transfer should take place. On the due date, the company records the electronic transfer as a receipt of cash to its bank account and posts the amount paid to the customer's account.

Companies encourage customers to use EFT for the following reasons:

- EFTs cost less than receiving cash payments through the mail.
- EFTs enhances internal controls over cash since the cash is received directly by the bank without any employees handling cash.
- EFTs reduces late payments from customers and speed up the processing of cash receipts.

Control of Cash Payments

The control of cash payments should provide reasonable assurance that:

- Payments are made for only authorized transactions.
- Cash is used effectively and efficiently. For example, controls should ensure that all available purchase discounts are taken.

In a small business, an owner/manager may authorize payments based on personal knowledge. In a large business, however, purchasing goods, inspecting the goods received, and verifying the invoices are usually performed by different employees. These duties must be coordinated to ensure that proper payments are made to creditors. One system used for this purpose is the voucher system.

Voucher System - A voucher system is a set of procedures for authorizing and recording liabilities and cash payments. A voucher is any document that serves as proof of authority to pay cash or issue an electronic funds transfer. An invoice that has been approved for payment could be considered a voucher. In many businesses, however, a voucher is a special form used to record data about a liability and the details of its payment.

In a manual system, a voucher is normally prepared after all necessary supporting documents have been received. For the purchase of goods, a voucher is supported by the supplier's invoice, a purchase order, and a receiving report. After a voucher is prepared, it is submitted for approval. Once approved, the voucher is recorded in the accounts and filed by due date. Upon payment, the voucher is recorded in the same manner as the payment of an account payable.

In a computerized system, data from the supporting documents (such as purchase orders, receiving reports, and suppliers' invoices) are entered directly into computer files. At the due date, the checks are automatically generated and mailed to creditors. At that time, the voucher is electronically transferred to a paid voucher file.

Cash Paid by EFT - Cash can also be paid by electronic funds transfer systems. For example, many companies pay their employees by EFT. Under such a system, employees authorize the deposit of their payroll checks directly into their checking accounts. Each pay period, the

company transfers the employees' net pay to their checking accounts through the use of EFT. Many companies also use EFT systems to pay their suppliers and other vendors.

Bank Accounts

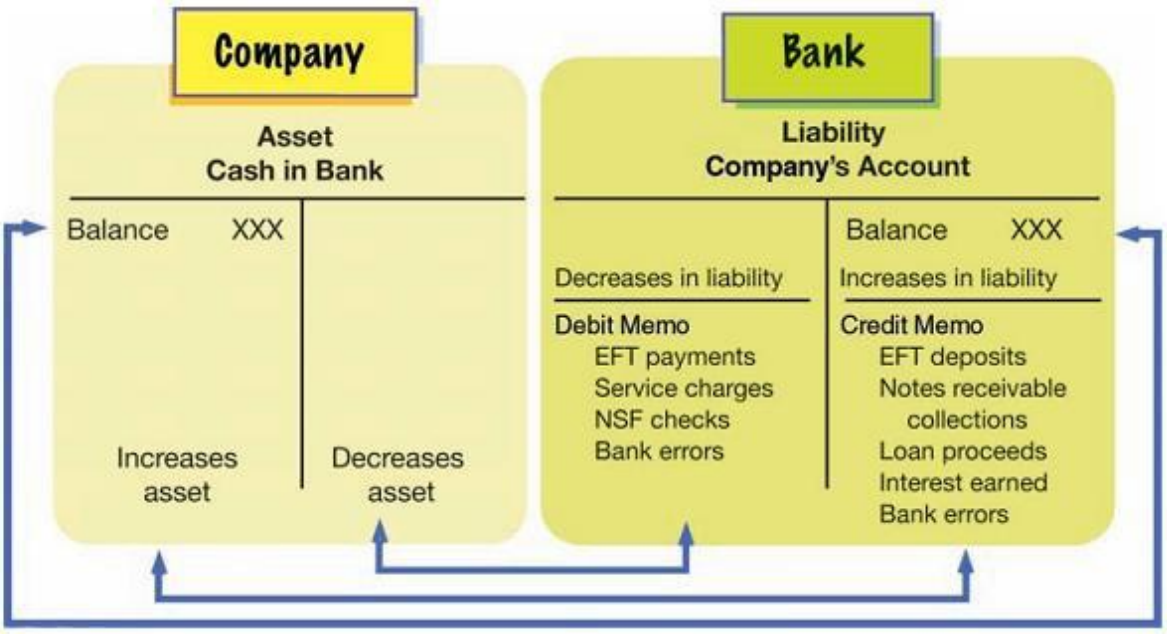
A major reason that companies use bank accounts is for internal control. Some of the control
advantages of using bank accounts are as follows:

- Bank accounts reduce the amount of cash on hand.
- Bank accounts provide an independent recording of cash transactions. Reconciling the balance of the cash account in the company's records with the cash balance according to the bank is an important control.
- Use of bank accounts facilitates the transfer of funds using EFT systems.

Bank Statement

Banks usually maintain a record of all checking account transactions. A summary of all transactions, called a bank statement, is mailed to the company (depositor) or made available online, usually each month. The bank statement shows the beginning balance, additions, deductions, and the ending balance. Checks or copies of the checks listed in the order that they were paid by the bank may accompany the bank statement. If paid checks are returned, they are stamped "Paid," together with the date of payment. Many banks no longer return checks or check copies. Instead, the check payment information is available online.

The company's checking account balance in the bank records is a liability. Thus, in the bank's records, the company's account has a credit balance. Since the bank statement is prepared from the bank's point of view, a ***credit memo*** entry on the bank statement indicates an increase (a credit) to the company's account. Likewise, a ***debit memo*** entry on the bank statement indicates a decrease (a debit) in the company's account. This relationship is shown below.



A bank makes credit entries (issues **credit memos**) for the following:	A bank makes debit entries (issues **debit memos**) for the following:
· Deposits made by EFT · Collections of note receivable for the company · Proceeds for a loan made to the company by the bank · Interest earned on the company's account · 5. Correction (if any) of bank errors	· Payments made by EFT · Service charges · Customer checks returned for NSF · 4. Correction (if any) of bank errors

Customers' checks returned for not sufficient funds, called *NSF checks*, are customer checks that were initially deposited, but were not paid by the customer's bank. Since the company's bank credited the customer's check to the company's account when it was deposited, the bank debits the company's account (issues a debit memo) when the check is returned without payment.

Using the Bank Statement as a Control over Cash

The bank statement is a primary control that a company uses over cash. A company uses the bank's statement as a control by comparing the company's recording of cash transactions to those recorded by the bank. The cash balance shown by a bank statement is usually different from the company's cash balance, as shown below for Power Networking Company.

Bank Statement

Beginning balance		$ 4,218.60
Additions:		
Deposits	$13,749.75	
Miscellaneous	408.00	14,157.75
Deductions:		
Checks	$14,698.57	
NSF check	300.00	
Service charge	18.00	(15,016.57)
Ending balance		$ 3,359.78

Power Networking Records

Beginning balance	$ 4,227.60
Deposits	14,565.95
Checks	(16,243.56)
Ending balance	$ 2,549.99

Power Networking should determine the reason for the difference in these two amounts.

Differences between the company and bank balance may arise because of a delay by either the company or bank in recording transactions. For example, there is normally a time lag of one or more days between the date a check is written and the date that it is paid by the bank. Likewise, there is normally a time lag between when the company mails a deposit to the bank (or uses the night depository) and when the bank receives and records the deposit.

Differences may also arise because the bank has debited or credited the company's account for transactions that the company will not know about until the bank statement is received. Finally,

differences may arise from errors made by either the company or the bank. For example, the company may incorrectly post to Cash a check written for $4,500 as $450. Likewise, a bank may incorrectly record the amount of a check.

5.2. Bank Reconciliation

One of the most common cash control procedures is the *bank reconciliation*. In business, every bank statement should be promptly reconciled by a person not otherwise involved in the cash receipts and disbursements functions.

Bank reconciliation is the process of matching the balances in an entity's accounting records for a cash account to the corresponding information on bank statement, with the goal of ascertaining the differences between the two and booking changes to the accounting records as appropriate. The information on the bank statement is the bank's record of all transactions impacting the entity's bank account during the month.

Bank reconciliation should be completed at regular intervals for all bank accounts, to ensure that a company's cash records are correct. Otherwise, it may find that cash balances are much lower than expected, resulting in bounced checks or overdraft fees. Bank reconciliation will also detect some types of fraud after the fact; this information can be used to design better controls over the receipt and payment of cash. The reconciliation is needed to identify errors, irregularities, and adjustments for the Cash account. Having an independent person prepare the reconciliation helps establish separation of duties and discourage fraud by requiring collusion for unauthorized actions.

There are many different formats for the reconciliation process, but they all accomplish the same objective. The reconciliation compares the amount of cash shown on the monthly *bank statement* (the document received from a bank which summarizes deposits and other credits, and checks and other debits) with the amount of cash reported in the general ledger.

In general, *bank reconciliation* is an analysis of the items and amounts that result in the cash balance reported in the bank statement to differ from the balance of the cash account in the ledger. The adjusted cash balance determined in the bank reconciliation is re-ported on the balance sheet. Bank reconciliation is usually divided into two sections as follows:

- The *bank section* begins with the cash balance according to the bank statement and ends with the adjusted balance.
- The *company section* begins with the cash balance according to the company's records and ends with the adjusted balance.

The *adjusted balance* from bank and company sections must be equal. The format of the bank reconciliation is shown below.

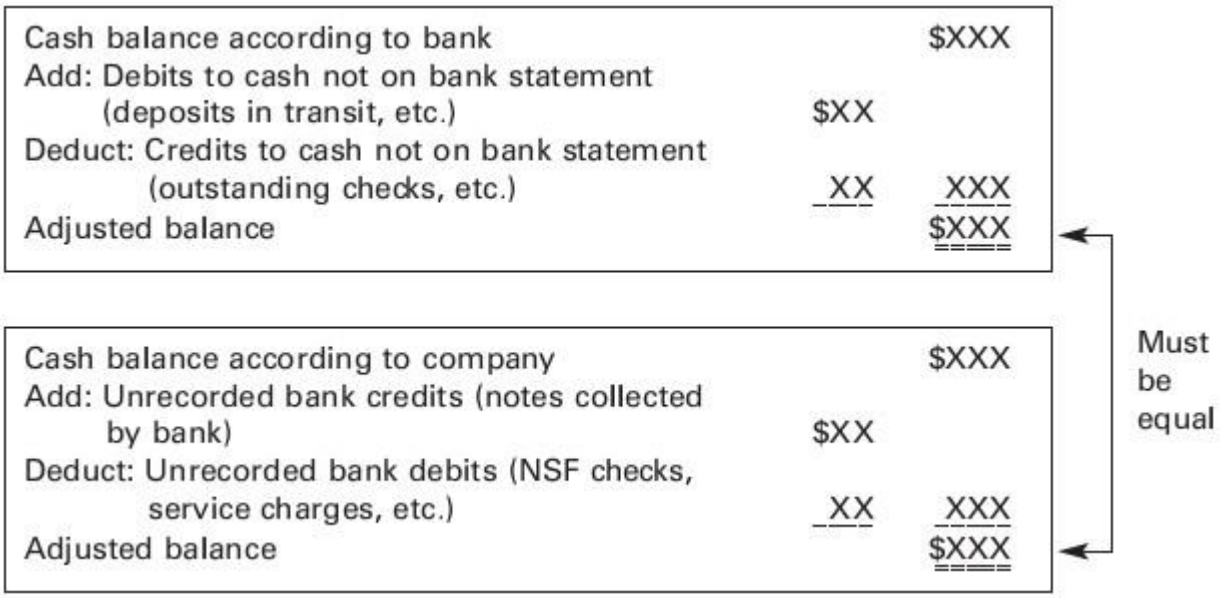
Bank reconciliation is prepared using the following steps:

Bank Section of Reconciliation

Step 1: Enter the *Cash balance according to bank* from the ending cash balance according to the bank statement.

Step 2: *Add deposits not recorded by the bank.*

Identify deposits not recorded by the bank by comparing each deposit listed on the bank statement with unrecorded deposits appearing in the preceding period's reconciliation and with the current period's deposits. Examples: Deposits in transit at the end of the period.



Step 3: *Deduct outstanding checks* that have not been paid by the bank.

Identify outstanding checks by comparing paid checks with outstanding checks appearing on the preceding period's reconciliation and with recorded checks. Examples: Outstanding checks at the end of the period.

Step 4: Determine the *Adjusted balance* by adding Step 2 and deducting Step 3.

Company Section of Reconciliation

Step 5: Enter the *Cash balance according to company* from the ending cash balance in the

ledger.

Step 6: *Add credit memos that have not been recorded*.

Identify the bank credit memos that have not been recorded by comparing the bank statement credit memos to entries in the journal. Examples: A note receivable and interest that the bank has collected for the company.

Step 7: *Deduct debit memos that have not been recorded*.

Identify the bank debit memos that have not been recorded by comparing the bank statement debit memos to entries in the journal. Examples: Customers' not sufficient funds (NSF) checks; bank service charges.

Step 8: Determine the *Adjusted balance* by adding Step 6 and deducting Step 7.

Step 9: Verify that the Adjusted balances determined in Steps 4 and 8 are equal.

The adjusted balances in the bank and company sections of the reconciliation ***must be equal***. If the balances are not equal, an item has been overlooked and must be found. Sometimes, the adjusted balances are not equal because either the company or the bank has made an error. In such cases, the error is often discovered by comparing the amount of each item (deposit and

check) on the bank statement with that in the company's records. Any bank or company errors discovered should be added or deducted from the bank or company section of the reconciliation depending on the nature of the error.

To illustrate, consider the bank statement for Power Networking Company shown above. This bank statement shows a balance of $3,359.78 as of July 31. The cash balance in Power Networking's ledger on the same date is $2,549.99. Using the preceding steps, the following reconciling items were identified:

Step 2: Deposit of July 31, not recorded on bank statement: $816.20

Step 3: Outstanding checks:

Check No. 812	$1,061.00
Check No. 878	435.39
Check No. 883	48.60
Total	$1,544.99

Step 6: Note receivable of $400 plus interest of $8 collected by bank not recorded in the journal as indicated by a credit memo of $408.

Step 7: Check from customer (Thomas Ivey) for $300 returned by bank because of insufficient funds (NSF) as indicated by a debit memo of $300.00.

Bank service charges of $18, not recorded in the journal as indicated by a debit memo of $18.00

In addition, an error of $9 was discovered. This error occurred when Check No. 879 for $732.26 to Taylor Co., on account, was recorded in the company's journal as $723.26. The bank reconciliation, based on the bank statement and the preceding reconciling items, is shown below.

Power Networking Company
Bank Reconciliation
July 31, 2012

Step 1 →	Cash balance according to bank statement		$3,359.78
Step 2 →	Add deposit of July 31, not recorded by bank		816.20
			$4,175.98
Step 3 →	Deduct outstanding checks:		
	No. 812	$1,061.00	
	No. 878	435.39	
	No. 883	48.60	1,544.99
Step 4 →	Adjusted balance		$2,630.99
Step 5 →	Cash balance according to Power Networking		$2,549.99
Step 6 →	Add note and interest collected by bank		408.00
			$2,957.99
Step 7 →	Deduct: Check returned because of insufficient funds	$ 300.00	
	Bank service charge	18.00	
	Error in recording Check No. 879	9.00	327.00
Step 8 →	Adjusted balance		$2,630.99

Step 9

The company's records do not need to be updated for any items in the bank section of the reconciliation. This section begins with the cash balance according to the bank statement. However, the bank should be notified of any errors that need to be corrected. The company's records do need to be updated for any items in the company section of the bank reconciliation. The company's records are updated using journal entries. For example, journal entries should be made for any unrecorded bank memos and any company errors.

The journal entries for Power Networking, based on the bank reconciliation shown above, are as follows:

July	31	Cash		408	
		Notes Receivable			400
		Interest Revenue			8
	31	Accounts Receivable—Thomas Ivey		300	
		Miscellaneous Expense		18	
		Accounts Payable—Taylor Co.		9	
		Cash			327

After the preceding journal entries are recorded and posted, the cash account will have a debit balance of $2,630.99. This cash balance agrees with the adjusted balance shown on the bank reconciliation. This is the amount of cash on July 31 and is the amount that is reported on Power Networking's July 31 balance sheet. Businesses may reconcile their bank accounts in a slightly different format from that shown in ***Bank Reconciliation*** above. Regardless, the objective is to control cash by reconciling the company's records with the bank statement. In doing so, any errors or misuse of cash may be detected.

To enhance internal control, the bank reconciliation should be prepared by an employee who does not take part in or record cash transactions. Otherwise, mistakes may occur, and it is more likely that cash will be stolen or misapplied. For example, an employee who handles cash and also reconciles the bank statement could steal a cash deposit, omit the deposit from the accounts, and omit it from the reconciliation.

Bank reconciliations are also important computerized systems where deposits and checks are stored in electronic files and records. Some systems use computer software to determine the difference between the bank statement and company cash balances. The software then adjusts for deposits in transit and outstanding checks. Any remaining differences are reported for further analysis.

Activity 1: Bank Reconciliation preparation!

The following data were gathered to use in reconciling the bank account of Coco's Corporation for January 31, 2014:

Balance per bank $14,500
Balance per company records 13,875
Bank service charges 75
Deposit in transit 3,750

NSF checks 800
Outstanding checks 5,250

Required: Prepare bank reconciliation:

a. What is the adjusted cash balance on the bank reconciliation?
b. Journalize any necessary entries for Photo Op based on the bank reconciliation.

5.3. Petty Cash and Change Funds

A company often has to pay small amounts for such items as postage, office supplies, or minor repairs. Although small, such payments may occur often enough to total a significant amount. Thus, it is desirable to control such payments. However, writing a check for each small payment is not practical. Instead, a special cash fund, called a ***petty cash fund***, is used.

A petty cash fund is established by estimating the amount of payments needed from the fund during a period, such as a week or a month. A check is then written and cashed for this amount. The money obtained from cashing the check is then given to an employee, called the *petty cash custodian*. The petty cash custodian disburses monies from the fund as needed. For control purposes, the company may place restrictions on the maximum amount and the types of payments that can be made from the fund. Each time money is paid from petty cash, the custodian records the details on a petty cash receipts form.

The petty cash fund is normally replenished at periodic intervals, when it is depleted, or reaches a minimum amount. When a petty cash fund is replenished, the accounts debited are determined by summarizing the petty cash receipts. A check is then written for this amount, payable to Petty Cash.

To illustrate, assume that a petty cash fund of $500 is established on August 1. The entry to record this transaction is as follows:

Aug.	1	Petty Cash		500	
		Cash			500

The only time Petty Cash is debited is when the fund is initially established, as shown in the preceding entry, or when the fund is being increased. The only time Petty Cash is credited is when the fund is being decreased.

At the end of August, the petty cash receipts indicate expenditures for the following items:

Office supplies ……. $380
Postage (debit Office Supplies) …… 22
Store supplies …… 35
Miscellaneous administrative expense ……. 30
Total …….. $467

The entry to replenish the petty cash fund on August 31 is as follows:

Aug.	31	Office Supplies		402	
		Store Supplies		35	
		Miscellaneous Administrative Expense		30	
		Cash			467

Petty Cash is not debited when the fund is replenished. Instead, the accounts affected by the petty cash disbursements are debited, as shown in the preceding entry. Replenishing the petty cash fund restores the fund to its original amount of $500.

Companies often use other cash funds for special needs, such as payroll or travel expenses. Such funds are called *special-purpose funds*. For example, each salesperson might be given $1,000 for travel-related expenses. Periodically, each salesperson submits an expense report, and the fund is replenished. Special-purpose funds are established and controlled in a manner similar to that of the petty cash fund.

5.4. Classifications of Receivables

The receivables that result from sales on account are normally accounts receivable or notes receivable. The term receivables includes all money claims against other entities, including people, companies, and other organizations. Receivables are usually a significant portion of the total current assets.

Accounts Receivable

The most common transaction creating a receivable is selling merchandise or services on account (on credit). The receivable is recorded as a debit to Accounts Receivable. Such accounts receivable are normally collected within a short period, such as 30 or 60 days. They are classified on the balance sheet as a current asset.

Notes Receivable

Notes receivable are amounts that customers owe for which a formal, written instrument of credit has been issued. If notes receivable are expected to be collected within a year, they are classified on the balance sheet as a current asset. Notes are often used for credit periods of more than 60 days. For example, an automobile dealer may require a down payment at the time of sale and accept a note or a series of notes for the remainder. Such notes usually provide for monthly payments.

Notes may also be used to settle a customer's account receivable. Notes and accounts receivable that result from sales transactions are sometimes called trade receivables. We assume that all notes and accounts receivable in this chapter are from sales transactions.

Other Receivables

Other receivables include interest receivable, taxes receivable, and receivables from officers or employees. Other receivables are normally reported separately on the balance sheet. If they are expected to be collected within one year, they are classified as current assets. If collection is expected beyond one year, they are classified as noncurrent assets and reported under the caption Investments.

5.6. Accounting for Uncollectible Accounts

In prior chapters, the accounting for sales of merchandise or services on account (on credit) was described and illustrated. A major issue that has not yet been discussed is that some customers will not pay their accounts. That is, some accounts receivable will be uncollectible.

Companies may shift the risk of uncollectible receivables to other companies. For example, some retailers do not accept sales on account, but will only accept cash or credit cards. Such policies shift the risk to the credit card companies. Companies may also sell their receivables. This is often the case when a company issues its own credit card. Selling receivables is called *factoring* the receivables. The buyer of the receivables is called a *factor*. An advantage of factoring is that the company selling its receivables immediately receives cash for operating and other needs. Also, depending on the factoring agreement, some of the risk of uncollectible accounts is shifted to the factor.

Regardless of how careful a company is in granting credit, some credit sales will be uncollectible. The operating expense recorded from uncollectible receivables is called *bad debt expense, uncollectible accounts expense, or doubtful accounts expense*. There is no general rule for when an account becomes uncollectible. Some indications that an account may be uncollectible include the following:

- The receivable is past due.
- The customer does not respond to the company's attempts to collect.
- The customer files for bankruptcy.
- The customer closes its business.
- The company cannot locate the customer.

If a customer doesn't pay, a company may turn the account over to a collection agency. After the collection agency attempts to collect payment, any remaining balance in the account is considered worthless. The two methods of accounting for uncollectible receivables are as follows:

1. The *direct write-off method* records bad debt expense only when an account is determined to be worthless.
2. The *allowance method* records bad debt expense by estimating uncollectible accounts at the end of the accounting period.

The direct write-off method is often used by small companies and companies with few receivables. Generally accepted accounting principles (GAAP), however, require companies with a large amount of receivables to use the allowance method. As a result, most well-known companies such as *Pepsi, Intel, and FedEx* use the allowance method.

1. Direct Write-Off Method for Uncollectible Accounts

Under the direct write-off method, Bad Debt Expense is not recorded until the customer's account is determined to be worthless. At that time, the customer's account receivable is written off.

To illustrate, assume that a $4,200 account receivable from D. L. Ross has been determined to be uncollectible. The entry to write off the account is as follows:

May	10	Bad Debt Expense		4,200	
		Accounts Receivable—D. L. Ross			4,200

An account receivable that has been written off may be collected later. In such cases, the account is reinstated by an entry that reverses the write-off entry. The cash received in payment is then recorded as a receipt on account.

To illustrate, assume that the D. L. Ross account of $4,200 written off on May 10 is later collected on November 21. The reinstatement and receipt of cash is recorded as follows:

Nov.	21	Accounts Receivable—D. L. Ross		4,200	
		Bad Debt Expense			4,200
	21	Cash		4,200	
		Accounts Receivable—D. L. Ross			4,200

The direct write-off method is used by businesses that sell most of their goods or services for cash or accept only **MasterCard** or **VISA**, which are recorded as cash sales. In such cases, receivables are a small part of the current assets and any bad debt expense is small. Examples of such businesses are a convenience store, a small retail store, etc.

2. Allowance Method for Uncollectible Accounts

The allowance method estimates the uncollectible accounts receivable at the end of the accounting period. Based on this estimate, Bad Debt Expense is recorded by an adjusting entry.

To illustrate, assume that ExTone Company began operations August 1. As of the end of its accounting period on December 31, 2009, ExTone has an accounts receivable balance of
$200,000. This balance includes some past due accounts. Based on industry averages, ExTone estimates that $30,000 of the December 31 accounts receivable will be uncollectible. However, on December 31, ExTone doesn't know which customer accounts will be uncollectible. Thus, specific customer accounts cannot be decreased or credited. Instead, a contra asset account, *Allowance for Doubtful Accounts*, is credited for the estimated bad debts.

Using the $30,000 estimate, the following adjusting entry is made on December 31:

Dec.	31	Bad Debt Expense		30,000	
		Allowance for Doubtful Accounts			30,000
		Uncollectible accounts estimate.			

- *The adjusting entry reduces receivables to their net realizable value and matches the uncollectible expense with revenues.*

The preceding adjusting entry affects the income statement and balance sheet. On the income statement, the $30,000 of Bad Debt Expense will be matched against the related revenues of the period. On the balance sheet, the value of the receivables is reduced to the amount that is expected to be collected or realized.
This amount, $170,000 ($200,000 - $30,000), is called the *net realizable value* of the receivables.

After the preceding adjusting entry is recorded, Accounts Receivable still has a debit balance of $200,000. This balance is the total amount owed by customers on account on December 31 as supported by the accounts receivable subsidiary ledger. The accounts receivable contra account, Allowance for Doubtful Accounts, has a credit balance of $30,000.

- ***Write-Offs to the Allowance Account***

When a customer's account is identified as uncollectible, it is written off against the allowance account. This requires the company to remove the specific accounts receivable and an equal amount from the allowance account.

To illustrate, on January 21, 2010, John Parker's account of $6,000 with ExTone Company is written off as follows:

2010 Jan.	21	Allowance for Doubtful Accounts	6,000	
		Accounts Receivable—John Parker		6,000

At the end of a period, Allowance for Doubtful Accounts will normally have a balance. This is because Allowance for Doubtful Accounts is based on an estimate. As a result, the total write- offs to the allowance account during the period will rarely equal the balance of the account at the beginning of the period. The allowance account will have a credit balance at the end of the period if the write-offs during the period are less than the beginning balance. It will have a debit balance if the write-offs exceed the beginning balance.

- ***Estimating Uncollectibles***

The allowance method requires an estimate of uncollectible accounts at the end of the period. This estimate is normally based on past experience, industry averages, and forecasts of the future. The two methods used to estimate uncollectible accounts are as follows:

- Percent of sales method.
- Analysis of the receivables method.

Percent of Sales Method - Since accounts receivable are created by credit sales, uncollectible accounts can be estimated as a percent of credit sales. If the portion of credit sales to sales is relatively constant, the percent may be applied to total sales or net sales.

To illustrate, assume the following data for ExTone Company on December 31, 2010, before any adjustments:

Balance of Accounts Receivable ……. $240,000
Balance of Allowance for Doubtful Accounts ……. 3,250 (Cr)
Total credit sales …….. 3,000,000
Bad debt as a percent of credit sales…… ¾ %

Bad Debt Expense of $22,500is estimated as follows:

Bad Debt Expense = Credit Sales * Bad Debt as a Percent of Credit Sales
Bad Debt Expense = $3,000,000 * ¾ % = **$22,500**

The adjusting entry for uncollectible accounts on December 31, 2010, is as follows:

Dec.	31	Bad Debt Expense		22,500	
		Allowance for Doubtful Accounts			22,500
		Uncollectible accounts estimate.			
		($3,000,000 × 0.0075 = $22,500)			

- *The estimate based on sales is added to any balance in Allowance for Doubtful Accounts.*

Under the percent of sales method, the amount of the adjusting entry is the amount estimated for Bad Debt Expense. This estimate is credited to whatever the unadjusted balance is for Allowance for Doubtful Accounts.

Activity 2: Percent of Sales Method - check your understanding!
At the end of the current year, Accounts Receivable has a balance of $800,000; Allowance for Doubtful Accounts has a credit balance of $7,500; and net sales for the year total $3,500,000. Bad debt expense is estimated at ½ of 1% of net sales.
Required: Determine (a) the amount of the adjusting entry for uncollectible accounts; (b) the adjusted balances of Accounts Receivable, Allowance for Doubtful Accounts, and Bad Debt Expense; and (c) the net realizable value of accounts receivable.

Analysis of Receivables Method - The analysis of receivables method is based on the assumption that the longer an account receivable is outstanding, the less likely that it will be collected. The analysis of receivables method is applied as follows:
Step 1: The due date of each account receivable is determined.
Step 2: The number of days each account is past due is determined. This is the number of days between the due date of the account and the date of the analysis.
Step 3: Each account is placed in an aged class according to its days past due. Typical aged classes include the following:

Not past due
1–30 days past due
31–60 days past due
61–90 days past due
91–180 days past due
181–365 days past due
Over 365 days past due

Step 4: The totals for each aged class are determined.
Step 5: The total for each aged class is multiplied by an estimated percentage of uncollectible accounts for that class.
Step 6: The estimated total of uncollectible accounts is determined as the sum of the uncollectible accounts for each aged class.

The preceding steps are summarized in an aging schedule, and this overall process is called ***aging the receivables***.

To illustrate, assume that ExTone Company uses the analysis of receivables method instead of the percent of sales method. ExTone prepared an aging schedule for its accounts receivable of $240,000 as of December 31, 2010, as shown below.

Aging of Receivables Schedule
December 31, 2010

	A	B	C	D	E	F	G	H	I
1			Not	Days Past Due					
2			Past						Over
3	Customer	Balance	Due	1–30	31–60	61–90	91–180	181–365	365
4	Ashby & Co.	1,500			1,500				
5	B. T. Barr	6,100					3,500	2,600	
6	Brock Co.	4,700	4,700						
Steps 1–3									
21									
22	Saxon Woods Co.	600					600		
Step 4 → 23	Total	240,000	125,000	64,000	13,100	8,900	5,000	10,000	14,000
Step 5 → 24	Percent uncollectible		2%	5%	10%	20%	30%	50%	80%
Step 6 → 25	Estimate of uncollectible accounts	26,490	2,500	3,200	1,310	1,780	1,500	5,000	11,200

- *The estimate based on receivables as compared to the balance in the allowance account to determine the amount of the adjusting entry*.

Assume that ExTone Company sold merchandise to Saxon Woods Co. on August 29 with terms 2/10, n/30. Thus, the due date (Step 1) of Saxon Woods' account is September 28, as shown below.

Credit terms, net	30 days
Less: Aug. 29 to Aug. 30	2 days
Days in September	28 days

As of December 31, Saxon Woods' account is 94 days past due (Step 2), as shown below.

Number of days past due in September	2 days	(30 – 28)
Number of days past due in October	31 days	
Number of days past due in November	30 days	
Number of days past due in December	31 days	
Total number of days past due	94 days	

Aging schedule shows that the $600 account receivable for Saxon Woods Co. was placed in the 91–180 days past due class (Step 3). The total for each of the aged classes is determined (Step 4).

The schedule shows also that $125,000 of the accounts receivable are not past due, while $64,000 are 1–30 days past due. ExTone Company applies a different estimated percentage of uncollectible accounts to the totals of each of the aged classes (Step 5). As shown in the schedule, the percent is 2% for accounts not past due, while the percent is 80% for accounts over 365 days past due.

The sum of the estimated uncollectible accounts for each aged class (Step 6) is the estimated uncollectible accounts on December 31, 2010. This is the desired adjusted balance for Allowance for Doubtful Accounts. For ExTone Company, this amount is $26,490, as shown in the schedule.

Comparing the estimate of $26,490 with the unadjusted balance of the allowance account determines the amount of the adjustment for Bad Debt Expense. For ExTone, the unadjusted balance of the allowance account is a credit balance of $3,250. The amount to be added to this balance is therefore $23,240 ($26,490 - $3,250). The adjusting entry is as follows:

Dec.	31	Bad Debt Expense		23,240	
		Allowance for Doubtful Accounts			23,240
		Uncollectible accounts estimate.			
		($26,490 – $3,250)			

After the preceding adjusting entry is posted to the ledger, Bad Debt Expense will have an adjusted balance of $23,240. Allowance for Doubtful Accounts will have an adjusted balance of
$26,490, and the net realizable value of the receivables is $213,510 ($240,000 - $26,490).

6.7. Accounting for Notes Receivable

A note has some advantages over an account receivable. By signing a note, the debtor recognizes the debt and agrees to pay it according to its terms. Thus, a note is a stronger legal claim.

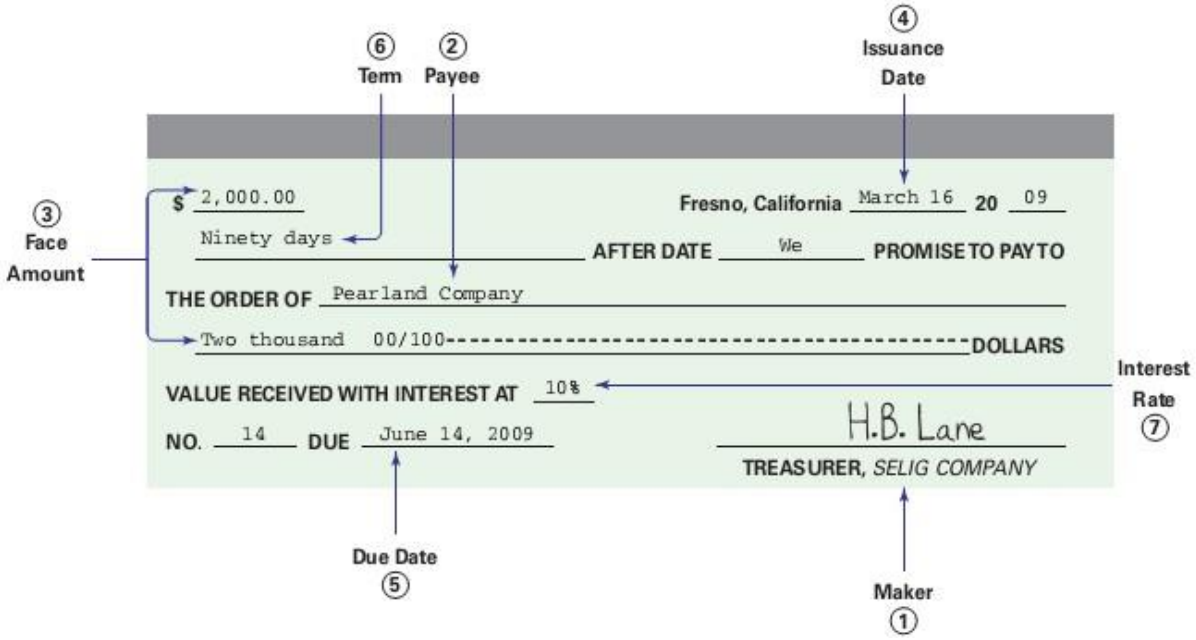
Characteristics of Notes Receivable

A promissory note is a written promise to pay the face amount, usually with interest, on demand or at a date in the future.

Characteristics of a promissory note are as follows:

1. The *maker* is the party making the promise to pay.
2. The *payee* is the party to whom the note is payable.
3. The *face amount* is the amount the note is written for on its face.
4. The *issuance date* is the date a note is issued.
5. The *due date* or *maturity date* is the date the note is to be paid.
6. The *term* of a note is the amount of time between the issuance and due dates.
7. The *interest rate* is that rate of interest that must be paid on the face amount for the term of the note.

The following figure illustrates a promissory note. The maker of the note is Selig Company, and the payee is Pearland Company.



The face value of the note is $2,000, and the issuance date is March 16, 2009. The term of the note is 90 days, which results in a due date of June 14, 2009, as shown below:

Days in March	31 days
Minus issuance date of note	16
Days remaining in March	15 days
Add days in April	30
Add days in May	31
Add days in June (due date of June 14)	14
Term of note	90 days

The interest on a note is computed as follows:

$$\text{Interest} = \text{Face Amount} \times \text{Interest Rate} \times (\text{Term}/360 \text{ days})$$

The interest rate is stated on an annual (yearly) basis, while the term is expressed as days. Thus, the interest on the note above is computed as follows:

$$\text{Interest} = \$2{,}000 \times 10\% \times (90/360) = \$50$$

To simplify, we will use 360 days per year. In practice, companies such as banks and mortgage companies use the exact number of days in a year, 365. The maturity value is the amount that must be paid at the due date of the note, which is the sum of the face amount and the interest. The maturity value of the note above is $2,050 ($2,000 + $50).

Accounting for Notes Receivable

A promissory note may be received by a company from a customer to replace an account receivable. In such cases, the promissory note is recorded as a note receivable.

To illustrate, assume that a company accepts a 30-day, 12% note dated November 21, 2010, in settlement of the account of W. A. Bunn Co., which is past due and has a balance of $6,000. The company records the receipt of the note as follows:

Nov.	21	Notes Receivable—W. A. Bunn Co.		6,000	
		Accounts Receivable—W. A. Bunn Co.			6,000

At the due date, the company records the receipt of $6,060 ($6,000 face amount plus $60 interest) as follows:

Dec.	21	Cash		6,060	
		Notes Receivable—W. A. Bunn Co.			6,000
		Interest Revenue			60
		$6,060 = [$6,000 + ($6,000 × 12% × 30/360)].			

If the maker of a note fails to pay the note on the due date, the note is a ***dishonored note receivable***. A company that holds a dishonored note transfers the face amount of the note plus any interest due back to an accounts receivable account. For example, assume that the $6,000, 30-day, 12% note received from W. A. Bunn Co. and recorded on November 21 is dishonored. The company holding the note transfers the note and interest back to the customer's account as follows:

Dec.	21	Accounts Receivable—W. A. Bunn Co.		6,060	
		Notes Receivable—W. A. Bunn Co.			6,000
		Interest Revenue			60

The company has earned the interest of $60, even though the note is dishonored. If the account receivable is uncollectible, the company will write off $6,060 against Allowance for Doubtful Accounts.

A company receiving a note should record an adjusting entry for any accrued interest at the end of the period. For example, assume that Crawford Company issues a $4,000, 90-day, 12% note dated December 1, 2010, to settle its account receivable. If the accounting period ends on December 31, the company receiving the note would record the following entries:

2010					
Dec.	1	Notes Receivable—Crawford Company		4,000	
		Accounts Receivable—Crawford Company			4,000
	31	Interest Receivable		40	
		Interest Revenue			40
		Accrued interest.			
		($4,000 × 12% × 30/360)			
2011					
Mar.	1	Cash		4,120	
		Notes Receivable—Crawford Company			4,000
		Interest Receivable			40
		Interest Revenue			80
		Total interest of $120.			
		($4,000 × 12% × 90/360)			

The interest revenue account is closed at the end of each accounting period. The amount of interest revenue is normally reported in the *Other Income* section of the income statement.

Activity 3: Notes Receivable - check your understanding!
ABC Co. received a 120-day, 6% note for $40,000, dated March 14, 2014 from a customer on account.
Required:

a. Determine the due date of the note.
b. Determine the maturity value of the note.
c. Journalize the entry to record the receipt of the payment of the note at maturity.

5.7.1 Discounting Notes Receivable

A company may endorse a note receivable and transfer it to a bank in return for cash. This is called discounting notes receivable. The bank pays cash (the proceeds) to the company after deducting a discount (interest). The discount is computed using a discount rate on the maturity value of the note for the discount period. The discount period is the time that the bank must hold the note before it becomes due.

To illustrate, assume that on May 3 a note receivable from Pryor & Co is discounted by Deacon Company at its bank. The related data are as follows:

Face amount of note	$1,800
Issuance date of note	April 8
Interest rate on note	12%
Term of note	90 days
Due date of note	July 7
Maturity value of note	$1,854 [$1,800 + ($1,800 × 12% × 90/360)]
Discount date	May 3
Discount period	65 days (May 3 to July 7)
Discount rate	14%
Discount	$46.87 ($1,854 × 14% × 65/360)
Discount proceeds	$1,807.13 ($1,854.00 − $46.87)

Deacon Company records the receipt of the proceeds as follows:

May	3	Cash		1,807.13	
		Notes Receivable			1,800.00
		Interest Revenue			7.13
		Discounted $1,800, 90-day, 12% note at 14%.			

If the proceeds had been less than the face amount, Deacon Company would have recorded the excess of the face amount over the proceeds as interest expense. For example, if the proceeds had been $1,785, Deacon Company would have recorded interest expense of $15 ($1,800 - $1,785). The length of the discount period, interest rate, and discount rate determine whether interest expense or interest revenue is recorded.

Without a statement limiting responsibility, Deacon Company must pay the maturity value of the note if the maker defaults. This potential liability is called a contingent liability. If the maker pays the maturity value, the contingent liability ceases to exist. If, on the other hand, the maker dishonors the note, the contingent liability becomes a liability that must be paid.

If a discounted note receivable is dishonored, the bank notifies the company and asks for payment. In some cases, the bank may charge a protest fee on dishonored notes. The entire amount paid to the bank, including the maturity value and protest fee, is debited to the account receivable of the maker.

To illustrate, assume that Pryor & Co. dishonors the $1,800, 90-day, 12% note that was discounted on May 3. The bank charges a protest fee of $12. Deacon Company's entry to record the payment to the bank is as follows:

July	7	Accounts Receivable—Pryor & Co.		1,866	
		Cash			1,866
		Paid dishonored, discounted note (maturity value of $1,854 plus protest fee of $12).			

5.8. Presentation of Cash and Receivables on the Balance Sheet

a. Financial Statement Reporting of Cash

Cash is normally listed as the first asset in the Current Assets section of the balance sheet. Most companies present only a single cash amount on the balance sheet by combining all their bank and cash fund accounts. A company may temporarily have excess cash. In such cases, the company normally invests in highly liquid investments in order to earn interest. These investments are called cash equivalents. Examples of cash equivalents include government Treasury bills, notes issued by major corporations (referred to as commercial paper), and money market funds. In such cases, companies usually report Cash and cash equivalents as one amount on the balance sheet.

b. Reporting Receivables on the Balance Sheet

All receivables that are expected to be realized in cash within a year are reported in the Current Assets section of the balance sheet. Current assets are normally reported in the order of their liquidity, beginning with cash and cash equivalents.

The partial balance sheet presentation for cash and receivables is shown below.

ABC Co. Balance Sheet December 31, 2013		
ASSETS		
Current assets:		
Cash and cash equivalents		$xxx
Accounts receivable	xxxx	
Less: Allowance for Doubtful Accounts	(xxx)	xxxx

In the financial statements, the allowance for doubtful accounts is subtracted from accounts receivable. Some companies report receivables at their net realizable value with a note showing the amount of the allowance.

Other disclosures related to receivables are reported either on the face of the financial statements or in the financial statement notes. Such disclosures include the market (fair) value of the receivables. In addition, if unusual credit risks exist within the receivables, the nature of the risks is disclosed.

Discuss the Following

1. What are the three classifications of receivables?
2. What types of transactions give rise to accounts receivable?
3. In what section of the balance sheet should a note receivable be listed if its term is (a) 90 days, (b) six years?
4. Give two examples of other receivables.
5. Which of the two methods of accounting for uncollectible accounts provides for the recognition of the expense at the earlier date?
6. What kind of an account (asset, liability, etc.) is Allowance for Doubtful Accounts, and is its normal balance a debit or a credit?
7. After the accounts are adjusted and closed at the end of the fiscal year, Accounts Receivable has a balance of $298,150 and Allowance for Doubtful Accounts has a balance of $31,200. Describe how the accounts receivable and the allowance for doubtful accounts are reported on the balance sheet.
8. A firm has consistently adjusted its allowance account at the end of the fiscal year by adding a fixed percent of the period's net sales on account. After seven years, the balance in Allowance for Doubtful Accounts has become very large in relationship to the balance in Accounts Receivable. Give two possible explanations.
9. Which of the two methods of estimating uncollectibles provides for the most accurate estimate of the current net realizable value of the receivables?
10. For a business, what are the advantages of a note receivable in comparison to an account receivable?

Text and reference books Text Book:

• Kieso, D. E., Weygandt, J. J., & Warfield, T. W. (2016). Financial Accounting, IFRS Edition, New York: John Willey & Sons. • Commercial Code of Ethiopia