

BOOKKEEPING

Student Manual



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The objective of this program is to teach you the basic mechanical process of bookkeeping. The explanations and instructions presented here use the cash-basis system of accounting and will familiarize you with the basics of keeping books for a business. This program will not teach you everything you need to be an accountant, nor is it meant to. The goal is to give you the skills necessary to determine the effects of transactions on financial statements and to make informed business decisions using those financial statements. This is crucial for those who wish to start their own business one day and, as an ex-felon, this can be a very valuable pursuit. Who better to employ us than us?



Does this mean that everyone who starts a business will need to do their own books and do them by hand? No. There are Apps and entire suites of computer software designed to streamline the process and take much of the tedious work away from the small business owner. There are also Certified Public Accountants (CPA's) whose job it is to take care of the accounting work involved in small businesses for those that hire them. So, why learn the manual method of keeping books?

The answer is simply that you need to know the basics of how and why the cash-basis system works so that you know if it is working correctly. For those who use computer software such as Quicken, Quickbooks, or Intuit, it is vital to realize that those computer programs are only as good as the numbers you put into them. Understanding the basics of what those programs do will allow you to make informed decisions about what sort of software you might need and what you need it to do for you. For those who use CPA's, realize that you are trusting them with your money and your business. It may be surprising, but there are shady CPA's out there. Even the honest ones are also human and can make mistakes. It is important to know the basics of bookkeeping so that you can tell if mistakes are being made, so that you can check either your own work or the work of others. A small business may be an extremely important enterprise, one on which you hinge your future. Give it as much chance of succeeding as possible by entering the process with as much knowledge as you can. That knowledge, ultimately will deliver you the power and control to determine your future.

What about those of us who do not intend to start our own businesses? The skills involved in bookkeeping can help you to understand the decisions and problems that are faced by employers so that you can make yourself the most valuable employee to them by meeting their needs or solving their problems. The cash-basis system also can give us some insight into personal budgeting and accountability. It can be a useful life skill that we can carry forward. Learning the basics now can also give those who are interested a leg up on learning to become a bookkeeper for someone else's business on the outside. It is, ultimately, about opening up new doors of opportunity.

In order to encourage student learning, accomplishment and participation, the material of this course is presented in a comprehensive method. The text and related assignments are based on learning by objective. Learning objectives are listed at the beginning of each chapter and again at the end of each chapter in the Chapter Summary. The reading and chapter assignments are presented as homework. At the beginning of every class session, there will be time to review and ask questions to clarify the reading work. It is very important that you use this time to understand the material that is presented.

Students will also receive a Workbook which presents a Case Study detailing the operation of a brand new small business over the course of one year and all of its financial transactions. This Workbook represents your Final Project. After discussion of the day's reading, the class will work together in the classroom to complete the Workbook assignments with time given during the process to ask questions and receive help from the facilitators.

Grading

There are a total of 102 possible points in the Bookkeeping program. You must earn a 70% in order to pass and proceed into the REEFS Business courses. The Grading Rubric is displayed to the right:

Grading Scale	Points
Chapter Assignments (6)	12
Mid-Term Test	20
Final Project	50
Final Test	20
Total Points	102
Must score 70 + points to enter SBC class	

Chapter 1

Introduction to Bookkeeping

Overview

Bookkeepers use special terms to describe the bookkeeping process, and you will need to learn and understand these terms. Bookkeeping itself is a mechanical process; however, once you understand the process and language of bookkeeping, you will learn that it is actually very straightforward.

In this chapter, you will be introduced to some of the language of Bookkeeping, some key components of bookkeeping, and generally accepted accounting principles. These topics are all needed to understand the process of bookkeeping.

Learning Objectives

After completing this chapter, you will be able to:

- Define some commonly used Bookkeeping terms
- Identify some of the accounting principles and concepts used in bookkeeping
- Identify the five basic account classifications:
 - Assets
 - Liabilities
 - Owner's equity
 - Revenue
 - Expenses
- Identify the running balance account ledger format
- Describe how the different account classifications are increased and decreased using debits and credits
- Understand the use of the account ledger



Why do we do it by hand?

People confuse accounting and bookkeeping all the time, believing they are one in the same. Actually, bookkeeping is only a small part of accounting, the record-making part. Today, most companies do their bookkeeping using computer software like 'QuickBooks'. However, at one time, back before computers were introduced, ALL businesses did their books manually. The method of keeping your books using paper journals and account ledgers is still recognized by all governing authorities because small businesses may not have the money needed to purchase a computer, printer and the software to do computerized bookkeeping.

Basic Bookkeeping Terms

Source Documents
The proof of a company's transactions

A company's financial transactions are recorded in chronological order in a book called a **General Journal**, also called the '*Book of Original Entry*.' Basically, the bookkeeper takes receipts or other proof of transactions, called **source documents**, and records them "on the books." Sounds simple, right? Well, at first it was but, like everything else, things have changed. To bring order to the accounting and reporting process, the accounting profession has developed certain rules and guidelines for recording and reporting business transactions. These rules and guidelines are collectively known as **Generally Accepted Accounting Principles (GAAP)**. The establishment of GAAP does not mean that all companies record and report financial activity in exactly the same way, but it does mean that the concepts they use are the same.

General Journal
A book where financial transactions are recorded in chronological order.

As an example of how GAAP works with accounting, think about softball. The game has certain rules by which teams must play. Everyone knows that if a player hits a ball in the air and it lands outside of the foul line, it's a foul ball, whether you are playing at a softball park or in a vacant lot. But what about the number of players your team can have on the line-up? Can you play with ten? How about only nine? Eleven? Can one team play with ten players and the other team play with eleven? The answer to all of these questions is yes because the rules of softball allow for differences in how individual teams can fill their line-up. GAAP works the same way for individual companies. There are rules that must be followed, and rules with certain options for how things can be done.



Whether you use a manual system for bookkeeping or use a computer, certain rules govern how you maintain your accounting records. Having an understanding of these rules will provide you with the tools to maintain proper records of your company's financial transactions. You will also become intimate with your company's numbers, giving you a better understanding of your company's financial position. As a business owner, you will have to make many important financial decisions; having a good understanding of your company's financial position will help you make the best decisions. By knowing these numbers, you can determine the best time to expand, the best time to apply for a loan or to make other investment decisions regarding your company.

Key Terms & Concepts

Monetary Unit Assumption requires that only events and activities that can be expressed in actual dollar amounts are recorded in a company's bookkeeping records.

What it means: There are many events or activities that can affect a business financially, but only things that we can put a dollar amount on should be placed in the books. For example, if Booker's Soul Food Restaurant is doing booming business with every customer that comes through the door raving about Booker's Great-Aunt's fantastic cooking. That autumn, Booker's Great-Aunt passed away. Will the business be affected and possibly lose business because their greatest cook is now gone? It's very possible. However, no exact dollar value can be placed on the loss of Booker's Great-Aunt. Therefore, her death and loss as an employee cannot be recorded in our bookkeeping records. Or, if a hurricane hits and leaves power out to half of the state as well as breaking one of the restaurant's windows, will it affect the income for the business? It's possible that income could actually increase because people who cannot cook at home will need to eat out more often. Again, we can't put an exact dollar amount on the impact that the hurricane might have on the business. We CAN list the repairs to the broken window on our books. That has an exact cost. However, we cannot put the hurricane itself on the books. Bookkeepers call this Monetary Unit Assumption.

Monetary Unit Assumption

The requirement that only events and activities that can be expressed in money are recorded in a company's bookkeeping records.

Separate Entity Assumption

The requirement that the accounts and records of a company must be as a unit that is separate and apart from its owners and other companies.

Separate Entity Assumption has two parts. It means you must keep your personal records and your business records separate, and it means that if you own two companies, you cannot combine their financial transactions in one set of records. The two companies are separate entities as are your personal and business records and must be kept separate for recording and reporting purposes.

What it means: The reason we keep everything separate is mostly because of a common phrase: **CYA** or **Cover Your Assets**. Even if you operate your business out of your home, you need to keep you personal and business finances completely separate. Even if you use personal assets (like a vehicle) for company use, you need to list the use of that asset for business purposes separate from your use of that asset for personal purposes. The reason for this should be fairly obvious. If you are ever audited by the IRS, and they find discrepancies in your books, if your personal and business finances are mingled they can come after your personal property in order to account for the losses. And, they WILL. For the same reason, if you own more than one company, the companies' records need to be kept separate from each other and separate from your personal records. Ultimately, this is about protecting yourself and your business.

Cost Principle

The requirement that all assets be initially recorded at cost.

Cost Principle requires that a company's assets remain on the books at their initial cost.

What it means: Whenever you purchase an asset, the value of that asset goes up or down (it 'appreciates' or 'depreciates'). The vast majority of assets depreciate rather than the other way around. Cost Principle states that if I paid \$20,000 for a new truck, \$20,000 gets recorded in my books regardless of the current value of the truck. In a year, the truck will no longer be worth that much, but that \$20,000 will still be on my books because **that is what I paid for it**. The amount I paid didn't change, in other words, only the market value changed. In the same way, if we were to purchase a plot of land for the business for \$20,000 and, one year from now, property values went up so the plot of land was now worth \$35,000, my books would still reflect the amount I originally paid for it. We do account for depreciation and appreciation, but we do it separately from the original cost. We will see how this works more later on in the course.

The most important thing you are going to learn in this course is the **accounting equation**. Also known as the golden rule of accounting. It is written as follows:

$$\text{Assets} = \text{Liabilities} + \text{Owner's Equity}$$

By calculating a company's total assets, total liabilities, and owner's equity, you get a picture of its **Financial Position**.

What it means: This, fairly simply, answers the question: How is my company doing? Did I make any money and how much money do I owe to other people? By calculating your financial position, you can determine the exact condition that your business is in at either a specific point in time or over a period of time.

Financial Position

Reveals the resources owned by the business and the claims on those resources by specified parties at a particular point in time

Basic Account Classifications

In bookkeeping, all financial transactions are recorded and accumulated in something called an *account*. Accounts are individual records that a company keeps of its financial transactions, with each account being kept separately. There are five basic account classifications. Let's take a close look at each of them:

Assets are items owned by the company with the expectation of some future benefit.

What it means: Assets are considered to be of value because they can be sold for cash (or they are used up to generate cash). Assets are vital to a company's survival because they are expected to become... cash. Basically, if you were to shut down your business today, could you sell a particular item and get money for it? If the answer is yes, it is an asset. There are many different kinds of asset accounts. Some examples are: Cash, Inventory, Equipment, and Pre-paid Accounts.

Assets

Items that are owned by the company that are expected to provide some future benefit

Liabilities represent the amount of money your company owes to the people who have given you money.

What it means: Liabilities are fairly simple. If you purchase something on credit, if you take out a loan, or if you have an investor, you owe them the value of the money that you borrowed. Liabilities are different from expenses even though both represent money that is owed out from the business's coffers. We will discuss the difference when we look at expenses. Examples of liability accounts would be: *Accounts Payable* (for credit), *Notes Payable* (for loans), and *Taxes Payable* (for taxes). As a starting business, you should be very careful when using credit. You may need to use some credit to get going, but it is recommended to operate with the company's cash on hand as much as possible.

Liabilities

The amount of money owed to others by the company

Owner's Equity is also referred to as **capital** (which means *money*, more or less).

What it means: When starting a company, you will probably invest some of your own money. Commonly, the entrepreneur who starts a business is also the largest investor. What this means is that you are effectively loaning your own money to the business, and the business now owes that money back to you in an equal amount. This creates what we call an 'interest' in the company's assets. It is important to note that as the business owner, your interest in the assets of the company is residual. That means that if the business closes, you are only legally entitled to what is left over after all other outstanding debts have been paid. You receive the 'residue.' Owner's Equity is recorded and maintained in an account that includes the owner's name, followed by the word 'capital.' For example, if you were the owner of New Life Shed Building Co., the money you invest to start the business would be recorded in an account titled, **Your Name - Capital**. In your Workbook this is simplified to read **Owner's Equity - Capital**, but in real life it would be your name listed to identify you as the investor.

Owner's Equity

The owner's interest in the assets of a business

Different businesses sell different goods or services; the money they receive as a result of these activities is referred to as **Revenue**.

What it means: Businesses exist for a reason, and that reason is a simple one: to make money. There are no business that do not have this goal in mind. Non-profits do exist as well as charity organizations. However, even those companies have the goal of making money. They simply use the money that they generate in a different way. When a business makes money as a result of selling a good or a service, we call that money revenue. A company's revenue is recorded in an account titled Sales. There can be multiple Sales accounts if a company sells more than one product or service.

Revenue

The amount charged to customers for goods or services sold

Expenses are the goods or services your company pays for in order to generate revenue. Unlike Assets, they do not benefit your company in the future.

What it means: Expenses are different from liabilities. Both are money that you pay out, but Liabilities are payments for transactions that have already occurred. For example, if you buy supplies on credit you have already received the supplies (the transaction is already done), but you still need to pay for that transaction over time. Expenses, on the other hand, are money you pay out for a current transaction (usually for items that make money for the business). For example, Rent is a month-to-month transaction. You have to pay for it every month for the current month. Fuel, Electricity, Payroll, all are expenses that you pay for as they occur. Expense accounts are listed in separate accounts for each type of expense. For example: *Electricity Expense, Fuel Expense, Rent Expense*, and so on.

Expenses
The costs incurred to produce revenue

The Account

An **account** is a term that bookkeepers use to describe an organized record of increases and decreases in a *specific* Asset, Liability, Owner’s Equity, Revenue, or Expense item. For example your company may have accounts for **Petty Cash, Owner’s Equity - Capital, Sales - Sheds, Accounts Payable, Fuel Expense**, and so on. Each account is maintained separately and increases or decreases separately. Let’s take a look at an account ledger page which uses what we call a running balance format.

Example of Running Balance Ledger Sheets

Petty Cash							Account No(s) 110															
Date		Explanation		Post Ref	Debit		Credit		Debit Balance		Credit Balance											
Accounts Payable							Account No(s) 210															
Date		Explanation		Post Ref	Debit		Credit		Debit Balance		Credit Balance											
Owner’s Equity, Capital							Account No(s) 310															
Date		Explanation		Post Ref	Debit		Credit		Debit Balance		Credit Balance											
Feb	8	initial investment		J1					1	3	7	5	00					1	3	7	5	00

Running Balance Form of Account

Table 1-1 shows a typical running balance form, using an account from New Life Shed Building Co., the business in the Workbook. This account is the **Cash - Wakulla Bank** account. The running balance form offers several advantages. Looking at **Table 1-1** we can see that it has the account title, “Cash - Wakulla Bank”, account number “140”, a column for the date of each transaction, an explanation, posting reference, the debit amount and the credit amount and the balance column used to maintain an up-to-date balance after each transaction.

Account Title

Table 1-1

Account Number

Cash - Wakulla Bank							Account No(s) 140															
Date		Explanation		Post Ref	Debit		Credit		Debit Balance		Credit Balance											
Feb	8	initial investment		J1	1	2	7	5	00					1	2	7	5	00				
Feb	9	Purchase business license		J1						1	0	0	00	1	1	7	5	00				

The Running Balance Form of Account looks similar to a Checking Account Register that you might have used with a Personal Checking Account from a bank. Each transaction amount is entered after the date and a short explanation of the transaction, and a running balance is tracked on the far right hand side. However, it is VERY important to realize that bookkeeping records do not function just like a Personal Checking account.

Debits and Credits

Looking at the ledger entry on the previous page in **Table 1-1**, the **Cash - Wakulla Bank** account shows two entries so far: The initial owner's investment of \$1,275.00 and the purchase of a business license for \$100.00. The initial investment to start the business is listed as a debit (or left) side entry while the purchase of a business license is listed as a credit (or right) side entry. Obviously, the debit of \$1,275.00 is an increase to the **Cash - Wakulla Bank** account, while the credit of \$100.00 is a decrease to the **Cash - Wakulla Bank** account. This account now has a debit balance of \$1175.00. (\$1,275.00 - \$100.00). This might seem crazy to those of us that are used to the word Debit meaning 'negative', 'decrease', or 'minus' and the word Credit meaning 'positive', 'increase' or 'plus.' This is the main difference between personal banking and bookkeeping, and it can be very hard to wrap your head around when first learning the basics of bookkeeping. In the accounting world, the words Debit and Credit simply refer to columns and **NOT** to types of transactions. The Debit Column is on the left-hand side, and the Credit column is on the right-hand side. That is, literally all that Debit and Credit mean in accounting: *Left or Right*.

After looking at the **Cash - Wakulla Bank** account in **Table 1-1**, you may have noticed that the account has both a debit and a credit entry. The debit entry of \$1,275.00 increased the account balance and the credit entry of \$100.00 decreased the account balance. So, for this account Debit (left-side) entries are positive and Credit (right-side) entries are negative. That seems pretty straightforward, right?

Just to further complicate matters, while it is true that **Debits and Credits** increase and decrease account balances, not all accounts are affected in the same way. **Table 1-2** shows a simplified version of the **Cash-Wakulla Bank** account (an Asset) showing the owner's investment of \$1,275.00 that was recorded on the Debit (or left-hand) side of the Asset account. The same amount was recorded on the Credit (or right-hand) side in the **Owner's Equity** account. Both accounts are increased, but one uses a Debit and one a Credit! How can they both be positive?!

Debits and Credits
Tools used to increase and decrease different account balances

Table 1-2

Assets		Owner's Equity	
Debit	Credit	Debit	Credit
\$1,275.00			\$1,275.00

Double Entry System
The requirement that a transaction always affects a minimum of two accounts

Let's take a breath. It seems confusing, but there is a very important reason why Debits and Credits are handled this way. One of the most basic reasons is this: Balance. Everything, when you are keeping books, needs to balance. For any transaction on the books, Debits need to equal Credits. Whatever is entered in one account as a Debit needs to be balanced with a Credit entry in another account. As you can see above, this is true in this example. The Debit in the Asset account equals the Credit in the Owner's Equity account. There is balance. It works the other way, too. For every Credit entry in one place there needs to be an equal Debit entry somewhere else. There must always be two accounts affected by EVERY transaction in order to achieve this balance. There may be more than two, but there can never only be one. This need for balance is called the **Double Entry System**. Once a transaction is recorded in this way, it is considered to be in balance.

It may still seem complicated, but just remember this: Debit = Left, Credit = Right, and Account Types increase or decrease using one or the other. Below is a chart to show you which Account Types use Debits and which use Credits to increase or decrease.

Table 1-3

Account Type	Normal Balance	To Increase	To Decrease
Assets	Debit	Debit	Credit
Liabilities	Credit	Credit	Debit
Owner's Equity	Credit	Credit	Debit
Revenue	Credit	Credit	Debit
Expenses	Debit	Debit	Credit

Note that Assets and Expenses carry a Debit balance (Credits decrease them), and every other Account Type carries a Credit balance (Debits decrease those).

The Account Ledger

With all of the different bookkeeping accounts needed for a business, you may be wondering where you are going to keep them all. Keeping these records in a shoebox, or on a shelf in the office closet is probably not the best idea. To keep things organized, companies keep their accounts in a book called an ***Account Ledger***, which contains a separate listing for each account that will appear on a company's financial statements. We will discuss financial statements more later. What is important now is that you know the different specific accounts that your company will need. Simply having an Asset account is not specific enough. For New Life Shed Building Co. we have five different Asset accounts: **Petty Cash, Equipment, Prepaid Insurance, Cash - Wakulla Bank, and Accumulated Depreciation - Equipment**. The entire group of accounts maintained by a company are collectively kept in a book known as the **Account Ledger**.

Account Ledger
Book that contains separate listings for each account that will appear on a company's financial statements



Chapter 1 Summary - We have...

1. **Identified some of the accounting principles and concepts used in bookkeeping.** In bookkeeping, standardization is necessary. GAAP is a set of rules and guidelines to follow:
 - Monetary Unit Assumption
 - Separate Entity Assumption
 - Cost Principle
 - Financial Position

2. **Identified the five basic Account classifications.** Accounts are individual records a company keeps of its financial transactions. The following are the ones used in bookkeeping:
 - Assets
 - Liabilities
 - Owner's equity
 - Revenue
 - Expenses

3. **Identified the Running Balance Account Ledger Format.** This format provides an up-to-date balance after each transaction

4. **Described how different types of Accounts are increased and decreased using Debits and Credits.** Debits and credits are tools used in bookkeeping to increase and decrease account balances. Certain types of accounts are debited to record an increase, and credited to record a decrease. Other accounts are just the opposite, with debits used to decrease and credits used to increase.

5. **Understood the use of the Account Ledger.** An account ledger is a book that contains separate listings for each account that will appear on a company's financial statements.

Review Questions

1. Define the term 'separate entity assumption'.

2. List four examples of assets and four examples of expenses:

_____	_____
_____	_____
_____	_____
_____	_____

3. Write the 'Accounting Equation'. _____ = _____ + _____

4. Describe the account ledger and explain its use.

5. Define the term 'liability' and give two examples.

6. Define the term 'owner's equity'.

7. Define the term 'monetary unit assumption'.

8. Fill in the blank boxes for the following chart using either 'credit' or 'debit':

Account Type	Normal Balance	To Increase	To Decrease
Assets			
Liabilities			
Owner's Equity			
Revenue			
Expenses			

9. In your own words describe the 'cost principle concept'.

10. Give three examples of different classifications of assets.

11. The account form used in bookkeeping is called the _____ of account.

12. The system of bookkeeping that requires that any entry be in balance and always affect at least one debit transaction and one credit transaction is called the _____ of bookkeeping.

13. The amounts charged to customers for goods sold or for services provided is called _____.

Chapter 2

The General Journal and Posting Process

Overview

In this chapter, you will be introduced to the **General Journal** and the **Chart of Accounts**. You will also learn about the **Posting Process**. In class, we will begin to record transactions for New Life Shed Building Co. in the Workbook.

Learning Objectives

After completing this chapter, you will be able to:

- ‡ Create a Chart of Accounts and explain its purpose.
- ‡ Explain what Source Documents are.
- ‡ Analyze financial transactions
- ‡ Record transactions in the General Journal.
- ‡ Perform the Posting Process using the General Journal to record transactions in the Account Ledger.

The Chart of Accounts

In bookkeeping, every account in the ledger is assigned an Account Number. Doing this helps to make sure that your records are organized and accurate. You can think of these Account Numbers like the Dewey Decimal System used by libraries to track and organize various kinds of books (i.e., fiction, non-fiction, history, social studies, and so on), Account Numbers are assigned based on the different types of accounts. In this class; all the **Asset** accounts will be listed in the **100's**, **Liability** accounts in the **200's**, **Owner's Equity** accounts in the **300's**, **Revenue** accounts in the **400's**, and **Expense** accounts in the **500's**.

Chart of Accounts

A detailed listing of a company's accounts and associated account numbers

With the many different accounts that a company could need in order to record its financial transactions, it needs to have a complete listing of all of the accounts used and their associated account numbers. This is done in what is called a **Chart of Accounts**. The Chart of Accounts works much like an index, collecting all the individual Accounts and Account Numbers in one place. It is useful not just for your reference but for anyone else who may need to look at your books. Rather than needing to search for each individual record, the Chart of Accounts will tell you exactly where to look. On the first day of business, as you open your books, the first thing you should do is to create this chart. The **Chart of Accounts** for New Life Shed Building Co. is shown in **Table 2-1**.

Table 2-1

New Life Shed Building Co.		
Chart of Accounts		
Assets (100s)	Liabilities (200s)	Owner's Equity (300s)
110 Petty Cash	210 Accounts Payable	310 Owner's Equity, Capital
120 Equipment	220 Federal Taxes Payable	
130 Prepaid Insurance	230 State Unemployment Tax Payable	
140 Cash - Wakulla Bank	235 Workers' Compensation	
150 Accum. Depr. - Equip.		
Revenue (400s)	Expenses (500s)	
410 Sales - Sheds	510 Licenses Expense	570 Fuel Expense
415 Sales - Porches	520 Building Supplies Expense	580 Food Expense
420 Sales - Yard Work	530 Mileage Expense	590 Office Supplies Expense
	540 Payroll Expense	595 Advertising Expense
	550 Insurance Expense	
	560 Depreciation Expense	

As you can see, each individual account for New Life Shed Building Co., and the associated Account Number for each account, is listed in the **Chart of Accounts** under the heading describing what *type* of account it is. The Asset account **Petty Cash** is numbered **110**, **Equipment** is numbered **120**, and so on, with all of the company's **Asset** accounts numbered in the **100's**. Notice that the numbers assigned to each of the Asset accounts are not consecutive (110, 111, 112...and so forth). We do this so that if you need to add an additional Asset account to your Chart of Accounts you have the space to do that and can place it in between the other accounts. For example, all the **Revenue** Accounts are listed in the **400's**. When we first started New Life Shed Building Co., our concept was to only build sheds and perform some light yard work on the side. So, when we first made up our Chart of Accounts, our only **Revenue** Accounts were **410 Sales - Sheds** and **420 Sales - Yard Work**. Afterward, we looked at our inventory and decided that we could also offer a service to build covered porches without adding any production cost. So, we went back and added a new Revenue Account in between the others: **415 Sales - Porches**. This is most useful for keeping similar types of accounts grouped together if you have a large number of different accounts.

When a business begins operations, the first bookkeeping duty is, as we said, to create the Chart of Accounts and then to open up Account Ledgers for all the individual ledger accounts. When starting your account ledger, you will need to put the account number and title on each account. There is no beginning account balance for any of the Accounts because we have had no activity, yet. So, when opening up your Accounts, it would look something like this:

Write in the Account Name

There are no transactions yet, so there is no beginning balance

Write in the Account Number

Petty Cash							Account No(s) 110						
Date		Explanation			Post Ref	Debit		Credit		Debit Balance		Credit Balance	

Equipment							Account No(s) 120						
Date		Explanation			Post Ref	Debit		Credit		Debit Balance		Credit Balance	

Prepaid Insurance							Account No(s) 130						
Date		Explanation			Post Ref	Debit		Credit		Debit Balance		Credit Balance	

Cash - Wakulla Bank							Account No(s) 140						
Date		Explanation			Post Ref	Debit		Credit		Debit Balance		Credit Balance	

And so on, doing this for each of the accounts listed in your Chart of Accounts. In the Workbook, this step has already been done for you and the Chart of Accounts has already been set up. Once this has been done, your books are now considered to be "open."

Source Documents

The purpose of bookkeeping is to record the financial transactions of a business. During the course of everyday business activity, each transaction that is made should be supported by some kind of a document. For example, if your company purchases a business license for \$100, you would get a receipt for that from the court clerk. This receipt is the document that shows proof of the transaction. It is absolutely vital that you keep all of the **Source Documents** that relate to the transactions in your books. Should



you ever be audited, the auditor will request to see these documents. If you cannot provide them, the transaction is considered invalid.

To record a transaction you would review the source document and make the proper entry into the General Journal. The support for this entry is referred to as the **Source Document**. Other examples of source documents are invoices, a copy of a credit purchase made by a customer, a check stub or copy of a check, or a tape printout of the totals from a cash register's activity for the day. These are some examples of Source Documents (also found in the front of your Workbook):

Source Documents

The proof of a company's transactions

MEMO TO FILE

To Whom It May Concern

On February 8, 20XX, I started my business with \$1,375.00 cash investment.

The name of my company is: New Life Shed Building Co.

It is a sole-proprietorship.

Signature

Date

RECEIPT

Date ___/___/20___ No. _____

Received from _____ Dollars

for payment of: _____

Cash
 Check
 Credit Card
 Money Order

Amount Due	\$ _____
Amount Paid	\$ _____
Balance Due	\$ _____

Signature

New Life Shed Building Co.
 1212 Any Street
 Simpson City, Florida 32211

_____ 20 _____

Pay to the order of _____ \$ _____

_____ Dollars

Memo _____

23242522242224 25562556525

One other point: it is also very important that you store these Source Documents in an organized manner. We will discuss this more when we look at the Posting Process. Once you have the Source Document, you will need to review it in order to properly record the transaction on your books. Analyzing the transaction involves answering five questions. Let's look at a sample transaction and analyze how we would enter it into our General Journal. This transaction is taken from page 3 of your Workbook, and the Source Document looks like this:

With this document in hand, we can begin the process of analyzing and recording the transaction. Let's look at this process on the next page and begin answering the questions involved in reviewing transaction.

MEMO TO FILE

To Whom it may concern:

On February 8, 20XX, I started my business with \$1,375.00 cash investment, deposited \$1,275.00 into checking account at Wakulla Bank and kept \$100.00 in petty cash.

The name of my company is: New Life Shed Building Co.

It is a sole-proprietorship.

Signature

Date

Reviewing Transactions

1. What's going on?

It is necessary to understand the transaction and exactly what activity is taking place. In this case, the answer is that we are starting the business by investing money into it. This Source Document is a signed memo written to yourself detailing how much money you invested and what you did with that money.

2. What Accounts are affected?

This question is frequently answered by the previous question. If what is going on is that I am purchasing fuel for cash, then the affected accounts would clearly be: Cash and Fuel Expense. In our example, however, it is not as clear (and it sometimes may not be). But, by using the Chart of Accounts, we can determine exactly which Accounts are affected. In this case, the Source Document states that we are placing \$100 into the **Petty Cash** account (Account Number 110) and placing the remaining \$1,275.00 into a business Checking Account opened at Wakulla Bank (which is listed in our books as Account Number 140: **Cash - Wakulla Bank**).

There is another account affected as well. Remember in our discussion about Owner's Equity we said that any money you put into the business is technically a loan from you to the business and the business now owes that money back to you. It is your 'interest' in the business. So, this initial investment needs to be listed in the **Owner's Equity - Capital** Account (Number 310) as well to track that 'interest.'

Remember that the **Double-Entry System** tells us that there must ALWAYS be at least two accounts affected by any transaction. In this case, there are three accounts affected. There can never be only one. Bear that in mind when answering this question. There must be more than one account affected by each transaction.

3. How are the Accounts affected?

The accounts can really only be affected in one of two ways by the transaction. They either increase or decrease. We indicate this by listing the transaction as a Debit or a Credit to the affected accounts.

It is entirely possible, as with our example transaction, for all the accounts involved to increase. In other words, it is not always the case that an account needs to decrease for another to increase. In our example, **Petty Cash** is increasing because we are putting money into it, **Cash - Wakulla Bank** (our business Checking Account) is increasing because we are putting money into it, and **Owner's Equity - Capital** is increasing because our interest in the business is increasing.

4. Does the account entry balance?

Remember our discussion about Balance? **For every Debit there must be an equal Credit (and vice versa).** This is one of the main reasons why Debits and Credits work in different ways for different accounts. Let's take a look at the Accounting Equation that we mentioned in Chapter 1 again:

$$\text{Assets} = \text{Liabilities} + \text{Owner's Equity}$$

For those of you who are familiar with algebra, this equation works just the same way as an algebraic equation, so whatever you do to one side of the equation you must do to the other. When we analyze our transaction, if this equation remains true, then the transaction is in balance. So, every transaction has to have a dual effect on this equation. Let's look at an example from the Workbook to try to make this a little clearer.

Event (1). Investment of Cash by Owner. On February 8, we invested cash of \$1,375.00 in New Life Shed Building Co. to start it up. This event is an accounting transaction because it results in an increase in both Assets and in Owners' Equity. There is an increase of \$100.00 in the Asset account **Petty Cash**, an increase of \$1,275.00 in the Asset account **Cash - Wakulla Bank** and an increase of \$1,375.00 in the Owner's Equity account **Owner's Equity - Capital**. Take a look at the effect of this transaction on the basic equation and note that the equation remains in balance:

Assets		=	Liabilities	+	Owner's Equity
Petty Cash	Cash - Wakulla Bank	=		+	Owner's Equity - Capital
+ \$100.00	+ \$1,275.00	=	\$0.00	+	\$1,375.00

5. Does my analysis make sense?

This is the most important question. You must determine whether the results from your analysis affected the correct accounts. If the analysis doesn't make complete sense, return to question number one and start over.

General Journal

Bookkeeping can be complicated. There are often many transactions taking place each day that increase or decrease a company's Accounts. Once we have answered the five questions to analyze our day's transactions, the starting point for recording those transactions is the **General Journal**, another name for the general journal is the *Book of Original Entry*.

As we have already learned, a company's transactions are recorded and accumulated into individual Accounts. The General Journal brings order to the recording process by summarizing all the day's transactions in one place. The information is also recorded in the General Journal in chronological order (in the order they occurred). Having all of this information in one spot makes it easier to trace, track, and check a company's financial transactions.

Table 2-2 shows the General Journal entry for our initial investment of capital to start the New Life Shed Building Co. Total Debits of \$1,375.00 equal total Credits of \$1,375.00. Remember the Double-Entry System. Each transaction always affects a minimum of two accounts. Transactions can affect as many as three, four, five, twenty, 100 or more accounts, but they will never affect only one account. Remember also that total debits must equal total credits for any transaction recorded in your books. After recording a transaction, if you add up the total debits and total credits, and they are not equal, something is wrong.

General Journal

The form where transactions are initially recorded in chronological order. Also called the *Book of Original Entry*

Table 2-2

General Journal										Page 1										
20XX Date		Account Title	Doc No.	Post Ref	Debit					Credit										
Feb	8	Cash - Wakulla Bank	M		1	2	7	5	00											
		Petty Cash	M			1	0	0	00											
		Owner's Equity, Capital (intial investment)	M							1	3	7	5	00						

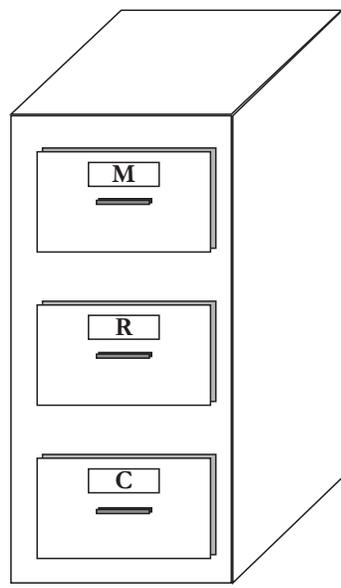
In the **Date** column, make sure you write the month and day of the transaction. The year is also normally written in at the top of the column (as shown above).

In the **Account Title** column, write the exact title of each Account (as they are listed on your Chart of Accounts) affected by this transaction, each on its own line. Underneath the last affected Account, on the next line write in a short explanation of what is happening in this transaction. In the example above, we wrote in "(initial investment)" as the explanation. There is some leeway in what the explanation should say. You could have written in "(original investment)" or "(investment of money by owner)" or "(owner's investment)." It's really up to you what is written for the explanation as long as it accurately describes what is going on.

Note, however, that the explanation is written on its own line and in parentheses. The parentheses tells anyone who looks at the books that this line is not one of your Accounts. To make the General Journal easier to read, it is also a good practice to leave an empty line between transactions.

The **Doc No.** (or Document Number) column tells us what original source document was used and where it is located. How you store your source documents and how you list them in the General Journal is one of the areas where there is a lot of freedom in GAAP. We mentioned earlier that it was important to store your source documents in an organized manner. It is not a good idea to just stuff all your receipts and deposit slips in a shoebox in the back seat of your truck. The reason for this is obvious. Audits happen. Sooner or later, if you own a business, one will happen to you. When it does, you want the process to be as fast and efficient as you can make it. An auditor is going to go over every transaction, and the more you make him work to figure out what's going on, the more he is going to try to find every tiny error. Beyond that, sitting through an audit takes you away from the time you could be spending running your business and making money.

So, how do you store your source documents? You could organize them into folders, envelopes, filing cabinets, or whatever method is convenient for you. The important thing is to be consistent. Once you choose a method, stick with it. Continually changing the way you do things is a great way to make mistakes. Let's take a look at the example of a filing cabinet. In this case, there are drawers labelled M (for Memos), R (for Receipts), and C (for Check Stubs). We could also include drawers for D (Deposit slips), I (Invoices), or S (Bills of Sale). The possibilities could be vast. But, by storing each in its own drawer and placing them in chronological order now when someone sees the letter M in the Doc. No. column (as in our example), they will know exactly where to look.



The **Post Ref** (or Posting Reference) column will list the Account Number for the Account listed on that line and is always the *last* step of the Posting Process (which we will discuss shortly). Notice that there is nothing written in that space for now since we have not yet completed the Posting Process.

The last two columns in the General Journal (**Debit** and **Credit**) list how the Accounts in the transaction are affected (they either increase or decrease). Be careful to know how each account is affected by a Debit or Credit when writing these numbers in. Note that there is no spot on the General Journal for a running balance for each account. Those balances are recorded in the Account Ledger portion of the books and not here. The General Journal is simply for tracking each transaction in the amount and order that it occurred.

The Posting Process

Posting
The process by which transactions in the General Journal are transferred to individual accounts in the Account Ledger

At this point, you already have enough of the tools needed to record General Journal entries, and you will be doing so in the next class session. However, we are not quite done with entering transactions into the books. We may have listed the transaction in the General Journal in **Table 2-2** (this was the entry to record the formation of New Life Shed Building Co. showing that the company was founded on February 8th when the owner, you, invested \$1,375.00 and opened a checking account at Wakulla Bank), but there is still nothing in our Account Ledger and nothing in the Posting Reference column.

This column is reserved for a process called **Posting**. The Posting Process involves transferring each of the transactions that have been recorded in the General Journal to their proper Accounts in the Account Ledger. Normally, this is done at the end of the day for all transactions that occurred that day, after they have been recorded in the General Journal. However, posting can be done at other intervals - throughout the day, on a weekly basis, or even at the end of the month.

How often you do this is up to you, but waiting until the end of the month tends to land you in a mountain of work that can take hours to complete. By posting at the end of the day, you limit the amount of time you have to spend on any given day working on your books. It also allows you to catch mistakes much more easily while the events of that day are still fresh in your mind.



The reason we go through the Posting Process is because the General Journal alone is not sufficient to describe a business's finances. Many transactions will affect the same Account and must be grouped together to allow us, eventually, to prepare our Financial Statements. In bookkeeping, we use different Accounts so we can easily and efficiently record and track all of our **Assets, Liabilities, Owner's Equity, Revenues, and Expenses** individually. Imagine if you had twenty or thirty transactions in a day all affecting your **Cash - Wakulla Bank** account. How would you be able to calculate the balance of that account? How would you be able to see which transactions affected the account in different ways? To do this, we need to use the Account Ledger.

To illustrate the Posting Process, the six steps listed on the next page will guide you through **Table 2-3**.

Table 2-3

General Journal										Page 1			
20XX Date		Account Title	Doc No.	Post Ref	Debit					Credit			
Feb	8	Cash - Wakulla Bank	M	140	1	2	7	5	00				
		Petty Cash	M			1	0	0	00				
		Owner's Equity, Capital (initial investment)	M							1	3	7	5 00

Cash - Wakulla Bank			Account No(s) 140													
Date	Explanation	Post Ref	Debit					Credit				Debit Balance	Credit Balance			
Feb 8	initial investment	J1	1	2	7	5	00					1	2	7	5 00	

- Step 1:** The date of the transaction (February 8) is transferred from the **Date** column of the General Journal to the Date column of the Account Ledger.
- Step 2:** Enter the **Explanation** in the Account Ledger that was recorded in the General Journal, in this case it was “(initial investment).” Remember that when we entered this transaction in the General Journal we had some elbow room as far as how we described the transaction. However, when posting the transaction to your Account Ledger, the explanation you write must match whatever you chose to write in the General Journal. This, again, is to make it easier on whoever else may need to review your books. They can easily look to see where in “Initial Investment” is listed in your **Cash - Wakulla Bank** account to trace the transaction. It’s very important to note that we do not write the Account Name in the Account Ledger, just the Explanation.
- Step 3:** In the **Post Ref.** column of the **Cash - Wakulla Bank** account, we enter **J1** to signify that the this transaction was transferred into the Account Ledger from page one of the General Journal (**J1 = “Journal Page 1”**). This is done in case you ever need to go back and trace a Ledger entry back to its origin in the journal and makes it much easier to cross-reference and find mistakes.
- Step 4:** The transaction recorded in the General Journal shows a Debit to the **Cash - Wakulla Bank** account. This dollar amount is transferred from the General Journal to the Debit column of the **Cash - Wakulla Bank** account in the Account Ledger. Be very cautious to transfer Debit transactions to the **Debit** column and Credit transactions to the **Credit** column during this step. Transferring a dollar amount to the wrong column is one of the most common ways to make a mistake during this process.
- Step 5:** Calculate a new balance for the account in the **Debit Balance** or **Credit Balance** column. This is where we find the running total or running balance for each account. This is an extremely useful and necessary step. In the future, with many transactions listed in our books, by turning to the individual accounts in the ledger, we can very quickly see how much capital we have left in our Cash accounts, the value of all the equipment that we own, the total Liabilities that we owe, and so on. Note that each Account carries its own balance. They do not combine. Just because we have both a **Petty Cash** and a **Cash - Wakulla Bank** account that both deal with cash, we track them separately. So, if we reduced the **Cash-Wakulla Bank** account by \$100, it would not affect the **Petty Cash** account at all.
- Step 6:** For this step, we return to the General Journal. In the **Post Ref.** column of the General Journal, enter the **Cash - Wakulla Bank** account number (**140**). This step actually serves two purposes:

- ‡ The Posting Reference traces the entry to the Account where the amount was actually transferred to.
- ‡ The Posting Reference also signifies completion of the Posting Process. This is the last step. If this column is blank in the General Journal, you know that the journal entry has yet to be posted to its proper account in the ledger. This is important for the sake of consistency. If you are in the middle of posting the day’s entries and get called away from your desk for an emergency or you get distracted somehow, when you then return to the books, you know by simply looking at the General Journal which transactions have been completed and which have not if this is the last step. Any of the first five steps can really be done in whatever order works best for you, but it is important to pick a method and stick with it. And, always have step 6 be the last step.

You have now posted the debit column entry for **Cash - Wakulla Bank**, now you must post the Debit column entry of the transaction for the **Petty Cash** account. To accomplish this you must repeat steps one thru six for each part of the transaction.

General Journal										Page 1					
20XX Date		Account Title		Doc No.	Post Ref	Debit				Credit					
Feb	8	Cash - Wakulla Bank		M	140	1	2	7	5	00					
		Petty Cash		M	110		1	0	0	00					
		Owner’s Equity, Capital (initial investment)		M							1	3	7	5	00

Petty Cash										Account No(s) 110							
Date		Explanation		Post Ref	Debit				Credit				Debit Balance		Credit Balance		
Feb	8	initial investment		J1		1	0	0	00					1	0	0	00

And, again for the Owner’s Equity, Capital account, completing the Posting Process for each part of the transaction, working line by line to transfer the entry into each individual account that is affected by the transaction. This may seem like a tedious process (and, to be fair, it is), but it is necessary to maintain accurate books. Using computer software greatly simplifies this process, but it is important to know exactly HOW the process works. Computers go down, computer users make mistakes. It is necessary to be able to let your business continue to function even if you have to do things manually for a time.



Chapter 2 Summary - We have...

1. **Created a Chart of Accounts and explained its purpose.** The Chart of Accounts is a detailed listing of all of the accounts that will appear on a company's financial statements.
2. **Explained what Source Documents are.** Source documents are evidence of transactions, which can include receipts from purchases, invoices, check stubs, etc...
3. **Analyzed financial transactions.** Transaction analysis involves answering these five questions:
 - What's going on?
 - What accounts are affected?
 - How are the accounts affected?
 - Does the account entry balance?
 - Does my analysis make sense?
4. **Recorded transactions in the General Journal.** Transactions affect numerous accounts, the General Journal brings order to the recording process by summarizing a transaction's financial data in one location and in chronological order.
5. **Performed the Posting Process.** Many transactions affect the same Account and must be grouped together to allow for the preparation of financial statements later.

Review Questions

1. Explain the 'chart of accounts' and its purpose.

2. Explain why it's important to analyze financial transactions properly.

3. Define the term 'general journal'.

4. In the chart of accounts, why are spaces left between account numbers?

5. Give another name for the 'general journal' and describe what it means.

6. List the five questions asked when analyzing a financial transaction.

7. List the six steps in the posting process.

8. What two purposes does writing the account number in the post ref. column of the journal serve?

Chapter 3

Payroll & Sales Tax

Overview

When your company grows you will have to deal with the financial repercussions of that growth. Payroll and Sales Tax are two financial realities that many businesses face when they start out, and the responsibilities they represent only increase over time. In this Chapter, we will look at the Payroll Process as well as the process to collect and remit sales tax. These are two areas of your business's finances that you truly need to get right the first time.

Learning Objectives

After completing this chapter, you will be able to:

- Calculate Payroll and Payroll taxes.
- Remit Taxes to the correct taxing authority.
- Calculate Sales Taxes on taxable sales.
- Complete General Journal entries on sales with and without Sales Tax
- Remit Sales Taxes to the Department of Revenue



Introduction to Payroll

Even if you start a business like New Life Shed Building Co. that has only you (the owner) working in it, that still means you have *one employee*. Believe it or not, it is still very important to **pay yourself**. Let's look at an example to see why:

Chris McAlister had a great idea for a new company. He was very excited about the long term potential to make a lot of money and knew that riches and fame would quickly come his way. His calculations showed millions of dollars in profit within the first four years! Chris looked very carefully at each of the important start-up costs for his business, and the grand total to start his business was \$39,000. Chris saved money and pinched pennies for two years before he finally opened his business, and the grand opening was a huge success! Retail stores all over were placing orders for the new product, and that's when the problems started.



Mrs. McAlister was a short-tempered, feisty redhead and at the end of the first month, she put her hands on her hips, cocked her head sideways, and demanded that Chris cough up the \$2,500 monthly salary he had promised to provide for the family. Chris, unfortunately, had tied up all his operating cash in filling all the orders that had come in, and hadn't included a salary for himself as part of his business budget. Things went downhill from there. Chris had shipped the company's product allowing the stores that ordered from him thirty days to pay. That meant that no money was actually coming in, and Chris had no way to add a salary for himself in at that point. He was now two months late on his personal bills, and the feisty redhead was furious and threatening divorce. Eventually, GMAC repossessed Chris's magenta Chevy Malibu, and he had no way to even get to work. Chris McAlister had a great idea for a business, but it failed because he forgot to pay *himself*.

The sad truth is that this happens *all the time*. The vast majority of companies lose money in their first months, or even years, of operation. If you do not take into account the money that the business should be paying you (as both owner and employee), you may be leaving yourself completely without an income. We'll look more closely at Owner's Equity and how it might grow later on, but it is very important to leave the money that a company generates in the company in order to increase the amount of money that it has to operate with, especially at first. Before you begin your financial planning for your company, take some time to look at your own finances and figure out how much you need to pay yourself in order to survive. Then, work that cost into the operating costs of the company.



You may very well get to a point where your company needs to hire additional employees, but even if it doesn't the Payroll Process is still something that you need to understand.

To begin, you will need an Employer Identification Number or **EIN**. The **EIN** is a number given to your company by the IRS that identifies your company and will require the company to file certain tax documents quarterly and/or annually. Think of it like a Social Security Number for your business.

To operate your company you will also need a Business or Occupational License. This could be a county, city and/or state level requirement.

The next step is to decide whether or not you want to do all the payroll processing yourself. Doing payroll for only one employee can be pretty easy, but if you get to a point where you have 10, 15, 20, or more employees doing payroll can become very time consuming. There are companies like ADP that offer Payroll processing services, and many have become relatively inexpensive. Some banks and most accountants offer low rates on payroll services to their business customers, and there are even computer programs that will help automate your payroll process. However, even if you hire a service provider to complete your payroll, you will still need to understand the basics of how the payroll process works. Just like with bookkeeping in general, you need to be able to see if everything is being done correctly, even if that means checking your own work for errors. On top of that, if you are hiring employees, you need to be able to figure out the true cost of hiring them.

Payroll and Payroll Taxes Payable

Taxes can get a little complicated, to say the least, so let's break this down a piece at a time. Let's look at New Life Shed Building Co. In our Workbook example, we decided that we would be paying ourselves a basic wage of \$12/hour. It's low, but we wanted to keep more operating capital in the company for the first year at least, and \$12/hour was enough for us to survive for that time.

In the month of February, we worked 13 hours in the business. That's not a lot, but we're just starting out operations. With a wage of \$12.00 per hour, we would earn \$156 for the time we worked (13 times \$12.00 = \$156.00). Does that mean we receive a check for \$156 at the end of the month? Nope. The reason we do not receive \$156 is that your company is required to withhold amounts from your wages to pay as tax to the government.

In our example (and these were current figures for the state of Florida as of 2016 - bear in mind that these figures are subject to change; to get the correct rates you can contact the Federal and State Departments of Revenue), New Life Shed Building Co. is responsible for withholding amounts for Social Security taxes (4.2%), Medicare taxes (1.45%), and Federal Income taxes (12%). Let's look at how this breaks down (remember that percentages can also be written as decimals: 12% = .12):

Gross Pay (13 hours X \$12.00):		\$156.00
Less Withholdings:		
Federal Income Tax (\$156 X .12)	\$18.72	
Social Security Tax (\$156 X .042)	\$6.55	
Medicare Tax (\$156 X .0145)	\$2.26	
Total Withholdings:	-	\$27.53
Net (or 'take-home') Pay:		\$128.47

We're also, hopefully, assuming that we still have an additional income at this point as \$128.47 is not a lot of money to live off for the month. Realistically, we would also have worked in the number of hours it takes us to perform the administrative duties of New Life Shed Building Co. (the books, sorting and organizing source documents, taking phone calls, scheduling appointments, etc...). Let's say that it takes us 40 hours a week to do all the extra administration work, and we are taking the same salary for it. The additional payroll check for administration (for the three weeks we worked in February) would look like this:

Gross Pay (40 hours X \$12.00 X 3 weeks):		\$1,440.00
Less Withholdings:		
Federal Income Tax (\$1,440 X .12)	\$172.80	
Social Security Tax (\$1,440 X .042)	\$60.48	
Medicare Tax (\$1,440 X .0145)	\$20.88	
Total Withholdings:	-	\$254.16
Net (or 'take-home') Monthly Pay:		\$1,185.84

Still not a huge amount, but for three weeks it's a lot more realistic. Now, that would be on top of the paycheck we wrote to ourselves for the manual labor we performed. For purposes of the Workbook example, we are not including the administrative payroll check, but know that, in a real world example, you would need to do this.

Once you have calculated the amount of taxes that the employee must pay out of his paycheck, the company withholds that tax in a separate Account (in the case of our example it is Account Number 220 - Federal Taxes Payable). The business basically acts as an intermediary, collecting the tax from the employee and passing it on to the government at the end of each quarter. In addition to this, as an employer you have an additional financial Liability when it comes to Payroll taxes. The business is also responsible for paying its own taxes on the wages that it pays out to employees.

For example, the employer, must match the Social Security Tax payment (4.2% or .042) and the Medicare tax payment (1.45% or .0145). The employer must also pay additional taxes such as Worker’s Compensation (2.5% or .025), Federal Unemployment Tax (1% or .01), and State Unemployment Tax (.5% or .005). Your business may also be responsible for additional taxes. Check with the Departments of Revenue on both the State and Federal levels for these and for up-to-date rates (again, these were accurate as of 2016). Note that the business is NOT responsible for paying Federal Income Tax. That’s because, for the company this is not income. It is entirely a Liability.

What does all that mean? It means that if you pay 4.2 % of your own Gross Pay to Social Security, the company (as your ‘employer’) is also required to pay 4.2% of your Gross Pay to Social Security. You also pay 1.45% to Medicare, and the company must also pay 1.45% to Medicare. When you pay yourself, you are costing your company more than the \$12 per hour salary that you designated for yourself. It’s the same with any employee. If you pay someone \$8/hour, it is *costing* you more than \$8/hour. This is an important consideration when you hire someone. You need to know the actual cost of employing that person so that you can anticipate the effect they will have on your books. Let’s look at the **Employer’s** portion of Payroll taxes for the 13 hours that we worked in February:

Gross Pay (13 hours X \$12.00):		\$156.00
Employer taxes:		
Social Security Tax (\$156 X .062)	\$6.55	
Medicare Tax (\$156 X .0145)	\$2.26	
Worker’s Compensation (\$156 X .025)	\$3.90	
Federal Unemployment Tax (\$156 X .01)	\$1.56	
State Unemployment Tax (\$156 X .005)	\$0.78	
Total Employer Taxes:	\$15.05	

So, how much did it actually cost us to pay ourselves a \$12/hour salary for the month of February? It cost New Life Shed Building Co. \$13.16/hour to pay out those wages (\$156 + \$15.05 = \$171.05 / 13 = \$13.16). That’s the cost of giving someone a \$12/hour salary for 13 hours. What if we included the 40 hours of administrative duties that we did NOT include in the Workbook example? That would have been a total of 53 hours for a total payout of \$714.00 to the employee (that’s us, and we’re making overtime because we are working over 40 hours), and the Employer portion of the Payroll tax would have been \$83.18. So, \$714.00 + \$83.18 = \$797.18 / 53 hours = \$15.04/hour. That’s \$15.04/hour just to pay ourselves a \$12/hour salary. Now, the increase is because of the overtime, but you can see how it is very important to both know the true cost of employing a worker and also to know how many hours those employees are working.

How do we record all this on the books? The proper General Journal entry for recording payroll for New Life Shed Building Co. for the month of February would look like this...

General Journal					Page 2							
Date		Account Title	Doc No.	Post Ref	Debit				Credit			
Feb	28	Cash - Wakulla Bank	M	140					1	2	8	47
		Payroll Expense	M	540	1	5	6	00				
		Federal Taxes Payable*	M	220						2	7	53
		(payroll - owner, feb xx)										

*Note that, in a real world setting, you could separate the ‘Taxes Payable’ into individual accounts. In other words, you could have a Federal Income Taxes Payable, Social Security Taxes Payable, and Medicare Taxes Payable Account. For simplicity’s sake, in our example we have combined all three into one Account: Federal Taxes Payable.

The General Journal entry for the Employer portion of the Payroll taxes would then look like this:

General Journal										Page 2		
Date		Account Title	Doc No.	Post Ref	Debit			Credit				
Feb	28	Payroll Expense	M	540		1	5	05				
		Federal Taxes Payable	M	220						1	0	37
		Workers' Compensation	M	235							3	90
		State Unemployment Tax Payable	M	230							0	78
		(employer taxes feb xx)										



The company then holds those Liability Accounts until the end of the quarter. At that time, New Life Shed Building Co. must 'remit,' or pay, both the taxes withheld from the employee's wages and the employer's portion of the Payroll taxes to the proper taxing authorities. In the case of our example it would be to the IRS and to the State of Florida. Realistically, it's a little more complicated with a separate agency for Social Security taxes and so on... Again, you can contact the Departments of Revenue in order to get the appropriate addresses for remittance. It is VERY important to make sure that these payments are made on time and to the correct authorities. Failure to do so WILL result in severe taxes and/or fines being levied against your company. When we make these payments, the General Journal entry will look like this:

General Journal										Page 2			
Date		Account Title	Doc No.	Post Ref	Debit			Credit					
Mar	31	Cash - Wakulla Bank	C	140							6	5	52
		Federal Taxes Payable	C	220		5	8	32					
		Workers' Compensation	C	235			6	00					
		State Unemployment Tax Payable	C	230			1	20					
		(payment of 1st qtr payroll taxes)											

The following is a side-by-side break-down of payroll for New Life Shed Building Co.'s February payroll:

Employee
Taxes
Federal Income Tax Rate: 12% (\$18.72)
Social Security Tax Rate: 4.2% (\$6.55)
Medicare Tax Rate: 1.45% (\$2.26)

New Life Shed Building Co. Employer
Taxes
Social Security Tax Rate: 4.2% (\$6.55)
Medicare Tax Rate: 1.45% (\$2.26)
Workers Compensation: 2.5% (\$3.90)
Federal Unemployment Tax: 1% (\$1.56)
State Unemployment Tax: .5% (\$0.78)

Introduction to Sales Tax

But, wait... There's more. We aren't quite done with paying taxes just yet. If you operate a business that provides any kind of product, you may need to charge Sales Tax, depending on what state you live in. In the State of Florida, there is a state Sales Tax (the rate of which varies county by county). Let's take a look at how this part of taxes works.

To start, You will need a **Sales Tax Number** unless you are a service only entity (lawn service, for example, which doesn't provide any actual product - only a service). This Sales Tax Number will be used for the purpose of collecting and remitting sales taxes to the state. Think of it like an EIN but on a state level instead of Federal.

Many of the products we purchase at stores are subject to sales tax. If you look at the canteen price list, you will notice that it indicates which products offered for sale are 'Taxable.' What is it that determines whether an item is taxable or not? There are some very complicated laws about it. In the State of Florida, an item for sale is considered taxable if it is a "non-food item" or if it is considered "prepared food" or "ready-to-eat." So, things like batteries or soap ("non-food items") are taxable. Any hot food that you buy out of the canteen window is considered "prepared" and is therefore taxable. Items like candy (of a certain size) or soda are considered "ready-to-eat" and are taxable, but items like ramen soup, beef stew, or refried beans are not taxable because they are not considered to be in one of those categories. Realistically, I could open up a soup package and just eat it or even a beef stew pack, but the tax laws considers those items as ones that you need to prepare yourself. Therefore, they are not taxable items.

When you buy a taxable item out of the canteen, Trinity (the seller) collects the tax from you (the customer). Trinity will remit (or pay) the Sales Tax it has collected to the state's Department of Revenue *on or by the date required by state law*. That date varies state by state, but in Florida the taxes collected are payable between the 1st and 20th of the following month.

Trinity does NOT report the Sales Tax as Revenue, nor do they report it as an Expense when they pay it to the State; Trinity simply forwards the amount collected from the customer to the Department of Revenue. Trinity serves only as a collection agent for the taxing authority (in this case the State of Florida). When you start your own company, depending on what type of business you do, you may need to collect and remit sales tax the same way. In this section, we will discuss the collection and payment of Sales Tax, as well as how to record these activities in your books.

Sales Tax Number

The number used for the purpose of collecting and remitting sales tax. This number is issued to your company by the state

Sales Taxes Payable

Under most state laws, the amount of the sale and the amount of the Sales Tax collected must be entered separately on the cash register. That's why a receipt from the canteen is broken down the way it is. Let's look at an example:

Notice that there is a column on the right side of the receipt that indicates if an item is taxable or not. In this example, only the soda was taxable. The cost of the entire receipt is then added up in a sub-total with Sales Tax calculated separately. Only then are the totals added together. This is very important and is required by Florida Law. Those 7 cents are kept completely separate from the actual sales.

The cash register readings are then used to credit the Sales and Sales Taxes Payable Accounts in our books. In our canteen example, if the November 29 cash register readings for Canteen Window 3 showed sales of \$42.18 and Sales Taxes of \$0.07 (sales tax rate of 7%), the General Journal entry would look like this:

Receipt					
WAKU - 3 - Wakulla Correctional #3					
Operator: J00316/MEDLOCK, JOHN P.					
Inmate: X22176/SHADE, NORTON L.					
11/29/17 14:39					
Receipt #: 498099					
Begin Canteen Balance: 42.30					
Item	Qty	Unit	Prc	\$	Tax
55719 Soup Chili, TOP RAMEN, 3 oz	10	EA	0.70	7.00	N
59091 VELVEETA, Cheddar Spread, 2 oz	5	EA	0.70	3.50	N
55406 Coffee, Resealable, Billy Brew	2	EA	6.03	12.06	N
55406 Buddy Bars, 3 oz	5	EA	1.00	5.00	N
52895 Oatmeal, Instant, Apple Cinn.	10	EA	0.53	5.30	N
59094 VELVEETA, Spicy Refried Beans	4	EA	1.74	6.96	N
54416 Coke	1	EA	0.99	0.99	Y
55408 Apple Fruit Pie, 4 oz	1	EA	1.37	1.37	N
				Sub-Total	42.18
				Sales Tax	0.07
				Total	42.25
				Remain Canteen Balance	0.05

General Journal					Page 17		
Date	Account Title	Doc No.	Post Ref	Debit	Credit		
Nov 29	Sales - Canteen Window 3	C			4	2	18
	Sales Tax Payable	C				0	07
	Cash - Wakulla Bank	C		4	2	25	
	(Canteen sales Nov. 2017)						

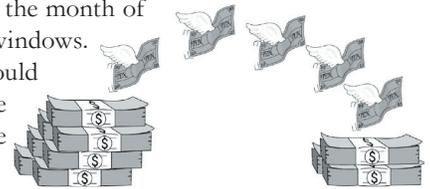
As we said before, the business collecting the sales tax is simply acting as an agent of the state. They are collecting the sales tax, keeping it in a completely separate Account in their books, and then forwarding that money on the the State Department of Revenue between the 1st and 20th of the next month. It seems like a lot of accounting work to do just out of the kindness of our hearts doesn't it? Why would a company go through all this on behalf of the state?

The short answer, of course, is MONEY. When a business remits the Sales Tax Payable on time, the state will pay you a commission on the amount collected (which shows up as a reduction of the amount that you actually need to send to the Department of Revenue). The state will provide you with a form that shows how to compute the commission amount when you apply for and receive your company's Sales Tax Number. The actual rates can vary from county to county in the State of Florida. If you don't pay the Sales Tax on time (if you remitted between the 21st and 31st of December in this case), you simply wouldn't receive the commission. Failure to pay it at all would come with a more severe penalty in the form of levies and fines.

When Sales Taxes are remitted to the state, the Sales Tax Payable account is decreased (*debited*) and the Cash account is decreased (*credited*). In our books, the difference between the two amounts (because of the commission we receive) would be recorded in a separate Account called Miscellaneous Income (so we know later on that that money did not come directly from a sale). In our example from the previous page, if Trinity remits the Sales Taxes collected in a timely manner (between the 1st and 20th of December in this case), and assuming the commission rate is 2.5% (or .025) as it was in 2016, the proper General Journal entry would look like this:

General Journal										Page 20		
Date		Account Title	Doc No.	Post Ref	Debit				Credit			
Dec	1	Sales Tax Payable	C				0	07				
		Cash	C								0	06
		Miscellaneous Income	C								0	01
		(Nov. 2017 sales tax remitted)										

Now, you might be looking at that and thinking, "Wow... 1 whole cent." That seems like a lot of work for a penny, doesn't it? And, we were being generous in our example by rounding up the commission amount to record in our books. It would actually have been a very small fraction of a penny. You are correct. That really is a lot of work just for a penny. However, bear in mind that our example was simply for one sale. Want to know how much Trinity actually collects in commission from making timely Sales Tax payments? Let's estimate and assume that each canteen window only collects \$25.00 each day in Sales Tax. For the month of January, that would equal about \$775.00 in Sales Tax collected, per window. There are 4 canteen windows. That equals \$3,100 collected in Sales Tax for the month. Remitting that on February 10th would mean they receive a commission amount of \$77.50 for January's sales. If they received the same amount each month, that would equal \$930.00 in extra income just for sending a check to the state and doing a bit of extra bookkeeping. That's money literally just flying into their pockets.



A little more significant, right? But, wait... That's only for the Main Unit. There are also canteen windows at the Annex and at the Work Camp. 6 more canteen windows equals another \$116.25 in commissions per month. That brings the yearly total to \$2,325.00. Now, consider that Trinity operates at more than one prison in Florida. There are currently 151 state-run institutions in Florida. Let's assume an average of 8 canteen windows per Institution, each collecting roughly \$25.00 per day in Sales Tax. That would mean that Trinity made \$23,405.00 in extra income just for passing that money along. For January. For the year, that would equal an extra \$280,860.00. Consider the fact that the canteen windows here only collect sales tax on a few items, as well. What if you were running a retail store that might collect upward of \$1,000 a day in sales tax? Now, how impressive do those pennies look?

Collecting the Sales Tax properly and paying it to the State at the correct time not only ensures that you are complying with the law, it is also a great source of extra revenue for your company. This is a very important thing to understand.

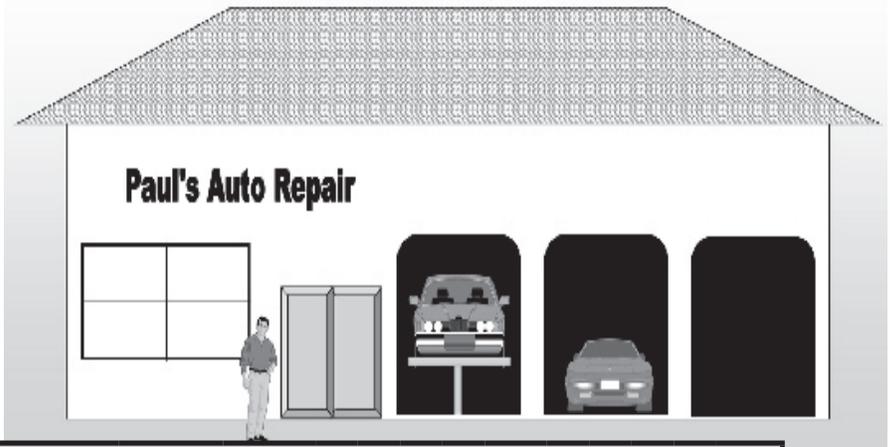
For the purposes of our Workbook example, we are NOT collecting Sales Tax from the customers. We are paying the Sales Tax ourselves for the materials purchased to build each shed or porch. Basically, we are taking on that cost and providing that as a benefit to the customer (allowing them to receive a lower cost for our products). Does that make good financial sense? Probably not, but this was done to keep things a little simpler. In the real world, you would most likely not pay the Sales Tax for your customers.

Bear in mind that Sales Tax only applies to companies that provide an actual product. If you have a service only company (like a lawn service or house painting company) you would not collect Sales Tax for services provided. However, in some instances, particularly with service companies like Auto Repair, while the *service* is not taxable, the *part used in the repair* (an alternator, for example) IS taxable. Even a house painter would not collect Sales Tax on the paint used as part of the house painting service. But, if the painter sold the home owner a few leftover gallons of paint when the job was finished, those gallons of paint WOULD be taxable. It is best to check with the Department of Revenue to clarify exactly what is and is not taxable and gather the forms needed. As we said, the tax laws are very complicated.

Let's look at an example. On April 4th, Paul's Auto Repair Center (PARC) replaced an alternator in Mr. Egge's 1970 Gremlin, charging him \$100. Forty dollars of that charge was for the alternator that PARC installed. Assuming that the sales tax rate in PARC's county is 7%, the sales tax applicable would be computed like this:

$$\$40.00 \times .07 = \$2.80.$$

The total amount collected from Mr. Egge would be \$102.80 (\$60.00 for the labor + \$40 for the alternator + \$2.80 in Sales Tax). The proper General Journal entry would look like this:



General Journal										Page 4				
Date		Account Title	Doc No.	Post Ref	Debit				Credit					
April	4	Cash	I		1	0	2	80						
		Service Revenue	I							6	0	00		
		Sales Revenue - Alternator	I							4	0	00		
		Sales Tax Payable	I								2	80		
		(Fix Mr. Egge's Car)												

Another area of tax that you will need to consider when running a business is taxes on business income. Just like a person, a company needs to file income tax with the IRS each year. We do not deal with this in the Workbook, but be aware that this is an additional requirement.

In all areas of taxation (Sales Tax, Income Tax, and Payroll Taxes), it is vitally important that you get it right the first time. Failing to do so will result not only in angry employees (as anyone who has ever found a mistake on their paycheck can tell you) but in some serious fines from the State or Federal governments, possibly even jail time if the infractions are serious enough. Taxes can be very complicated. Take the time to understand them and get them right.



Chapter 3 Summary - We have...

- Calculated payroll and payroll taxes.** When calculating your total cost of payroll it is important to remember that it not only includes the amount paid to the employee but also the Employer portion of Payroll Taxes.
- Remitted taxes to the correct taxing authority.** Taxes are remitted to the taxing authority in a timely manner. If this is not done correctly, substantial penalties and taxes will be levied against your company.
- Calculated sales tax on taxable sales.** On taxable sales, a state sales tax of 7% must be collected from the customer and remitted to the state Department of Revenue.
- Completed journal entries on sales with and without sales tax and the process of remitting sales taxes to the Department of Revenue.** The journal entries on taxable sales and non-taxable sales are not handled the same way and you must clearly distinguish between the two.

Review Questions

1. What is the purpose of the Employer Identification Number?

2. If your company has an employee that earns \$9.00 per hour and works 40 hours will he receive a check for \$360?
 Yes _____ No _____

3. What is the Federal Income Tax rate that the employee currently pays? _____

4. What is the Social Security Tax rate that the employee currently pays? _____

5. What is the Medicare Tax rate that the employee currently pays? _____

6. What is the Medicare Tax rate that the employer currently pays? _____

7. Calculate the gross pay, the withholdings for the following employee, and the employer's tax expenses using the charts below:

Hourly rate: \$10.00

Hours worked: 40

Gross pay:

Less Withholdings:

Federal Income Tax	_____
Social Security Tax	_____
Medicare Tax	_____
Total withholdings	_____

Net Pay

=====

Gross pay:

Employer Taxes

Federal Income Tax	_____
Social Security Tax	_____
Medicare Tax	_____
Worker's Compensation	_____
Federal Unemployment Tax	_____
State Unemployment Tax	_____

Total Employer Taxes: _____

8. What are the three Accounts affected when a taxable sale is made?

9. To whom does a company remit (send) the Sales Tax money it has collected? _____

10. Currently, Sales Taxes must be remitted to the Department of Revenue by what date on the following month? _____

11. Who pays the Sales Tax when a sale is made? _____

12. When is the Sales Tax collected? _____

13. Who collects the Sales Tax? _____

14. If a company has taxable sales of \$800 and the tax rate is 7%, what is the amount of Sales Tax collected on the sale? _____

15. If a company collects \$1,000 in Sales Tax and remits it to the Department of Revenue on the 15th of the following month, how much of a commission will the company keep, assuming a commission rate of 2.5% or 0.025? _____

16. Who issues the Sales Tax Number? _____

Chapter 4

The Worksheet & Financial Statements

Overview

In this chapter, you will learn how to check your work by preparing a Trial Balance using an Eight Column Worksheet. The Worksheet is also used for making Adjusting Entries and will aid you in the preparation of Financial Statements.

Learning Objectives

After completing this chapter, you will be able to:

- Prepare a Trial Balance Worksheet using the 8 Column Worksheet.
- Perform the Adjusting Process and record Adjusting Entries.
- Prepare a Balance Sheet and Income Statement.
- Prepare the year-end Closing Process
- Identify the steps in the Bookkeeping Cycle

Worksheet									
Company Name:									
Period Begin:									
Period End:									
Account Title	Trial Balance		Adjustments		Income Statement		Balance Sheet		
	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
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25									
26									
27									
28									

Worksheet Introduction

The **Worksheet** is a form that aids in constructing financial statements and may be used at any time. It is usually prepared at the end of a 'period' (for example, one month, one quarter, or one year). Not only does the worksheet help us prepare financial statements, we can also use it to see if we've made any mathematical errors.

The first step to constructing the worksheet is to write the name of the company at the top of the sheet. In our example from the Workbook, **New Life Shed Building Co.** Next, we need to record the dates for the period begin and period end sections. Because our records include the company's financial transactions for a period of time, we must record the date when the current period began, and the date when the period ended. In our example, we invested \$1,375.00 to start our business on February 8, 20XX. This was the day the business started operations, so the period begin date for our first Worksheet would be February 8, 20XX. Assuming that the period we are using is one quarter (or three months), the period end date would be March 31, 20XX.

Worksheet

A large columnar form that aids in the construction of financial statements

Company Name: New Life Shed Building Co.				
Period Begin: February 8, 20XX				
Period End: March 31, 20XX				
Account Title	Trial Balance	Adjustments	Income Statement	Balance Sheet

The third step in preparing the Worksheet is to list each Account in the Account Ledger with its balance in the **Trial Balance** columns. It is important that you list the Accounts on the Worksheet in the order in which they appear in the Chart of Accounts and Account Ledger.

Trial Balance

In Chapter two we talked about Balance and noted that, for every transaction recorded, total Debits must equal total Credits. Because General Journal entries are transferred (or 'Posted') to the accounts in the Account Ledger, the ledger accounts (collectively) should contain equal Debit/Credit totals as well. This happens because the same amounts are being posted from the General Journal to the individual Accounts. To find out if this is true, you need to prepare a **Trial Balance**. The **Trial Balance** is nothing more than a tool used to determine whether there is balance in your books. It is NOT proof that no mistakes have been made. For example, if the company took in \$100 in revenue, but it was mistakenly recorded as \$1,000, the total Debits and Credits would still be in balance, your records would just be wrong. Remember to transfer the balances to the worksheet properly, as either Debits or Credits.

Trial Balance

A listing of the ledger account names, along with their balances

When filled out, the Trial Balance will look like this for New Life Shed Building Co. for the first Quarter:

Company Name: New Life Shed Building Co.											
Period Begin: February 8, 20xx											
Period End: March 31, 20xx											
	Account Title	Trial Balance									
		Debit					Credit				
1	Petty Cash	1	7	1	60						
2	Equipment			0	00						
3	Prepaid Insurance	3	6	0	00						
4	Cash - Wakulla Bank	7	8	8	71						
5	Accum Depr - Equip							0	00		
6	Accounts Payable							0	00		
7	Federal Taxes Payable							0	00		
8	State Unemployment							0	00		
9	Workers' Compensatio							0	00		
10	Owner's Equity					1	3	7	5	00	
11	Sales - Sheds					1	4	5	0	00	
12	Sales - Porches							0	00		
13	Sales - Yard Work							0	00		
14	Licenses Expense	1	0	0	00						
15	Building Supplies Exp	9	0	6	13						
16	Mileage Expense	1	0	7	00						
17	Payroll Expense	2	6	3	16						
18	Insurance Expense			0	00						
19	Depreciation Expense			0	00						
20	Fuel Expense		9	1	00						
21	Food Expense			0	00						
22	Office Supplies Expen		3	2	40						
23	Advertising Expense			5	00						
24		2	8	2	5	00	2	8	2	5	00
25	Net Income										
26											
27											
28											

Fill out Account Titles in the order they appear on your Chart of Accounts

Fill out current Account Balances for every individual Account in the Ledger. Be careful to transfer Credits to the Credit Column and Debits to the Debit Column

Add up the total for each column. Total Debits should equal Total Credits. If they do not equal, there is an error somewhere in your accounts.



Adjusting Entries

At the time we construct and prepare the Trial Balance Worksheet, not all of the company's financial information for the period may have been recorded, and that leads us to the next step in filling out the Worksheet. There are some things that occur to increase or decrease your Accounts without an actual transaction taking place. This can happen when Assets are actually consumed (such as a restaurant that uses up its food inventory in the process of serving customers). A good example of this is any kind of Pre-Paid Account. In the example in our Workbook, we purchased a Business Insurance Policy from Socrates National Insurance on February 9th for \$360.00. That policy covers the Business and its employees for 6 months ($\$360 / 6 \text{ months} = \$60/\text{month}$). At the end of March, then, two months of the policy have been used up (\$120 worth) and four are left (\$240 still remains on the policy). The Asset got used up simply by the process of time passing. We never entered a transaction on our books, but the Prepaid Insurance Asset has decreased in value. We need to reflect that, so we enter something known as an ***Adjusting Entry***.

Another item that can cause an **Adjusting Entry** to occur is a mistake. As a point of advice, if you are keeping your books manually, as we are doing in the Workbook, **do not write them in pencil**. If an auditor reviews your books and sees that they are written in pencil, they will literally throw them out. Books written in pencil raise a huge red flag that something shady is going on. For the purposes of class, of course, you may use pencil in your Workbooks. With real books, however, write in blue or black pen as you would when writing out legal work, because your company's books really are considered legal documents.

Also, as with legal work, using white-out is not a good idea for the same reasons. If you make a mistake and you notice it, make a note of it on a separate paper. When it comes time to fill out the Worksheet, we perform an **Adjusting Entry** to correct any errors that we have made.

Any additional Expenses and Revenues that are incurred during the current period that have not yet been recorded would also be recorded as **Adjusting Entries**. We have an example of this in the Workbook, too. We did not yet reimburse ourselves for the mileage that we put on our personal truck. We need to calculate the amount of money that we need to pay ourselves based on that mileage. If we did not do that as a regular transaction, we would need to create an **Adjusting Entry** to account for it.

Depreciation is another source of Adjusting Entries. Any Equipment owned by the company tends to lose value over time all on its own. We refer to this as Depreciation, and it will be covered in the next chapter. For the first quarter, we don't need to worry about it, but be aware that an **Adjusting Entry** will be needed at the end of the year to account for the amount of value that our Assets lost.

To review, four items that can be affected by the Adjusting Process are:

- Assets that have been consumed in the current bookkeeping period
- Errors found in previous recording and the Posting of entries
- Additional Expenses and Revenues that come up in the current period that have not yet been recorded
- Depreciation of Equipment Assets over time

There could be more than these four, but these are the main sources of needed Adjustments. Let's look at how to perform an Adjustment on the Worksheet. In our Workbooks, the only Adjustment we should need (unless there is a mistake in the books somewhere) is to the Prepaid Insurance Asset. As we looked at above, by March 31 we have used up 2 months of the 6 month insurance policy we paid for back in February. At \$60/month, that means we have used up \$120. On the next page, we will look at how to record this Adjustment.

The first step in making an Adjustment is to know the amount to be adjusted (in this case, \$120) and the Accounts that will be adjusted. Remember, as with any transaction, there must be at least two affected accounts. Even with Adjustments, total Credits must equal total Debits. In our example, we will be decreasing the Prepaid Insurance Account to reflect the amount we used up and the Insurance Expense Account, which will be increasing by the same amount. We write those amounts in the appropriate columns in the Adjustment section of the Worksheet.

1

Next, we add each column down to find the total Debits and total Credits. In this case, the math is pretty simple since there's only one entry in each column, but we are again looking for Balance between Debits and Credits. If they are not equal there is a mistake.

2

Once the Adjustments have been made, assign a Reference Letter to each Adjustment. The easiest way to do this is to assign the letter "a" to the first Adjustment, "b" to the second Adjustment, "c" to the third, and so on... At the bottom of the Worksheet, we write a note explaining the purpose of each Adjustment. We do this so anyone who reviews the Worksheet will know exactly why each Adjustment was made. We also use this information when entering the Adjustments into the General Journal.

3

Company Name: New Life Shed Building Co.		Worksheet																							
Period Begin: February 8, 20xx																									
Period End: March 31, 20xx																									
	Account Title	Trial Balance						Adjustments																	
		Debit			Credit			Debit			Credit														
1	Petty Cash	1	7	1	60																				
2	Equipment			0	00																				
3	Prepaid Insurance	3	6	0	00									(a)	1	2	0	00							
4	Cash - Wakulla Bank	7	8	8	71																				
5	Accum Depr - Equip								0	00															
6	Accounts Payable								0	00															
7	Federal Taxes Payable								0	00															
8	State Unemployment								0	00															
9	Workers' Compensatio								0	00															
10	Owner's Equity							1	3	7	5	00													
11	Sales - Sheds							1	4	5	0	00													
12	Sales - Porches									0	00														
13	Sales - Yard Work									0	00														
14	Licenses Expense	1	0	0	00																				
15	Building Supplies Exp	9	0	6	13																				
16	Mileage Expense	1	0	7	00																				
17	Payroll Expense	2	6	3	16																				
18	Insurance Expense												(a)	1	2	0	00								
19	Depreciation Expense			0	00																				
20	Fuel Expense	9	1		00																				
21	Food Expense			0	00																				
22	Office Supplies Exp	3	2	40																					
23	Advertising Expense			5	00																				
24		2	8	2	5	00	2	8	2	5	00			1	2	0	00					1	2	0	00
25	Net Income																								
26																									
27	(a) 2 mon. insurance																								
28																									

The last step to this process is to record the entries in the General Journal and post it to the Account Ledger into the appropriate Accounts. When entering the information into the General Journal, we always put Adjustments on their own Journal page in order to keep them separate from the entries made in the normal course of business. One of the entire purposes of Bookkeeping is to be able to find whatever information you want quickly. Want to know exactly how much Equipment you purchased in August? You can find that at a glance just by looking at the Equipment Account in the Account Ledger. Want to know exactly how much Petty Cash you are supposed to have on hand? You can find that the same way. So it is with Adjusting Entries. By keeping them on their own Journal page, we can very quickly see exactly what Adjustments we needed to make, when, and why. On the next page is an example of how the General Journal entry for our example Adjustment would look and then the entries as they would look when Posted to the Account Ledger.

General Journal										Page 16			
Date		Account Title	Doc No.	Post Ref	Debit				Credit				
Mar	31	Insurance Expense	M	550		1	2	0	00				
		Prepaid Insurance	M	130							1	2	0 00
		(Adjusting Entry)											

Note something important here. The explanation for an Adjusting Entry is always: (Adjusting Entry). This is done so that anyone reviewing the books will know at a glance that this transaction was an Adjustment and will not have the normal Source Documents associated with it. In our case, we will have written a Memo noting what the Adjustment was. The actual explanation of what the Adjusting Entry was for will be located on the Worksheet itself (with the reference letters that we wrote in). In the example above, the entries have already been Posted to the Account Ledger, so let's take a look at what those entries would look like as well.

Insurance Expense										Account No(s) 550												
Date		Explanation	Post Ref	Debit				Credit				Debit Balance				Credit Balance						
Mar	31	Adjusting entry	J16		1	2	0	00							1	2	0	00				

Prepaid Insurance										Account No(s) 130												
Date		Explanation	Post Ref	Debit				Credit				Debit Balance				Credit Balance						
Feb	9	Purchase 6 mon. prepaid ins.	J1		3	6	0	00							3	6	0	00				
Mar	31	Adjusting Entry	J16							1	2	0	00		2	4	0	00				

Introducing Financial Statements

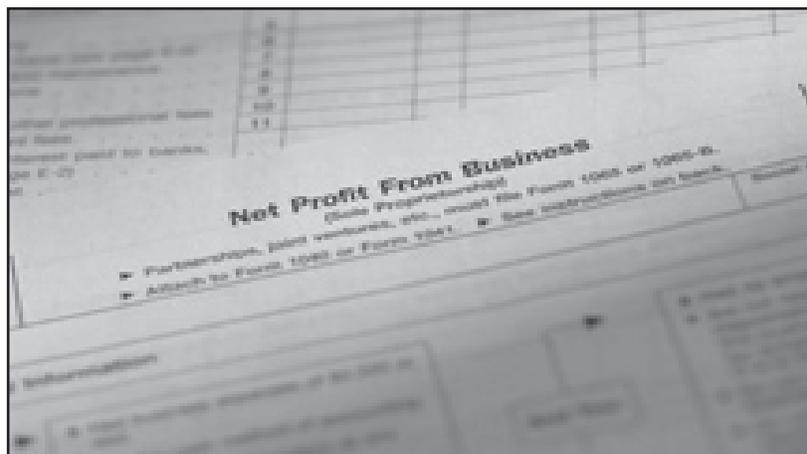
With the Trial Balance and Adjusting Entries completed, the next steps in filling out a Worksheet deal with the construction of Financial Statements. Financial Statements are reports that give us a picture of a company's financial position at a given point in time. They also show us the results of a company's performance over a period of time. The building of Financial Statements is one of the primary purposes of the Worksheet, and it is very important to understand how these work. People who will use Financial Statements include the business owner, his managers, banks and other lenders, investors, and analysts. Before we begin constructing our Financial Statements in the Workbook, let's take a look at what each of these Financial Statements do.

The Income Statement

The Income Statement compares a company's Revenues and Expenses to show us how the business has done over a given period of time. The main purpose of the income statement is to answer the question: "Did the company make any money?" "Did we turn a profit or did we lose money?", in other words. This question is answered by first recording any Revenues and then subtracting the Expenses. The end result is either a **Net Income** or **Net Loss**.

Net Income

The amount of revenue in excess of the amount of expenses



Net Loss

The amount of expenses in excess of the amount of revenue

Basically, if there is a Net Income, the company has made money. If there is a Net Loss, it lost money. An example Income Statement for New Life Shed Building Co. is shown here. The Income Statement shown is for the first quarter of operations (February and March of 20XX). The statement starts with Revenue and then the company's Expenses are subtracted to get the Net Profit or Loss amount. When looking at the Income Statement, we look at these three things:

1. **Revenue** - The amount charged to customers for goods or services sold.
2. **Expenses** - What it costs the company to produce Revenue.
3. **Net Income** - the excess of a company's Revenue over Expenses, or...
Net Loss - the excess of a company's Expenses over Revenue.

When filling out the Income Statement, we list the Revenue first. Then, we total the amount from all sources of Revenue. In the case of our example, the math is again pretty simple as we only have one source of Revenue so far.

We then list all the Expenses in our Account Ledger and total those up. This gives us our Total Expenses.

Lastly, we subtract the Expenses from the Revenue. In the case of our example, this leaves us with a negative number (\$1,450.00 - \$1,624.69 = - \$174.69). So, for the first quarter of 20XX, New Life Shed Building Co. reported a Net Loss. In Bookkeeping, we represent negative numbers by putting them in parentheses which, in this case, shows us at a glance that it is a Net Loss.

New Life Shed Building Co.	
Income Statement	
For Period of February 1 to March 31, 20XX	
Sales - Sheds	\$1,450.00
Sales - Porches	0.00
Sales - Yard Work	0.00
Total Income	\$1,450.00
Licenses Expense	\$100.00
Building Supplies Expense	906.13
Mileage Expense	107.00
Payroll Expense	263.16
Insurance Expense	120.00
Depreciation Expense	0.00
Fuel Expense	91.00
Food Expense	0.00
Office Supplies Expense	32.40
Advertising Expense	5.00
Total Expenses	\$1,624.69
Net Income/(Loss)	(\$174.69)

Changes in Owner's Equity

At the bottom of the Income Statement is a section called **Changes in Owner's Equity**. This section is technically a separate Financial Statement, but it is most often included with the Income Statement. As the heading states, this section shows us any changes in Owner's Equity during the time period covered by the Income Statement (February to March in our example). Remember that Owner's Equity represents the owner's interest in the company. It's our stake as the only investor in New Life Shed Building Co., and that stake can go up or down in four different ways:

1. **Another investment by the Owner** - When the owner of a company invests personal assets (such as cash, vehicles, land, tools, and so on), the Owner's Equity increases. We saw this during our initial investment of \$1,375.00
2. **Withdrawals by the Owner** - The opposite of an investment. In this case, the Owner is taking Assets out of the company (usually cash) for personal use. If there is more than one investor or stock holders, this option can get pretty complicated.
3. **Net Income** - When a company makes a profit, Owner's Equity increases.
4. **Net Loss** - When a company loses money, Owner's Equity decreases.

When filling out the **Changes in Owner's Equity** section, the **Beginning Balance** in our example is zero because this was the first quarter of operations for our company.

As the owner, we made an investment on February 8th, which is represented here.

The **Net Income** or **Loss** is entered here (in this case, a loss) and is subtracted to give us the **Ending Balance** as of March 31st. This **Ending Balance** will be the **Beginning Balance** for the next quarter.

Changes in Owner's Equity	
Beginning Balance, February 1, 20xx	\$0.00
Investments:	
Owner's Investment	1,375.00
Net Income for the Period	(174.69)
Ending Balance, March 31, 20xx	\$1,200.31

The Balance Sheet

The other Financial Statement that we deal with here is called the **Balance Sheet** and it lists the company's Assets, Liabilities, and Owner's Equity amounts. Those categories should sound familiar from the Accounting Equation that we discussed in Chapter two.

Assets = Liabilities + Owner's Equity

By revealing the resources owned by the business (Assets), and the claims on those resources by specified parties (Liabilities), the Balance Sheet gives us a picture of the company's Financial Position at a particular point in time. That "particular point" is one specific day, and this is one of the major differences between the Balance Sheet and the Income Statement. The Income Statement showed us how the business was doing over a period of time (in our example, it was two months). The Balance Sheet shows us how the business is doing on one specific day. The difference between these gives us a more complete picture of the prosperity of our company. In the case of the Balance Sheet for New Life Shed Building Co. the particular point in time we are dealing with is March 31, 20XX.

Notice the two main sections of the balance sheet:

1. **Assets** and
2. **Liabilities and Owner's Equity.**

We begin by listing all of our current Assets as of March 31st and totalling them up.

Repeat that step for Liabilities. In our case, we don't have any Liabilities yet.

We list the current Balance in our Owner's Equity - Capital Account (from our Account Ledger). Then, we add or subtract down to find the Total Owner's Equity.

Finally, we add up the Total Liabilities and the Total Owner's Equity. Observe that the dollar total is the same for both Total Assets and Total Liabilities and O/E. This equality is what is meant by the Accounting Equation ($A = L + C$).

New Life Shed Building Co.	
Balance Sheet	
March 31, 20XX	
Assets	
Petty Cash	\$171.60
Equipment	0.00
Prepaid Insurance	240.00
Cash - Wakulla Bank	788.71
Accumulated Depreciation - Equip	0.00
Total Assets	\$1,200.31
Liabilities:	
Accounts Payable	\$0.00
Federal Taxes Payable	0.00
State Unemployment Tax Payable	0.00
Workers' Compensation	0.00
Total Liabilities	\$0.00
Owner's Equity:	
Owner's Equity - Capital	\$1,375.00
Retained Earnings/(Loss)	(\$174.69)
Total Owner's Equity	\$1,200.31
Total Liabilities and O/E	\$1,200.31

In our example, the Retained Earnings (which is the same as Net Income) is - \$174.69. The Changes in the Owner's Equity section is the link between the Balance Sheet and Income Statement, with the Ending Balance for Owner's Equity being shown on the Balance Sheet (\$1,200.31 in our example).

Now that we have seen what the Financial Statements look like and what they do, where do we get all those numbers from? The answer to that is...

The Worksheet

The adjusted balances on the Worksheet serve as the raw material for the company's Financial Statements. Let's take a look at our Worksheet for New Life Shed Building Co., specifically at the last two sections which are conveniently labelled "Income Statement" and "Balance Sheet." The process for getting the balances for these two sections is very simple. We merely add each row on the Worksheet across. Note that, because we listed our Trial Balances in the order they appear in the Chart of Accounts, our Account Titles are all listed by category already.

		Trial Balance		Adjustments		Income Statement		Balance Sheet	
Account Title		Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
Company Name: New Life Shed Building Co. Worksheet		Period Begin: February 8, 20xx							
Period End: March 31, 20xx									
Assets	1 Petty Cash	1 7 1 60						1 7 1 60	
	2 Equipment		0 00						0 00
	3 Prepaid Insurance	3 6 0 00		(a) 1 2 0 00				2 4 0 00	
	4 Cash - Wakulla Bank	7 8 8 71						7 8 8 71	
	5 Accum Depr - Equip		0 00						0 00
Liabilities	6 Accounts Payable		0 00						0 00
	7 Federal Taxes Payable		0 00						0 00
	8 State Unemployment		0 00						0 00
	9 Workers' Compensatio		0 00						0 00
Owner's Equity	10 Owner's Equity		1 3 7 5 00					1 3 7 5 00	
Revenue	11 Sales - Sheds		1 4 5 0 00			1 4 5 0 00			
	12 Sales - Porches		0 00				0 00		
	13 Sales - Yard Work		0 00				0 00		
Expenses	14 Licenses Expense	1 0 0 00				1 0 0 00			
	15 Building Supplies Exp	9 0 6 13				9 0 6 13			
	16 Mileage Expense	1 0 7 00				1 0 7 00			
	17 Payroll Expense	2 6 3 16				2 6 3 16			
	18 Insurance Expense		0 00	(a) 1 2 0 00		1 2 0 00			
	19 Depreciation Expense		0 00				0 00		
	20 Fuel Expense	9 1 00				9 1 00			
	21 Food Expense		0 00				0 00		
	22 Office Supplies Exp	3 2 40				3 2 40			
	23 Advertising Expense		5 00				5 00		
	24	2 8 2 5 00	2 8 2 5 00	1 2 0 00	1 2 0 00	1 6 2 4 69	1 4 5 0 00	1 2 0 0 31	1 3 7 5 00
25 Net Income						1 7 4 69		1 7 4 69	
26					1 6 2 4 69	1 6 2 4 69	3 7 5 00	1 3 7 5 00	
27 (a) 2 mon. insurance									
28									

1 Assets, Liabilities, and Owner's Equity gets added (or subtracted) across to the Balance Sheet section. Note that Credits subtract from Debits (and the other way around).

2 Revenue and Expenses get added (or subtracted) across to the Income Statement section.

3 Once all the totals have been added (or subtracted) across, add each column down to get the Total Debits and Total Credits. Note that there should be a difference between Credits and Debits in this case. This difference represents our Net Income or Net Loss.

4 The last step in this process is to bring to Debit and Credit Totals into agreement. We do this by adding the difference to the lower number (even when doing this, Debits should equal Credits). A Credit on the Income Statement with a corresponding Debit on the Balance Sheet represents a Net Loss (as we have here). If there was a Net Income, there would be a Debit needed on the Income Sheet and a Credit on the Balance Sheet.

Adding the totals across the Worksheet is done on a line by line basis as we did on the previous page. Once the Worksheet is completed, the preparation of our Financial Statements is fairly easy. Virtually all of the information we need is found in the Worksheet's Income Statement and Balance Sheet sections. Then, it's simply a matter of transferring the numbers off one sheet onto our Financial Statements.

The Closing Process

There is one more step in the Bookkeeping Cycle, and that's called the **Closing Process**. Companies normally close their books at the end of the year, as we will see when we are completing our Worksheet. The Closing Process should help to tie together some loose ends. As we explained earlier, four factors cause Owner's Equity to change: **Owner Investments, Withdrawals, Net Income, and Net Loss**. Taking a look at the Balance Sheet for New Life Shed Building Co., we saw that the Ending Balance for Owner's Equity on March 31st was \$1,200.31. We saw that difference represented on the Worksheet, but it is still not represented in the General Journal or the Account Ledger. Obviously, we need to change the Owner's Equity in order to reflect the correct amount. To do this, we perform the Closing Process.

Once again, this process is normally only done at the end of the year and, in our Workbooks, we will not be doing this step until we reach December 31st. However, for illustration purposes here, we will show what the Closing Process would look like IF we were to do it on March 31st.

Closing the books is really a two-step process, and the General Journal entry would look like this:

1. Close all the Revenue Accounts; and
2. Close all Expense Accounts.

You could do all of these separately, but it is more common practice (and far easier) to close these Accounts all together, combining the entries in the General Journal.

So, the Accounts involved in this entry are: all Expense accounts, the Revenue account, and the Owner's Equity Account.

General Journal										Page 7		
Date	Account Title	Doc No.	Post Ref	Debit				Credit				
Mar 31	Sales - Sheds	M		1	4	5	0	00				
	Sales - Porches	M					0	00				
	Sales - Yard Work	M					0	00				
	License Expense	M							1	0	0	00
	Building Supplies Expense	M							9	0	6	13
	Mileage Expense	M							1	0	7	00
	Payroll Expense	M							2	6	3	16
	Insurance Expense	M							1	2	0	00
	Depreciation Expense	M								0	00	
	Fuel Expense	M							9	1	00	
	Food Expense	M								0	00	
	Office Supplies Expense	M							3	2	40	
	Advertising Expense	M							5	00		
	Owner's Equity, Capital	M					1	7	4	69		
	(to record the closing entry											
	for March 31st, 20xx)											

1 Step One: Close all the Revenue Accounts.

The closing of the Revenue Accounts involves reducing the Revenue Accounts to zero. To do so, you need to **Debit** each Revenue Account for its current balance. In our case, we have only sold Sheds at this point, so the other two Revenue Accounts are Debited with zeroes.

2 Step Two: Close all Expense Accounts.

The closing of the Expense Accounts works the same way, but to reduce the Expense Accounts to zero we need to enter a **Credit** to each Account in the amount of its current balance.

3 Step Three: Update the Owner's Equity Account.

The Closing entry to record the Net Loss for the first quarter to Owner's Equity - Capital is made to the **Debit** side of this Account. This **decreases** our interest in the assets of the business (because the business lost money). We do this because our Expenses were greater than our Revenue.

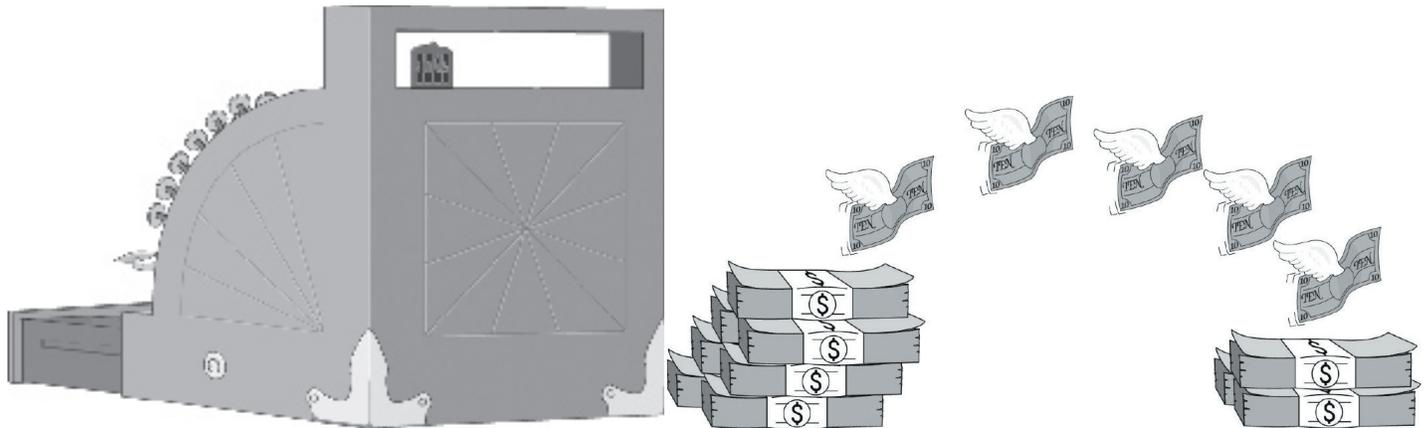
You may be wondering why we're zeroing out all these Accounts. The Closing Process has two purposes. First, of course, Closing corrects the lack of agreement between the Owner's Equity Account and the Financial Statements. Second, the Income Statement reports financial activity for a span of time (in the case of our example, two months). Once that period is over, the company must start building up new balances for the next financial report. In other words, Revenue and Expense Accounts must be Closed so that there is no carry-over from one period to the next. These accounts are known as Temporary Accounts because they only build from period to period.

The rest of the Accounts are Permanent Accounts. When a large company reports its earnings for the year, it reports only the earnings for that year. They do not combine their earnings with previous years. The Revenue Accounts, in other words, are closed at the end of every year in order to facilitate the creation of their Financial Statements. Expenses, which are also part of the Income Statements, therefore also need to build up from year to year.

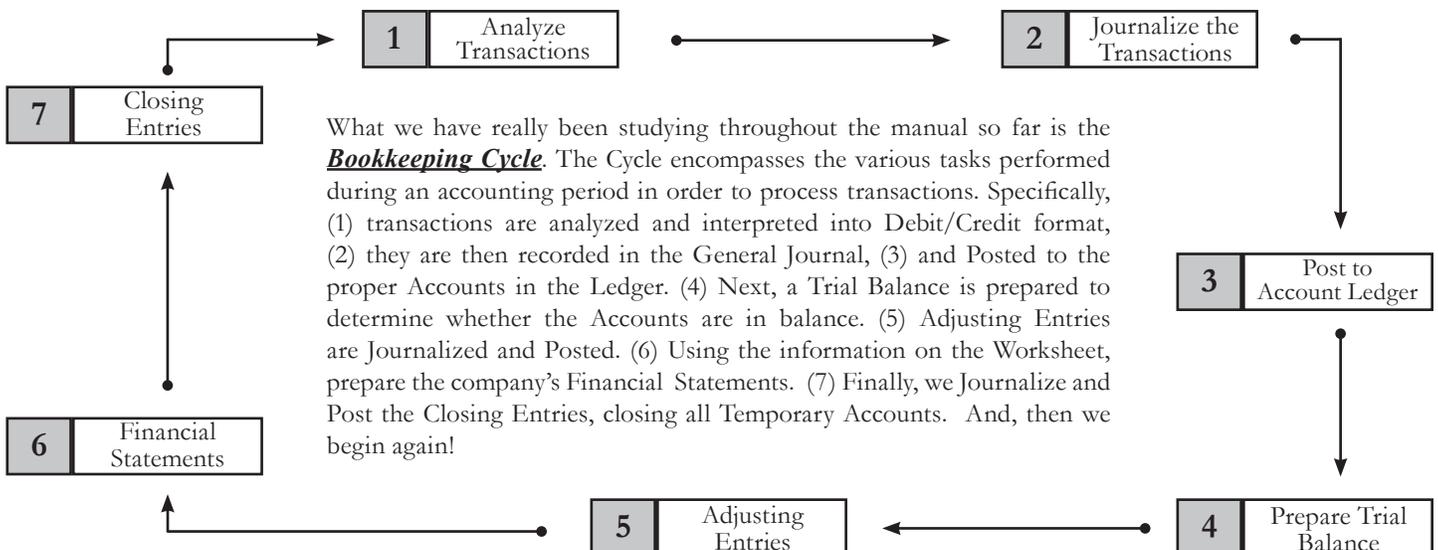
The Balance Sheet reports information at a very specific point in time. The Balance Sheet components (Assets, Liabilities, and the ending Owner's Equity) are **never** closed. That's because those categories build and build over time. New Life Shed Building Co., for example, reported a balance in his Cash - Wakulla Bank Account of \$788.71 on March 31. It would not make any sense to remove all the cash from the business in order to reduce this Account to zero so that we could put it right back in again on April 1st and let the company start accounting all over again. Likewise, regardless of how much money you made or lost, your Liabilities (the amount of money you owe to other people or companies) remain the same. In our case, we don't yet have any Liabilities, but the company does have \$788.71 worth of cash to begin operations in April.

By entering and Posting the final General Journal entry over to the individual Account Ledger accounts, we will have completed the Closing Process. Observe that the New Life Shed Building Co.'s Owner's Equity Account now agrees with the company's Financial Statements. Again, this is only an example. Do not go through this process yet in your Workbook, as it is only done at the end of the year.

Owner's Equity, Capital			Account No(s) 310																
Date		Explanation	Post Ref	Debit				Credit				Debit Balance		Credit Balance					
Feb	8	initial investment	J1					1	3	7	5	00			1	3	7	5	00
Mar	31	Closing entry, 1st qtr 20xx	J7	1	7	4	69								1	2	0	0	31



The Bookkeeping Cycle





Chapter 4 Summary - We have...

1. **Prepared a Worksheet.** The Worksheet is a columnar form that aids in the preparation of the Trial Balance, Adjusting Entries, and Financial Statements. The Worksheet is really the bookkeeper's "scratch pad" and provides evidence of computations.
2. **Prepared a Trial Balance using the eight column Worksheet.** The Trial Balance is performed to check for equality in the company's ledger Accounts, ensuring that Total Debits equal Total Credits.
3. **Performed the Adjusting Process and recorded Adjusting Entries.** Adjustments are necessary to record the changes in the balances of Asset and Liability Accounts where needed.
4. **Prepared an Income Statement and Balance Sheet.** The Income Statement shows the company's Revenues and Expenses for a particular period of time. The Balance Sheet shows the current financial condition of the company.
5. **Performed the Closing Entries as needed.** At the end of a reporting period, a company's Temporary Accounts (Revenues and Expenses) are closed, or reduced to zero.
6. **Identified the steps in the Bookkeeping Cycle.** The Bookkeeping Cycle consists of the various tasks performed during a period to process transactions: (1) Transaction Analysis, (2) Journalize the transactions, (3) Post to the Account Ledger, (4) prepare a Trial Balance, (5) Adjusting Entries, (6) Financial Statements, (7) Closing Entries.

Review Questions

1. What is the Worksheet and its purpose.

2. Why is a Trial Balance prepared?

3. What are the three steps involved in construction of the Worksheet?

4. What four specific situations does the Adjusting Process center on?

5. Why are Adjusting Entries necessary?

6. When constructing the Worksheet, each Account is listed. Where do we find these Accounts?

7. Why are the Adjusting Entries on the Worksheet referenced by letters next to each Adjustment?

8. What are the types of Accounts that appear on the 'Income Statement'?

9. What is the final step to preparing the 'Income Statement' and 'Balance Sheet'?

10. Explain the main purpose of the 'Income Statement'.

11. What are the types of Accounts that appear on the 'Balance Sheet'?

12. Why are Closing Entries needed?

13. When do we normally perform the Closing Process?

14. Name the seven steps in the 'Bookkeeping Cycle'.

_____	_____
_____	_____
_____	_____

Chapter 5

Depreciation

Overview

In this chapter we will look at Depreciation

Learning Objectives

After completing this chapter, you will be able to:

- Define the term Depreciation.
- Calculate the cost of Equipment over time.
- Explain the meaning of Salvage Value.
- Calculate Depreciation using the Straight-Line Method of Depreciation.

Introduction to Depreciation

Companies often purchase items (equipment, buildings, and vehicles for example) that have a Useful Life of more than one year. But, as we know, nothing lasts forever. Over time, items wear down; they become obsolete or inadequate to keep up with our demands. New computers, for instance, come out every year. They are smarter and faster, making older models obsolete. Vehicles wear out very fast, needing more and more repairs and maintenance. For each accounting period, a portion of an Asset's cost is subtracted from the Revenues that the Asset helped to generate. **By allocating the Depreciation over the life of the Asset, we are able to match the Expense that is caused by that Asset's loss of value over time to the income that the Asset helped us generate.**

Depreciation

The allocation of the cost of long term Assets, over their Useful Lives, to Expense on the Income Statement

Determining Plant and Equipment Cost

When a company purchases an Asset, the amount paid is recorded on the company's books. For example, if New Life Shed Building Co. purchased a used truck, the cost of the truck would include tax, tag, title, and other fees that are involved in obtaining the truck and putting it into operation as an Asset for the company. Under GAAP, you would have the option of recording the title, taxes, and other fees as separate Expenses on your books or simply adding this amount to the initial purchase cost of the truck.

Regardless of how we choose to record it, Cost Principle (which we learned about back in the first Chapter) tells us that the amount of money we first paid for the truck does not change. If that truck cost us \$12,000, then we have \$12,000 of Equipment listed in our Account Ledger. Yet, we also know very well that vehicles in particular lose value extremely quickly. In fact, they lose 30% of their value the moment you drive them off the dealership lot. We need to account for this loss of value, and we do that by 'Depreciating the Asset' using a very specific method.

Depreciation Methods

Why do we do Depreciate our Assets? The short answer is, as always: money. We want to accurately reflect how much our Assets are worth because companies have to pay taxes on the total value of their Assets. By depreciating those Assets, we can lower the amount of money we are paying taxes on. Effectively, by reducing (or depreciating) our company's Assets, we are lowering the amount of taxes we have to pay. Tax laws change all the time, and they may currently be in the process of changing as you read this. The important thing to remember is that there is a maximum amount of Depreciation that you can claim on your business taxes. Because of this, depending on the number of Assets you have, you may want to control the amount of Depreciation so that you can maximize the deductions you can make when you file. In other words, if the limit for deductions is \$25,000 and you calculate \$30,000 in Depreciation you can still only claim \$25,000 for tax purposes. You would be wasting the other \$5,000. The way to control how much your Assets Depreciate is with the method of Depreciation that you use (and there are several). The method you select will not affect the total amount of the Depreciation Expense over the life of the Asset. However, different methods will result in different patterns of Depreciation.

Straight Line Depreciation

A method that Expenses an equal amount of Depreciation for each year of the Asset's Useful Life

The method of Depreciation that we will discuss in this manual is called ***Straight-Line Depreciation***, and the pattern that it creates is a very steady and predictable one. Let's take a close look at how this method works.

Useful Life

The estimated Useful Life of an Asset to a business

Salvage Value

An asset's estimated value at the end of its service life

All Depreciation involves spreading the amount of value lost over the estimated **Useful Life** of the Asset. Useful Life is basically a guess, as is Salvage Value. Think about it: None of us can tell what the future holds. We can buy a vehicle with the belief that it will last us a good five years, but we don't know for a fact that it won't be totalled next week. When we estimate the Useful Life of an Asset, we are guessing at how long it will be 'useful' to the business. For our example, let's assume that we are buying a used truck for New Life Shed Building Co. for \$12,000 from Felder & Mark's Used Auto Lot. We are estimating that the truck will be useful for five years. So, the Useful Life of our truck is: 5 years.

To figure out the amount to actually be depreciated is the Asset's cost minus its **Salvage Value**.



Salvage Value

Some Assets, such as computers and trucks, can be sold or traded in when they reach the end of their Useful Life. The **Salvage Value** of an Asset is another guess. It is what we estimate for the trade-in or sales value at the end of its Useful Life. Some Assets may have little or no **Salvage Value** after their Useful Life is completed. For example, at the end of its Useful Life, some machinery can be sold only as scrap. Obviously, when an Asset is purchased, estimating its exact Salvage Value is difficult. Yet, we need to make a guess about its Salvage Value so that we can work out the Depreciation, even if our guess is 'zero.'

In other words, the depreciable cost of an Asset equals the cost of the Asset, minus any **Salvage Value**.

Straight-Line Depreciation Method

The **Straight-Line Method** is the most straight-forward method in calculating Depreciation Expense. Calculating Straight-Line Depreciation is done using the following steps:

- Step 1 Determine the cost of the Asset to be depreciated.
- Step 2 Estimate the Useful Life of the Asset.
- Step 3 Estimate the Salvage Value of the Asset.
- Step 4 Subtract the Salvage Value from the cost of the Asset. This gives you the Depreciable Value (the total amount of money that will be Depreciated over time)
- Step 5 Divide the sum by the Useful Life.

Example with our used truck

- 1 \$12,000
- 2 5 years
- 3 \$1,000

4

Cost	\$12,000
Minus: Salvage value	- \$1,000
Depreciable value	<u>\$11,000</u>

5

\$11,000	/	5	=	\$2,200
Depreciable Value	divided by	Useful Life	=	<u>Annual Depreciation Expense</u>

What this tells us is that, every year, we will be Depreciating \$2,200 in an Expense to offset the loss of value of the truck. That is the usefulness of the Straight-Line Depreciation Method. As we said, it is very predictable. Every year, \$2,200, until we reach \$1,000 and cannot Depreciate any more. How would we record this on our books?

Our Depreciation Schedule looks like this:

Year	Value of Asset at Beginning of Year	Depreciation Expense	Accumulated Depreciation	Value of Asset at End of Year
1	\$12,000.00	\$ 2,200.00	\$ 2,200.00	\$ 9,800.00
2	9,800.00	2,200.00	4,400.00	7,600.00
3	7,600.00	2,200.00	6,600.00	5,400.00
4	5,400.00	2,200.00	8,800.00	3,200.00
5	3,200.00	2,200.00	11,000.00	1,000.00

At the end of each year, then, we need to account for \$2,200 in Depreciation on our books. That's done with an Adjusting Entry on the final Workbook for the year. But, which Accounts are affected by Depreciation? Remember that there need to be at least two Accounts affected. Also, remember when we talked about Cost Principle. The initial cost of the Asset was already recorded on our books in the Equipment Account when we first bought it. That can't change. What we need is another Account to show the Accumulated Depreciation that builds up over time. Fortunately, we have one: **Account Number 150: Accumulated Depreciation - Equipment**

It's important to know that this Account (the Accumulated Depreciation Account) is listed in our books as an Asset (because it provides us a benefit in the form of a tax write-off). However, it functions differently from any other type of Asset Account. It is what is known as a **Contra Asset Account**. In the dictionary, 'Contra' means 'against,' and that is exactly what this type of Account does. It works directly *against* another Asset Account (in this case, Equipment). In other words, the amount that builds up in the Accumulated Depreciation - Equipment Account decreases the value of the Equipment Account. Because of this, it is the opposite of all the other Asset Accounts. Instead of increasing with a Debit, a Contra Asset Account increases with a Credit. In other words, it carries an opposite balance to the Account it is offsetting (the Equipment Account).

**Contra
Asset
Account**

An Account that is offset against an Asset amount

The total amount of Depreciation is accumulated (or built up) in the Accumulated Depreciation - Equipment Account. That's one of the Accounts affected, but remember that we need to affect two Accounts (there can never just be one). We're building Credits in the Contra Asset Account, so we need to balance that with Debits. Those Debits are entered into an Expense Account called Depreciation Expense. The General Journal entry would look like this after one year:

General Journal					Page 8										
Date		Account Title	Doc No.	Post Ref	Debit					Credit					
Dec	31	Depreciation Expense	M		2	2	0	0	00						
		Accumulated Depreciation - Equipment	M							2	2	0	0	00	
		(Adjusting Entry)													

And, we would Post that transaction out to the individual Accounts in the Account Ledger, of course. Bear in mind that our example is for a single Asset. In a real world setting, you would need to Depreciate each Asset separately and then combine those totals to get your total Accumulated Depreciation amount at the end of every year.

Also, be aware that our example uses one Depreciation method. There are others. Many starting businesses use what is known as an Accelerated Depreciation Method (such as the Double-Declining Balance Method). Accelerated Depreciation is not a steady set amount ever year. It Depreciates more of the value of the Asset in the first years it is in operation and less or none of the value in the later years of its Useful Life. This can be of use in allowing you to write off more in taxes in the first years of operation when you might need more operating cash in the business, but keep in mind that it also forces you to write off less in taxes in the later years of your Asset's Useful Life. The Double-Declining Balance Method uses a rate that is double the Straight-Line Method, for example. Without going into the math, the Depreciation Schedule for our used truck with the Double-Declining Balance Method would look like this:

Year	Value of Asset at Beginning of Year	Depreciation Expense	Accumulated Depreciation	Value of Asset at End of Year
1	\$12,000.00	\$ 4,800.00	\$ 4,800.00	\$ 7,200.00
2	7,200.00	2,880.00	7,680.00	4,320.00
3	4,320.00	1,728.00	9,408.00	2,592.00
4	2,592.00	1,036.80	10,963.20	1,555.20
5	1,555.20	555.20	11,000.00	1,000.00

The Depreciation Expense is the amount that we can claim on the business's taxes. Notice that with the Accelerated Method you can write off much more during years one and two but less and less as you move into years three through five. This would keep more money in the business during the first years of operation. What you would be counting on is turning a profit by year three with this method.

The method you choose to use is a strategic one that varies from business to business. Whichever one you pick, at the end of five years the Asset (the used truck in this case) is only worth \$1,000, which was our Salvage Value. At that point, you can't Depreciate any more. You have reached the Asset's minimum value. Once that's done, you can either trade the vehicle in for a new one or continue using it but without being able to build any more Depreciation. In our example, what do you with the truck at the end of five years? Let's assume that we are getting rid of the truck. We've gotten all the use we can out of it.

Disposal of Depreciated Assets

Eventually, the time may come when the Depreciated Asset has given your company all the benefit that it can. When a fully Depreciated Asset is sold or scrapped, both the Asset, and its related Accumulated Depreciation Account, must be removed from the books of the company. If the Salvage Value of the truck was \$ 0.00 (in other words, it's useless), and assuming that the truck is our only Equipment Asset, the Journal Entry would look like the following (representing the fact that we are simply getting rid of it):

General Journal										Page 4				
Date		Account Title	Doc No.	Post Ref	Debit					Credit				
Dec	31	Accum Depreciation - Truck	M	150	12	0	0	0	00					
		Truck	M	120						12	0	0	0	00
		(Disposal of Truck)												

In our example, the truck did have a Salvage Value. When we dispose of an Asset that has worth (what we call a 'positive net book value'), there are three options. Remember that the Salvage Value was our guess about what the truck would be worth at the end of five years. In option one, we estimated too low (or we found someone who thought that our estimate was wrong) and were able to sell the truck for more than we thought it was worth. We were guessing the truck would be worth \$1,000, but in this first example we were able to sell it for \$1,500. The Journal entry would look like this:

General Journal										Page 4				
Date		Account Title	Doc No.	Post Ref	Debit					Credit				
Dec	31	Accum Depreciation - Truck	M	150	11	0	0	0	00					
		Truck	M	120						12	0	0	0	00
		Cash	M	140	1	5	0	0	00					
		Gain on Sale of Truck	M	610							5	0	0	00
		(Sale of Truck for \$1,500)												

The second option is that we estimated too high when we guessed at our Salvage Value, and we now can't find anyone who will buy the truck for what we think it is worth. In this case, we estimated that the truck would be worth \$1,000, but the best offer we can get for it is only \$500. For this second example, the Journal entry would look like this:

General Journal										Page 4				
Date		Account Title	Doc No.	Post Ref	Debit					Credit				
Dec	31	Accum Depreciation - Truck	M	150	11	0	0	0	00					
		Cash	M	140		5	0	0	00					
		Loss on Disposal of Truck	M	620		5	0	0	00					
		Truck	M	120						12	0	0	0	00
		(Sale of Truck for \$500)												

With either of these first two options it's important to note that the Loss or Gain is entered in its own separate Account. It is miscellaneous income that must be kept apart from your regular income for taxation purposes. This is because a Gain or Loss on the disposal of a Depreciated Asset is not part of the regular operating income of the company. The Gain or Loss Account will eventually be posted to the Income Statement.

The third option when we try to sell the truck is that we guessed the Salvage Value spot on and received the exact amount that we were expecting for it. In that case, the Journal entry would look like this:

General Journal										Page 4			
Date		Account Title	Doc No.	Post Ref	Debit					Credit			
Dec	31	Accum Depreciation - Truck	M	150	11	0	0	0	00				
		Cash	M	140	1	0	0	0	00				
		Truck	M	120						12	0	0	00
		(Sale of Truck for \$1,000)											

Whatever happens with the truck when we sell it at the end of its Useful Life, we Journalize the transaction and then Post the transaction to the Account Ledger.

Maintenance and Repair Expenditures

How would maintenance or repairs affect Depreciation? How would that affect the Asset's value? This is one of those gray areas in GAAP, and accountants differ in their view on how you should handle this. In general, if maintenance performed on an Asset would extend the Useful Life and/or increase the Salvage Value of an Asset beyond the original estimate, it is appropriate to re-calculate the Depreciation for the remaining Useful Life of the Asset. That may be simple or it may involve a lot of math.

The alternative is to simply write off the maintenance as an Expense and record the extra value as a Gain when the Asset is sold off, an example of which is below.

General Journal										Page 4			
Date		Account Title	Doc No.	Post Ref	Debit					Credit			
Dec	31	Truck Maintenance Expense	C	540		5	0	0	00				
		Cash	C	140						5	0	0	00
		(Repair Truck)											



Chapter 5 Summary - We have...

1. **Defined the term Depreciation.** The allocation of the cost of long-term Assets over their Useful Lives to Expense on the Income Statement.
2. **Calculated the cost of equipment.** The total cost of equipment includes not only what the price of the equipment is but also any costs incurred to put that asset into operation.
3. **Explained the meaning of Salvage Value.** An estimated value that is expected to be realized at the end of its Useful Life.
4. **Calculated Depreciation using the Straight-Line Method.** A method that expenses an equal amount of Depreciation for each year of the Asset's Useful Life. The formula for this is: the cost of the Asset minus its Salvage Value, divided by its Useful Life

Review Questions

1. What is the proper definition of the term depreciation?

2. Can depreciation affect the amount of taxes a company pays?

Yes **No**

3. Does depreciation affect the amount of cash a company has?

Yes **No**

4. Define the term accelerated depreciation.

5. Straight-line depreciation is an accelerated depreciation method?

Yes **No**

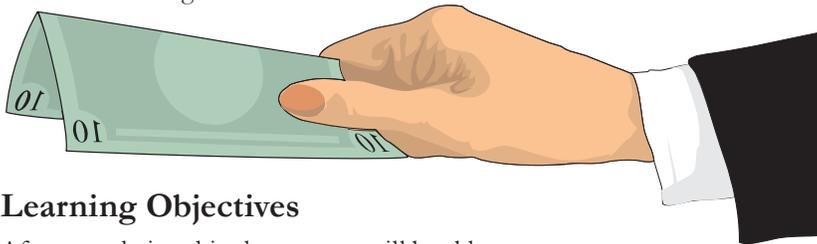
6. What does the term useful life mean?

Chapter 6

Inventory Control

Overview

For a company like Wal-Mart, inventory makes up a large part of its Assets. Company-wide, they have hundreds of thousands of items scattered across a vast geographic area, so recording inventory purchases, and the sales of items from inventory, can get pretty complex. As a starting business, you probably won't have those kinds of problems, but you will very likely still have to deal with processing inventory. In our Workbook example, this does not come up because the inventory that New Life Shed Building Co. deals with passes through to the customer very quickly. This was done purposefully to try to simplify the process somewhat. However, with a real business it is vital that you understand how this all works. This chapter focuses on inventory, its effects on the Balance Sheet, Income Statement, and the Recording Process.



Learning Objectives

After completing this chapter, you will be able to:

- Define the term inventory.
- Calculate the value of inventory and cost of goods sold using the **FIFO** method.
- Calculate the value of inventory and cost of goods sold using the **LIFO** method.
- Understand the usage of the Specific Identification method.
- Explain the differences between the Perpetual and the Periodic Inventory systems.

Cost of Goods:

This is a term that gets used often in business language. It indicates the cost of items that are purchased and then sold to customers. In other words, 'it costs money to make money.' It works something like this:

1. You pay out money to purchase items
2. You use those items to create the product you are selling.
3. You sell the finished product to the customer (hopefully for a profit).

That money you paid out in step one is your 'Cost of Goods Sold.' Those items you buy can be anything, depending on what type of business you are running. If you have a sandwich shop, your Cost of Goods Sold might include items like bread, cheese, chicken or ham. If you are building model airplanes to sell, your Cost of Goods Sold might include wood, glue, paint, and small model engines. If you are selling paintings, your Cost of Goods Sold might simply include canvas, paper, paint, and brushes.

Cost of Goods Sold can involve a lot of things, but, put simply, it is what it costs you to make money.

Introducing Inventory

In its basic form, ***Inventory*** represents items that are held by a company for sale to its customers. Service companies have very low inventory, and it generally consists of items like office supplies and other things of relatively low value. These items are consumed within the company, rather than being sold to their customers. With New Life Shed Building Co., there is also an inventory of supplies (items like receipts, paper, pens, etc...). For supply items like this, it is highly suggested that you simply Expense the cost of these items as you purchase them (i.e., record them in an Account like Supplies Expense rather than counting them as inventory). You will make your life a lot easier by doing it this way.

But, what if you don't have a service-oriented company? What if you actually sell a product? When a company purchases merchandise that it intends to sell to customers, it stores those items in a warehouse, on store shelves, in a closet, or some other place set aside for that purpose. Until these items are sold, the amount of inventory is kept on the books as an Asset. As items in inventory are sold, the cost of those items is transferred from the Balance Sheet (Asset) to the Income Statement (as an Expense, to be subtracted from Revenue). The tables below show the flow of the Cost of Goods Sold and shows the movement of inventory on the Balance Sheet to the Expense section on the Income Statement.

Balance Sheet		Income Statement	
Inventory (Asset)		Cost of Goods Sold (Expense)	
Purchase of merchandise for resale increases inventory (credits to Accounts Payable or Cash)	When merchandise is sold, the cost flows from the inventory Asset to...		
		...the Cost of Goods Sold Expense Account	

Recognizing Cost of Goods Sold is a process of accounting for the flow of costs from the inventory (Asset) Account on the Balance Sheet to the Cost of Goods (Expense) Account on the Income Statement. Note that accounting for the flow of cost does not necessarily account for the physical movement of any items in inventory. All it does is balance the inventory on your books. Let's take a look at what this actually means...

Inventory Cost-Flow Assumptions

As with Depreciation, there are different practices to account for inventory. Different practices can give you different results and affect how much Net Income gets reported on the Income Statement. Why is that important? Wouldn't we want to report as much Net Income as possible? If my business is doing very well, I want people to know that it's doing very well. I want to see that, right?

That depends. Yes, it is very important to turn a profit rather than reporting a loss. Don't forget that your business has to pay taxes on its income, though. By controlling the amount of Net Income that shows up on the Income Statement, you can have some control over how much income tax the business has to pay. You can't just make up numbers or hide your income. That crosses the line into illegal activity. What you can do is control how your company's inventory is handled. Which inventory method you choose has a direct effect on how your costs flow from the inventory Account to the Cost of Goods Sold Account. We call these different inventory methods 'cost-flow assumptions,' and there are three of them*:

1. **Specific Identification**
2. **First-In, First-Out** (or **FIFO**) (*pronounced FIE-FOE*)
3. **Last-In, First-Out** (**LIFO**) (*pronounced LIE-FOE*)

We will focus on the **FIFO** and **LIFO** cost-flow assumptions because these are vastly more common. However, we will briefly discuss Specific Identification as it can be very important to some types of businesses.

Specific Identification Method

This method of inventory is used by retail companies that can tag each item with a unique identification number. Literally, every single item in the company's inventory has its own specific number that applies only to that one item. This method is commonly used by businesses like Auto Dealers, Jewelry Stores, and other businesses that dealing with highly identifiable products (and generally extremely expensive products - like jewelry or automobiles). Each item in a Jewelry Store's inventory is tagged with a specific stock number. When a particular item is sold (a \$7,500 watch, for instance), the Jewelry Store owner is able to identify what was sold, when it was placed in inventory, when it was sold and removed from inventory, and, possibly, to whom it was sold. This is a very useful method to use if you want to track every single purchase in great detail.



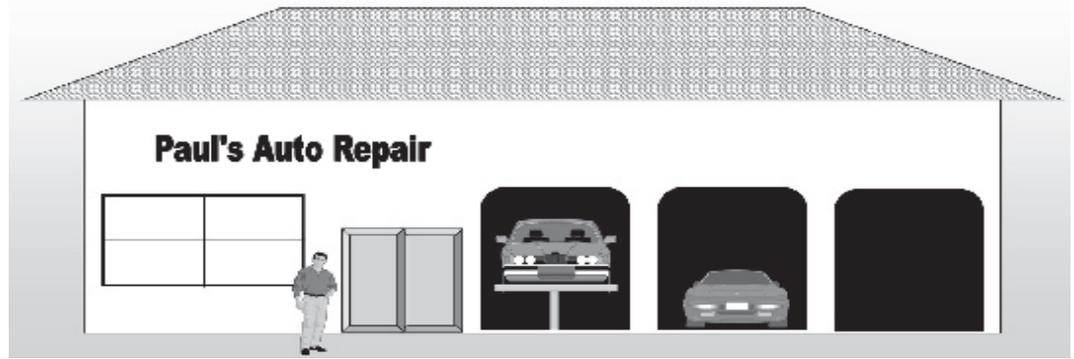
First-In, First-Out (FIFO)

If you run a business that sells slightly less valuable merchandise, you will most likely want to sell the oldest merchandise first. A Grocery Store, for example, would want to sell perishable items such as fruit, milk, and vegetables as they come in, with the newer deliveries being placed on the shelves behind the older deliveries. This makes sure that older items don't spoil before they get sold. Spoiled milk doesn't earn much profit.

Consequently, merchandise like this tends to flow out on a **First-In, First-Out** basis. When **FIFO** is applied in calculating Cost of Goods Sold, we assume that costs also follow this pattern (**First-In, First-Out**). As a result, the cost of the *last items purchased* are assigned to the ending inventory and the remaining costs are assigned to Cost of Goods Sold. To better understand that, take a look at the breakdown of inventory for Paul's Auto Repair Center (PARC) on the next page, which uses the **FIFO** method.

*Note: There are actually more than three, but these are the three most commonly used.

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Paul's Auto Repair Center Alternator Inventory Record (FIFO)					
Date	Purchases	Sales	Cost of Goods Sold	Inventory	Value
Beginning Inv				0 items	\$0
2/2/2017	20 @ \$20 each			20 @ \$20 each	\$400
2/8/2017	5 @ \$25 each			20 @ \$20 each 5 @ \$25 each	\$525
2/10/2017		5 @ \$20 each	\$100	15 @ \$20 each 5 @ \$25 each	\$425
2/15/2017		10 @ \$20 each	\$200	5 @ \$20 each 5 @ \$25 each	\$225

In this example, PARC starts out with no alternators. PARC's Manager purchases alternators for the auto shop's inventory on February 2nd. He gets a good deal from his supplier because he is buying in bulk and manages to get 20 alternators for \$20 each. At this point, there are twenty \$20 alternators in inventory (worth \$400).

Twenty alternators isn't quite enough for the demand he anticipates, so he buys another 5 on the 8th. These 5 are not considered a bulk purchase, so he doesn't get the discount and has to pay \$25 for each of those 5. Now, there are twenty \$20 alternators in inventory and five \$25 alternators (worth a total of \$525). It's important to know that all 25 of these alternators came from the exact same supplier and are identical products. Only the price was different.

On the 10th of February, 5 customers come in and need their alternators replaced. Using **FIFO**, on February 10th, it doesn't matter if PARC's employee grabs the five alternators needed to perform that day's repairs from the alternators that were purchased on February 2nd, or five from the group that were purchased on February 8th. They are all identical alternators. **FIFO** is simply a cash flow assumption, not necessarily a measure of actual physical inventory. All we are doing is tracking the flow of our inventory costs, so we assume that the first alternators purchased by PARC were the first ones to be sold out to customers.

On the 10th, PARC sells 5 alternators to its customers and assumes that they were from the first batch (the ones bought on the 2nd). So, PARC sells 5 alternators at \$20 a piece. The Cost of Goods Sold is \$100 (5 X 20 = 100). That cost is subtracted from the value of the inventory. PARC now has fifteen \$20 alternators and five \$25 alternators in inventory (worth \$425).

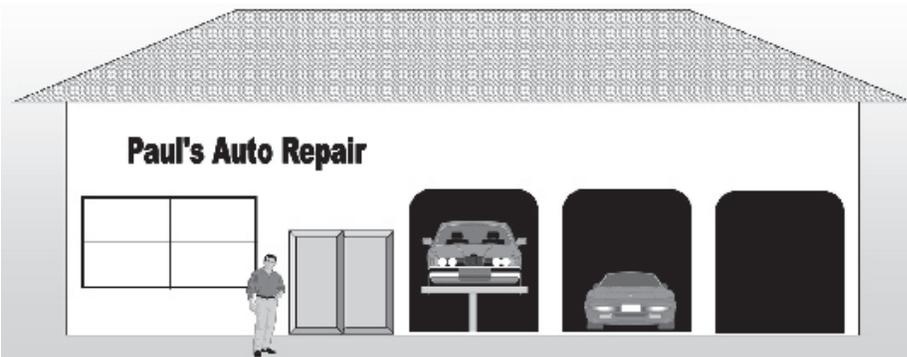
PARC sells 10 more alternators on the 15th. Those 10 are also assumed to come out of the first batch that was purchased (and, again, it really doesn't matter which alternators are physically used). These 10 alternators are sold at \$20 each. The Cost of Goods Sold is \$200 (10 X 20 = 200). That cost is subtracted from the value of the inventory. PARC now has five \$20 alternators left in inventory and five \$25 alternators (for a total worth of \$225).

Total Cost of Goods Sold: \$300

Ending Inventory: \$225

L Last-In, First-Out (LIFO)

Let's look at the exact same scenario but use the **LIFO** method instead. Remember that the **LIFO** method assumes that the last items placed in inventory are sold or used first. Using this method, the costs of the last goods placed into inventory are matched with Revenue from Sales.



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Paul's Auto Repair Center Alternator Inventory Record (LIFO)					
Date	Purchases	Sales	Cost of Goods Sold	Inventory	Value
Beginning Inv				0 items	\$0
2/2/2011	20 @ \$20 each			20 @ \$20 each	\$400
2/8/2011	5 @ \$25 each			20 @ \$20 each 5 @ \$25 each	\$525
2/10/2011		5 @ \$25 each	\$125	20 @ \$20 each	\$400
2/15/2011		10 @ \$20 each	\$200	10 @ \$20 each	\$200

In this new example, PARC starts out again with no alternators. PARC's Manager once again purchases alternators for the auto shop's inventory on February 2nd. He gets the same good deal from his supplier for buying in bulk and gets the 20 alternators for \$20 each. At this point, there are twenty \$20 alternators in inventory (worth \$400), and everything is the same as in the **FIFO** example.

Twenty alternators still isn't quite enough, so he buys another 5 on the 8th. These 5 are not considered a bulk purchase, so he doesn't get the discount and has to pay \$25 for each of those 5. Now, there are twenty \$20 alternators in inventory and five \$25 alternators (worth a total of \$525). Again, all 25 of these alternators came from the exact same supplier and are identical products. Only the price was different. Everything looks the same so far. However, on the 10th things start to change.

On the 10th of February, 5 customers come in and need their alternators replaced. Using **LIFO**, on February 10th, it still doesn't matter if PARC's employee grabs the five alternators needed to perform that day's repairs from the alternators that were purchased on February 2nd, or five from the group that were purchased on February 8th. They are still all identical alternators. **LIFO** is, again, an assumption and not a measure of actual physical inventory. All we are doing is tracking the flow of our inventory costs, so we assume, in this case, that the *last* alternators purchased by PARC were the first ones to be sold out to customers.

On the 10th, PARC sells 5 alternators to its customers and assumes that they were from the last batch (the ones bought on the 8th). So, PARC sells 5 alternators at \$25 a piece. The Cost of Goods Sold is \$125 (5 X 25 = 125). That cost is subtracted from the value of the inventory. PARC now has twenty \$20 alternators (worth \$400).

PARC sells 10 more alternators on the 15th. Those 10 are also assumed to come out of the last batch that was purchased. In this case, though, only the \$20 alternators are left. So, these 10 alternators are sold at \$20 each. The Cost of Goods Sold is \$200 (10 X 20 = 200). That cost is subtracted from the value of the inventory. PARC now has ten \$20 alternators left in inventory (for a total worth of \$200).

Total Cost of Goods Sold: \$325

Ending Inventory: \$200

Notice the difference. With FIFO, the total Cost of Goods Sold was \$300 and the ending inventory was worth \$225. With LIFO, the total Cost of Goods Sold was \$325 and the ending inventory was worth \$200. By using a different method of cost flow assumption, the costs have changed.

To understand the impact that this can have on an Income Statement, let's assume that PARC made \$900 in Revenues for the month of February (Bear in mind that, when we were looking at inventory, all we were concerned with was the Cost to US - the Cost of Goods Sold. When we actually sell the alternators to the customer, we will most definitely NOT be selling them at our cost. Our goal in business is to make a profit, so we would sell those alternators for \$50 or \$60 each giving us a Revenue of \$900).

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Paul's Auto Repair Center		
FIFO		
Income Statement		
February 1, 2017 - February 28, 2017		
Revenue		\$900
Cost of Goods Sold	\$300	
Net Income		\$600

Paul's Auto Repair Center		
LIFO		
Income Statement		
February 1, 2017 - February 28, 2017		
Revenue		\$900
Cost of Goods Sold	\$325	
Net Income		\$575

If we subtract the total Cost of Goods Sold using the **FIFO** method, the company's Net Income would be \$600 (\$900 - \$300). On the other hand, if we subtract the total Cost of Goods Sold using **LIFO**, the company's Net Income would be \$575 (\$900 - \$325). While our example may only yield a \$25 difference in Net Income, imagine if we added a few 0's to those figures. The difference could easily equal hundreds of thousands, or even millions, of dollars. Nothing changed between the two scenarios we looked at except for how we assumed the inventory got used up, but it can end up meaning a huge extra cost in taxes if you use the wrong method for your business.

So, using the **LIFO** method decreases the company's ending inventory value, while increasing the Cost of Goods Sold. **FIFO** does the opposite. Different companies use different methods for many reasons. Taxation is only one of those reasons, but it is the most visible. A higher Cost of Goods Sold will result in a lower Net Income and, possibly, lower taxes paid out.

Inventory Accounting System Alternatives

In practice, the system to account for inventory cost flow can be very complex because most companies have hundreds or thousands of inventory items. Think about companies like Wal-Mart and Target, with shelves and warehouses stocked with hundreds of thousands of products for sale to consumers. Beyond simply making assumptions on the books for taxation purposes, companies obviously want to track all that inventory physically. Imagine if you owned a marine repair business. Your inventory would consist of tools, boats, and marine supplies. All of those can be extremely high cost items. If you simply tracked the cost flow on paper but never went and actually looked at your physical inventory you might never realize whether or not your assumptions match up with reality. This happened to a businessman in Miami several years ago. He owned that marine repair company and only tracked his inventory on paper for many years. Eventually, the IRS audited him and asked to see his physical inventory. When they went to the warehouse and actually counted what he had they discovered that over \$3 Million in inventory was missing. It had been stolen by his employees, and he never knew it. The result was that he ended up owing the IRS for all that missing inventory. He lost his business.



Obviously, business owners never want to face that situation. So, they use two main inventory accounting systems to track their physical inventory: **Perpetual** and **Periodic**. We will look at both systems.

Perpetual Inventory System

In a **Perpetual Inventory System**, a record is made of every purchase and every sale with a continuous record of the quantity and cost of every item in inventory. Computers have made **Perpetual Inventory Systems** much more feasible for small to medium-sized retailers. It used to be that most companies of this size were forced to use Periodic Systems because it was simply too much paperwork to track down every purchase. Advances in the use of product bar coding and scanning devices at cash registers, as well as radio frequency identification tags, have lowered the cost of maintaining **Perpetual** records.

To get a good idea about how scanners and bar codes are used by companies to track inventory and sales, think about the canteen operators. When you go to the window and make a purchase, the operator runs your ID through a scanner. That scanner reads the bar code on your ID. This allows Trinity's computer system to identify you and your account (much like a debit card on the street). You select the item you want to purchase and the canteen operator points a scanner device at the bar code that corresponds with that item. You hear a BEEP! What just happened?

When the canteen operator scans the item's bar code, the computer looks up the price of that item and then records your purchase, deducting the price of the item from your account. It also alerts Trinity that one unit of that item was just sold and removes it from their total inventory. Trinity has an electronic **Perpetual Inventory System**. If you don't have a computer system like Trinity, you could perform a **Perpetual Inventory** by hand. However, if you have a lot of sales and a large number of inventory items, this could be VERY time consuming. Still, if you are a small service company, using a **Perpetual Inventory System** for your supplies would be a good idea. After all, you need to know when you need to order more of whatever it is you use (like cleaning chemicals, lumber, screws, and so on). The illustrations we used for **FIFO** and **LIFO** are examples of the **Perpetual Inventory System**.

Periodic Inventory System

In a **Periodic Inventory System**, a count of the inventory on hand (actually going and physically counting it) is made 'periodically.' While this is usually performed at the end of each year, you could take a physical inventory any time you wish. Trinity performs a physical inventory of the canteens much more often than that. Performing a physical inventory means that you count each and every item on the shelf or in the warehouse. This allows you to check the count recorded by your computer in your Perpetual Inventory (what you *should* have) against what you actually *do* have. Taking a physical inventory is a great way to detect theft or damaged goods, which is largely why Trinity does it so often. Bookkeeping errors and theft, or mysterious disappearances of goods, will cause differences between the recorded and actual quantity of inventory items. When differences are found, you need to reflect these as inventory losses, or corrections to Cost of Goods Sold, as appropriate.

Most companies do what Trinity does and actually use a mixture of **Perpetual** and **Periodic Inventory**. What is right for your company depends largely on your situation.



Chapter 6 Summary - We have...

1. **Defined the term inventory.** Inventory is a way of recording the use of Assets.
2. **Calculated the value of inventory and Cost of Goods Sold using the FIFO method.** FIFO is the method of inventory that assumes the first thing you buy is the first thing you sell.
3. **Calculated the value of inventory and Cost of Goods Sold using the LIFO method.** LIFO is the method of inventory that assumes the last thing you buy is the first thing you sell.
4. **Understood the usage of the Specific Identification Method.** The Specific Identification Method of inventory is where you track an inventory item from purchase to sales.
5. **Explained the difference between Perpetual and Periodic Inventory Systems.** A Perpetual Inventory System records every item purchased and sold versus a Periodic Inventory System, which counts all of the inventory on hand but does not keep track of each item.

Review Questions

1. What are the two accounts affected when looking at the flow of products sold?

2. Describe the specific identification method of inventory.

3. Describe the FIFO method of inventory.

4. Describe the LIFO method of inventory.

5. Describe the periodic inventory system.

6. Describe the perpetual inventory system.
