ENTREPRENEURSHIP • ACCOUNTING / UNIT VIII

"The business of America is business" –Calvin Coolidge

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UNIT VIII / LESSON 1

Accounting Assumptions and Principles

Time Frame
2 days

Standards
NES: <u>Economics</u> – Explain accounting standards (GAAP)
NES: <u>Skills</u> – Follow directions
Apply effective listening skills
Make oral presentations
Prepare accounting reports

Guiding Question
What methods, rules, and principles guide accounting practices in the U.S.?

Materials
Handouts VIII.1.A-D

Objectives
Students will be able to:

- discuss cash vs. accrual-based accounting.
- explain/describe the following assumptions, principles, and/or agencies: monetary unit assumption, economic entity assumption, time period assumption, conservatism, matching revenues and expenses principles, revenue recognition, GAAP (generally accepted accounting principles), FASB (Financial Accounting Standards Board).

Teacher Background
In establishing an accounting system, businesses use either a cash or accrual-based method. To some extent the decision about which method to use is up to the business. However, in some cases the size of the business dictates the choice. In addition to adhering to either a cash or accrual-based system, the following long-standing rules and principles guide accounting in this country: economic entity assumption, monetary unit assumption, time period assumption, cost principle, full disclosure principle, going concern principle, matching principle, revenue recognition principle, materiality, and conservatism.

In Handout VIII.1.A, students will be asked to compare cash and accrual-based accounting. In Handout VIII.1.B, students will examine the advantages and disadvantages of the cash and accrual methods of accounting. Next, students will participate in a cooperative learning activity related to the 10 rules and principles that guide accounting in the United States. Finally, in Handout VIII.1.D, the class will take a 20-question quiz to test their understanding of the 10 guiding accounting principles and assumptions followed in this country.

Teaching Strategies/Supporting Activities

- Distribute Handout VIII.1.A, "Cash and Accrual Accounting." Have students complete the exercise on the handout, then have them explain their answers to the following questions:
  - What do we learn about cash and accrual-based accounting from this handout?
  - What are the most significant differences between the cash and accrual methods?
  - What do you see as the major advantages and disadvantages of cash accounting?
  - What do you see as the major advantages and disadvantages of accrual accounting?
  - Why do accounting principles require that businesses use the accrual method when a business has sales of more than $5 million per year?
  - If you ran business, in which you had the choice of using the cash or accrual method, which would you choose and why?
- Distribute Handout VIII.1.B, "Advantages and Disadvantages." Have students complete the exercise on the handout, then have them explain their answers to the following questions:
  - What is this handout about?
  - Which is the most significant advantage and disadvantage of the cash method listed on this page?
  - What is the most significant advantage and disadvantage of the accrual method listed on this page?
  - Explain what the handout means by saying that "To have a firm and true understanding of your business's finances, you need more than just a collection of monthly totals; you need to understand what your numbers mean and how to use them to answer specific financial questions."
- Divide the class into five equal-size groups. Distribute Handout VIII.1.C, "Basic Accounting Principles." Assign each group the task of studying two of the ten, principles on the page. Each group should meet to discuss what they read and prepare a presentation to the class of no more than five minutes in which they:
  - Summarize the two principles they studied;
  - Discuss the reasons why these principles were instituted; and
  - Explain how these principles are intended to serve the interests of the business owner(s) and/or his/her customers.

Summary/Assessment

Distribute Handout VIII.1.D, "Quiz." Have students take the 20-question quiz on accounting principles. Review the quiz with the class.

Here are the correct answers:

1. b	5. c	9. a, b	13. b	17. c
2. a	6. b	10. a	14. c	18. c
3. c	7. b	11. c	15. c	19. a
4. c	8. a	12. c	16. b	20. b

Follow-Up

Assign students to write a one- to two-page paper on the Financial Accounting Standards Board (FASB). Among the information that should be included in the paper is a description of the agency, an explanation of why it was created, and a discussion of its major achievements and challenges.

Handout VIII.1.A, "Cash and Accrual Accounting"

Directions: Read the handout below and complete the exercise that follows.

The cash method and the accrual method of accounting are the two principal methods of keeping track of a business's income and expenses. In most cases, a business can choose which method to follow.

Cash vs. Accrual Accounting: The Basics

In a nutshell, these methods differ only in the timing of when transactions are recorded to the business's accounts. Here's how each works:

- **The cash method.** Under the cash method, income is not counted until cash (or a check) is actually received, and expenses are not counted until they are actually paid. The cash method is the more commonly used method of accounting in small business.

- **The accrual method.** Under the accrual method, transactions are counted when the order is made, the item is delivered, or the services occur, regardless of when the money for them is actually received or paid. In other words, income is counted when the sale occurs, and expenses are counted when you receive the goods or services. You don't have to wait until you see the money, or actually pay money from your checking account, to record a transaction.

Example 1
Your computer installation business finishes a job in November, and does not get paid until three months later, in January. Under the cash method, you would record the income in January. Under the accrual method, you would record the income in November.

Example 2
In July, you paid $3,000, for July, August, and September's rent. Using the cash method, you would record a $3,000 expense for July, the month when the money is actually paid. Under the accrual method, you would record a $1,000 expense for July, a $1,000 expense for August, and a $1,000 expense for September.

Determining the Transaction Date

With the accrual method, sometimes it's not easy to know when the sale or purchase has occurred. The key date is the job completion date.

- **When to record income.** Not until you finish a service, or deliver all the goods a contract calls for, do you record the income in your books.

- **When to record an expense.** Likewise, you don't record an item as an expense until the service is completed or all goods have been received and installed, if necessary. (If a job is mostly completed but will take another 30 days to add the finishing touches, technically it doesn't go on your books until the 30 days pass.)

Choosing an Accounting Method

- Most small businesses (with sales of less than $5 million per year) are free to adopt either accounting method.
- Businesses must use the accrual method if:
  - Sales are more than $5 million per year, or
  - They stock an inventory of items to sell to the public and gross receipts are over $1 million per year. Inventory includes any merchandise to sell, as well as supplies that will physically become part of an item intended for sale.

http://www.nolo.com/legal-encyclopedia/cash-vs-accrual-accounting-29513.html

Exercise: In the space below, list two advantages and two disadvantages of cash and accrual accounting.

CASH		ACCRUAL	
Advantages	**Disadvantages**	**Advantages**	**Disadvantages**
1.	**1.**	**1.**	**1.**
2.	**2.**	**2.**	**2.**

Handout VIII.1.B, "Advantages and Disadvantages"

Directions: Underline the one significant advantage and one significant disadvantage of the accrual and cash accounting methods listed on this page.

Whether a business uses the accrual or cash method of accounting, it's important to realize that either one gives only a partial picture of the financial status of the business.

Advantages and Disadvantages of the Accrual Method	Advantages and Disadvantages of the Cash Method
The accrual method shows the ebb and flow of business income and debts more accurately than the cash method. However, it may leave you in the dark as to what cash reserves are available, which could result in a serious cash flow problem. For instance, your income ledger may show thousands of dollars in sales, while in reality your bank account is empty because your customers have not paid you yet.	The cash method provides a more accurate picture of how much actual cash your business has available. However, it may offer a misleading picture of longer-term profitability. Under the cash method, for instance, your books may show one month to be spectacularly profitable, when actually sales have been slow and, by coincidence, a lot of credit customers paid their bills in that month.

To have a firm and true understanding of your business's finances, you need more than just a collection of monthly totals; you need to understand what your numbers mean and how to use them to answer specific financial questions.

http://www.nolo.com/legal-encyclopedia/cash-vs-accrual-accounting-29513.html

Handout VIII.1.C, "Basic Accounting Principles"

Directions: The general rules that govern the field of accounting are referred to as basic accounting **principles and guidelines**. Because of generally accepted accounting principles we are able to assume that there is consistency from year to year in the methods used to prepare a company's financial statements. The table below lists the ten main accounting principles and guidelines together with a highly condensed explanation of each. The class will be divided into groups for an activity using this handout. In your group, you will study two of the 10 principles listed below. For the two principles your group is assigned, you will make a presentation to the class in which you:

- Summarize the principles of each in a paragraph.
- Explain the reasons why you think the two principles you were assigned were established.
- Briefly discuss how the two principles impact a business owner and/or his/her customers.

1. **Economic Entity Assumption.** The accountant keeps all of the *business* transactions of a sole proprietorship separate from the business owner's *personal* transactions. For *legal* purposes, a sole proprietorship and its owner are considered to be one entity, but for accounting purposes they are considered to be two separate entities.	2. **Monetary Unit Assumption.** Economic activity is measured in U.S. dollars, and only transactions that can be expressed in U.S. dollars are recorded. Because of this basic accounting principle, it is assumed that the dollar's purchasing power has not changed over time. As a result accountants ignore the effect of inflation on recorded amounts. For example, dollars from a 1960 transaction are combined (or shown with) dollars from a 2012 transaction.
3. **Time Period Assumption.** This accounting principle assumes that it is possible to report the complex and ongoing activities of a business in relatively short, distinct time intervals such as the five months ended May 31, 2012, or the five weeks ended May 1, 2012. The shorter the time interval, the more likely the need for the accountant to estimate amounts relevant to that period. For example, the property tax bill is received on December 15 of each year. On the income statement for the year ended December 31, 2011, the amount is known; but for the income statement for the three months ended March 31, 2012, the amount was not known and an estimate had to be used. It is *imperative* that the time interval (or period of time) be shown in the heading of each income statement, statement of stockholders' equity, and statement of cash flows. Labeling one of these financial statements with "December 31" is not good enough—the reader needs to know if the statement covers the *one week* ending December 31, 2011 the *month* ending December 31, 2011 the *three months* ending December 31, 2011 or the *year ended* December 31, 2011.	4. **Cost Principle.** From an accountant's point of view, the term "cost" refers to the amount spent (cash or the cash equivalent) when an item was *originally* obtained, whether that purchase happened last year or 30 years ago. For this reason, the amounts shown on financial statements are referred to as *historical* cost amounts. Because of this accounting principle, asset amounts are *not* adjusted upward for inflation. In fact, as a general rule, asset amounts are not adjusted to reflect *any* type of increase in value. Hence, an asset amount does not reflect the amount of money a company would receive if it were to sell the asset at today's market value. (An exception is certain investments in stocks and bonds that are actively traded on a stock exchange.) If you want to know the current value of a company's long-term assets, you will not get this information from a company's financial statements—you need to look elsewhere, perhaps to a third-party appraiser.

continued

Handout VIII.1.C, "Best Accounting Principles" (continued)

5. **Full Disclosure Principle.** If certain information is important to an investor or lender using the financial statements, that information should be disclosed within the statement or in the notes to the statement. It is because of this basic accounting principle that numerous pages of "footnotes" are often attached to financial statements. As an example, let's say a company is named in a lawsuit that demands a significant amount of money. When the financial statements are prepared, it is not clear whether the company will be able to defend itself or whether it might lose the lawsuit. As a result of these conditions and because of the full disclosure principle, the lawsuit will be described in the notes to the financial statements. A company usually lists its significant accounting policies as the first note to its financial statements.	6. **Going Concern Principle.** This accounting principle assumes that a company will continue to exist long enough to carry out its objectives and commitments and will not liquidate in the foreseeable future. If the company's financial situation is such that the accountant believes the company will *not* be able to continue on, the accountant is required to disclose this assessment. The going concern principle allows the company to defer some of its prepaid expenses until future accounting periods.
7. **Matching Principle.** This accounting principle requires companies to use the **accrual basis of accounting.** The matching principle requires that expenses be matched with revenues. For example, sales commissions expenses should be reported in the period when the sales were made (and not reported in the period when the commissions were paid). Wages to employees are reported as an expense in the week when the employees worked and not in the week when the employees are paid. If a company agrees to give its employees 1% of its 2012 revenues as a bonus on January 15, 2013, the company should report the bonus as an expense in 2012 and the amount unpaid at December 31, 2012 as a liability. (The expense is occurring as the sales are occurring.) Because we cannot measure the future economic benefit of things such as advertisements (and thereby we cannot match the ad expense with related future revenues), the accountant charges the ad amount to expense in the period that the ad is run.	8. **Revenue Recognition Principle.** Using the accrual basis of accounting (as opposed to the **cash basis of accounting), revenues** are recognized as soon as a product has been sold or a service has been performed, regardless of when the money is actually received. Under this basic accounting principle, a company could earn and report $20,000 of revenue in its first month of operation but receive $0 in actual cash in that month. For example, if ABC Consulting completes its service at an agreed price of $1,000, ABC should recognize $1,000 of revenue as soon as its work is done—it does not matter whether the client pays the $1,000 immediately or in 30 days. Do not confuse *revenue* with a ***cash receipt***.
9. **Materiality.** Because of this basic accounting principle or guideline, an accountant might be allowed to violate another accounting principle if an amount is insignificant. Professional judgment is needed to decide whether an amount is insignificant or immaterial. An example of an obviously immaterial item is the purchase of a $150 printer by a highly profitable multi-million dollar company. Because the printer will be used for five years, the *matching* principle directs the accountant to expense the cost over the five-year period. The **materiality** guideline allows this company to violate the matching principle and to expense the entire cost of $150 in the year it is purchased. The justification is that no one would consider it misleading if $150 is expensed in the first year instead of $30 being expensed in each of the five years that it is used. Because of materiality, financial statements usually show amounts rounded to the nearest dollar, to the nearest thousand, or to the nearest million dollars, depending on the size of the company.	10. **Conservatism.** If a situation arises where there are two acceptable alternatives for reporting an item, conservatism directs the accountant to choose the alternative that will result in less net income and/or less asset amount. Conservatism helps the accountant to "break a tie." It does not direct accountants to be conservative. Accountants are expected to be unbiased and objective. The basic accounting principle of conservatism leads accountants to anticipate or disclose losses, but it does not allow a similar action for gains. For example, *potential* losses from lawsuits will be reported on the financial statements or in the notes, but *potential* gains will not be reported. Also, an accountant may write inventory *down* to an amount that is lower than the original cost, but will not write inventory *up* to an amount higher than the original cost.

http://www.accountingcoach.com/online-accounting-course/09Xpg01.html

Handout VIII.1.D, "Quiz"

Directions: For each of the 20 questions that follow, circle the choice that you think is the correct answer.

1. The personal assets of the owner of a company will **not** appear on the company's balance sheet because of which principle/guideline?
   a) Cost b) Economic Entity c) Monetary Unit

2. Which principle/guideline requires a company's balance sheet to report its land at the amount the company paid to acquire the land, even if the land could be sold today at a significantly higher amount?
   a) Cost b) Economic Entity c) Monetary Unit

3. Which principle/guideline allows a company to ignore the change in the purchasing power of the dollar over time?
   a) Cost b) Economic Entity c) Monetary Unit

4. Which principle/guideline requires the company's financial statements to have footnotes containing information that is important to users of the financial statements?
   a) Conservatism b) Economic Entity c) Full Disclosure

5. Which principle/guideline justifies a company violating an accounting principle because the amounts are immaterial?
   a) Conservatism b) Full Disclosure c) Materiality

6. Which principle/guideline is associated with the assumption that the company will continue on long enough to carry out its objectives and commitments?
   a) Economic Entity b) Going Concern c) Time Period

7. A very large corporation's financial statements have the dollar amounts rounded to the nearest $1,000. Which accounting principle/guideline justifies not reporting the amounts to the penny?
   a) Full Disclosure b) Materiality c) Monetary Unit

8. Accountants might recognize losses but not gains in certain situations. For example, the company might write-down the cost of inventory, but will not write-up the cost of inventory. Which principle/guideline is associated with this action?
   a) Conservatism b) Materiality c) Monetary Unit

9. Which principle/guideline directs a company to show all the expenses related to its revenues of a specified period even if the expenses were not paid in that period?
   a) Cost b) Matching c) Monetary Unit

10. When the accountant has to choose between two acceptable alternatives, the accountant should select the alternative that will report less profit, less asset amount, or a greater liability amount. This is based upon which principle/guideline?
    a) Conservatism b) Cost c) Materiality

Handout VIII.1.D, "Quiz" (continued)

11. Public utilities' balance sheets list the plant assets before the current assets. This is acceptable under which accounting principle/guideline?

    a) Conservatism b) Cost c) Industry Practices

12. A large company purchases a $250 digital camera and expenses it immediately instead of recording it as an asset and depreciating it over its useful life. This practice may be acceptable because of which principle/guideline?

    a) Cost b) Matching c) Materiality

13. A corporation pays its annual property tax bill of approximately $12,000 in one payment each December 28. During the year, the corporation's monthly income statements report Property Tax Expense of $1,000. This is an example of which accounting principle/guideline?

    a) Conservatism b) Matching c) Monetary Unit

14. A company sold merchandise of $8,000 to a customer in December. The company's sales terms require the customer to pay the company in 30 days. The company's income statement reported the sale in December. This is proper under which accounting principle/guideline?

    a) Full Disclosure b) Monetary Unit c) Revenue Recognition

15. Accrual accounting is based on this principle/guideline.

    a) Cost b) Full Disclosure c) Matching

16. The creative chief executive of a corporation who is personally responsible for numerous inventions and innovations is not reported as an asset on the corporation's balance sheet. The accounting principle/guideline that prevents the corporation for reporting this person as an asset is

    a) Conservatism b) Cost c) Going concern

17. An asset with a cost of $120,000 is depreciated over its useful life of 10 years rather than expensing the entire amount when it is purchased. This complies with which principle/guideline?

    a) Cost b) Full Disclosure c) Matching

18. Near the end of the current year, a company required a customer to pay $200,000 as a deposit for work that is to begin in the following year. At the end of the current year the company reported the $200,000 as a liability on its balance sheet. Which accounting principle/guideline prevented the company from reporting the $200,000 on its income statement for the current year?

    a) Going concern b) Materiality c) Revenue Recognition

19. A retailer wishes to report its merchandise inventory on its balance sheet at its retail value. This would violate which accounting principle/guideline?

    a) Cost b) Full Disclosure c) Monetary Unit

20. A company borrowed $100,000 in December and will make its only payment for interest when the note comes due six months later. The total interest for the six months will be $3,600. On the December income statement the accountant reported Interest Expense of $600. This action was the result of which accounting principle/guideline?

    a) Cost b) Matching c) Revenue Recognition

http://www.accountingcoach.com/online-accounting-course/09Dpg01.html

UNIT VIII / LESSON 2

Accounting Systems

Time Frame
2 days

Standards
NES: Economics – Describe why business needs to maintain financial records
NES: Skills – Follow directions
Apply effective listening skills
Make oral presentations
Prepare accounting reports

Guiding Question

How important is it for a business to have an effective accounting system?

Materials

Handouts VIII.2.A-D

Objectives

Students will be able to:

- examine the steps required to develop an accounting system.
- explain how a business sets ups an accounting system (e.g., using QuickBooks™, hiring an accountant, self-accounting).
- determine the various kinds of internal and external uses for a business's accounting information (e.g., filing taxes, going to funders, making internal business decisions).
- differentiate between a manual and computerized accounting system.

Teacher Background

An effective accounting system provides a business with essential information for running the company. Such a system facilitates things like purchasing raw materials, tracking inventory, paying vendors and/or employees, and collecting payment for credit sales. Setting up an effective accounting system necessitates taking certain steps and making decisions about whether or not to hire an accountant and/or use a manual or computerized accounting system.

Handout VIII.2.A explains five steps that many businesses take in developing an accounting system. Handout VIII.2.B allows students to examine the arguments for and against hiring an accountant. In Handout VIII.2.C, the class will look at the various uses for a business's accounting information. Finally, Handout VIII.2.D asks the class to decide whether they would choose to use a manual or computerized accounting system if they were opening a new business.

Teaching Strategies/Supporting Activities

- Distribute Handout VIII.2.A, "Steps." Have students complete the exercise on the handout (Answers: 2.C, 3.A, 4.D, 5.B), then have them explain their answers to the following questions:
  - What is the correct order for the five paragraphs describing the steps involved in setting up an accounting system?
  - What did you learn about each of the steps involved in setting up an accounting system from this handout?
  - Which of these steps would you find most difficult?
  - Which of these steps is most important for running an effective business?
- Distribute Handout VIII.2.B, "Accounting Decision." Have students complete the exercise on the handout, then have them explain their answers to the following questions:
  - What is this reading about?
  - What is the strongest argument for a business person to do the accounting work for him or herself?
  - What is the strongest argument for hiring an accountant?
  - If you were starting a business, what decision would you make about hiring an accountant? What would be the most important factors about your business that would influence you to either hire or not hire an accountant?
- Distribute Handout VIII.2.C, "Accounting Information." Have students complete the exercise on the handout, then have them explain their answers to the following questions:
  - In your own words, explain how accounting information might be used to:
    1) improve the performance of various business operations, 2) create budgets, 3) make more informed business decisions, and 4) make wiser investment decisions.
  - What does the author of this handout mean when he says: "The inability to provide outside lenders or investors with accounting information can severely limit financing opportunities for a small business?"
  - As a business owner, which of the four uses of accounting information described on this handout would you find most valuable?
- Distribute Handout VIII.2.D, "Manual vs. Computerized Accounting." Have students complete the exercise on the handout, then have them explain their answers to the following questions:
  - What are some of the major differences between manual and computerized accounting?
  - What did you find to be the greatest advantage and disadvantage of manual accounting?
  - What did you find to be the greatest advantage and disadvantage of computerized accounting?
  - If you were opening a business in the very near future, would you be more likely to use a manual or computerized system of accounting?

Summary/Assessment

Ask students to explain their answer to the following question:

How important is it for a business to have an effective accounting system?

Follow-Up

- Ask students to survey at least three businesses in their local communities, asking the business owners the following questions:
    1. Do you use a cash-based or accrual method of accounting? Why? Does the accounting method you selected meet the needs of your business? How?
    2. Do you have an accountant or do you act as your own accountant? Why?
    3. To what extent have you or others used accounting information:
        - to measure the performance of various business operations? Can you give an example?
        - to create budgets? Can you give an example?
        - to make business decisions? Can you give an example?
        - to makes decisions about loans to your business or investments in your business? Can you give an example?
    4. Do you use a computerized or manual accounting system? Why?
- Conduct a class discussion based on the survey findings.
- Conclude with the question, "Can a business succeed without an effective accounting system?"

Handout VIII.2.A, "Steps"

Directions: At least five steps are involved in setting up an accounting system. Step one appears in the box below. Steps two through five appear under the box, but they are not in the correct order. After reading the handout, decide what is the correct order for steps two through five. Write the number 2, 3, 4, or 5 on lines A-D, to indicate what you think is the correct order for the steps involved in setting up an accounting system.

__1__ **Study the Two Possible Accounting Methods.** A good place to begin setting up an accounting system is to study the two possible choices of accounting methods to use for your business:

1. The Cash Method (or Cash Basis) – this means that you count income when you actually receive it (either as cash, credit card charges, or check) and count your expenses when you actually pay them.
2. The Accrual Method (or Accrual Basis) – this means that you count income when a sale is made (regardless if you actually receive the money for it) and count expenses when you actually receive the good or service (instead of paying for it immediately).

______ **A. Choose a Method for Recording Transactions.** After you've decided on an accounting method, the next step is to decide how you are going to record transactions. You have basically two choices:

1. Hand-Recording Transactions – you actually hand-write each transaction in a ledger.
2. Software – you enter transactions in a software program, which then automates many routine tasks.

By far the most popular method is software. There are dozens of accounting software packages and most of them will help you maintain your books as well as automate things like payroll and reports.

______ **B. Learn and Maintain Your Accounting System.** Once you've chosen your accounting system, the final step is learning and maintaining your accounting system. Learning the system will obviously depend on what solution you've adopted, but maintaining the system is accomplished primarily by two things:

1. You Have to Use the System – once you've taken the time and energy to setup an accounting system, you have to actually utilize it properly. This means entering every transaction, check, bill, charge, or refund.
2. Reconcile Your Bank Statement – the best way to maintain your accounting system is by comparing the record of transactions from your bank accounts with your accounting system's record of transactions, making sure that they balance. This process alone will force you to properly account for the company's money.

______ **C. Select Either the Cash or Accrual Method of Accounting.** The accrual method is generally considered to give you a more accurate picture of your company's financial situation but requires you to take extra steps, such as maintaining records for money owed to you by others but not yet received or money you owe to others but have not yet paid. The cash method is generally easier to maintain and is the preferred method for small businesses.

Handout VIII.2.A, "Steps" (continued)

______ **D. Set Up Your "Chart of Accounts."** After choosing a method for recording transactions, it's time to set up your "chart of accounts". A "chart of accounts" is simply a listing of all the various accounts in your accounting system. There are income accounts, expense accounts, asset accounts, etc.

An accountant can be of great assistance in setting up your initial chart of accounts. Also, QuickBooks Pro™ and some other software programs include a "wizard" that will customize a "chart of accounts" for your business.

http://www.mynewcompany.com/accounting.htm

Handout VIII.2.B, "Accounting Decision"

Directions: Once an accounting system is set up, a business owner has to decide whether or not to do the accounting work for him or herself or hire an accountant. Read the two points of view below and complete the exercise that follows.

The Case for Not Hiring an Accoutant

Keeping your small business accounting in-house can save you a lot of money in fees over the course of time. While it may require that a bookkeeper (or other designated person) enter the information on a regular basis, the salary paid to this person could be much less than outsourcing the work to an accountant.

Many businesses perform their own **small business accounting**, making use of accounting software that is readily available on the market. Software, like QuickBooks™ that is manufactured today is highly sophisticated, and it can even conduct payroll tasks.

QuickBooks™ are literally an all-in-one solution that helps the do-it-yourself accountant because:

- It integrates well with your favorite tax software program, as well as Microsoft Excel™.
- It provides a number of ready-to-use templates that business owners can use to create invoices, spreadsheets, charts, and business plans.
- It also tracks not only sales, but accounts receivable, accounts payable, and other important information such as inventory.

Once you have all the required software set up, you must keep it up to date. A small company (with only a couple of people working) may only have to update on a weekly basis, while a larger company will likely keep it updated daily.

When you are making important decisions for the company, sometimes you need to have a quick snapshot of the company's financial standing in a split second. Keeping the small business accounting in-house will afford you the opportunity to have that information right away, as opposed to having to contact the accountant, and then waiting for him to provide you with the necessary reports.

Despite the fact you are doing your small business accounting yourself, you will still want to keep an accountant on retainer. He or she can then go over the books and prepare your tax returns for the business. QuickBooks™ will allow you to provide an accountant with copies of your information, which your accountant can open with the services' copy of the software. They can review records, complete tax returns, and notify you of any irregularities that may occur.

http://www.wahm.com/articles/should-you-do-your-own-small-business-accounting.html
http://smallbusiness.chron.com/advantages-using-quickbooks-4933.html

The Case for Hiring an Accountant

Getting a professional small business accountant can help you to stay on track with your business's financial development while foreseeing potential financial risks.

Running a successful small business requires making smart decisions. Unfortunately, many small business owners have wonderful talent and expertise in their trade but do not have the financial accounting knowledge necessary to make a business run smoothly. Having a professional small business accountant to help you streamline your business is a priceless asset.

A small business accountant can help you with all aspects of business finance, no matter how great or small. If you are a new business owner, an accountant can provide you useful advice on strategic planning and the financial structure that will guide all your business operations. An accountant can also show you how to reach maximum and cost-effective efficiency in your regular business procedures and routines.

If your business manages several employees and has expenses like store rent and utility bills, office equipment or product inventory, an accountant will help standardize a payroll system, organize your budget so that you reach a specific profit goal, offer alternatives to expensive, costly procedures, and advise you in major purchases. Accountants can also give advice about loans and investments that are best for your business and goals.

For any small business, bookkeeping is essential. Bookkeeping records your sales and purchases, regular expenses, your bank balance and all other financial events related to your business. Without detailed and accurate records of your financial transactions, you lack the ability to budget soundly and foresee the possibility of future gains or losses. Improper bookkeeping can easily cost you a major financial crisis, so if you already have enough on your hands just trying to manage the day to day of your business, it is sensible to hire a bookkeeper or accountant to take care of the books.

Small business accountants can help make sure your business stays on top of things. The last thing you want is the Internal Revenue Service knocking at your door. Professional accountants are experienced in tax matters and in addition to providing advice on tax-related decisions, can do all of your taxes for you. You won't have to worry about filling out the wrong forms, missing out on a tax privileges you knew nothing about, or making mathematical errors that raise the IRS's brows.

With an experienced and professional small business accountant on your team, you can breathe easy knowing your financial affairs are being managed by an expert and in the meantime, can focus your attention on the other important matters of your business. A small business accountant will most definitely keep your life from falling apart by keeping the seams of your business together.

http://www.smallbizaccountants.com/The-Benefits-of-Hiring-a-Small-Business-Accountant

Exercise: Based on this handout, write a paragraph (in the space below) in which you advise new entrepreneurs whether or not they should hire an accountant.

Handout VIII.2.C, "Accounting Information"

Directions: Accounting systems provide companies with various kinds of information regarding their business operations. Read the four uses for accounting information listed below and complete the exercise that follows.

Uses for Accounting Information

Performance Management

A common use of accounting information is measuring the performance of various business operations. While financial statements are the classic accounting information tool used to assess business operations, business owners may conduct a more thorough analysis of this information when reviewing business operations. Financial ratios use the accounting information reported on financial statements and break it down into leading indicators. These indicators can be compared to other companies in the business environment or an industry standard. This helps business owners understand how well their companies operate compared to other established businesses.

Budgets Creation

Business owners often use accounting information to create budgets for their companies. Historical financial accounting information provides business owners with a detailed analysis of how their companies have spent money on certain business functions. Business owners often take this accounting information and develop future budgets to ensure they have a financial road map for their businesses. These budgets can also be adjusted based on current accounting information to ensure a business owner does not restrict spending on critical economic resources.

Business Decisions

Accounting information is commonly used to make business decisions. Decisions may include expanding current operations, using different economic resources, purchasing new equipment or facilities, estimating future sales or reviewing new business opportunities. Accounting information usually provides business owners information about the cost of various resources or business operations. These costs can be compared to the potential income of new opportunities during the financial analysis process. This process helps business owners understand how current business operations will be affected when expanding or growing their businesses. Opportunities with low income potential and high costs are often rejected by business owners.

Investment Decisions

External business stakeholders often use accounting information to make investment decisions. Banks, lenders, venture capitalists, or private investors often review a company's accounting information to assess its financial health and operational profitability. This provides information about whether or not a small business is a wise investment decision. Many small businesses need external financing to start up or grow. The inability to provide outside lenders or investors with accounting information can severely limit financing opportunities for a small business.

http://smallbusiness.chron.com/general-uses-accounting-information-3951.html

Exercise: After reading about the four uses of accounting information that are explained on this handout, list which of these four uses (you may list more than one use) would be most valuable to:

1. A bank loan officer:

   ____

2. The business's largest vendor:

   ____

3. A person interested in buying the business:

   ____

Handout VIII.2.D, "Manual vs. Computerized Accounting"

Directions: While all business people might agree that having an accounting system is absolutely necessary, the choice between using a manual or computerized system may not be so simple. Read the handout below which contains a series of five notes comparing manual and computerized accounting. Then, complete the exercise that follows

Manual Accounting
A manual accounting system requires the acting accountant or bookkeeper to record business transactions to the general journal, general ledger, and worksheet by hand. This process can be completed by either using actual paper journal and ledger sheets or by creating these sheets in a computer program such as Excel. It is considered manual because each transaction is entered into the system by hand.

Computerized Accounting
A computerized accounting system allows the user to record the transaction into the program once, and all accounts are updated as necessary. For example, if your business buys $1,000 worth of office supplies with a combination of $500 cash and $500 credit, instead of going to each account and recording the transaction, with a computerized system you would check office supplies, cash, and any other relevant accounts and the transactions automatically would be entered

Speed and Accuracy
Computerized accounting programs are quicker as far as entering information is concerned. However, even with the built-in error detection of computer programs, sometimes it is easier to cross-check journals ledgers in a manual system since you can flip to the pages you need, and even spread the books out on a table if needed.

End-of-Period Reports
Computerized accounting packages will automatically pull all relevant ledger entries for the period reports. Manual accounting takes longer, but can help a bookkeeper better understand the posting and end-of-period process. This is one reason why accounting students cannot take a computerized accounting course until beginning and intermediate accounting classes are completed.

Data Manipulation
With a computerized accounting system, information for a particular period of time can be compiled quickly. With a manual system, it can take time to locate the information from each book and compile it into a report.

http://smallbusiness.chron.com/advantages-manual-vs-computerized-accounting-4020.html

Handout VIII.2.D, "Manual vs. Computerized Accounting" (continuted)

Exercise: After reading the handout above, list the greatest advantage and disadvantage of using manual and computerized accounting systems.

MANUAL	
Advantage	**Disadvantage**

COMPUTERIZED	
Advantage	**Disadvantage**

UNIT VIII / LESSON 3

Recordkeeping for Business

Time Frame
2 days

Standards
NES: <u>Economics</u> – Explain why businesses need to maintain financial records
Explain how special journals and ledgers are used in the accounting cycle
NES: <u>Skills</u> – Follow directions
Apply effective listening skills
Make oral presentations
Prepare accounting reports

Guiding Question

What kinds of records do entrepreneurs keep to help make important business decisions?

Materials

Handouts VIII.3.A-D

Objectives

Students will be able to:

- describe the importance of good recordkeeping in running a business.
- examine the kinds of records (journals and ledgers) kept by entrepreneurs.
- discuss how accurate recordkeeping helps entrepreneurs make important business decisions.

Teacher Background

Accurate recordkeeping is vital to running a business effectively. Although many companies use specialized journals for certain transactions, all businesses use a **general journal**. After journalizing transactions, they are posted to accounts in the general ledger.

In Handout VIII.3.A, students will read about the necessity for recordkeeping in business. In Handout VIII.3.B, the class will engage in an exercise in which they describe some of the special features of a journal. Handout VIII.3.C features a sample ledger and asks students to participate in an exercise in which they summarize the information contained in ledger accounts. Finally, Handout VIII.3.D looks for the class to suggest how journals and ledgers can help entrepreneurs make important business decisions.

Teaching Strategies/Supporting Activities

- Ask students to explain their answers to the following questions:
  - What kind of personal and financial records do you keep (e.g., telephone numbers, addresses, birthdays, etc.) to keep yourself organized?
  - Why is it important that those records are accurate?
  - What kinds of records do you think businesses keep?

  - How important is it that businesses keep accurate records?
  - What types of trouble could result from poor recordkeeping?

- Distribute Handout VIII.3.A, "Recordkeeping." Have students complete the exercise on the handout, then have them explain their answers to the following questions:
  - What do we learn about the importance of recordkeeping from this handout?
  - What is the most important reason listed in Part A for a business to keep accurate records?
  - Which information listed in Part B do you think is most important to a business owner?
- Distribute Handout VIII.3.B, "Journal." Have students complete the exercise on the handout, then have them explain their answers to the following questions:
  - What did you learn about the journal from this handout?
  - In the exercise, for each of the three bullet points, what words did you write to describe the journal for the PowerPoint™ slide?
  - Based on what you know about a journal, how necessary is a journal for running a business?
- Distribute Handout VIII.3.C, "Ledger." Have students complete the exercise on the handout, then have them explain their answers to the following questions:
  - How does a journal compare to a ledger?
  - For this ledger, how did you summarize the changes reflected in the four accounts listed?
  - How would a businessperson use the information contained in a ledger?
- Divide the class into groups of five students each. Distribute Handout VIII.3.D, "Decisions and Recordkeeping." Following the directions on the handout, have each group complete the chart on that page. As part of the whole class discussion in which you call on each group, have students explain their answers to the following questions:
  - What decisions did your group list in Column I?
  - How did you suggest the information contained in journals and ledgers might be used to make the decisions you listed?

Summary/Assessment

Ask students to explain their answer to the following question:

How are journals and ledgers used to track economic business transactions?

Follow-Up

Invite one or two entrepreneurs to class to have them discuss the importance of good recordkeeping to their businesses.

Handout VII.3.A, "Recordkeeping"

Directions: In Part A of the handout below, underline the most important reason for a business to keep accurate records. In Part B, underline the most critical information a business needs to operate effectively.

You arrive at work this morning and look around with a sense of accomplishment. This business is yours. From the start, you've done everything right: You conducted meaningful market research; your product is in demand; you understand the competition and have identified your competitive advantage (i.e., cost, service, and/or quality); and business flows steadily through the doors.

However, despite some significant achievements, these nagging questions about the business disturb you: "Why is it that sometimes I don't have enough cash to pay my suppliers? How much real profit is in my business, anyway? I'll deposit the payroll taxes well enough... but, why is it going to be tight again this quarter?"

Part A: The Importance of Recordingkeeping

What's really happening in your business? If you're not exactly sure, then it's time to return to the basics—the basics of good recordkeeping. Bluntly, a small business that fails to keep complete and accurate financial records places its long-term success and continuance in grave, grave doubt. The following three points discuss some of the major reasons that good (i.e., complete and accurate) financial recordkeeping is crucial to the success of your business:

1. Good records provide the financial data that help you operate more efficiently, thus increasing the profitability of your enterprise. This is because accurate and complete records enable you, or your accountant, to identify what you own, how much you owe, how much you make, and what are your greatest expenses, which, when compared to appropriate industry averages, help you pinpoint the strong and weak phases of your business operations.
2. Good records are essential for the preparation of current financial statements. These, in turn, are critical for maintaining good relations with your banker. They also present a complete picture of your total business operation which will benefit you as well.
3. Good records are required for the preparation of complete and accurate tax documents. On the other hand, poor records often lead to the preparation of income tax returns that result in underpayment or overpayment of taxes.

Part B: Key Information

Even though you may be experiencing some success with your business, as a business begins to grow rapidly, the owners often work frantically to simply meet demand, minimizing the time they devote to keeping good records. The following checklist highlights the type of information your financial records should provide:

1. How much income are you generating now and how much can expect in the future?
2. How much cash is tied up in money owed the business, but not yet received (and thus not available)?
3. How much do you owe for merchandise? For rent? For equipment?

Handout VII.3.A, "Recordkeeping" (continued)

4. What are your expenses, including payroll, payroll taxes, merchandise, and benefit plans for yourself and employees (such as health insurance, retirement, etc.)?
5. How much cash do you have on hand? How much cash is tied up in inventory?
6. Which of your product lines, departments or services are making a profit, which are not?
7. How does all of the financial data listed above compare with last year—or last quarter?
8. How does all of the financial data compare with that of your competitors?

http://www.access2000.com.au/Guides/Tips/Small_Business_Tips/small_business_tips_44.htm

Handout VII.3.B, "Journal"

The journal contains a record of all a business's transactions. Every journal transaction involves recording two entries, one that appears in the debits column, and the other in the credits column. The result of this double-entry system is that the amount of debits always equals the amount of credits. Debits and credits represent changes to an account in the journal. Debits and credits do not affect all accounts in the same way, however.

Accounts are classified into three broad categories: assets, liabilities, and owner's equity. (*Assets* are things of value that the business owns; *liabilities* are debts the business owes; *owner's equity* represents the owner's claim on the assets of the business.) Debits and credits have the opposite effect on assets than they do on liabilities and owner's equity. For example, a debit increases an asset, but decreases a liability or owner's equity. Conversely, a credit decreases an asset, but increases a liability or owner's equity. In order to record transactions correctly, one has to be able to categorize an account into the correct category, and then know how to apply the rules of debits and credits. The table below summarizes the effects of debits and credits on assets, liabilities, and owner's equity accounts.

Assets		Liabilities		Owner's Equity	
Debit	Credit	Debit	Credit	Debit	Credit
increase	decrease	decrease	increase	decrease	increase
+	-	-	+	-	+

In the journal entry below, on April 1, the owner, J. Green invested $50,000 of her own funds in the business. Cash (an asset) is increased (debited). J. Green, Capital, (owner's equity) the account that measures the owner's claim on the company's assets, is increased (credited). Based on what you have learned about journalizing accounting transactions, can you explain what took place on April 2? (Hint: the delivery vehicle is an asset, notes payable is a liability.)

GENERAL JOURNAL

GJI

Date	Account Title and Description	Ref.	Debit	Credit
20X2				
April 1	Cash	100	50,000	
	J. Green, Capital	300		50,000
	To record owner's investment			
2	Delivery vehicle	155	25,000	
	Cash	100		10,000
	Notes payable	280		15,000
	Purchased truck			

Handout VII.3.B, "Journal" (continued)

Exercise: In the space below, create three bullet points for a PowerPoint™ slide that explains what a general journal is. Restrict what you write to only 10 words following the dots (. . .) for each bullet point.

- In looking at a general journal, one would see…

- A general journal contains the following information…

- In a general journal one finds debits and credits, which represent…

Handout VII.3.C, "Ledger"

Directions: After reading this handout, complete the exercise below.

In the accounting process, the next step after recording transactions in the journal is to transfer those transactions to the ledger. The difference between the journal and the ledger is that the journal is a diary where all transactions are recorded, in chronological order, and the ledger is where these same transactions are grouped, by account. Thus, if you want to see a record of all transactions that took place in a given month, you would look in the journal. If you want to see all transactions that involve a particular account, you would look in the ledger. The ledger shows the increases, decreases, and balance of the account. Remember, if the account is an asset, increases would be shown in the debit column, decreases would be shown in the credit column. On the other hand, for liability and owner's equity accounts, increases would be shown in the credit column, decreases would be shown in the debit column. Look at the ledger below, which contains four separate accounts: "Vehicles," "Cash," "Notes Payable," and "J. Green, Capital."

GENERAL LEDGER

Cash					No. 100
Date	**Explanation**	**Ref.**	**Debit**	**Credit**	**Balance**
20X2					
April 1		GJ1	50,000		50,000
2		GJ1		10,000	40,000

Vehicles					No. 155
Date	**Explanation**	**Ref.**	**Debit**	**Credit**	**Balance**
April 2		GJ1	25,000		25,000

Notes Payable					No. 280
Date	**Explanation**	**Ref.**	**Debit**	**Credit**	**Balance**
April 2		GJ1		15,000	15,000

J. Green, Capital					No. 300
Date	**Explanation**	**Ref.**	**Debit**	**Credit**	**Balance**
April 1		GJ1		50,000	50,000

Exercise: Based on the rules of debits and credits, write short statements that describe the transactions that have been reflected in the four accounts appearing in the ledger above:

- Vehicles
- Cash
- Notes Payable (a note payable is a written promise to pay a certain sum of money on a future date)
- J. Green, Capital

Handout VII.3.D, "Decisions and Recordkeeping"

Directions: You will be divided into groups of five to complete the chart below. In Column I, labeled "Decision Item," list three different decisions an entrepreneur might have to make in running his/her business. In Column II, labeled "Information Found in a Journal or Ledger," briefly describe the kinds of information contained in financial records, such as a journal or ledger, that would help an entrepreneur in making his/her decision. Before beginning this exercise, note the example of how to fill out this chart.

Example:

Column I: Decision Item	Column II: Information Found in a Journal or Ledger
Whether or not to expand the business	Amounts of cash accumulated daily by the business

Column I: Decision Item	Column II: Information Found in a Journal or Ledger
1.	
2.	
3.	

UNIT VIII / LESSON 4

Financial Statements:
Income Statement, Cash Flow Statement, Balance Sheet

Time Frame
2 days

Standards
NES: Economics – Prepare estimated/projected income statement
Estimate cash flow needs
Prepare estimated/projected balance sheet
NES: Skills – Follow directions
Apply effective listening skills
Make oral presentations
Prepare accounting reports

Guiding Question
How are financial statements prepared for an entrepreneur's business?

Materials
Handouts VIII.4.A-C

Objectives
Students will be able to:

- compare and contrast an income statement, cash flow statement, and balance sheet, and discuss what each reports.
- explain the fundamental accounting equation.

Teacher Background
All public companies are required to prepare documents showing their financial performance at regular, periodic intervals. Most companies prepare annual statements; others prepare them semiannually, and some issue them quarterly or even monthly. These statements not only tell a lot about the existing health of the company, but give strong hints about the company's future performance, as well.

The three basic financial statements are: 1) the balance sheet, which lists on a particular date all the business's assets and liabilities, and the difference between the two – owner's equity (the company's net worth); 2) the income statement, which answers the question of how the company performed from the beginning to the end of the accounting period; and 3) the cash flow statement, which shows where the cash of the business came from and where it went during the accounting period.

In Handout VIII.4.A, the class will examine a sample company's income statements for two consecutive years and then compare the company's performance from one year to the next. Students should note:

- Sales increased by 15 percent, but gross profit increased by only 3 percent. The business owner may not be satisfied with this outcome.

- One might expect to see total operating expenses increase when sales increase. In this case, however, sales have increased by 15 percent and operating expenses have increased by 26 percent. With the absence of additional information to understand why expenses have increased, one has to wonder why expenses have increased by almost twice the rate of sales.

- Sales have increased by 15 percent but income from operations has decreased by 32 percent. We have already observed that expenses increased at a higher rate than sales; even worse is the 44 percent increase in cost of goods sold.

In Handout VIII.4.B, the class will examine a sample company's cash flow statements for two consecutive years, draw inferences about what has taken place from one year to the next and recognize the effect of these events on the cash position of the company. Students should note that:

- The increase in cash receipts from YEAR 1 to YEAR 2 was $40,000 but the increase in payments was $51,777.

- The company borrowed $50,000 in both YEAR 1 and YEAR 2. Since the total of debt payments for both years = $44,671, the total indebtedness at the end of YEAR 2 = $55,329 ($100,000 - $44,671).

- The company owner might not be satisfied. Cash from operating activities has actually decreased from YEAR 1 to YEAR 2. In YEAR 2, net cash from operating, investing, and financing activities = $62,342, of which $50,000 is new debt and $6,000 is from the sale equipment.

The fundamental accounting equation appears in Handout VIII.4.C.

Teaching Strategies/Supporting Activities

- Divide the class into groups of three. Have each group member select one of the three handouts, review the information, then explain it by answering the questions at the bottom of each handout.

- Once each group's members have had a chance to review and explain their chosen handout, have a member from each group explain their answers to the entire class.

Summary/Assessment

Ask the students to explain what a business owner needs to know about an income statement, a cash flow statement, and a balance sheet.

Follow-Up

Using spreadsheet software, have the students create a replica of the income statement and cash flow statement provided in Handouts VIII.4.A and VIII.4.B. Students should apply formulas to as many cells as is appropriate – as opposed to keying in numbers only.

Handout VIII.4.A, "Income Statements"

Directions: Examine the income statements below, then answer the questions that follow:

Cherry Computer Company
Income Statement

	YEAR 1	YEAR 2
Sales revenues		
Cash sales	$ 170,000	$ 180,000
Sales on account	30,000	50,000
Total sales revenues	200,000	230,000
Cost of goods sold or services provided	60,000	86,250
Gross profit	140,000	143,750
Operating expenses		
Salaries	40,000	55,000
Rent	7,667	9,000
Depreciation	8,169	8,169
Payroll tax	3,060	3,825
Advertising	14,000	17,000
Promotion	750	750
Insurance	333	333
Interest	2,484	4,446
Supplies	1,500	1,200
Utilities	4,600	4,800
Other	1,817	1,500
Total operating expenses	84,380	106,023
Income from operations	$ 55,620	$ 37,72

1. Comment on the change in total sales revenues and gross profit from YEAR 1 to YEAR 2. If you were the company owner, would you be satisfied with a $3,750 increase in gross profit from YEAR 1 to YEAR 2?

Handout VIII.4.A, "Income Statements" (continued)

2. Comment on the change in total operating expenses from YEAR 1 to YEAR 2. Is the change proportional to the change in total sales revenue? Would you expect it to be? Why or why not?

3. Comment on the change in income from operations from YEAR 1 to YEAR 2. What factors explain why income from operations has decreased even though total sales revenue has increased?

Handout VIII.4.B, "Cash Flow Statements"

Directions: Examine the cash flow statements below, then answer the questions that follow:

Cherry Computer
Cash Flow Statement

CASH FLOWS FROM OPERATING ACTIVITIES	**YEAR 1**	**YEAR 2**
Receipts of cash:		
Sales	$ 170,000	$ 180,000
(Receipts of) Accounts receivable		30,000
Other		
Total receipts:	170,000	210,000
Payments:		
Cost of merchandise	60,000	86,250
Salaries	40,000	55,000
Rent	7,667	9,000
Payroll tax	3,060	3,825
Advertising/ promotion	14,750	17,750
Insurance	333	333
Interest	2,760	4,974
Supplies	1,500	2,000
Utilities	4,600	4,800
Other or miscellaneous	1,817	1,500
Total payments:	136,487	185,432
Net cash from operating activities	33,513	24,568
Cash flows from investing activities:		
Purchase of equipment	10,000	
Sale of equipment		6,000
Net cash from investing activities	(10,000)	6,000
Cash flows from financing activities:		
Issuance of debt (borrowing)	50,000	50,000
Payment of debt	8,840	18,226
Net cash from financing activities	41,160	31,774
Net cash from operating, investing, financing activities	64,673	62,342
Cash at beginning of period	0	64,673
Cash at end of period	$ 64,673	$ 127,015

Handout VIII.4.B, "Cash Flow Statements" (continued)

1. Although cash receipts from sales were greater in YEAR 2 than YEAR 1, cash from operations was greater in YEAR 1 than YEAR 2; can you explain?

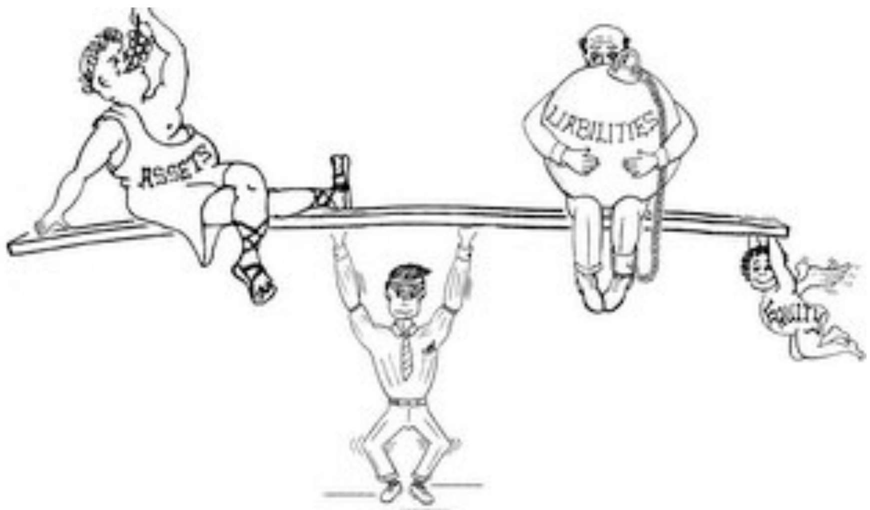
2. What can you determine about the company's issuance of debt during YEARS 1 and 2 and the amount of total indebtedness at the end of YEAR 2?

3. If you were the company owner, would you be satisfied with the increase in cash of $62,342 from YEAR 1 to YEAR 2? Explain.

Handout VIII.4.C, "Balance Sheet"

Directions: Read the handout below and complete the exercise that follows.

The Fundamental Accounting Equation: Assets = Liabilities + Equity



Businesses usually own assets. Assets are things that can be used to generate revenue through the sale of goods and services. Assets include cash, inventory, furniture and equipment, and accounts receivable. A business may also own intangible assets such as patents, trademarks, and goodwill.

Generally Accepted Accounting Principles (GAAP) suggests that all assets of a business are either owned outright by the business owners or are subject to the claims of creditors. Creditors include anyone who has loaned money or extended credit to the business. Loans and other forms of extended credit are called liabilities. The portion of assets not subject to claims by creditors is called equity.

In the GAAP framework there must be a continuous balance between assets on the one side and the total of liabilities and equity on the other side. This is represented by the fundamental equation of accounting:

Assets = Liabilities + Equity

This equation is also the basis for the most basic of accounting reports, the aptly named "balance sheet." A balance sheet reports what a business owns (assets), what it owes (liabilities), and what remains for the owners (equity) as of a certain date. This equation must always be in balance. Always keep in mind the teeter-totter illustration shown above.

Example. If a business has $1,000 of assets at a particular time, those assets must be matched by the total of the claims of creditors and owners. Here is one example of an infinite number of acceptable balance sheets:

Example: Balance Sheet

Assets	$ 1,000
Liabilities	500
Equity	500
Total Liabilities and Equity	$ 1,000

Equity

Equity is simply the difference between assets and liabilities. The owner has positive equity only to the extent that assets exceed liabilities. If a business has $1,000 of assets and $600 of liabilities the $600 of liabilities are, in effect, a claim on the assets. Equity is the difference between the assets and liabilities, or $400.

Equity = Assets – Liabilities

Equity is simply the difference between assets and liabilities. The owner has positive equity only to the extent that assets exceed liabilities. If a business has $1,000 of assets and $500 of liabilities the $500 of liabilities are, in effect, a claim on the assets. Equity is the difference between the assets and liabilities, or $500. If a business ceases operations remaining assets first go to outside creditors. The claims of owners can be realized only after outside creditors' claims are satisfied. So equity represents the owners' residual claim on business assets.

The Accounting Equation as a Conservation Principle

Accounting measurements reflect the changes in the composition of a firm's assets, liabilities, and equity, subject to the conservation rule reflected in the fundamental equation. The conservation rule is simply that any net change up or down in a firm's assets must be offset by an equal change to the combination of liabilities and equity. If there is an increase in assets, there must be an increase in the total of liabilities and equity. If there is a decrease in assets, there must be a decrease in the total of liabilities and equity. The teeter-totter must always be balanced.

http://www.understand-accounting.net/accountingequation.html

Exercise: Based on what you read in the handout, indicate whether the four statements below are true or false.

Statement	True	False	Not Sure
1. Another way to state the fundamental accounting equation is: Liabilities = Assets + Equity.			
2. A robot that helps assemble cars would most appropriately be categorized as an asset.			
3. According to GAAP, there must always be a balance between a business's equity and liability on one side and its assets on the other side.			
4. According to the conservation rule, no matter how much a business's assets change, its liability and equity remain the same.			

UNIT VIII / LESSON 5

Analyzing Financial Statements

Time Frame
2-3 days

Standards
NES: Economics – Calculate financial ratios
NES: Skills – Follow directions
Apply effective listening skills
Make oral presentations
Prepare accounting reports

Guiding Question

How can analyzing financial statements help entrepreneurs run their businesses more effectively?

Materials

Handouts VIII.5.A-E

Objectives

Students will be able to:

- compare and contrast vertical, horizontal analysis and ratio analysis.
- explain how vertical, horizontal and ratio analyses are used in the business world.
- perform vertical, horizontal analysis and ratio analysis using spread sheet software.

Teacher Background

Financial statement analysis is defined as the process of identifying financial strengths and weaknesses of a company by properly establishing the relationship between the items of the balance sheet and the profit and loss account. Financial statements are prepared to meet external reporting obligations and also for decision making purposes. They play a dominant role in setting the framework of managerial decisions. But the information provided in the financial statements is not an end in itself, as no meaningful conclusions can be drawn from these statements alone. However, the information provided in the financial statements is of immense use in making decisions through the examination and interpretation of financial statements. Among the key tools used in the financial statement interpretation are horizontal, vertical, and ratio analysis.

In Handout VIII.5.A, selected students will role play an interview with three experts discussing financial statement analysis. The related exercise asks students to suggest a question they would have asked the "experts." For Handout VIII.5.B, the class will perform a simple horizontal analysis, comparing two income statements for a fictitious company. After reading about vertical analysis, students will perform such an analysis using Handout VIII.5.C. In Handout VIII.5.D, students will combine horizontal and vertical analysis. Finally, the class will be given the opportunity to perform ratio analysis in the exercise related to Handout VIII.5.E.

Teaching Strategies/Supporting Activities

- Tell students to assume they are entrepreneurs who have recently opened their first businesses. Have them respond the following questions by raising their hands to indicate how important knowing the following information would be to them:
  - How important would it be to you to be able to compare your current year's business performance to a previous year's? Very important (raise hands), slightly important (raise hands), or not important (raise hands)? Explain your answer.
  - How important would it be to you to be able to know what percentage of revenue (the total amount of money received by the company for goods sold or services provided during a certain time period) remains as net income (difference between a company's total revenues—money earned from sales—and total expenses? Very important (raise hands), slightly important (raise hands), or not important (raise hands)? Explain your answer.
  - How important would it be to you to know what percentage of your business expenses do you spend on salaries? Very important (raise hands), slightly important (raise hands), or not important (raise hands)? Explain your answer.

  Explain to the class that today they will learn about how businesspeople find these kinds of information using financial statements and interpret the information using financial analysis.

- Ask eight students to act out the role play on Handout VIII.5.A, "Interview." Assign them the following roles: Student Interviewers #1-5 (appearing as S #1-5 on the handout) and Experts (appearing as E #1-3 on the handout). Distribute Handout #1 to the class. After the role play has been acted out, ask students to complete the exercise at the bottom of the handout. Then have students explain their answers to the following questions:
  - What question would have asked the experts about financial statement analysis?
  - What did you learn about financial statement analysis from this interview?
  - What are the major differences between horizontal, vertical, and ratio analysis?
  - If you were a business owner, which of these types of financial analyses would you rely most in making business decisions?

- Distribute Handout VIII.5.B, "Conducting Horizontal Analysis." If access to spreadsheet software is available, have the students calculate the change for each income statement item, then express the change as a ratio, dividing it by the total YEAR 1 amount. Otherwise, students can be presented with the data.
  - Students should note that the 15 percent spelling increase in total sales is largely the result of a 66.67 percent increase in sales on account.
  - The largest dollar amount change was for salaries expense ($15,000).
  - Interest expense increased by the largest percentage (78.99%).

- Distribute Handout VIII.5.C, "Performing Vertical Analysis." Have students complete the exercise on this handout, noting that:

- The company's total current assets exceed current liabilities. In fact, total cash is greater than current liabilities, so the company would have no problem paying its short-term debt.
- By definition, current assets can be converted to cash somewhat readily; since current assets exceed total liabilities, if the company felt the need to pay off all its debt, it might very well be able to do so.
- The Fundamental Accounting Equation tells us that the owners' claim to the assets of a business is equal to the total amount of assets minus the total amount of creditors' claims (company debt). In this case, creditors' claims are greater than the owners' claims (52% > 48%).

- Distribute Handout VIII.5.D, "Combining Horizontal and Vertical Analysis." Have students complete the exercise on this handout, noting that:
  - In YEAR 1, current assets represent 62 percent of total assets; in YEAR 2, current assets represent 80 percent of total assets. Liquidity measures the short-term ability of a company to pay current debts and meet unexpected demands for cash. Since current assets are more liquid than fixed assets, the company is in a better position after YEAR 2.
  - In YEAR 1, total liabilities represent 52 percent of total assets; in YEAR 2, they represent 47 percent of total assets. Although the total amount of debt has increased by $21,639 (from $76,764 to $98,403), when expressed as a percentage of total assets, total liabilities have decreased.
  - From YEAR 1 to YEAR 2, total assets have increased by $60,566 (from $146,764 to $207,330) while total liabilities (debts) have increased by $21,639. The owner would welcome an increase in his/her equity of $38,927 (from $70,000 to $108,927).
- Have students review the information in Handout VIII.5.E, "Conducting Ratio Analysis." After calculating the financial ratios, have them share their assessment of the changes for Cherry Computer Company from one year to the next.

Summary/Assessment

Ask students to explain their answer to the following question:

How do the various kinds of analysis mentioned in this lesson help business people to interpret the data about their businesses?

Handout VIII.5.A, "Introduction"

Directions: The handout below is a script of an interview between five student interviewers and three financial analysis experts. Financial analysis refers to the tools which enable business owners the ability to interpret a company's financial statements. In the box at the end of the script, write a question you would have asked the experts, if you participated in this interview.

S #1 What is financial statement analysis?
E #1 Financial statement analysis is the process of identifying a firm's financial strengths and weaknesses through the examination of documents such as the income statement, cash flow statement, and balance sheet.

S #2 Why is financial statement analysis important to a businessperson?
E #2 Financial statements play a crucial role in making managerial decisions such as: Should a business expand? Should more workers be hired? What is the best way to raise additional capital?

S #3 What are some of the methods used in analyzing financial statements?
E #3 Among the methods used to interpret financial statements are horizontal, vertical, and ratio analysis.

S #4 Tell us what you mean by horizontal analysis.
E #1 Horizontal analysis compares current financial statements to a previous year's financial information.

S #5 Can you give us an example of horizontal analysis?
E #2 Companies often place several years of financial statements in a side-by-side comparison format. Horizontal analysis enables business owners and managers to review the same month over several years to determine if revenues, expenses, assets or liabilities have increased, decreased, or stayed the same.

S #1 What you can you tell us about vertical analysis?
E #3 In vertical analysis an item is stated as a percentage of some total of which that item is a part.

S #2 Would you give us an example of vertical analysis?
E #1 Sure. One might study all the components that make up a company's net sales. The vertical analysis might reveal that last year the cost of goods sold (the expense involved in obtaining raw materials and producing finished goods that are sold to consumers by the company) was 59.1 percent of net sales.

S #3 Finally, what is ratio analysis?
E #2 Ratio analysis is used to evaluate relationships between one item appearing in a financial statement and another. The ratios are used to evaluate the health of a business at a specific point in time, identify trends over time for one company, or to compare two or more companies at one point in time.

Handout VIII.5.A, "Introduction" (continued)

S #4 Could you please give us an example of ratio analysis?

E #3 Here's a simple example. If we wanted to find out the extent to which a firm is relying on debt to finance its operations, we would look at the company's Debt to Equity Ratio. This determined by comparing the firm's Total Equity to Total Debt. Obviously, a higher total equity to total debt would represent a firm on solid financial footing.

S #5 Thank you all for coming and helping us understand these important ideas.

Your question:

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http://www.accounting4management.com/accounting_ratios.htm
http://accounting-financial-tax.com/2009/10/horizontal-vs-vertical-analysis-of-financial-statements/

Handout VIII.5.B, "Horizontal Analysis"

To compare the changes in a company's revenue and expense items from one year to the next, it is helpful to express the amount of the change as percentage of the total amount of the item in the first year of the comparison. Calculate the difference between YEAR 1 and YEAR 2 for each item in the income statement below. Then, express that change as a percentage of the YEAR 1 amount. (Create a ratio where the numerator is the amount of the change, and the denominator is the YEAR 1 amount.) Then, answer the questions that follow:

Cherry Computer Company
Income Statement

	YEAR 1	YEAR 2	Change	Change as a percentage of YEAR 1
Sales revenues				
Cash sales	$ 170,000	$ 180,000	10,000	0.0588
Sales on account	30,000	50,000	20,000	0.6667
Total sales revenues	200,000	230,000	30,000	0.1500
Cost of goods sold or services provided	60,000	86,250	26,250	0.4375
Gross profit	140,000	143,750	3,750	0.0268
Operating expenses				
Salaries	40,000	55,000	15,000	0.3750
Rent	7,667	9,000	1,333	0.1739
Depreciation	8,169	8,169	-	0.0000
Payroll tax	3,060	3,825	765	0.2500
Advertising	14,000	17,000	3,000	0.2143
Promotion	750	750	-	0.0000
Insurance	333	333	-	0.0000
Interest	2,484	4,446	1,962	0.7899
Supplies	1,500	1,200	(300)	-0.2000
Utilities	4,600	4,800	200	0.0435
Other	1,817	1,500	(317)	-0.1745
Total operating expenses	84,380	106,023	21,643	0.2565
Income from operations	$ 55,620	$ 37,727	(17,893)	-0.3217

Handout VIII.5.B, "Horizontal Analysis" (continued)

- Which category of sales contributed the most to the increase in total sales from YEAR 1 to YEAR 2?

- When considering only the ***dollar amount*** of the change from YEAR 1 to YEAR 2, which individual expense item increased the most?

- When considering the percentage increase of the change from YEAR 1 to YEAR 2, which individual expense item increased the most?

Handout VIII.5.C, "Performing Vertical Analysis"

To perform vertical analysis of a financial statement, an analyst compares individual items to a total of items that include the individual item. For example, in the balance sheet below, cash represents 37 percent of total assets; 62 percent of total assets are current assets (current assets are defined as being relatively easy to convert to cash).

Cherry Computer Company Balance Sheet
MM/DD/YYYY

ASSETS		**As a percentage of total assets**
Current Assets		
Cash	$ 53,764	37%
Accounts receivable	30,000	20%
Merchandise inventory	3,000	2%
Supplies	4,000	3%
Total Current Assets	**90,764**	62%
Fixed Assets		
Computers	45,000	31%
Less: accumulated depreciation	9,000	
Furniture and fixtures	15,000	10%
Less: accumulated depreciation	3,000	
Office equipment	10,000	7%
Less: accumulated depreciation	2,000	
Total Fixed Assets	**56,000**	38%
Total Assets	**$ 146,764**	100%
Liabilities and Shareholders' Equity		
Current Liabilities		
Accounts payable	$ 34,094	23%
Long Term Liabilities		
Loan payable	42,670	29%
Total Liabilities	76,764	52%
Owners' Equity		
J. Cherry, Capital	70,000	48%
Total Liabilities and Owners' Equity	**$ 146,764**	100%

Handout VIII.5.C, "Performing Vertical Analysis" (continued)

Exercise: The relationships these items have to one another explain the company's financial health. Keeping in mind the Fundamental Accounting Equation from the previous lesson where assets = liabilities + equity, answer the following questions:

- If the company had to pay all its short-term debt (current liabilities) right away, how likely would it be able to do so?

- If the company had to pay all its liabilities (current and long-term liabilities) right away, how likely would it be able to do so?

- Whose claim on the total assets of the business are greater, the creditors or the owners? How would you know?

Handout VIII.5.D, "Combining Horizontal and Vertical Analysis"

Comparing the results of vertical analysis for two different years provides an even greater understanding of a company's financial health. Refer to the results of a vertical analysis of Cherry Company's balance sheets for YEAR 1 and YEAR 2, then answer the questions that follow:

ASSETS		YEAR 1 as a percentage of total assets		YEAR 2 as a percentage of total assets
Current Assets				
Cash	$ 53,764	37%	$ 107,130	52%
Accounts receivable	30,000	20%	50,000	24%
Merchandise inventory	3,000	2%	4,000	2%
Supplies	4,000	3%	4,200	2%
Total Current Assets	90,764	62%	165,330	80%
Fixed Assets				
Computers	45,000	31%	45,000	22%
Less: accumulated depreciation	9,000		18,000	
Furniture and fixtures	15,000	10%	15,000	7%
Less: accumulated depreciation	3,000		6,000	
Office equipment	10,000	7%	10,000	5%
Less: accumulated depreciation	2,000		4,000	
Total Fixed Assets	56,000	38%	42,000	20%
Total Assets	$146,764	100%	$ 207,330	100%
Liabilities and Shareholders' Equity				
Current Liabilities				
Accounts payable	$ 34,094	23%	$ 20,767	10%
Long Term Liabilities				
Loan payable	42,670	29%	77,636	37%
Total Liabilities	76,764	52%	98,403	47%
Owners' Equity				
J. Cherry, Capital	70,000	48%	108,927	53%
Total Liabilities and Owners' Equity	$ 146,764	100%	$ 207,330	100%

Handout VIII.5.D, "Combining Horizontal and Vertical Analysis" (continued)

- How has the ratio of current assets to total assets changed from YEAR 1 to YEAR 2? Is this change for the better or worse? Explain.

- How has the ratio of total liabilities to total assets changed from YEAR 1 to YEAR 2? Is this change for the better or worse? Explain.

- If you were the company owner, how would you feel about the company's financial health when comparing YEAR 1 to YEAR 2? Has it become better or worse? Explain.

Handout VIII.5.E, "Conducting Ratio Analysis"

A ratio expresses the mathematical relationship between one quantity and another. Ratio analysis expresses the relationship among selected items of financial statement data. The table below contains information about some commonly used financial ratios.

Ratio	Type of Ratio	Formula	Purpose
Current ratio	Liquidity – measure of the ability of a company to pay current obligations	Current assets/current liabilities	Measures short-term debt paying ability. The higher the ratio the better. It shows how many dollars of current assets are available for each dollar of current debt.
Return on assets	Profitability – measure of the income or operating success of a company over a period of time	Net income/average assets. Average assets = (assets at beginning of period + assets at end of period) / 2 If average assets cannot be calculated, use end of year assets amount reported on balance sheet.	Measures overall profitability of assets. Companies that can achieve greater income with fewer assets are making better use of the assets they own.
Asset turnover	Profitability	Net sales/average assets	Measures how efficiently assets are used to generate sales
Debt to total assets	Solvency – measure the ability of a company to survive over a long period of time	Total debt/total assets	Measures the percentage of total assets provided by creditors

Exercise: Use the income statements and balance sheets for Cherry Computer Company from the previous handouts for YEARS 1 and 2 to calculate the following financial ratios. Then write a statement that describes and summarizes the changes from YEAR 1 to YEAR 2.

Ratio Name	YEAR 1	YEAR 2
Current		
Return on assets		
Asset turnover		
Debt to total assets		

UNIT VIII / LESSON 6

Payroll Management

Time Frame
1 day

Standards
NES: Economics – Calculate payroll taxes
NES: Skills – Follow directions
Apply effective listening skills
Make oral presentations
Prepare accounting reports

Guiding Question

How does the payroll process work in an entrepreneurial venture?

Materials

Handouts VIII.6.A-E

Objectives

Students will be able to:

- explain regulations governing the payroll process.
- examine a sample payroll register.
- determine an employee's gross pay, net pay, payroll taxes, and payroll withholding using spreadsheet software.
- discuss the employer's obligation regarding the payroll process as it relates to federal, state, and local taxes.

Teacher Background

Employers are required to adhere to the different payroll laws and regulations of the federal government, as well as the states and cities in which their business is located. The U.S. Department of Labor (DOL) sets the federal labor laws, while the Internal Revenue Service enforces the federal payroll tax laws. Related to payroll regulations is payroll processing, which includes the multitude of tasks involved in calculating employees pay, making necessary deductions and sending reports to the appropriate authorities.

Handouts VIII.6.A and VIII.6.B introduces the class to some of the regulations that govern employee pay. In Handout VIII.6.C, students will examine a payroll register to learn about the information contained in that document. In Handout VIII.6.D, students will determine employees' gross pay, net pay, payroll taxes, and payroll withholding using spreadsheet software

Teaching Strategies/Supporting Activities

- Distribute Handout VIII.6.A, "Payroll Regulations." Have students complete the exercise on the handout, then have them explain their answers to the following questions:
  - What is this handout about?
  - How would you describe the ways these regulations try to protect employees?
  - How do these regulations impact businesses that have to abide by them?
  - How would the workplace be different without these regulations? Would the elimination of these regulations be better or worse for workers? For businesses?
- Divide the class into six sections. Distribute Handout VIII.6.B, "Payroll Rights." Ask each section to read a different one of the six categories on the handout and complete the exercise that appears there. (The correct answers are: 1) 2; 2)1, 3) 2; 4) 1; 5) 2; and 6) 2. Have students explain their answers to the following questions:
  - (Call on 2-3 volunteers from each of the six categories.) Was 1 or 2 the correct answer for the category you were assigned to read on the handout?
  - (Call on 2-3 volunteers from each of the six categories.) What did you learn from your reading about the payrolls rights workers have?
  - Which of these rights is most justified?
  - Which of these rights is least justified?
  - In general, are businesses better, or worse off with more or fewer regulations related to workers rights?
- Distribute Handout VIII.6.C, "Payroll Register." Have students complete the exercise on the handout, then have them explain their answers to the following questions:
  - How did you answer the four questions asked in the exercise?
  - Based on what you saw and read on this handout, how would you describe a payroll register to some who has not seen one before?
  - How does a payroll register serve the needs of employees?
  - How does a payroll register serve the needs of employers?
  - What reasons might explain why one employee earns $7.50 per hour and another employee earns $31.00 per hour?
  - How can you explain why employees have so many tax deductions? What might be some of the benefits and risks involved in reducing the amount of taxes business people pay?

Summary/Assessment

Ask students to explain their answer to the following question:

How important is an understanding of the regulations and payroll process to a new business owner?

Follow-Up

Distribute Handout VIII.6.D, "Application: Payroll Process." Have students complete the exercise on the handout, using an Excel™ spreadsheet. After giving students sufficient time to complete the exercise, distribute Handout VIII.6.E, "Completed Payroll Register." Then ask students to explain the answers to the following questions:

- How well did you do in this exercise?
- Which operations caused you the most difficulties?

Handout VIII.6.A, "Payroll Regulations"

Directions: Employers are required to follow various payroll laws imposed by the federal, state, and municipal governments. The U.S. Department of Labor (DOL) sets the federal labor laws, while the Internal Revenue Service enforces the federal payroll tax laws. Listed below are many of the most important payroll regulations. Circle any of these regulations about which you had no knowledge before this lesson.

DOL and IRS

The DOL's mission is to protect the rights of wage earners and job seekers. This includes ensuring that they are paid in a fair and timely manner. Employees can report employers that violate labor and wage laws to the DOL. The IRS requires employers to withhold, report, and pay payroll taxes in accordance with its regulations. The IRS charges fees and penalties to employers that do not comply with its policies.

Wage Processing

Under the DOL's Fair Labor Standards Act, which went into effect in 2009, the employer cannot pay nonexempt workers less than the hourly minimum wage of $7.25. Nonexempt workers are those not exempt from minimum wage and overtime pay; this accounts for most hourly workers. Under the Youth Minimum Wage Program, the employer can pay workers under 20 at the rate of $4.25 per hour for the first 90 workdays.

Timekeeping

While a time clock is an effective method of monitoring hours worked, it is not mandatory. The DOL notes that any timekeeping system may be used as long as it maintains correct and complete records. This includes hard copy and computerized time sheets.

Withholding Taxes

The federal government requires the employer to withhold federal income tax, Social Security tax, and Medicare tax from employee paychecks. Most states require state income tax withholding. If city or local income tax applies, the employer must withhold them as well. Payroll processing includes ensuring that these taxes are appropriately withheld.

Salaried Workers

Salaried workers receive a set amount of pay each pay period. The salary is a predetermined or guaranteed amount of pay that the employee can count on each pay date. The salary amount is usually fixed; therefore, the net pay does not change unless the employee has had a pay adjustment or a deduction change. The employer must pay the salaried worker his entire pay each pay period unless certain exceptions apply, such as overuse of benefits days, the worker is a new hire, termination, or unpaid suspension. In these cases, the employer can pro-rate the salary.

State Laws

Some states, such as Alaska and California, have their own minimum wage laws, which can conflict with the federal minimum wage. In this case, the employer must use the higher rate of pay. The employer can check with its state labor board for its state's minimum wage requirements.

http://smallbusiness.chron.com/payroll-processing-government-regulations-3589.html

Handout VIII.6.B, "Payroll Rights"

Directions: The class will be divided into six sections. Each section will read one of the six payroll rights categories described below. In each category, two possible versions of the wording related to payroll rights appears, For the category you are assigned, circle either 1 or 2, indicating what you believe represents the correct wording that actually should appear.

1) **Minimum Wage**
   Any employee who works is entitled to be paid for the hours paid. (1. Only employees who work for a company with more than 10 people need be paid the minimum wage. 2. Employees may not be paid less than minimum wage, unless the employee receives other wages or benefits that add up to minimum wage.) An employee is responsible for paying withholding tax, but the employer must take out the correct amount of taxes, according to the tax forms and exemptions the employee submits.

2) **Pay Days**
   (1. An employer must pay all employees on a regular payday. 2. An employer does not have to pay workers on a regular payday, as long as he/she does not wait too long before providing payment.) If the payday falls on a holiday, it is the responsibility of the employer to get checks, direct deposits, and other payment methods together so the payment is not late. If an employee is fired, the law requires the employee to be paid immediately, or by the next pay period. It is illegal to hold an employees pay for any reason, unless the employee had legal deductions taken out of his or her check that caused non-payment.

3) **Overtime Pay**
   Employees have the right to overtime pay. If an employee works more than the normal full-time work schedule, typically 40 hours a week, the employee has the right to be paid an overtime rate for any hour worked thereafter. (1. All employees must be paid overtime. 2. There are some employees, such as independent contractors, volunteers, casual domestic baby sitters, and newspaper deliverers who are exempt from overtime pay.) Employees who work on a small farm and computer analysts, programmers and software engineers whose salary is at least $27.63 per hour are not entitled to overtime pay.

4) **Wage Garnishments**
   A payroll department cannot legally threaten to withhold the wages of an employee unless a court of law has ordered otherwise. (1. If an employee owes a creditor money, the creditor will have to take the employee to small claims court and have a judge rule in his favor. 2. If an employee owes a creditor money, they must settle the matter without involving an employee's employer.) The employer and payroll department will need to verify all garnishments and deductions are legal, because if proved illegal, the employer will be responsible for reimbursing the employee with the money paid to the creditors.

5) **Minimum Wage and Tips**
Depending on the state the employee lives in, the law requires that an employee who is paid tips not have his or her wages decreased. An employer is required to pay the employee minimum wage, (1. unless the tips equal 25% of an employee's pay. 2. despite how many tips an employee brings in.) In some states, an employee is allowed to pay lower than minimum wage if an employee brings in more than $30 per month in tips. However, the tips of the employee must at least add up to minimum wage for each hour worked, or the employer has to make up the difference.

6) **Jury Duty**
All states require an employer to allow an employee time off for jury duty. Some states allow employees time off to testify as a witness in a court hearing. (1. All states require employers to compensate the employee for the time the employee had off due to jury duty. 2. Some states, such as Connecticut, New York, and Massachusetts, require employers to compensate the employee for the time the employee had off due to jury duty.) The employee will be paid by the courts for jury duty, but the employer can deduct the amount the jury duty pays from the normal wage. The employee has the right to be paid nonetheless.

http://www.ehow.com/print/about_5282915_employee-payroll-rights.html

Handout VIII.6.C, "Payroll Register"

Directions: Read the information below on payroll registers, including the sample provided. Then complete the exercises that follow. A payroll register is a spreadsheet that lists the total information from each payroll, including: total gross pay, total of each type of deduction, and total net pay. In a payroll register, the calculation for each individual employee for total gross pay, withholding and deduction amounts, and total net pay is set out in an employee earnings record and the totals from all employee earnings for the pay period are the source of the totals in the payroll register.

The payroll register must include a record of totals for all employees for the following:

- Total gross wages, total social security wages (up to the maximum for each employee each year), and total Medicare wages.
- Totals withheld from employee pay for federal, state, and local income taxes.
- Totals withheld for the employee share of Social Security and Medicare.
- Totals withheld for all optional donations, such as charitable giving, union dues, and others.

Businesses use a payroll register to help perform several important payroll tax tasks:

- Making payroll tax deposits,
- Submitting quarterly payroll tax reports to the IRS, and
- Providing annual wage and tax reports to employees and to the Social Security Administration.

Sample Payroll Register

Date	Employee ID	Name	Hourly Wage	Hours	Gross Pay	Federal Allowance	State Tax	Federal Income Tax	Social Security 6.2%	Medicare 1.45%	Total Tax Withheld	Insurance Deduction	Net Pay
1/2/20X0	1	McDonald, Reginald	$13.57	80	$1085.60	0	$35.34	$161.58	$67.31	$15.74	$279.97	$34.36	$771.27
1/2/20X0	2	Davis, Mark	$25.00	80	$2000.00	2	$65.13	$246.77	$124.00	$29.00	$464.90	$45.00	$1490.10
1/2/20X0	3	Doubit, Margaret	$18.75	80	$1500.00	1	$28.23	$222.69	0	$21.75	$272.67	$15.00	$1212.33
Totals			XXX	XXX	$4585.60	XXX	$128.70	$631.04	$191.31	$66.49	$1017.54	$94.36	$3473.70

http://office.microsoft.com/en-us/templates/sample-payroll-register-TC001111770.aspx

Handout VIII.6.C, "Payroll Register" (continued)

Exercise 1: Based on your reading of the sample payroll register above, write the answers to the following questions:

1. What is the name of the person who receives the lowest amount of pay? ________________________________

2. What are the highest hourly wages paid for a person working in this company? ____________________________

3. How much is the total tax is withheld from Margaret Doubit? ____

4. Who is the only person on the register claiming two federal allowances? _________________________________

Exercise 2: Based the information in the chart below, use an Excel spreadsheet to fill in the correct amounts for (1) gross pay, (2) Social Security contribution, (3) Medicare contribution, (4) total tax withheld, and (5) net pay of the five employees listed below. Then use the spreadsheet to total columns 1-5.

Employee ID	Name	Hourly Wage	Hours	(1) Gross Pay	Federal Allowance	State Tax	Federal Income Tax	(2) Social Security 6.2%	(3) Medicare 1.45%	(4) Total Tax Withheld	Insurance Deduction	(5) Net Pay
1	Kane, John	$13.25	36.00		0	$34.33	$57.10				$26.00	
2	Kane, Lori	$25.00	40.00		2	$74.86	$146.54				$35.00	
3	Kastner, Steven H.	$31.00	39.00		1	$96.49	$213.70				$35.00	
4	Katyal, Sandeep	$13.00	20.00		0	$17.73	$24.55				$26.00	
5	Kawai, Masato	$7.50	30.00		1	$13.03	$10.36				$26.00	
Totals		XXX	XXX		XXX							

http://office.microsoft.com/en-us/templates/payroll-calculator-TC006101177.aspx?CTT=5&origin=HA001084367

Handout VIII.6.C, "Payroll Register" (continued)

Directions: Compare the answers you entered on Handout VIII.6.C with the correct answers below. Circle the answers that you did not enter correctly.

Employee ID	Name	Hourly Wage	Hours	(1) Gross Pay	Federal Allowance	State Tax	Federal Income Tax	(2) Social Security 6.2%	(3) Medicare 1.45%	(4) Total Tax Withheld	Insurance Deduction	(5) Net Pay
1	Kane, John	$13.25	36.00	**$477.00**	0	$34.33	$57.10	**$29.57**	**$6.92**	**$127.92**	$26.00	**$323.08**
2	Kane, Lori	$25.00	40.00	**$1000.00**	2	$74.86	$146.54	**$62.00**	**$14.50**	**$297.90**	$35.00	**$667.10**
3	Kastner, Steven H.	$31.00	39.00	**$1209.00**	1	$96.49	$213.70	**$74.96**	**$17.53**	**$402.68**	$35.00	**$771.32**
4	Katyal, Sandeep	$13.00	20.00	**$260.00**	0	$17.73	$24.55	**$16.12**	**$3.77**	**$62.17**	$26.00	**$171.83**
5	Kawai, Masato	$7.50	30.00	**$225.00**	1	$13.03	$10.36	**$13.95**	**$3.26**	**$40.60**	$26.00	**$158.40**
Totals		XXX	XXX	**$3171.00**	XXX	$236.44	$452.25	**$196.60**	**$45.98**	**$931.27**	$148.00	**$2091.73**

Taxes: Corporate, Payroll, Sales, and Personal

Time Frame
2 days

Standards
NES: <u>Economics</u> – Prepare tax returns
NES: <u>Skills</u> – Follow directions
Apply effective listening skills
Make oral presentations
Prepare accounting reports

Guiding Question
How is a tax return prepared?

Materials
Handouts VIII.7.A-E

Objectives
Students will be able to:

- evaluate the pros and cons of various progressive and regressive taxes.
- review the obligations placed on businesses to collect and pay taxes.
- discuss the kinds of information gathered to prepare a tax return.
- prepare a simple individual tax return.

Teacher Background
Businesses spend significant time collecting and/or paying taxes, including corporate, individual, property, and sales taxes, among others. While many business people hire tax professionals to perform their tax work, others with more limited incomes and/or a desire to keep on top of their financial records act as their own accountants.

Students will evaluate personal, corporate, sales, and property taxes in Handout VIII.7.A, where they will be asked to consider pro and con arguments for each of the taxes. Using Handouts VIII.7.B-E, each class member will prepare a 1040EZ tax return, based on sample information provided.

Teaching Strategies/Supporting Activities

- Distribute Handout VIII.7.A, "Taxes: Pro and Con." Have students complete the exercise on the handout, then have them explain their answers to the following questions:
  - What did you learn about the four different taxes mentioned on the handout?
  - How many of you expressed a favorable opinion of the income tax? An unfavorable opinion? Explain.
  - How many of you expressed a favorable opinion of the corporate tax? An unfavorable opinion? Explain.
  - How many of you expressed a favorable opinion of the property tax? An unfavorable opinion? Explain.
  - How many of you expressed a favorable opinion of the sales tax? An unfavorable opinion? Explain.
  - If you had the power to do away with one of these taxes which would it be?
- Distribute Handout VIII.7.B, "1040EZ Form," Handout VIII.7.C, "1040EZ Instructions and Worksheet," and Handout VIII.7.D, "Tax Table Excerpt." Assign students the task of completing Handout VIII.7.B, "1040EZ Form," using their own names and the data about wages, tax withholding, and interest earned provided at the top of Handout VIII.7.B. Remind students that to calculate:
  1) the tax owed or refund, they will need to refer to Handout VIII.7.C, where they will find the worksheet to determine the amount entered on Line 5.
  2) the amount to be entered on Line 10, they will need to refer to the table on Handout VIII.7.D. While students are working with Handout VIII.7.D, have them complete the exercise on that page.
- After giving students sufficient time to complete the 1040EZ Income Tax form, distribute Handout VIII.7.E, "Tax Form Answer Key." Ask students to check their completed tax return on Handout VIII.7.B against the answer key. Have them circle any answers that were incorrect. Ask students to explain their answers to the following questions:
  - What did you learn about preparing an income tax return from this exercise?
  - How well did you complete this form?
  - Which part of completing the tax return did you find most difficult? What questions about completing the form do you have?

Summary/Assessment

Ask students to explain their answer to the following:

What advice would you give to someone completing a 1040EZ form for the first time?

Follow-Up

Ask students to explain their answers to the following question:

If you were a member of an IRS taxpayer advisory committee, what suggestions would you make to the IRS to change the form to make it more understandable?

Handout VIII.7.A, "Taxes: Pro and Con"

Directions: Some of the taxes businesspeople pay and or collect are listed below, along with arguments favoring and opposing that tax. Indicate your opinion about each of those taxes by placing a check in the appropriate column.

Name of Tax and Description	Favor the Tax	Oppose the Tax	Not Sure
Income Taxes: A tax in which people with higher incomes generally pay, not only a high amount of money, but a higher **percentage** of their income in taxes than people with lower incomes. In favor of an income tax: "The income tax is the only major component of our tax system based on ability to pay, so almost any attempt to shift taxes elsewhere will inevitably take more from those who can afford it least." Opposed to an income tax: "Rather than have an income tax to support government programs, we should cut spending and learn to live within our means."			
Corporate Taxes: A tax in which businesses with higher profits generally pay, not only a high amount of money, but a higher **percentage** of their earnings in taxes than people with lower earnings. In favor of a corporate tax: "The governments need to collect taxes to perform services the private sector cannot or will not carry out. It seems reasonable to ask a company's shareholders as well as its employees for their fair share. Opposed to a corporate tax: "Such a tax just depresses pay levels and business investment and scares available capital away.			
Property Taxes: These taxes are imposed mostly on real estate owners. Because everyone in the same locality pays same tax rate on their property, less affluent people tend to spend a larger percentage of their income on housing than wealthier people. In favor of a property tax: Property taxes go directly to fund programs which in turn raises property values. For example, higher property taxes often mean more is spent on schools, leading to better education for local youngsters and a more desirable community. Opposed to a property tax: Taxing property discourages people from buying property in a location. As a result property taxes will always lower property prices as it makes it less desirable to own that property.			
Sales Taxes: Such taxes are levied by state and local governments at the time and place of purchase for specific goods and services. In favor of a sales tax: It requires a minimal amount of recordkeeping and is only captured when a person spends on item. Those wishing a lower tax bill have the option of spending less. Opposed to a sales tax: A sales tax is a regressive tax, i.e., low-income individuals pay a much higher share of their incomes on this tax than wealthy individuals.			

Handout VIII.7.B, "1040EZ Form"

Directions: Using your own name and current marital status, complete the income tax form below using the following information:

Information for 1040EZ form	
Wages:	$11,357
Tax withheld:	1,248
Interest earned from savings account:.........	488

Refer to Handout VIII.7.C to find the worksheet to calculate the amount to be entered on Line 5 and Handout VIII.7.D to calculate the amount to be entered on Line 10 (assume that the taxpayer is single).

Department of the Treasury—Internal Revenue Service

Form **1040EZ** **Income Tax Return for Single and Joint Filers With No Dependents** (99) **2011** OMB No. 1545-0074

Your first name and initial	Last name		**Your social security number**
If a joint return, spouse's first name and initial	Last name		**Spouse's social security number**
Home address (number and street). If you have a P.O. box, see instructions.		Apt. no.	▲ Make sure the SSN(s) above are correct.
City, town or post office, state, and ZIP code. If you have a foreign address, also complete spaces below (see instructions).			**Presidential Election Campaign** Check here if you, or your spouse if filing jointly, want $3 to go to this fund. Checking a box below will not change your tax or refund. ☐ **You** ☐ **Spouse**
Foreign country name	Foreign province/county	Foreign postal code	

Income

Attach Form(s) W-2 here.

Enclose, but do not attach, any payment.

1	Wages, salaries, and tips. This should be shown in box 1 of your Form(s) W-2. Attach your Form(s) W-2.	1	
2	Taxable interest. If the total is over $1,500, you cannot use Form 1040EZ.	2	
3	Unemployment compensation and Alaska Permanent Fund dividends (see instructions).	3	
4	Add lines 1, 2, and 3. This is your **adjusted gross income.**	4	
5	If someone can claim you (or your spouse if a joint return) as a dependent, check the applicable box(es) below and enter the amount from the worksheet on back. ☐ **You** ☐ **Spouse** If no one can claim you (or your spouse if a joint return), enter $9,500 if **single;** $19,000 if **married filing jointly.** See back for explanation.	5	
6	Subtract line 5 from line 4. If line 5 is larger than line 4, enter -0-. This is your **taxable income.** ▶	6	

Payments, Credits, and Tax

7	Federal income tax withheld from Form(s) W-2 and 1099.	7	
8a	**Earned income credit (EIC)** (see instructions).	8a	
b	Nontaxable combat pay election. 8b		
9	Add lines 7 and 8a. These are your **total payments and credits.** ▶	9	
10	**Tax.** Use the amount on **line 6 above** to find your tax in the tax table in the instructions. Then, enter the tax from the table on this line.	10	

Refund

Have it directly deposited! See instructions and fill in 11b, 11c, and 11d or Form 8888.

11a	If line 9 is larger than line 10, subtract line 10 from line 9. This is your **refund.** If Form 8888 is attached, check here ▶ ☐	11a	
▶ b	Routing number ▶ c Type: ☐ Checking ☐ Savings		
▶ d	Account number		

Amount You Owe

12	If line 10 is larger than line 9, subtract line 9 from line 10. This is the **amount you owe.** For details on how to pay, see instructions. ▶	12	

Third Party Designee

Do you want to allow another person to discuss this return with the IRS (see instructions)? ☐ **Yes.** Complete below. ☐ **No**

Designee's name ▶ Phone no. ▶ Personal identification number (PIN) ▶

Sign Here

Joint return? See instructions.

Keep a copy for your records.

Under penalties of perjury, I declare that I have examined this return and, to the best of my knowledge and belief, it is true, correct, and accurately lists all amounts and sources of income I received during the tax year. Declaration of preparer (other than the taxpayer) is based on all information of which the preparer has any knowledge.

Your signature	Date	Your occupation	Daytime phone number
Spouse's signature. If a joint return, **both** must sign.	Date	Spouse's occupation	If the IRS sent you an Identity Protection PIN, enter it here (see inst.)

Paid Preparer Use Only

Print/Type preparer's name	Preparer's signature	Date	Check ☐ if self-employed	PTIN
Firm's name ▶		Firm's EIN ▶		
Firm's address ▶		Phone no.		

For Disclosure, Privacy Act, and Paperwork Reduction Act Notice, see instructions. Cat. No. 11329W Form **1040EZ** (2011)

Handout VIII.7.C, "1040EZ Instructions and Worksheet"

Use this form if

- Your filing status is single or married filing jointly. If you are not sure about your filing status, see instructions.
- You (and your spouse if married filing jointly) were under age 65 and not blind at the end of 2011. If you were born on January 1, 1947, you are considered to be age 65 at the end of 2011.
- You do not claim any dependents. For information on dependents, see Pub. 501.
- Your taxable income (line 6) is less than $100,000.
- You do not claim any adjustments to income. For information on adjustments to income, use TeleTax topics 451–453 and 455–458 (see instructions).
- The only tax credit you can claim is the earned income credit (EIC). The credit may give you a refund even if you do not owe any tax. You do not need a qualifying child to claim the EIC. For information on credits, use TeleTax topics 601, 602, 607, 608, 610, 611, and 612 (see instructions).
- You had only wages, salaries, tips, taxable scholarship or fellowship grants, unemployment compensation, or Alaska Permanent Fund dividends, and your taxable interest was not over $1,500. But if you earned tips, including allocated tips, that are not included in box 5 and box 7 of your Form W-2, you may not be able to use Form 1040EZ (see instructions). If you are planning to use Form 1040EZ for a child who received Alaska Permanent Fund dividends, see instructions.

Filling in your return

If you received a scholarship or fellowship grant or tax-exempt interest income, such as on municipal bonds, see the instructions before filling in the form. Also, see the instructions if you received a Form 1099-INT showing federal income tax withheld or if federal income tax was withheld from your unemployment compensation or Alaska Permanent Fund dividends.

For tips on how to avoid common mistakes, see instructions.

Remember, you must report all wages, salaries, and tips even if you do not get a Form W-2 from your employer. You must also report all your taxable interest, including interest from banks, savings and loans, credit unions, etc., even if you do not get a Form 1099-INT.

Worksheet for Line 5 — Dependents Who Checked One or Both Boxes

Use this worksheet to figure the amount to enter on line 5 if someone can claim you (or your spouse if married filing jointly) as a dependent, even if that person chooses not to do so. To find out if someone can claim you as a dependent, see Pub. 501.

A. Amount, if any, from line 1 on front . . . .
+ 300.00 Enter total ▶ **A.** ____________

B. Minimum standard deduction . . . . **B.** 950.00

C. Enter the **larger** of line A or line B here . . . . **C.** ____________

D. Maximum standard deduction. If **single**, enter $5,800; if **married filing jointly**, enter $11,600 . **D.** ____________

E. Enter the **smaller** of line C or line D here. This is your standard deduction . . . . **E.** ____________

F. Exemption amount.
- If single, enter -0-.
- If married filing jointly and —
  - —both you and your spouse can be claimed as dependents, enter -0-.
  - —only one of you can be claimed as a dependent, enter $3,700.

} **F.** ____________

G. Add lines E and F. Enter the total here and on line 5 on the front . . . . **G.** ____________

(keep a copy for your records)

If you did not check any boxes on line 5, enter on line 5 the amount shown below that applies to you.
- Single, enter $9,500. This is the total of your standard deduction ($5,800) and your exemption ($3,700).
- Married filing jointly, enter $19,000. This is the total of your standard deduction ($11,600), your exemption ($3,700), and your spouse's exemption ($3,700).

Mailing Return

Mail your return by **April 17, 2012.** Mail it to the address shown on the last page of the instructions.

Handout VIII.7.D "Tax Table Excerpt"

Directions: Use the tax table below to complete the exercise that follows.

2011 Tax Table–*Continued*

If Line 6 (taxable income) is ---- At least	But less than	And you are— Single	Married filing jointly *	Married filing sepa-rately	Head of a house-hold
		Your tax is—			
5,000					
5,000	5,050	503	503	503	503
5,050	5,100	508	508	508	508
5,100	5,150	513	513	513	513
5,150	5,200	518	518	518	518
5,200	5,250	523	523	523	523
5,250	5,300	528	528	528	528
5,300	5,350	533	533	533	533
5,350	5,400	538	538	538	538
5,400	5,450	543	543	543	543
5,450	5,500	548	548	548	548
5,500	5,550	553	553	553	553
5,550	5,600	558	558	558	558
5,600	5,650	563	563	563	563
5,650	5,700	568	568	568	568
5,700	5,750	573	573	573	573
5,750	5,800	578	578	578	578
5,800	5,850	583	583	583	583
5,850	5,900	588	588	588	588
5,900	5,950	593	593	593	593
5,950	6,000	598	598	598	598
6,000					
6,000	6,050	603	603	603	603
6,050	6,100	608	608	608	608
6,100	6,150	613	613	613	613
6,150	6,200	618	618	618	618
6,200	6,250	623	623	623	623
6,250	6,300	628	628	628	628
6,300	6,350	633	633	633	633
6,350	6,400	638	638	638	638
6,400	6,450	643	643	643	643
6,450	6,500	648	648	648	648
6,500	6,550	653	653	653	653
6,550	6,600	658	658	658	658
6,600	6,650	663	663	663	663
6,650	6,700	668	668	668	668
6,700	6,750	673	673	673	673
6,750	6,800	678	678	678	678
6,800	6,850	683	683	683	683
6,850	6,900	688	688	688	688
6,900	6,950	693	693	693	693
6,950	7,000	698	698	698	698
7,000					
7,000	7,050	703	703	703	703
7,050	7,100	708	708	708	708
7,100	7,150	713	713	713	713
7,150	7,200	718	718	718	718
7,200	7,250	723	723	723	723
7,250	7,300	728	728	728	728
7,300	7,350	733	733	733	733
7,350	7,400	738	738	738	738
7,400	7,450	743	743	743	743
7,450	7,500	748	748	748	748
7,500	7,550	753	753	753	753
7,550	7,600	758	758	758	758
7,600	7,650	763	763	763	763
7,650	7,700	768	768	768	768
7,700	7,750	773	773	773	773
7,750	7,800	778	778	778	778
7,800	7,850	783	783	783	783
7,850	7,900	788	788	788	788
7,900	7,950	793	793	793	793
7,950	8,000	798	798	798	798
8,000					
8,000	8,050	803	803	803	803
8,050	8,100	808	808	808	808
8,100	8,150	813	813	813	813
8,150	8,200	818	818	818	818
8,200	8,250	823	823	823	823
8,250	8,300	828	828	828	828
8,300	8,350	833	833	833	833
8,350	8,400	838	838	838	838
8,400	8,450	843	843	843	843
8,450	8,500	848	848	848	848
8,500	8,550	854	853	854	853
8,550	8,600	861	858	861	858
8,600	8,650	869	863	869	863
8,650	8,700	876	868	876	868
8,700	8,750	884	873	884	873
8,750	8,800	891	878	891	878
8,800	8,850	899	883	899	883
8,850	8,900	906	888	906	888
8,900	8,950	914	893	914	893
8,950	9,000	921	898	921	898
9,000					
9,000	9,050	929	903	929	903
9,050	9,100	936	908	936	908
9,100	9,150	944	913	944	913
9,150	9,200	951	918	951	918
9,200	9,250	959	923	959	923
9,250	9,300	966	928	966	928
9,300	9,350	974	933	974	933
9,350	9,400	981	938	981	938
9,400	9,450	989	943	989	943
9,450	9,500	996	948	996	948
9,500	9,550	1,004	953	1,004	953
9,550	9,600	1,011	958	1,011	958
9,600	9,650	1,019	963	1,019	963
9,650	9,700	1,026	968	1,026	968
9,700	9,750	1,034	973	1,034	973
9,750	9,800	1,041	978	1,041	978
9,800	9,850	1,049	983	1,049	983
9,850	9,900	1,056	988	1,056	988
9,900	9,950	1,064	993	1,064	993
9,950	10,000	1,071	998	1,071	998
10,000					
10,000	10,050	1,079	1,003	1,079	1,003
10,050	10,100	1,086	1,008	1,086	1,008
10,100	10,150	1,094	1,013	1,094	1,013
10,150	10,200	1,101	1,018	1,101	1,018
10,200	10,250	1,109	1,023	1,109	1,023
10,250	10,300	1,116	1,028	1,116	1,028
10,300	10,350	1,124	1,033	1,124	1,033
10,350	10,400	1,131	1,038	1,131	1,038
10,400	10,450	1,139	1,043	1,139	1,043
10,450	10,500	1,146	1,048	1,146	1,048
10,500	10,550	1,154	1,053	1,154	1,053
10,550	10,600	1,161	1,058	1,161	1,058
10,600	10,650	1,169	1,063	1,169	1,063
10,650	10,700	1,176	1,068	1,176	1,068
10,700	10,750	1,184	1,073	1,184	1,073
10,750	10,800	1,191	1,078	1,191	1,078
10,800	10,850	1,199	1,083	1,199	1,083
10,850	10,900	1,206	1,088	1,206	1,088
10,900	10,950	1,214	1,093	1,214	1,093
10,950	11,000	1,221	1,098	1,221	1,098
11,000					
11,000	11,050	1,229	1,103	1,229	1,103
11,050	11,100	1,236	1,108	1,236	1,108
11,100	11,150	1,244	1,113	1,244	1,113
11,150	11,200	1,251	1,118	1,251	1,118
11,200	11,250	1,259	1,123	1,259	1,123
11,250	11,300	1,266	1,128	1,266	1,128
11,300	11,350	1,274	1,133	1,274	1,133
11,350	11,400	1,281	1,138	1,281	1,138
11,400	11,450	1,289	1,143	1,289	1,143
11,450	11,500	1,296	1,148	1,296	1,148
11,500	11,550	1,304	1,153	1,304	1,153
11,550	11,600	1,311	1,158	1,311	1,158
11,600	11,650	1,319	1,163	1,319	1,163
11,650	11,700	1,326	1,168	1,326	1,168
11,700	11,750	1,334	1,173	1,334	1,173
11,750	11,800	1,341	1,178	1,341	1,178
11,800	11,850	1,349	1,183	1,349	1,183
11,850	11,900	1,356	1,188	1,356	1,188
11,900	11,950	1,364	1,193	1,364	1,193
11,950	12,000	1,371	1,198	1,371	1,198
12,000					
12,000	12,050	1,379	1,203	1,379	1,203
12,050	12,100	1,386	1,208	1,386	1,208
12,100	12,150	1,394	1,213	1,394	1,213
12,150	12,200	1,401	1,218	1,401	1,219
12,200	12,250	1,409	1,223	1,409	1,226
12,250	12,300	1,416	1,228	1,416	1,234
12,300	12,350	1,424	1,233	1,424	1,241
12,350	12,400	1,431	1,238	1,431	1,249
12,400	12,450	1,439	1,243	1,439	1,256
12,450	12,500	1,446	1,248	1,446	1,264
12,500	12,550	1,454	1,253	1,454	1,271
12,550	12,600	1,461	1,258	1,461	1,279
12,600	12,650	1,469	1,263	1,469	1,286
12,650	12,700	1,476	1,268	1,476	1,294
12,700	12,750	1,484	1,273	1,484	1,301
12,750	12,800	1,491	1,278	1,491	1,309
12,800	12,850	1,499	1,283	1,499	1,316
12,850	12,900	1,506	1,288	1,506	1,324
12,900	12,950	1,514	1,293	1,514	1,331
12,950	13,000	1,521	1,298	1,521	1,339
13,000					
13,000	13,050	1,529	1,303	1,529	1,346
13,050	13,100	1,536	1,308	1,536	1,354
13,100	13,150	1,544	1,313	1,544	1,361
13,150	13,200	1,551	1,318	1,551	1,369
13,200	13,250	1,559	1,323	1,559	1,376
13,250	13,300	1,566	1,328	1,566	1,384
13,300	13,350	1,574	1,333	1,574	1,391
13,350	13,400	1,581	1,338	1,581	1,399
13,400	13,450	1,589	1,343	1,589	1,406
13,450	13,500	1,596	1,348	1,596	1,414
13,500	13,550	1,604	1,353	1,604	1,421
13,550	13,600	1,611	1,358	1,611	1,429
13,600	13,650	1,619	1,363	1,619	1,436
13,650	13,700	1,626	1,368	1,626	1,444
13,700	13,750	1,634	1,373	1,634	1,451
13,750	13,800	1,641	1,378	1,641	1,459
13,800	13,850	1,649	1,383	1,649	1,466
13,850	13,900	1,656	1,388	1,656	1,474
13,900	13,950	1,664	1,393	1,664	1,481
13,950	14,000	1,671	1,398	1,671	1,489

Handout VIII.7.D "Tax Table Excerpt" (continued)

Exercise: Using the tax table on this handout, determine what the tax would be for the following three employees:

1. Employee X has a taxable income of $9,640, and is married filing jointly. His/her tax is _______.

2. Employee Y has a taxable income of $11,800, and is single. His/her tax is _______.

3. Employee Z has a taxable income of $13,920, and is head of a household. His/her tax is _______.

Handout VIII.7.E, "Tax Form Answer Key"

Directions: Check your return against the answers that appear below, circle any lines on the tax form (Handout VIII.7.B) or worksheet (Handout VIII.7.C), where your answers differ from the ones below.

Tax Form (Handout VIII.7.B)

Tax Form Line	Item	Amount
Line 1	Wages	$11357
Line 2	Taxable Interest	$488
Line 4	Adjusted Gross Income	$11845
Line 5	Deduction (You)	$5800 (calculated on worksheet Handout VIIIC)
Line 6	Taxable Income	$6045
Line 7	Tax Withheld	$1248
Line 10		$1248
Line 11	Tax (from tax table on Handout VIII.7.D)	$603
Line 12a	Refund	$645

Worksheet (Handout VIII.7.C)

Line A	$11657
Line C	$11657
Line D	$5800
Line E	$5800
Line G	$5800
Line F	0

http://www.econedlink.org/lessons/index.php?lid=947&type=educator
http://www.econedlink.org/lessons/docs_lessons/947_1040%20EZ%20Tax%20Form%20Teacher%20Answer%20Key.pdf