



GEORGIA

PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

BUSINESS & COMPUTER SCIENCE

PATHWAY: Financial Management - Accounting

COURSE: Principles of Accounting II

UNIT 2: Assets



INTRODUCTION

Annotation: In this unit students will look at a variety of ways to account for both current and long-term assets. Students should be familiar with the definition of assets and which accounts are asset accounts. They will learn the accounting procedures used to value assets under Generally Accepted Accounting Principles.

Grade(s):

| | |
|-------------------------------------|------------------|
| <input type="checkbox"/> | 9 th |
| <input checked="" type="checkbox"/> | 10 th |
| <input checked="" type="checkbox"/> | 11 th |
| <input checked="" type="checkbox"/> | 12 th |

Time: 25 hours

Author: Dr. Marilyn K. Skinner

Additional Author(s):

Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.



FOCUS STANDARDS

GPS Focus Standards:

BCS-PAII-2. Students will use Generally Accepted Accounting Principles (GAAP) to determine the value of assets.

- Differentiate current and long-term assets and analyze their effect on financial statements.
- Identify and apply cash control techniques.
- Establish and maintain accounts related to accounts receivable interest.
- Apply appropriate accounting techniques for uncollectible accounts.
- Explain the purpose of notes receivable; establishes, calculates, and maintains records for receivables and related interest.
- Compare and evaluate inventory concepts and costing procedures and apply these concepts and procedures to merchandising and manufacturing businesses.
- Apply appropriate accounting concepts and techniques for acquisition, depreciation, depletion, and disposal of assets.
- Explain, compare, and analyze various depreciation methods and their effect on the value of assets.
- Use manual and computerized accounting systems for assets.

GPS Academic Standards:

ELA11RC3. The student acquires new vocabulary in each content area and uses it correctly.

ELA11C1. The student demonstrates understanding and control of the rules of the English language, realizing that usage involves the appropriate application of conventions and grammar in both written and spoken formats.

ELA11SLV1. The student participates in student-to-teacher, student-to-student, and group verbal interactions.

MM3P1. Students will solve problems (using appropriate technology).

MM3P4. Students will make connections among mathematical ideas and to other disciplines.

National / Local Standards / Industry / ISTE:

Accounting II: Apply generally accepted accounting principles to determine the value of assets, liabilities, and owner's equity.



UNDERSTANDINGS & GOALS

Enduring Understandings:

- The most critical purpose of the accounting system is to help protect assets.
- Correctly valuing assets in the financial statements is critical to the reliability of the information that financial statements provide to decision makers.

Essential Questions:

- How are cash and other liquid current assets valued under GAAP?
- What is the process for accounting for Accounts Receivable?
- How do we account for Notes receivable?
- How are inventories valued?
- How are plant assets valued and depreciated?

Knowledge from this Unit:

Students will know:

- Current assets are those that are used up within a year.
- Bad debt for accounting purposes is different from bad debt for tax purposes.
- The method of valuing inventory affects the bottom line.
- Negotiable instruments transfer ownership from one person to another.
- Depreciation is a non-cash expense.

Skills from this Unit:

Students will know how to:

- Record petty cash, change fund, and marketable securities
- Value accounts receivable, record and write-off bad debt, and reinstate an uncollectible account
- Record and discount notes receivable
- Value inventories through LIFO, FIFO, and Weighted Average methods
- Record, depreciate, and dispose of fixed assets



ASSESSMENT(S)

Assessment Method Type:

- ☐ Pre-test
- ☒ Objective assessment - multiple-choice, true- false, etc.
 - ☐ Quizzes/Tests
 - ☐ Unit test
- ☒ Group project
- ☒ Individual project
- ☒ Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
 - ☒ Self-check rubrics
 - ☐ Self-check during writing/planning process
 - ☐ Journal reflections on concepts, personal experiences and impact on one's life
 - ☐ Reflect on evaluations of work from teachers, business partners, and competition judges
 - ☐ Academic prompts
 - ☐ Practice quizzes/tests
- ☒ Subjective assessment/Informal observations
 - ☐ Essay tests
 - ☐ Observe students working with partners
 - ☒ Observe students role playing
- ☐ Peer-assessment
 - ☐ Peer editing & commentary of products/projects/presentations using rubrics
 - ☐ Peer editing and/or critiquing
- ☐ Dialogue and Discussion
 - ☐ Student/teacher conferences
 - ☐ Partner and small group discussions
 - ☐ Whole group discussions
 - ☐ Interaction with/feedback from community members/speakers and business partners
- ☒ Constructed Responses
 - ☐ Chart good reading/writing/listening/speaking habits
 - ☒ Application of skills to real-life situations/scenarios
- ☐ Post-test

Assessment(s) Title:

Accounting for Current and Long-term assets.

Assessment(s) Description/Directions:

Use a mini practice set such as the one that appears in Glencoe's Advanced Accounting that cover adjusting entries required for current and long-term assets.

Attachments for Assessment(s):



LEARNING EXPERIENCES

Sequence of Instruction

BCS-PAII-2

Lesson 1 – How are cash and other liquid assets recorded under GAAP?

- **Define Vocabulary.**
 - **Change fund** – an amount of money consisting of varying denominations of bills and coins, that is used to make change for transactions
 - **Marketable securities** – short-term, liquid investments
 - **Petty cash fund** – Cash on Hand used to pay for incidentals.
- **Introduce accounting for cash-** Discuss with students the need for internal controls to protect a company's asset cash. Ask students to discuss what might happen with a company's cash if no internal controls were in place. Introduce students to the change fund. Ask how many have worked with cash registers and what the cash fund was for their job. Ask what happened if they came up short or over. Discuss the Change Fund account and the Cash Short and Over account. Discuss the reasons for the Petty Cash Fund. Using the text as a guide show students how to establish and replenish the Petty Cash Fund. Explain that companies often have excess cash that they want to put to work. They do this in the form of marketable securities.
- **Supplemental Activities.**
 - Have students complete the Petty Cash Exercise. They will need to complete the petty cash record (Excel file) and the general journal (Word File).
 - Have students review the instructions for managing petty cash from the University of Pennsylvania website. Have them match the instructions to some of the tenets of good internal controls of cash (limiting the number of persons handling cash, separating accounting tasks, etc.)
- **Extension activity.**
 - Have students participate in Petty Cash Skit Activity. A very interactive and social activity that has a real life scenario.
- **Assessment.**
 - Teachers may create a test or use one provided by the textbook publisher.

Attachments for Learning Experiences:

<http://www.finance.upenn.edu/treasurer/cashier/pettycash.shtml>
Petty Cash Exercise
Petty Cash Record (Excel)
General Journal (Word)
Petty Cash Skit Activity

Lesson 2 –What is the process for accounting for accounts receivable?

- **Define Vocabulary.**

- **Aging of account receivable method** – The uncollectible accounts expense is based on the date each customer account is due.
 - **Allowance method** – Matches the estimated uncollectible accounts expense with sales made during the same period.
 - **Book value of Accounts Receivable** – The amount the business can reasonably expect to collect from the accounts receivable.
 - **Direct write-off method** – When the business determines that the amount owed will not be paid, the uncollectible account is removed from the accounting records
 - **Matching principle** – states that revenue should be matched with the expenses incurred in generating revenue
 - **Percentage of Net Sales Method** – The business assumes that a percentage of net sales will be uncollectible.
 - **Uncollectible accounts** – Accounts receivable that cannot be collected
- **Introduce accounting for accounts receivable:** Discuss what they already know about accounts receivable. Ask them if they think everyone always pays their accounts. Using the text take them through the information on accounting for bad debt. Discuss the matching principle and relate it to the methods for the allowance for doubtful accounts. Discuss the term contra account. Discuss how to write off accounts under the direct write-off method and the allowance method. Explain the two methods for estimating the allowance – percentage of net sales and aging accounts receivable.
 - **Supplemental Activities.**
 - Have students complete the Bad Debt and the IRS project. Discuss their findings as a class.

Attachments for Learning Experiences:

Aging Accounts Receivable PowerPoint
Bad Debt and the IRS project

Lesson 3 – How do we account for Notes Receivable?

- **Define Vocabulary.**
 - **Accrued Interest** – Amount of interest due, but not paid, at the end of an accounting period.
 - **Bank Discount** – The interest deducted by the bank when purchasing a note receivable.
 - **Contingent Liability** – The business is liable for the note if the maker does not pay.
 - **Discount Period** – The number of days in the term of the note minus the number of days it was held by the business. (Equals the number of days the bank will hold the note.)
 - **Discounted Notes Receivable** – A note sold to a bank for less than face value.
 - **Dishonored Note Receivable** – Note not paid by the maker.
 - **Face Value** – the amount written on the “face” of the note; the principal and face value are usually the same.
 - **Issue Date** – The date the note is signed
 - **Maker** – The person or company who promises to repay the principal and interest and signs the note.
 - **Maturity Date** – the date the payment is due; also called the due date.
 - **Negotiable Instrument** – A financial document that transfers ownership from one person to another.
 - **Payee** – The person or company to whom the note is payable.
 - **Principal** – The amount of money borrowed.
 - **Promissory Note** – A written promise to pay a certain amount of money on demand or at a specified time.

- **Term** – The amount of time between the issue date and the maturity date.
- **Introduce Notes Receivable:** Explain to students the difference between accounts receivable and notes receivable. Note that when someone gets behind on their account, companies will often take a note and charge them interest. Use the graphic organizer to explain the parts of a note. Teach students how to calculate the maturity date of a note either mathematically or using a time calendar. Let the students practice calculating maturity dates. Demonstrate how to calculate simple interest and determine the maturity value of the note. Using the text, demonstrate how to record the exchange of an account receivable for a note receivable. A Recording Notes Receivable PowerPoint is provided. Describe how dishonored notes are accounted for. Explain that companies will often discount notes with a bank to get needed cash. A PowerPoint is provided to help explain the steps in discounting notes receivable.
- **Supplemental Activities.**
 - Have students create their own time calendar (a blank template is provided). This activity will help students better understand the difference between notes stated as months and notes stated as days.
- **Extension Activities:**
 - When you have completed the Notes Payable chapter, the Notes Receivable and Payable Quiz provide problems that ask for transactions for both companies involved.

Attachments for Learning Experiences:

Time Calendar Complete
 Time Calendar Blank
 Notes Receivable Graphic Organizer
 Notes Receivable Quiz
 Recording Notes Receivable PowerPoint
 Notes Receivable PowerPoint
 Notes Receivable and Payable Quiz

Lesson 4 – How are inventories valued?

- **Define Vocabulary**
 - **Consistency Principle** – A business applies the same accounting methods from one period to another.
 - **First-in, first-out (FIFO) method** – based on the assumption that the first items bought were the first items sold.
 - **Gross profit method** – Uses the percentage of Gross Profit to estimate the cost of inventory.
 - **Last-in, first-out (LIFO) method** – based on the assumption that the last items purchased were the first items sold.
 - **Lower- of-Cost or Market Rule** – When reporting the cost of ending inventory on the financial statements, the accountant uses the cost or market value, whichever is lower.
 - **Market Value** – the current price that is charged for similar items in the market.
 - **Markup** – A dollar amount or percentage added to the cost of an item to determine selling price.
 - **Merchandise Inventory Turnover** – a measure of a business' performance that indicates the number of times the inventory has been sold during the year.
 - **Retail Method** – A four step process used by retail stores to estimate the inventory cost.
 - **Specific Identification Method** – the actual cost of each item in the ending inventory is assigned to the item.

- **Weighted Average Cost Method** –assigns the average cost to each unit in inventory.
- Review what students already know about inventory, i.e. the difference between perpetual and periodic inventory. Discuss the different methods of assigning cost to ending inventory: specific identification, FIFO, LIFO, and weighted average. Manipulatives can be very helpful in giving students visual examples of these methods (see Notes and Reflections). A PowerPoint is also available to help explain the methods. Explain the lower-of-cost-or-market rule for reporting inventory. Explain that companies must often estimate the cost of their inventory using either the retail method or the gross profit method. Finally, discuss the meaning of the merchandise turnover rate.
- **Supplemental activities.**
 - Use Stock Market game Teams or divide students into groups and have them select five to seven companies to complete the Inventory Project.
The Geddes Company has an excellent exercise available on its website that deals with keeping inventory for a school store (<http://www.raymondgeddes.com/lesson-plans/teaching-strategies.html>)
- **Extension activities.**
 - Wal-Mart is recognized world-wide for its inventory system. Have students research and write a paper on Wal-Mart's inventory methods and how it relates to their supply chain and how they use RFID technology. Make sure students use MLA style. The following links are good starting points for this project. If the technology is available (a wiki or Google Docs), this would be an excellent opportunity for a collaborative paper (either partners or teams).
<http://www.asaresearch.com/ecommerce/supplychain.htm>
http://news.cnet.com/RFID-a-retail-revolution/2030-1069_3-5254246.html

Attachments for Learning Experiences:

Inventory Project
Inventory Quiz

Lesson 5 – How are plant assets valued?

- **Define Vocabulary.**
 - **Property, plant and equipment** – long-lived assets that are used in the production or sale of other assets or services over several accounting periods.
 - **Appraisal Value** – property's estimated worth
 - **Depreciation** – a systematic procedure for allocating the cost of a plant asset over the asset's useful life
 - **Salvage Value** – Estimated value of an asset at time of disposal
 - **Depreciable cost** – Original cost of the asset less any salvage value.
 - **Straight-line method** – Depreciable cost divided by the years of useful life.
 - **Declining balance method** – an accelerated method of depreciation that offers more depreciation expense in earlier years.
 - **Book value** – Asset's cost minus its accumulated depreciation
 - **Accumulated Depreciation** – The total amount of depreciation that has been recorded up to a specific point in time.
 - **Sum-of-the-years'-digits method** – an accelerated method of depreciation that uses a fraction based on the number of years in the asset's estimated useful life to determine the depreciation expense.
 - **Units-of Production Method** – Calculates depreciation based on use rather than time.

- **Introduce Depreciable Assets:** Using the text, help students identify assets that would be classified as Property, Plant, and Equipment. Discuss with students how the cost of the assets is determined. Explain that the Matching Principle requires us to match the expenses to the revenues they helped to make. Since Property, Plant and Equipment help make revenues over a long period of time, depreciation helps spread the expense of these items over a long period of time. Review straight-line depreciation with the students. Explain the need for accelerated methods of depreciation. Demonstrate the declining balance and sum-of-the-year's-digits methods of accelerated depreciation. Demonstrate how to calculate partial year depreciation. Explain how to record depreciation expense. Discuss how to record the disposal of plant assets and the related gains or losses.
- **Supplemental Activities.**
 - The Depreciation Math in CTE Activity helps to support the math needed to calculate depreciation.
 - The Depreciation Spreadsheet activity is a team activity that has students use Excel to calculate depreciation for various assets by both the straight-line and the declining balance method.
- **Extension Activities.**
 - An excellent project can be found at the following website:
<http://www.uwsp.edu/education/celtProject/Teachers/instructional%20planning/lessonplans/secondary%20lesson%20plans/math/Linda%20Keats/AccountingForPlant.htm>
 The project is multifaceted, offers great differentiation, and could be done by individuals or teams.

Attachments for Learning Experiences:

Depreciation Math
 Depreciation Spreadsheet Project
 Depreciation PowerPoint
 Methods of Depreciation PowerPoint

Notes & Reflections:

Notes on teaching inventory methods:

Purchase plastic cups in three or four different colors. Label each color cup with a different dollar amount (keep denominations small \$1.00, \$1.25, \$1.50, etc.) Use the cups to demonstrate FIFO, LIFO, Weighted Average, and Specific Identification.



CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Attachments for Culminating Performance Task:



UNIT RESOURCES

Web Resources:

<http://www.raymondgeddes.com/lesson-plans/teaching-strategies.html>

<http://www.asaresearch.com/ecommerce/supplychain.htm>

http://news.cnet.com/Rfid-a-retail-revolution/2030-1069_3-5254246.html

<http://www.uwsp.edu/education/celtProject/Teachers/instructional%20planning/lessonplans/secondary%20lesson%20plans/math/Linda%20Keats/AccountingForPlant.htm>

Attachment(s):

Materials & Equipment:

What 21st Century Technology was used in this unit:

| | | | | | |
|-------------------------------------|-------------------------|-------------------------------------|--------------------|-------------------------------------|---------------------------------|
| <input checked="" type="checkbox"/> | Slide Show Software | <input type="checkbox"/> | Graphing Software | <input type="checkbox"/> | Audio File(s) |
| <input type="checkbox"/> | Interactive Whiteboard | <input type="checkbox"/> | Calculator | <input checked="" type="checkbox"/> | Graphic Organizer |
| <input type="checkbox"/> | Student Response System | <input type="checkbox"/> | Desktop Publishing | <input type="checkbox"/> | Image File(s) |
| <input type="checkbox"/> | Web Design Software | <input type="checkbox"/> | Blog | <input type="checkbox"/> | Video |
| <input type="checkbox"/> | Animation Software | <input checked="" type="checkbox"/> | Wiki | <input type="checkbox"/> | Electronic Game or Puzzle Maker |
| <input type="checkbox"/> | Email | <input checked="" type="checkbox"/> | Website | | |