

Area/Skill - Mathematics	Cognitive Skill Level - Application	Correlation to Framework - 05.01/05.06/05.16	Lesson Number - 29
<p>Activity Title - Find That Bargain!</p> <p>Goal/Objective</p> <p>To teach the percentage method, reading and construction of graphs, and an awareness of consumer concerns.</p> <p>Lesson Outline</p> <p>Introduction</p> <p>The calculation of percentages can become troublesome for students when movement of the decimal point is involved. This discouragement often results in uncertainty in comparison shopping and determining sale values.</p> <p>Activity</p> <p>Introduce the fraction method of finding percentage using a percentage box for part, whole, and percent. Teach students how to place the numbers in the correct boxes, how to use clue words, and when to cross-multiply or divide. Provide students with a sample percentage box.</p> <p>Debriefing/Evaluation Activity</p> <p>Give each student two index cards. Have them write a percentage problem on each card. Shuffle all of the cards together and have each student select two cards and solve the problems using the percentage box method.</p>			<p>Materials/Texts/Realia/Handouts</p> <ul style="list-style-type: none"> • Handout - Percentage Box • Index cards • Paper and pencils • Calculators • Newspaper advertisements • Chart paper/board and markers
<p>Real-Life Connection</p> <p>In real-life, individuals often compare prices of an item that they wish to buy. Sometimes, newspaper ads provide percentages off of the original price rather than stating the actual reduced price. Have students find different newspaper ads that show the same product. As a class, discuss which of the ads offers the “bargain” price.;</p>			<p>Extension Activity</p> <p>Provide students with a short list of items. You may wish to include the Casio fx-260 calculator on the list. Have them go price shopping and report their findings back to the class.</p> <p>ESE/ESOL Accommodations</p> <p>Allow students to use calculators.</p> <p>Provide students with percentage boxes in which to solve the problems.</p> <p>Identify each step of the process needed to solve percentage problems.</p>

GED 2002 Teachers' Handbook of Lesson Plans

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Activity Title - Find That Bargain

Introduction

Ask: When you shop, can you always determine the best bargain? Do you always feel confident in your skills at finding the percent of markdown on an item? *Say:* Today, we are going to use a percentage box to help us figure out percent problems.

Main Activity

Distribute copies of the **Handout - Percentage Boxes**. *Say:* A percentage box is a simple way to make sure that you include all of the known facts when figuring percentage problems. To use a percentage box, you first need to read the question or equation. Notice that the bottom right hand box should always be filled in with the number 100. In percentage problems, 100 is considered the whole. In the example, you will notice that the top left hand box includes the word "is" and the bottom left hand box includes the word "of". This leaves the percent sign in the top right hand box. Let's see if we can put an equation correctly in the box.

Ask: What percent of 60 is 14? *Say:* The 14 goes into the "is" box. The 60 goes into the "of" box, and we already have the 100 in place. Now cross-multiply the 14 by 100 and divide by 60. *Ask:* Did you get 23.333333 %? *Say:* By using the percentage box method, you don't have to worry about moving the decimal. The answer comes out correct!

Have students complete different types of decimal problems with assistance.

Debriefing/Evaluation Activity

Provide each student with two index cards. *Say:* Write two different percentage problems on these cards. When you are done, I will collect them. Then each of you will draw two different cards and complete the problems using the percentage box method.

Have students teach the class how they got their answers using the percentage box method.

Follow-up Lessons/Activities

Have students bring in different newspaper ads in which the same product is advertised. Calculate the different prices using the discounts advertised. Compare the different prices for each item. Have students project the cheapest price prior to figuring the actual cost.

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Mathematics Lesson 29 Handout

Percentage Box

Part

is =	%
of	100

Whole