

Area/Skill - Math	Cognitive Skill Level - Analysis	Correlation to Math Framework - 05.07	Lesson Number - 25
<p>Activity Title - Ice Cream</p> <p>Goal/Objective</p> <p>To assist students in discovering the meaning of mean, median, mode, and range and to use each term correctly.</p> <p>Lesson Outline</p> <p>Introduction</p> <p>The ability to understand and use the measures of central tendency (mean, median, mode, and range) is often difficult for students. This lesson will help them understand how the same set of data can be interpreted in a variety of ways. Review the meanings of each of the terms and how each measure is obtained.</p> <p>Activity</p> <p>Have students use the survey form to gather the following data.</p> <ol style="list-style-type: none"> 1. Survey thirty to fifty people regarding their favorite flavor of ice cream: chocolate, vanilla, strawberry, neapolitan, other. 2. Record the data on a chart. 3. Have students determine the mean, median, mode, and range of the data. 4. Discuss the outcome—change, no change in ordering process 5. Identify what types of ice cream the shop should order in the largest quantities. <p>Debriefing/Evaluation Activity</p> <p>Have students discuss whether or not they believe that businesses complete this type of a survey process in order to determine what types of products to order and in what quantity. Discuss whether there are other methods in which businesses can track this type of data.</p>		<p>Materials/Texts/Realia/Handouts</p> <ul style="list-style-type: none"> • Handout - Survey Form • Paper, pencils • Chart paper • Magic markers • Calculators • Visuals such as empty ice cream cartons or pictures 	
<p>Real-Life Connection</p> <p>Invite a manager or owner of an ice cream shop or retail business to class to discuss successful business practices regarding the ordering of products and the quantity that is required. Have the speaker discuss what happens when too little is ordered, too much, or a product that does not sell.</p>		<p>Extension Activity</p> <p>Have the students use the information from their survey to create a graphic display. Students may wish to use a bar, circle, or pictograph to display the data.</p> <p>ESE/ESOL Accommodations</p> <ul style="list-style-type: none"> • Allow students to work in pairs or small groups. • Provide students with written definitions of the terms and the formulas to use when calculating each of the measures. • Allow additional time for students to complete the project. • Provide students with calculators to figure mean, median, mode, and range. 	

GED 2002 Teachers' Handbook of Lesson Plans - Script

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<p>Activity Title - Ice Cream</p> <p>Introduction</p> <p><i>Say:</i> The terms mean, median, mode, and range can be used to interpret the same data in several ways. Today we will practice using these terms and making decisions based on the information that we have obtained. Before we begin, let's briefly review the terms that we will use.</p> <p>Review with the class a short definition for mean, median, mode, and range.</p> <p>Main Activity</p> <p><i>Say:</i> Many businesses use statistical data for the purpose of ordering product. <i>Ask:</i> Have you ever wondered how a business knows how many of a certain product to order? Or what a businesses does if it orders too much or something or too little?</p> <p><i>Say:</i> One of the things that businesses do is to keep track of what products sell and how much of each is sold during a specific time period. Businesses also identify what products to purchase and how much based on surveys. Today, you will be using a survey form to determine what flavor of ice cream you should purchase for your store.</p> <p>Distribute the survey worksheet. <i>Say:</i> In the next thirty minutes, survey students on the campus by asking them the questions on the survey. Write down their answers.</p> <p>Make sure that students survey different individuals so that there is not an overlap of data. When they have completed a specific number of surveys, have the record their data on the board.</p> <p><i>Say:</i> Now that we have the raw data that we need, find the: mode - the flavor of ice cream that appears most often; the median - the flavor in the middle; the mean - the average, and the range - from what to what. <i>Ask:</i> Are there differences in the mode, median, mean, and range? What? Based on the data, what flavor(s) of ice cream would you purchase if you owned an ice cream shop?</p> <p>Closure/Conclusion</p> <p>Discuss with students that numbers can often be interpreted for general purposes and the benefits of using this type of data in business.</p> <p>Follow-Up Lessons/Activities</p> <p>Have students use the data to create different types of graphs. Students may wish to display the data through the drawing of a bar or pictograph or through using a circle graph.</p>			

**GED 2002 Teachers' Handbook of Lesson Plans
Math Lesson 25 Handout**

Survey Form

Ice Cream Survey

Complete the information for each of the following items.

I. Flavors of Ice Cream

Your Survey Results

Classroom Survey Results

Chocolate
Vanilla
Strawberry
Neapolitan
Other

II. Arrange the flavors in order from least to most.

III. Mode – the number that appears the most often.

IV. Mean – the number in the middle.

V. Range – the lowest number to the highest number.

VI. Median – the average where numbers are added and then that total is divided by the number of choices.