

Area/Skill - Math	Cognitive Skill Level - Application	Correlation to Math Framework - 05.01/05.03/05.16	Lesson Number - 26
<p>Activity Title - Road Trip</p> <p>Goal/Objective</p> <p>Students will compare the amount of miles traveled to a specific destination and will calculate the cost of fuel for the trip.</p> <p>Lesson Outline</p> <p>Introduction</p> <p>Discuss that often people must estimate the distance between certain points to which they are traveling so that they can calculate how much fuel will be required and the cost of the trip.</p> <p>Activity</p> <p>Provide each student with a partner. Give each group a United States road map and specific destinations. Using the current price of gasoline, have them estimate the number of miles that will be traveled and the cost of fuel for the trip. Decide as a class, how many miles per gallon of gasoline can be expected for an average automobile. Use this number of miles per gallon for each trip.</p> <p>Debriefing/Evaluation Activity</p> <p>Have students share the number of miles between their starting point and their destination and the cost of fuel to make the trip. Discuss how different types of automobiles, varying geography, etc. can impact the amount of gasoline needed for a trip.</p>		<p>Materials/Texts/Realia/Handouts</p> <ul style="list-style-type: none"> • U. S. road maps • Paper, pencils • Rulers • Calculators 	
<p>Real-Life Connection</p> <p>Fuel efficiency is often advertised as a positive trait of many vehicles. Discuss how different types of vehicles, the location of the destination, distance, etc. can impact a person's budget and decisions on such things as travel and vacations.</p>		<p>Extension Activity</p> <p>Have the students convert the distances for their trips and the number of gallons of fuel required to metric measurements.</p> <p>ESE/ESOL Accommodations</p> <ul style="list-style-type: none"> • Allow students to work in groups with others who can assist them. • Provide a conversion chart for metrics. • Provide written definitions of new vocabulary words. • Allow students to use calculators. 	

GED 2002 Teachers' Handbook of Lesson Plans - Script

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Activity Title - Road Trip

Introduction

Ask: If you were planning to take a trip in your car, how would you know how much you would spend on fuel? This lesson will show you how to determine fuel costs.

Main Activity

Say: Today, you are going to determine how much gasoline it would require to get from one destination to another. When we take a trip, we often need to know how much it will cost us in fuel.

Ask: If you know approximately how many miles you will be traveling, how could you calculate the fuel cost?
If students are uncertain about the answer, provide them with the formula.

Say: To obtain the cost of fuel for a trip, you will need to divide the number of miles traveled by the number of miles that your vehicle gets per gallon of gasoline. Each vehicle gets a different miles per gallon rate. You will then multiply that answer by the cost of gasoline per gallon.

As a group, determine what the miles per gallon figure will be used, as well as the cost of a gallon of gasoline. Use current costs of gasoline and a miles per gallon estimate that is common for a car, such as 15-20 miles per gallon.

Say: Today, you will figure the cost of fuel for a specific trip. First, find a partner with which to work. I will provide you with a road map of the United States and locations for which you will be figuring the cost of the trip. Use the cost per gallon of gas and the miles per gallon figure that we discussed to get your answer.

Hand out a road map of the United States and provide each group of students with different locations for which to figure the cost of a trip.

Debriefing/Evaluation Activity

Have students share their answers with the group.

Ask: What other factors may impact the cost of your trip? Discuss the additional costs of travel, such as oil, tires, other automobile parts, as well as the variance in miles per gallon based on the condition of the road, whether or not the driving is in town or on the open highway, etc.

Have students discuss the importance of creating a budget when embarking on a vacation or trip. List their answers on the board.