



Road Trip – Gas Mileage

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3rd Grade

Essential Question

How do I use my map to calculate how many miles I am traveling and how many gallons of gas I will use?

Standard(s)

3.A.2.2.1: Identify appropriate tools or instruments for specific tasks, and describe the information they provide (i.e., measuring [length—ruler; mass—balance scale] and making observations [hand lenses—very small objects]).

M03.B-O.1.1.2: Interpret and/or describe whole-number quotients of whole numbers

M03.A-T.1.1.1: Round two- and three-digit whole numbers to the nearest ten or hundred, respectively.

M3.A.1.1.4: Order a set of whole numbers from least to greatest or greatest to least

1.4.3.A: Write poems and stories. Include detailed descriptions of people, places, and literary elements

1.5.3.C: Organize writing in a logical order. Include a recognizable beginning, middle, and end

Objectives

Students will be able to count by 10's to find out how many miles they are traveling on their road trip.

Students will be able to calculate the gallons needed for their road trip based off of their map and the car given to them.

Materials and Equipment

- Calculator
- Car card
- Maps
- Paper for students to record their work
- Smartboard
- Early finisher worksheet

Procedures

Introduction

- **Today we are going to use our maps that we all made yesterday and take a little road trip on our maps. Have any of you been on a road trip before? When I say go, talk with your partner about a road trip you have taken or have wanted to take. Go.** (allow students time to share with their partners and get them excited about the lesson)

Anticipatory Set/Activating Learning Strategies

- **What type of things do you need to consider when you go on a road trip?** Students can give ideas about anything they think of. If not said try to prompt some information about cars and get them to talk about gas mileage.
- **Today, we are going to focus on the gas mileage and how to calculate how many gallons of gas that we need to get somewhere.**

Sequence of Lesson

- **We are going to use our maps that we made to take our road trip. We are all going to get a car and use that cars gas mileage to see how many gallons of gas we need on our trip.**
- **I am going to show you an example of how to calculate our gas mileage.**
- **Each box on our map is 10 miles. Lets practice counting by 10's, so we are ready. We are going to count to 300. 10...300**
- **On my map, we are going to count the boxes that my road goes across. Count with the students by 10's (180miles).**
- **I am going to pull out a car card from the bag. I pulled a 2015 Toyota Camry. The Camry gets 28mpg.**
- **Does anyone know how we can figure out how many gallons we need to make it 180 miles? (divide 180 by 28).**
- **We are going to use calculators to get our results. Can I have a friend who is sitting quietly with their hand raised come up and type it into the calculator? Call on a student to come up. What number do I type in first? Then what button do I hit? And what is the second number I type in? Lets see what number we get! (6.43)**
- **For my car to travel 180 miles, how many gallons do I need? (6.43 gallons).**
- **You are going to go look at your map and determine how many miles you are going on your road trip. Once you find that, raise your hand and I will let you pick a car from the bag and you can calculate your gallons needed on your trip.**

Closure/Summarizing Strategy

- **Once you have your gallons, come write your number on the board. We are going to see who used the most gallons on their trip.**
- **We are going to organize our numbers by least to greatest.**
(Organize the numbers on the board from least to greatest. Is this number bigger or smaller than this number)
- **Great Job! Tomorrow you are going to look at what effects your road trips.**

Assessment/Evaluation

- I will use the student's work and answer to make sure they understood how to calculate the gallons.

Assignments (if any)

Finding out the gallons needed for the road trip.

Special Considerations

Early Finishers

Students who finish early can complete the worksheet to write about their road trip and write about the different landforms that they pass on their trip.

Remediation

Do the problem with a smaller number to make it easier. Use numbers that will divide into a whole number

Enrichment

If gas is \$2 a gallon, how much would it cost you in gas to go on your road trip?

Special Accommodations

Larger map to map it easier for students to see the map. Larger calculator for students with motor deficits. Place students who need individual help near a student who understands the lesson.

Bibliography

<http://www.pdesas.org/>

<https://www.fueleconomy.gov/feg/findacar.shtml>

