

This project bridges the gap between basic arithmetic and "real life" by requiring you to calculate how far a gallon of gas will take you (mpg) and how your spending affects your remaining balance. This project will use a mix of geography, financial literacy, and data organization.

In Grade 6, we focused on *Ratios, Unit Rates, Fractions/Decimals, and Negative Numbers*. This project is a perfect opportunity to practice all we have learned. The project is called, "**The Ultimate Vacation Road Trip.**" You will need to manage a budget, calculate travel rates, and handle real-world proportions.

Project Progression: The 4 Phases

1. **Phase 1: The Destination & Route.** Pick a destination at least 500 miles away. Use a map to plan stops and calculate the total distance.
2. **Phase 2: The Gas & Speed Logistics.** Using the "unit rate," students calculate how much gas they need based on a car's MPG (miles per gallon) and how long the drive will take at a steady speed.
3. **Phase 3: The Vacation Budget.** You will be given a "virtual" budget (\$5000). You must subtract expenses for hotels, food, gas and activities.
4. **Phase 4: The Travel Brochure.** A creative summary of your trip by creating a travel brochure or digital slideshow.

Buckle Up! The Grade 6 Summer Road Trip Project

Dear Parents,

This summer, your child isn't just going on vacation—they're planning it! I am excited to introduce the *Ultimate Road Trip Project*, a hands-on way to practice 6th-grade math in a real-world setting.

Your child will be practicing:

- **Unit Rates:** Calculating miles per hour and miles per gallon.
- **Decimals & Money:** Managing a multi-day budget and tracking expenses.
- **Geography & Measurement:** Using map scales to determine actual distances.

How you can help: Encourage them to look up real gas prices or menu prices for their favorite restaurants along their "route." If you happen to go on a real trip this summer, let them help calculate the "miles to empty" or the tip at dinner!

Safe travels,

Cindy Jorritsma

Middle School Math Teacher, HCA

You're the Trip Leader! Where are we going?

Hey Travelers!

You've been given **\$5000** and a car with a full tank of gas. Your mission? Plan a 5-day road trip to any landmark in the country. But there's a catch: you have to prove you can afford it using math.

Requirements:

1. **The Map:** Draw your route. If your car gets *25 miles per gallon*, and gas is *\$3.50 per gallon*, how much will it cost to get to your destination?
2. **The Schedule:** If you drive at a constant rate of **60 miles per hour**, how many hours will you spend on the road?
3. **The Spending Log:** Keep a "Checkbook Register." Start with \$5000 and subtract your costs for food, hotels, gas and fun. Don't go into the negative!

Show us your adventure through a travel brochure or a digital slideshow!

I hope you have fun with this project!

Love,

Mrs. Jorritsma

Project Rubric

Category	Emerging (1-2)	Proficient (3)	Mastery (4)
Rates & Ratios	Struggle to calculate MPG or travel time.	Correctly calculates travel time and gas costs with minor errors.	Advanced use of unit rates; accounts for varying gas prices or speeds.
The Budget	Spending exceeds \$5000 or math is disorganized.	Budget is balanced; decimals are added/subtracted correctly.	Highly detailed budget including "emergency funds" and percentage breakdowns.
Data Visualization	No charts or maps included.	Includes a map and a basic list of expenses.	Features a professional infographic or pie chart showing spending categories.
Creativity	Basic list of facts.	Creative travel theme with clear effort in presentation.	Exceptional storytelling; looks like a real travel agency proposal.

Example calculations for Students

Destination: Grand Canyon (from Chicago, IL)

Distance: 1,700 miles

The Gas Math:

- Car MPG: 25 miles per gallon
- Total Gas Needed: $1,700 \text{ miles} / 25 \text{ mi/gal} = 68 \text{ gallons}$
- Total Cost: $68 (\$3.50) = \238.00

The Time Math:

- Speed: 60 mph
- Driving Time: $1,700 \text{ miles} / 60 \text{ miles per hour} = 28.3 \text{ hours}$