



# Gastimate!

## Here's how to play:

Players discuss and develop two math formulas to determine:

- Gallons of gas used by a vehicle traveling a specific distance
- Total distance that can be traveled by a car using a specific quantity of fuel
- Select five favorite cars and list the combined (city/highway) fuel economy using the EPA Fuel economy site: <https://www.fueleconomy.gov/feg/findacar.shtml>
- Select five cities you would like to visit and find the distance from your city using the distance calculator site: [https://distancecalculator.globefeed.com/US\\_Distance\\_Calculator.asp](https://distancecalculator.globefeed.com/US_Distance_Calculator.asp)

<u>Car or Truck</u>	<u>Combined Fuel Economy (MPG)</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

<u>Destinations</u>	<u>Distance from Your City</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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## Next, Play Gastimate!

### Player 1:

- Pick a destination and the car you want to drive
- Using a calculator and the appropriate formula, calculate how many gallons of gas you would use driving to this destination
- Tell Player 2 only your car and destination

### Player 2:

- Use your estimating skills and mental math, "gastimate" how many gallons of gas player one will need to reach that destination. Share your Gastimate.

### Both Players:

Record both the actual gas used and the gastimate on the score sheet and determine the difference. This is the margin of error. Switch roles. After each player has "driven" three trips, calculate the total margin of error for each player. The lowest total margin of error wins!

**Scoreboard – Round \_\_\_\_\_**

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**Trip One, Player 1: Destination \_\_\_\_\_ Vehicle \_\_\_\_\_**

Actual Gallons Used by Player 1 \_\_\_\_\_ gallons  
Player 2's Gastimate \_\_\_\_\_ gallons  
Difference (P2 margin of error) \_\_\_\_\_ gallons

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**Trip One, Player 2: Destination \_\_\_\_\_ Vehicle \_\_\_\_\_**

Actual Gallons Used by Player 2 \_\_\_\_\_ gallons  
Player 1's Gastimate \_\_\_\_\_ gallons  
Difference (P1 margin of error) \_\_\_\_\_ gallons

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**Trip Two, Player 1: Destination \_\_\_\_\_ Vehicle \_\_\_\_\_**

Actual Gallons Used by Player 1 \_\_\_\_\_ gallons  
Player 2's Gastimate \_\_\_\_\_ gallons  
Difference (P2 margin of error) \_\_\_\_\_ gallons

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**Trip Two, Player 2: Destination \_\_\_\_\_ Vehicle \_\_\_\_\_**

Actual Gallons Used by Player 2 \_\_\_\_\_ gallons  
Player 1's Gastimate \_\_\_\_\_ gallons  
Difference (P1 margin of error) \_\_\_\_\_ gallons

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**Trip Three, Player 1: Destination \_\_\_\_\_ Vehicle \_\_\_\_\_**

Actual Gallons Used by Player 1 \_\_\_\_\_ gallons  
Player 2's Gastimate \_\_\_\_\_ gallons  
Difference (P2 margin of error) \_\_\_\_\_ gallons

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**Trip Three, Player 2: Destination \_\_\_\_\_ Vehicle \_\_\_\_\_**

Actual Gallons Used by Player 2 \_\_\_\_\_ gallons  
Player 1's Gastimate \_\_\_\_\_ gallons  
Difference (P1 margin of error) \_\_\_\_\_ gallons

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**Gastimate Version 2**

Plan a trip to any number of cities determine the following:

- Total Mileage
- Total Fuel Used
- Total Cost of Travel