# Food on the Road

**Did you know food is grown all year long?**

Food is grown in many different parts of the world. Even in the cold and dry months, we can still buy fresh foods because of **imports**. Foods that are brought to other areas are called imports. In warmer places like California, some fruits and vegetables grow all year long. Foods sold in our grocery stores are shipped in from all over the world. This is the reason we are able to buy fresh foods any time of year.

Most of the foods in our grocery stores are transported on large trucks that burn **fossil fuels** as energy. Coal, oil and natural gas are all types of fossil fuels. Fossil fuels can cause pollution and produce **greenhouse gases**. This may influence **global warming**. Greenhouse gases help control the Earth's temperature. Greenhouse gases in the atmosphere can change the Earth's temperature. Global warming happens when the Earth's temperature increases. Transporting food may influence global warming. However, many people rely on imported food to provide a balanced diet year round.

Eating foods during their **growing season** is another great way to eat fresh food. Different foods grow best during certain times of the year. All fruits and vegetables grow best during their growing season. When our region does not have the best climate, we use imports from other regions. Let's find out the best route for these foods to travel to our region!
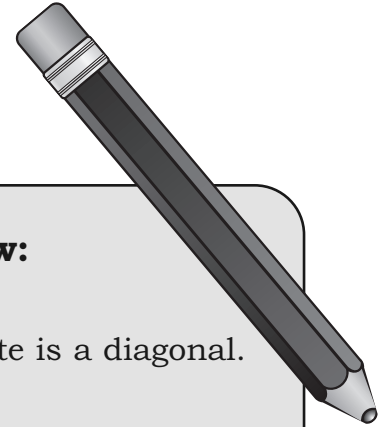
## DOODLE BUGS

In the reading, circle the name for the gases that help to control the Earth's temperature.

What is missing?

Coal, _____ and Natural gas

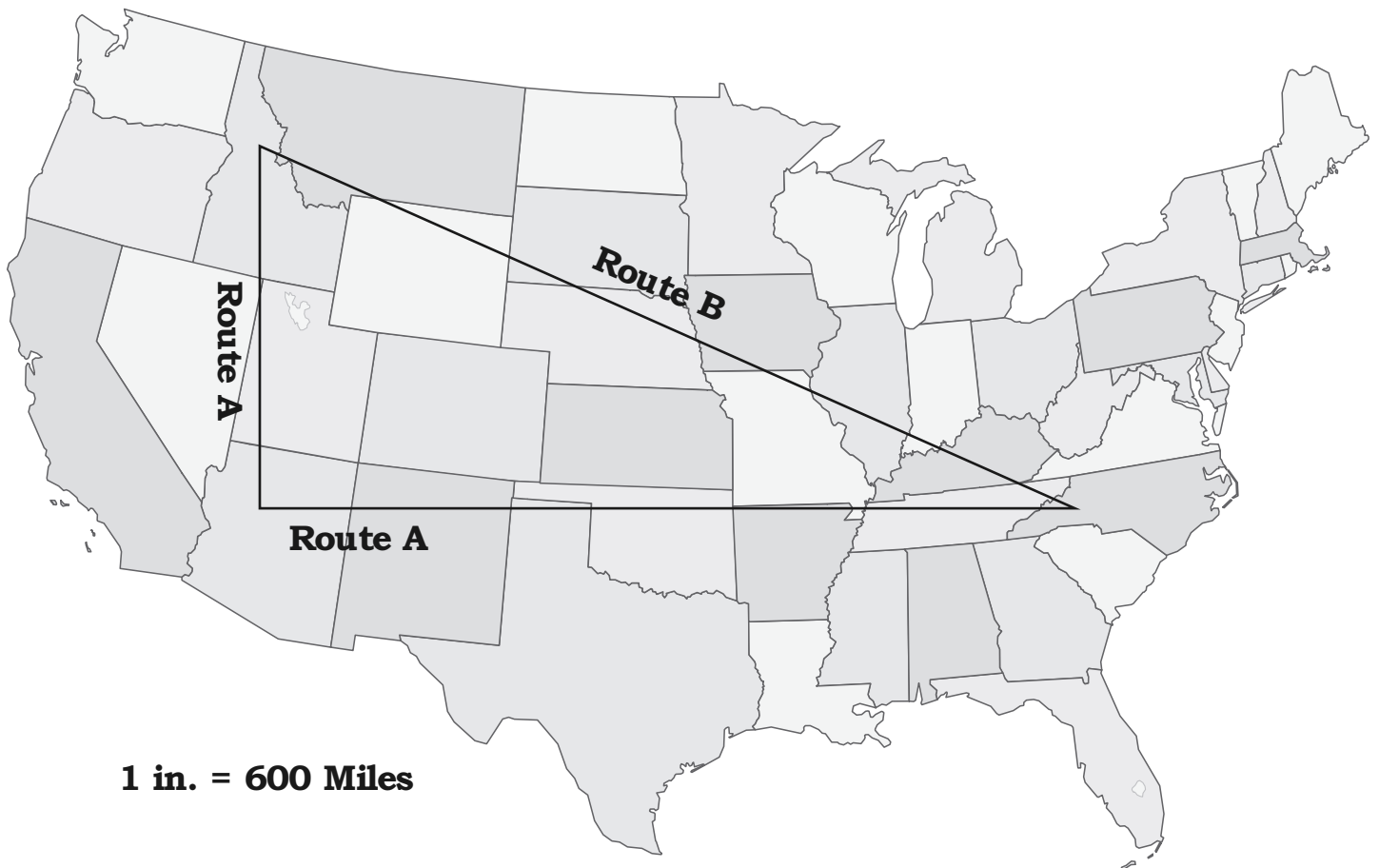# MATHEMATICS INVESTIGATIONS:
# **Traveling Taters**

**You will need:**

1 ruler
1 map
1 pencil
1 calculator

**Things to know:**

The shortest route is a diagonal.

Using the map below, predict which route you think will be the fastest to ship potatoes from Idaho to North Carolina. Measure each route to find the shortest distance. Then you will calculate the price to ship the potatoes.

**Prediction:** _____



Route A

Route B

Route A

**1 in. = 600 Miles**

MATHEMATICS INVESTIGATIONS:
# Traveling Taters (continued)

## Calculating the miles

1.  **To find out the total distance for Route A, add the perpendicular distances together. (Round measurement to the nearest half inch)**

    Route A (1) _____ inches      +      Route A (2) _____ inches

    Route A (total) _____ inches

2.  **To find that distance for Route A in miles, multiply the total inches by 600 miles.**

    Route A _____ miles

3.  **To find the distance for Route B in miles, multiply the total inches by 600 miles. (Round measurement to the nearest half inch)**

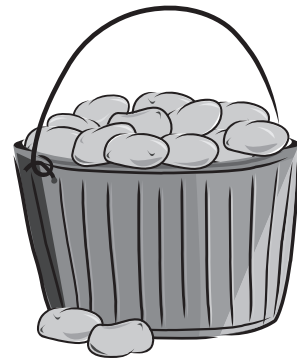    Route B _____ inches

    Route B _____ miles

4.  **Circle the shortest route below.**

              Route A                            Route B

5.  **Was your prediction correct? Why or why not?**

## MATHEMATICS INVESTIGATIONS:
# Traveling Taters (continued)

## Calculating the price

To find out how much it will cost for the potatoes to be sent to North Carolina use the Travel Chart to fill in your answers.

## Travel Chart

| Idaho Potatoes | Total Weight | Price per pound | Price for Total Weight | Distance (shortest route) | Total Price for Trip |
|---|---|---|---|---|---|
| | 5 pounds | $1.00 | $ ____ | ____ miles | $ ____ |

1. Multiply total weight by price per pound.
2. Record your answer under Price for Total Weight.
3. Multiply the price for total weight by the shortest distance.
4. Record you answer under Total Price for Trip.

## Challenge:

There are others costs linked to traveling. Toll roads are one of those costs. A toll road requires people to pay a price to drive. It is your job to find out how much it would cost to transport those potatoes to North Carolina, with toll booth costs included. Use the Toll Chart to find out how much each toll costs. Add the total to your previous trip total.

## Toll Chart

| Toll Roads | Price | Amount of Tolls | Total Price for Tolls |
|---|---|---|---|
| Road 1 | $0.50 | 2 | $ ___ |
| Road 2 | $1.00 | 1 | $ ___ |
| Road 3 | $ ___ | 3 | $3.00 |
| Road 4 | $0.75 | 1 | $ ___ |
| TOTAL: | | | $ ___ |

**Total Trip Price: Total Price for Trip + Total Price for Tolls = $ _____**

FUN WITH FOOD:
# Tasty Taters
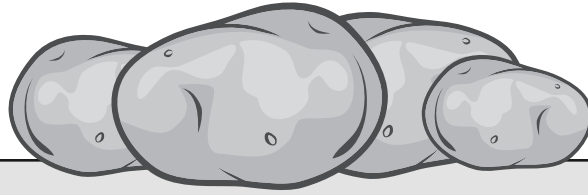
## You will need:
Toaster Oven or Oven
Baking sheet for toaster oven
1 knife
1 medium bowl
Measuring spoons

## PREP TIME: 2 hours
1 small baking potato
1½ tablespoons of olive oil
½ teaspoon seasoned salt
Help from an Adult

**Observe, taste and record how a potato transforms into a baked potato wedge.**

## Make your own potato wedges
1. Wash the potato.

2. Preheat toaster oven to 400°F.

3. Have an adult help peel the potato with a knife or peeler.

4. Cut the potato into thin wedges.

5. Mix the olive oil and seasoned salt in a medium bowl.

6. Place the potato wedges in the bowl with the mixture and mix it all together with your hands.

7. Place the slices on the baking sheet and place in toaster oven to bake for 35-40 minutes or until soft.

8. Have an adult help you take the wedges out of the oven.

9. Enjoy your wedges!

## Fun Facts
Fries or wedges that have been fried in vegetable oil can be high in fat. Bake fries or wedges in the oven for a healthier snack! Drizzle olive oil on top as a good source of monounsaturated fats.

FUN WITH FOOD:
# Tasty Taters

## Record and draw your observations

1.  Describe the potato appearance
    and texture before peeling.

    _____

    _____

    _____

    _____

2.  Describe the potato appearance
    and texture after slicing.

    _____

    _____

    _____

    _____

3.  Describe the potato appearance,
    texture and taste after baking.

    _____

    _____

    _____

    _____

4.  Do you think baked wedges taste better than French Fries? Why?

    _____

    _____

    _____

# Proficiency Questions

**Circle the best answer:**

1. **The increase in the Earth's temperature is called:**
   a. hot zone
   b. greenhouse gases
   c. global warming
   d. none of the above

2. **Fossil fuels _____.**
   a. cause pollution
   b. are friendly to the environment
   c. help food grow
   d. none of the above

3. **The two possible routes for potatoes to travel from Idaho to North Carolina form a triangle. Using the distances you found for each route, what is the perimeter of that triangle?**
   a. 240 miles
   b. 300 miles
   c. 690 miles
   d. none of the above

4. **If it costs $2.00 per mile to transport tomatoes 150 miles, how much will it cost for the total trip?**
   a. $150
   b. $200
   c. $250
   d. $300