



# Pretzel Power

## ★ Objective

The students will recognize the energy efficiency of different kinds of transportation and benefits of carpooling.

## 📄 Materials

- Bag of pretzels
- Plastic sandwich bags
- Cards with automobile names, gas mileage, and the number of passengers each car will carry
- Three signs (Home, Near Town, Far Town)

## Preparation

1. Prepare a plastic bag with ten pretzels for each student.
2. Print cards with automobile information. If you would like to print the cards on labels use Avery 5392.
3. Select a large area and place Home, Near Town, and Far Town signs on poles or walls. The distance to Near Town should be 50 steps. The distance to Far Town should be 100 steps. (Do not give these distances to students.)

## ➡ Procedure

1. Distribute automobile cards to students. Have students look over the information about their car.
2. Distribute a bag of pretzels to each student. Tell students not to eat the pretzels until they are told to.
3. Explain to the students that each pretzel represents one gallon of gasoline, and each step (heel-to-toe) the student takes represents one mile traveled.
4. Students eat a pretzel and take the appropriate number of steps before eating the next pretzel. All steps are heel-to-toe.

## ① Round One

- Use only 5 pretzels for this round. Each person will drive his/her car. Students will go to work in NEAR TOWN and return HOME. If anyone runs out of fuel (pretzels), he/she must stay at that point until round one is over. Line up at HOME and start stepping!
- **Discuss:** Which cars got you to work and home? Which didn't?
  - Did anyone have extra fuel remaining?
  - What alternatives to driving your own car are there?

## ② Round Two

- Use the remaining five pretzels, try some of the suggestions discussed above. Expect "negotiations." Suggest students carpool to work. Drivers may eat each passengers pretzels as fuel. Everyone will travel to FAR TOWN and return HOME. Line up at HOME and start stepping!
- **Discuss:** Who made it to FAR TOWN and back? How did you do this?
  - Who did not make it to FAR TOWN and back? Why not?

## Chevrolet El Camino

1984

**MPG:** 18

**Number of Passengers:** 2



## Chevrolet Corvette

1998

**MPG:** 15

**Number of Passengers:** 2



## Audi A3

2010

**MPG:** 24

**Number of Passengers:** 4



## Chevrolet Express 1500

2010

**MPG:** 14

**Number of Passengers:** 8



## Chevrolet Silverado C15 XFE

2010

**MPG:** 18

**Number of Passengers:** 4



## Bentley Azure

2010

**MPG:** 11

**Number of Passengers:** 4



## Dodge Ram

2010

**MPG:** 16

**Number of Passengers:** 4



## Ford F150 Pickup

1990

**MPG:** 16

**Number of Passengers:** 2



## Ford Ranger 4WD

2010

**MPG: 15**

**Number of Passengers: 4**



## Subaru Outback

2010

**MPG: 24**

**Number of Passengers: 6**



## Toyota Prius

2010

**MPG: 50**

**Number of Passengers: 5**



## Toyota Tundra

2010

**MPG: 16**

**Number of Passengers: 3**



## Hyundai Sonata

2010

**MPG: 25**

**Number of Passengers: 5**



## Buick Regal

2004

**MPG: 21**

**Number of Passengers: 5**



## Jaguar XK Convertible

2010

**MPG: 18**

**Number of Passengers: 2**



## Volkswagen Rabbit

1984

**MPG: 27**

**Number of Passengers: 2**



## Lexus LS 460

2010

**MPG: 19**

**Number of Passengers: 5**



## Lincoln Navigator

2010

**MPG: 16**

**Number of Passengers: 6**



## Mazda 3

2010

**MPG: 27**

**Number of Passengers: 4**



## Honda Civic CNG

2010

**MPG: 28**

**Number of Passengers: 5**



## Kia Spectra

2007

**MPG: 26**

**Number of Passengers: 5**



## Pontiac Solstice

2010

**MPG: 22**

**Number of Passengers: 2**



## Dodge Caravan

2000

**MPG: 20**

**Number of Passengers: 7**



## Saturn Vue Hybrid

2010

**MPG: 28**

**Number of Passengers: 5**



## smart fortwo coupe

2010

**MPG:** 36

**Number of Passengers:** 2



## Ferrari 612 Scaglietti

2010

**MPG:** 11

**Number of Passengers:** 2



## Mercedes-Benz ML63

2010

**MPG:** 12

**Number of Passengers:** 5



## Honda Odyssey

2010

**MPG:** 18

**Number of Passengers:** 8



## Volkswagen Jetta

2010

**MPG:** 25

**Number of Passengers:** 5



## Hyundai Sante Fe 4WD

2010

**MPG:** 22

**Number of Passengers:** 5



## Cadillac Eldorado

1985

**MPG:** 17

**Number of Passengers:** 4



## Jeep Wrangler

2010

**MPG:** 17

**Number of Passengers:** 4



## Acura TSX

2010

**MPG: 25**

**Number of Passengers: 5**



## Acura RDX

2010

**MPG: 21**

**Number of Passengers: 5**



## Ford Bronco 4WD

1986

**MPG: 15**

**Number of Passengers: 4**



## BMW 535i

2010

**MPG: 20**

**Number of Passengers: 5**



## Nissan Titan

2010

**MPG: 14**

**Number of Passengers: 3**



## Chrysler Sebring Convertible

2010

**MPG: 23**

**Number of Passengers: 4**



## Rolls Royce Phantom

2010

**MPG: 14**

**Number of Passengers: 5**



## Ford Escape Hybrid

2010

**MPG: 32**

**Number of Passengers: 5**



MPG:

Number of Passengers:



MPG:

Number of Passengers:



MPG:

Number of Passengers:



MPG:

Number of Passengers:



MPG:

Number of Passengers:



MPG:

Number of Passengers:



MPG:

Number of Passengers:



MPG:

Number of Passengers:



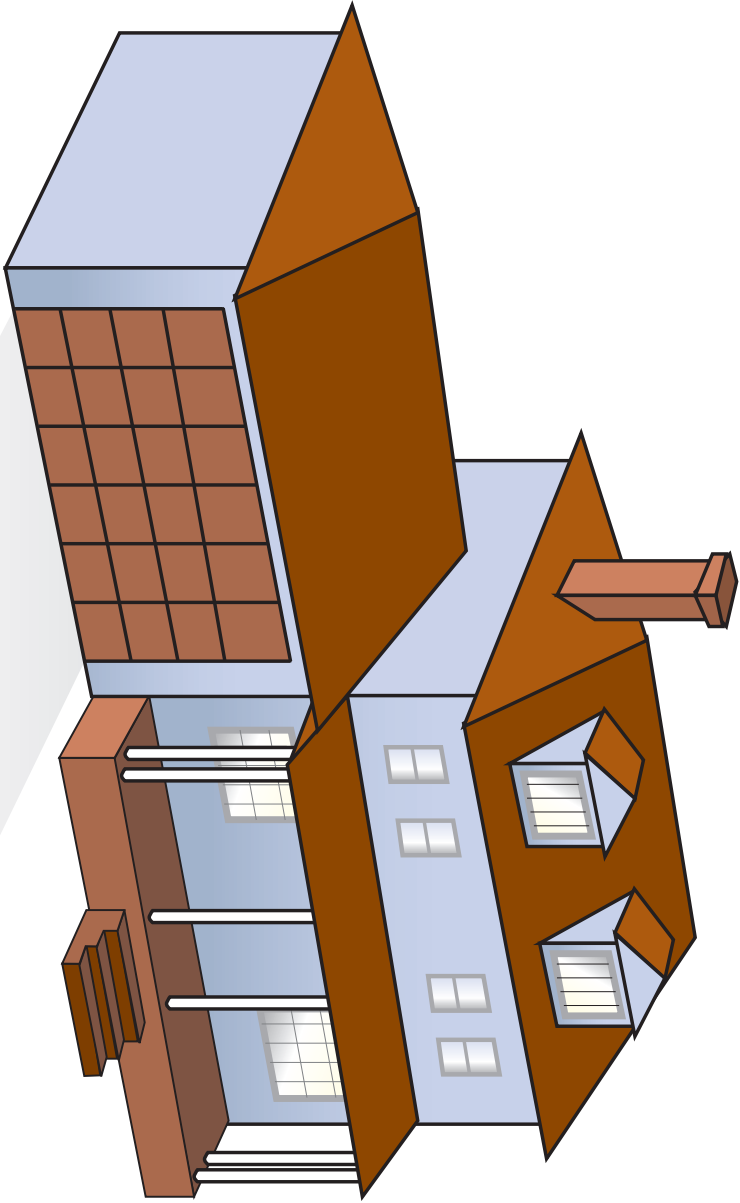
**NOT**

**FAIR**



**NOT  
MAN**

**NE  
FA  
RE**



**HOME**