



Using People Power

Safe Routes to School Lesson

Grade level: 1

Subject Area: Environment, Health
Skill Set: Math and Science

Introduction

This 30 minute lesson will introduce Safe Routes to Schools and discuss how different modes of transportation are powered. *Using People Power* will expose students to the idea that burning gas and oil to power vehicles causes pollutants to be put into the air while modes that do not use gas or oil are clean, green alternatives. Students will learn about the importance of sharing one's ride in order to reduce the environmental impact of personal commutes to and from school. They will also learn about the personal health benefits of getting "on the go."

Materials

- ✓ White board or chalk board
- ✓ Dry-erase pen or chalk
- ✓ Optional Hand Outs

Vocabulary (in order of presentation)

Safe Routes to School
Transportation
Carpool
Gas
Gas Power
Motor
Environment
People Power
Smoke and Pollution

1) Discussion: Introduce Safe Routes to Schools (SRTS)

SRTS is a program that helps more families walk, bike, take the bus or carpool to school everyday so that school communities can be safer and healthier.

2) Discussion: The Four Fantastic Reasons to bike and walk to get around.

Ask students to provide reasons for why people choose to walk or bicycle to school? Because we/they are;

- ✓ getting good exercise
- ✓ cutting down on pollution
- ✓ cutting down on traffic

- ✓ because it's "fun"

3) Definition: What is the "Environment?"

The Environment is a big word for the things around you. Expand on the idea of smoke and pollution from the discussion and discuss how smoke from vehicles and other sources can hurt humans, plants and animals in their Environment (around them).

4) Activity: What is People Power vs. Gas Power?

- Put two columns on the board labeling only the first column with "Gas Power". Brainstorm a list of ways of getting around (modes of transportation) that require gasoline to power them.
 - Expand the concept of gas-powered motors, explaining that when you burn gas to make a motor run and the vehicle move, (as in the case of the car) it leaves smoke behind in the air. Discuss the potential impact this has on the air around the school and in the neighborhood. Ask students if they have seen this exhaust coming out of the tailpipes of cars or buses.
 - Now, put up the title "Powered by People" on the next column. Brainstorm a list with students of the ways that you can get around using only your own power. Encourage the addition of scooter, skateboard, roller-skate, jumping, running, etc. Discuss the impact that these modes have on the environment.
 - Have students stand in a circle in the meeting area. Have them take turns going into the middle to act out different ways of getting around using People Power or Gas Power. The student actor can then call on classmates to guess what mode of transportation they are acting out and whether the mode is in the "People Power" or "Gas Power" category.
- 5) Closing: End the activity with a brief summary of the lesson and reminder that students have the chance to talk with their parents about how they want to get to school and use People Power whenever they can for the 4 Fantastic Reasons listed above.

Optional Activity: People Power vs. Gas Power - student chart

Materials

- ✓ White board or chalk board
- ✓ Hand Out: People vs. Gas chart. One per student.
- ✓ Hand Out: People vs. Gas cut outs. One per student.
- ✓ Tape or glue
- ✓ Scissors for each student

Activity: Pass out the People Power vs. Gas Power activity sheet. Review the two columns and discuss the environmental impact of each. Ask students to color and cut out the different modes of transportation and with glue or tape, attach them to the corresponding category: People Power or Gas Power. If preferred the activity can be done with the whole class, just enlarge and pre-cut the pictures.

Extension: Let's Share Our Ride*

- Make a list of ways to get around town sharing your ride with others. Things such as cars, the BART (train), MUNI (city bus) can be discussed and added to the list.
- Introduce the concept that the more you share your ride with other people, the less pollution is put into the air every day. For Example, if you and your neighbor share a car, then there is one less car on the road without its engine running.
- Pass out the activity sheet *Let's Share Our Ride*. Students can work on this individually or with a partner. Look at the first problem with the students – if two people each drive their own car- there are two cars. Now if you put the two people in one car, how many cars are left at home? Have them circle the car that is left behind.
- Students should try the following two problems and question alone. Once this worksheet is completed, discuss why sharing your ride is important for the planet and how it helps us reduce pollution from gas-powered vehicles.

*This lesson is focused on “gas-powered” vehicles; however there are (people powered) bicycles built to carry more than one person and many families bike together to school or other places using them.

Additional Safe Routes to School information can be found at:

www.sfsaferoutes.org
www.saferoutesinfo.org

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This curriculum was adapted with permission from the Alameda County Safe Routes to Schools “Walk and Roll K-5 Educator’s Guide” - 2012 version.