

Using People Power

Overview

Students will learn how different modes of transportation are powered. *Using People Power* will expose students to the idea that burning gas and oil to power vehicles cause pollutants to be put in 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."

Supplies

- ✓ Copies of *People Power vs. Gas Power* for each student
- ✓ Copies of *Get on the Go* coloring page for each student
- ✓ Copies of *Let's Share Our Ride* for each student
- ✓ Chart paper, pens, scissors, tape or glue
- ✓ Images of a lawn mower, washing machine, blender, or other items to show things powered by a motor (*optional*)
- ✓ Graphic of Air Pollution (in Resource Section)



Activity: What is People Power?

Time: 10 Minutes

- Put two columns on the board labeling only the first column with Powered by Motors. Brainstorm a list of things that use motors. Circle those that are modes of transportation.
- Introduce the concept of gas-powered engines, explaining that when you burn gas to make a motor run, as in the case of a car, it leaves smoke behind in the air. Discuss the potential impact that this has on the air around the school and the neighborhood. Ask students if they have seen this exhaust coming out of the tailpipes of cars or buses. Show students the pictures of air pollution.
- Now, put up the title Powered by People on the next column. Brainstorm a list with students of 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 of transportation have on the environment.
- Have students turn to a partner. Ask them to take turns acting out different ways of getting around using People Power.



Activity: People Power vs. Gas Power

Time: 20 Minutes

- Pass out the *People Power vs. Gas Power* handouts. Tell students that they will make a bar graph to show which pictures show examples of people power and which pictures show examples of gas power. Model how to cut out the pictures and paste them on the graph. When students are done, call the class back together. Ask them how many pictures showed people power? How many showed gas power? Did more of the pictures show people power or gas power?

When the activity is done, discuss the safest way to use “People Power” modes. Provide these important reminders:

- Wear a helmet at all times for bike riding, skateboarding, scootering and roller-skating. It is required by law for youth under 18 in California.
- Be aware at intersections, wait until you have the walk signal or light and watch for turning cars.
- Walk your bike when crossing the street at crosswalks.

Activity: Let's Share Our Ride

Time: 20 Minutes

- Make a list of ways to get around town sharing your ride with others. Things such as cars, the BART, city buses, school buses and taxis 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 in 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 math 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 put an X on the car that is left behind.

Note: the challenge problems are more appropriate for 1st graders than kindergartners and may need to be read aloud.



Name: _____

Sort the images and paste them where they belong.



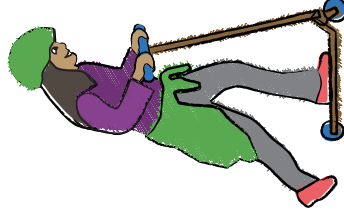
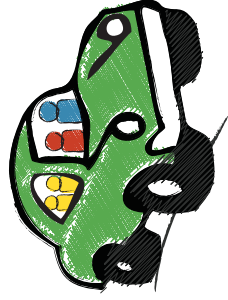
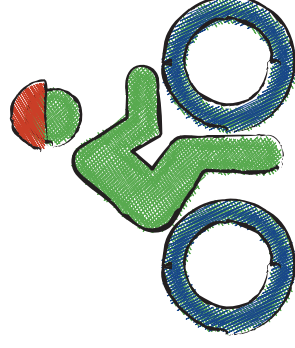
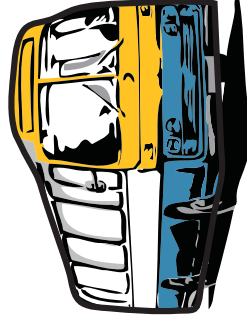
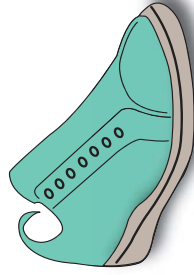
People Power



Gas Power

People Power vs. Gas Power

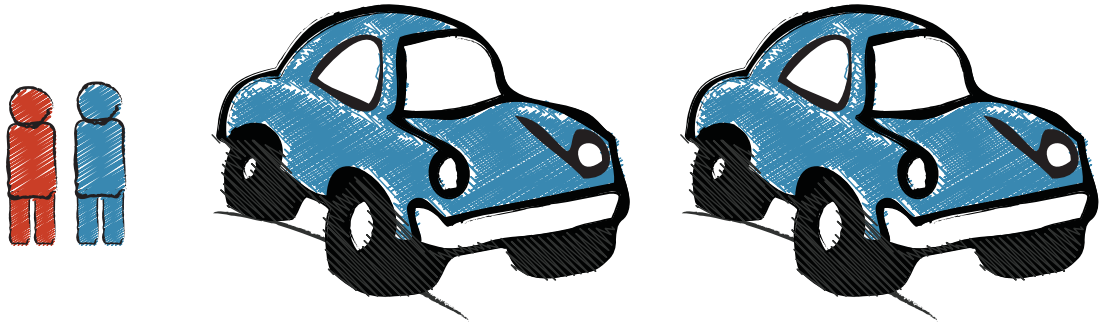
Cut out the shapes and paste them on the chart.



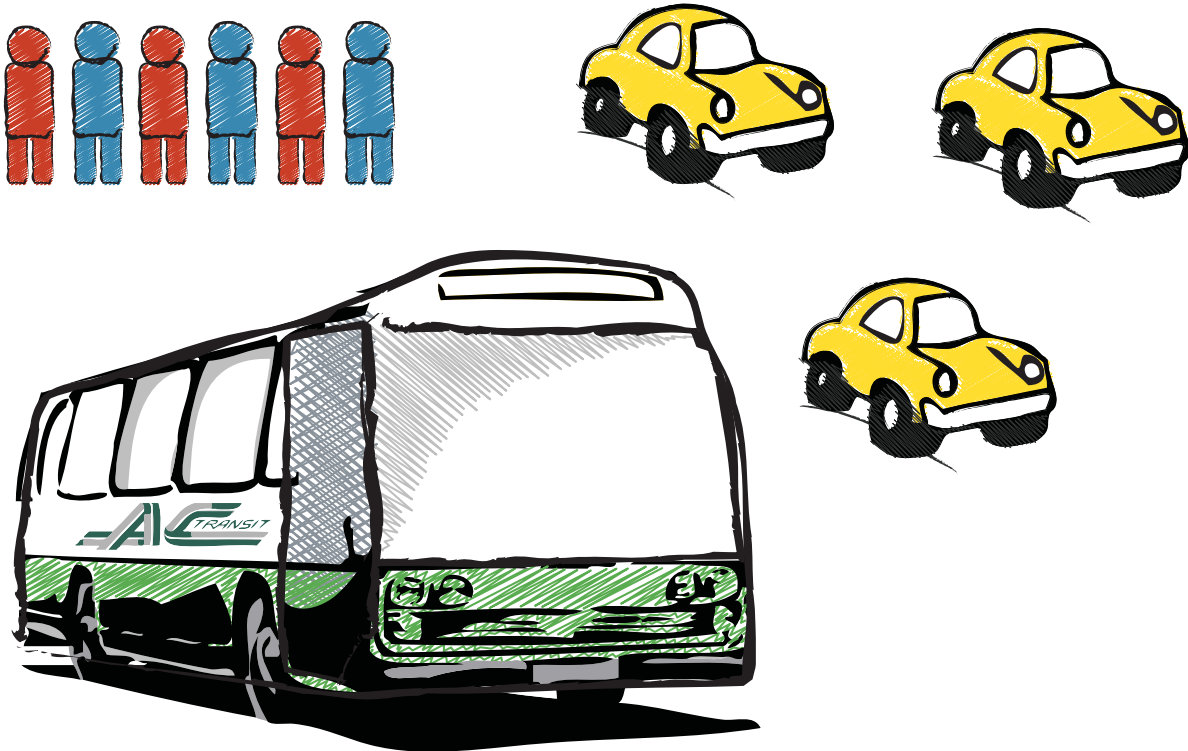
Name: _____

Let's Share Our Ride

1. If these 2 people decide to carpool in one car, how many cars are left at home? _____
Put the 2 people in one car and put an "X" over the car left at home.

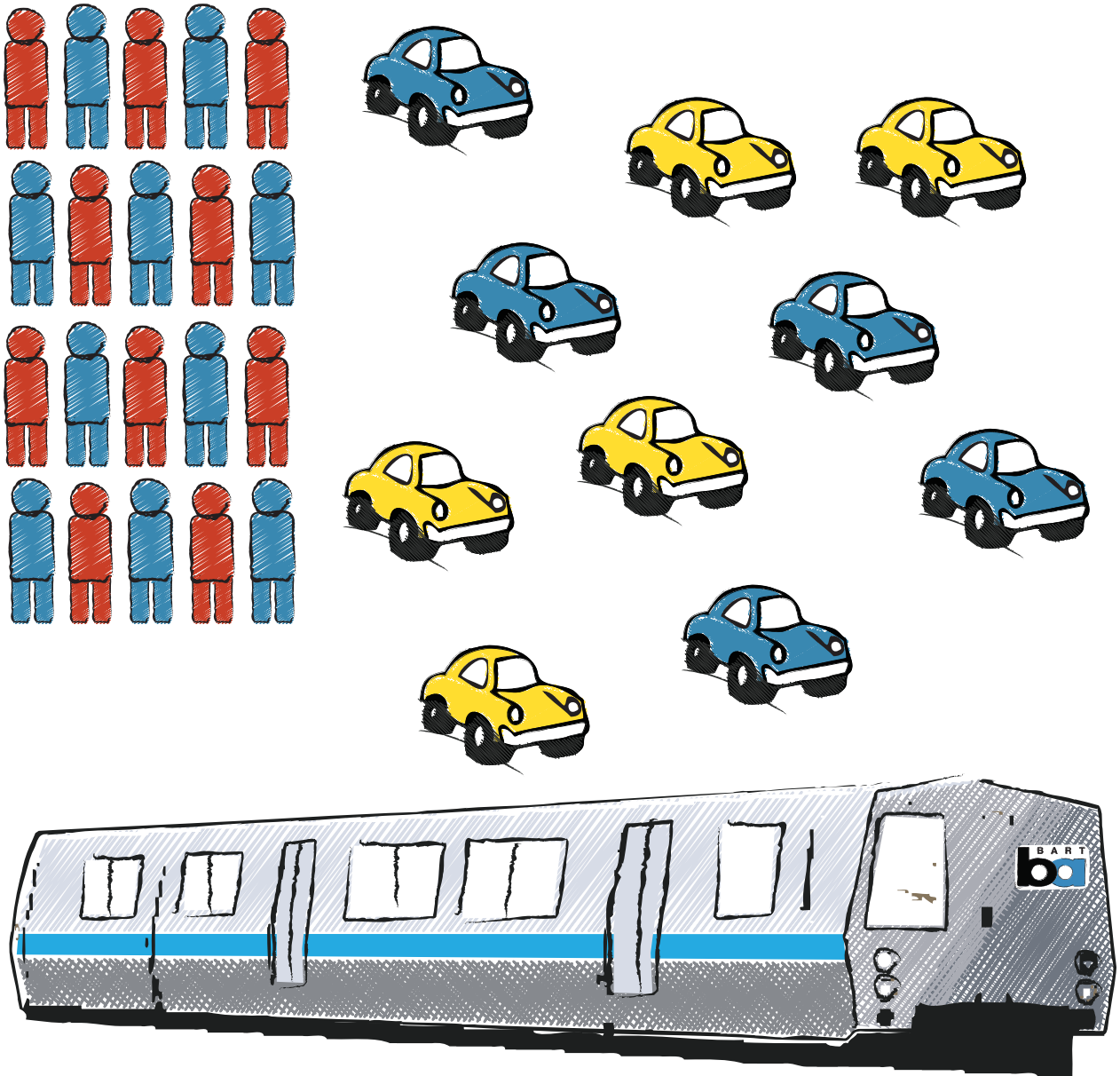


2. If these 6 people all decide to take the bus instead of carpool, how many cars are left at home? _____
Put the 6 people on the bus and put an "X" over the cars left at home.



3. If these 20 people all decide to take BART instead of carpool, how many cars are left at home? _____

Draw the 20 people on BART and put an "X" on the cars left at home.



Sharing our ride is good for the air!

Who can you share your ride with? _____