



**SAFE ROUTES
TO SCHOOLS**

MARIN COUNTY

P.O. Box 201

Forest Knolls, CA 94933

415.488.4101

Fax 415.488.0962

www.saferoutestoschools.org

Title: Transportation Choices and the Environment

Grade Level: sixth through eighth

Introduction: This lesson uses overhead transparencies of graphs and charts which illustrate statistics pertaining to the impact which transportation and other energy choices have on our environment. Use the overheads to guide a discussion. The students then participate in small group discussions with the goal of generating questions based on their concerns for the future.

Objective: Following the overhead presentation and whole class discussion, small discussion groups will each be responsible for generating at least one question about the future of energy or transportation. Groups record their questions; each group will share their questions with the whole class. Hold another whole group discussion to brainstorm answers and solutions. Use this activity to launch a research project.

Related Lessons: Eco-points ScoreCard, Travel Log, Greenhouse in a Bottle

Set Up: regular classroom

Materials:

- transparencies
- overhead projector
- screen
- paper and pens

Preparation:

- copy the eight transparencies

Discussion Points: (transparencies illustrate each of these topics)

- oil reserves in a teenagers lifetime
- global population growth
- the car is the designing technology of our built environment
- selected sources of energy from natural resources
- personal energy use
- costs of driving (13-16% of household budget)
- Ozone: good and bad
- how the greenhouse effect works

Instruction/Modeling:

- After viewing and discussing the images instruct the students that we will be working in small groups and that each group is responsible for at least one question that they have about the problem of diminishing energy resources,

particularly oil reserves used to produce gasoline.

- Share a personal concern for the future (nuclear waste being stored in Nevada, increases of rates of skin cancer due to good ozone depletion, large corporations controlling the energy market).
- Share a personal question (why do we still rely on non-renewable energy? Is solar power more expensive? Who decides where we get our energy from? How come the bus isn't more convenient? How come we don't have trains or light rail?).

Assessment: Did students have questions and engage in discussion in response to the overheads? Were discussion groups able to generate questions which reflected their concerns for the future?

Closing/Follow Up Activity: Create a master list of the students questions and post this in the room, refer to the list when the topic comes up in another subject area (science, current events...)