

Map and Miles Study

Grade Level: lower elementary, upper elementary/middle school
Duration: one 60-minute class period

Skills: application, critical thinking, collection and interpretation of data, discussion and evaluation

Subjects: math and social studies (geography)

Concepts

- Bridge the classroom and the local environment.

Vocabulary

- natural resources
- nonrenewable resources

Overview

Students learn about the upcoming field trip site by studying three different types of maps.

Objectives

After this activity, students will be able to:

- Name three different types of maps.
- Describe the kind of information provided on each type of map.
- Use a map mileage scale to estimate travel distance.
- Distinguish between saltwater and freshwater wetlands.
- Convert miles driven into gallons of gas and then into dollar cost.
- Describe at least three environmental costs of using nonrenewable resources.

Materials

- Various maps of the field trip site (road map, topographic map, site trails map)

Introduction

There is no introductory material for this unit.

Procedure

1. Have students study a map of the site you will be visiting. What type of habitat is this? Is it a freshwater or saltwater wetland? In which direction does the water flow? Where do they expect to find the most shorebirds? Where might be a safe viewing location?
2. Now ask the students to determine, as closely as possible, the number of miles to the field trip site. Have older students convert the miles into kilometers, or vice versa.
3. Have students calculate how much gas (a nonrenewable resource) it will take to get to the field trip site and back. (They will need to know how many miles per gallon your field trip vehicle gets.) Ask them to calculate the cost of the gasoline. Are there other “costs” associated with using nonrenewable resources (air pollution, potential oil spills, destruction of habitat at oil drilling sites, etc.)?
4. Ask students to brainstorm how to get the most out of their field trip, considering the cost of nonrenewable resources.

