

## **Teacher's Guide - What's up with Wind?**

**Objective:** To inform students about renewable energy sources

### **Getting started**

Ask students to describe what they have learned about nonrenewable fuels. Point out they also need to know the basics of renewable energy resources in order to be informed consumers.

Have students name renewable energy resources as you write them on the board.

*Ask: If these resources are available, why aren't we using them more often?*

As students study the issue tree about wind energy, discuss issues of cost, reliability, access, etc. Point out that everything has an opportunity cost, so it's inaccurate to say any energy source is free. Have students work alone or in pairs to make their own issue tree and explain it.

### **National Standards**

#### **Math**

Standard 1. Uses a variety of strategies in the problem-solving process

Standard 2. Understands and applies basic and advanced properties of the concepts of numbers

Standard 3. Uses basic and advanced procedures while performing the processes of computation

Standard 9. Understands the general nature and uses of mathematics

#### **Science**

Standard 9. Understands the sources and properties of energy

Standard 11. Understands the nature of scientific knowledge

#### **Geography**

Standard 7. Knows the physical processes that shape patterns on Earth's surface

Standard 11. Understands the patterns and networks of economic interdependence on Earth's surface

Standard 14. Understands how human actions modify the physical environment

Standard 16. Understands the changes that occur in the meaning, use, distribution, and importance of resources

Standard 18. Understands global development and environmental issues

#### **Time Considerations:**

Approximately two class periods