

MEETS NATIONAL STANDARDS

Nina learns to appreciate Natural Resources and Conservation!

BY CAROLE MARSH

Saving a little
saves a lot!

Solar Power!



SCIENCE ALLIANCE

Nina learns to appreciate **Natural Resources and Conservation!**

by Carole Marsh

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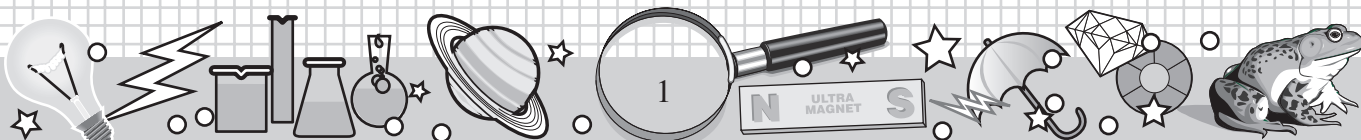
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SCIENCE FAIR PROJECT

Watch the Wind Blow

Background:

Alternate energy solutions like the wind are being used all over the world. High-tech windmills called wind turbines use the renewable energy from the wind to make electricity.

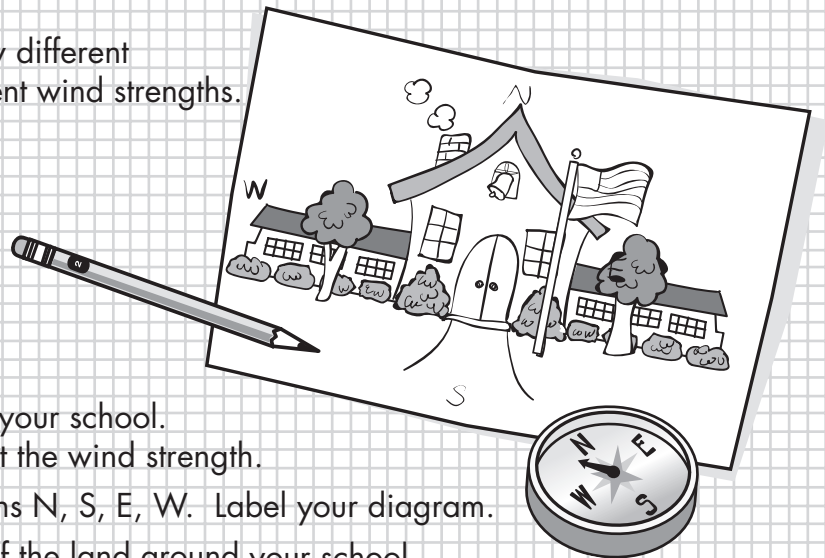
Objective:

The objective of this project is to see how different locations, times, and altitudes produce different wind strengths.

Materials:

pencils with erasers
thumbtack
25-cm of thread

paper
protractor
compass



Methods:

1. Draw a rough diagram of the outside of your school. Include bushes and trees that might affect the wind strength.
2. Using a compass, determine the directions N, S, E, W. Label your diagram.
3. Take care to note the differing altitudes of the land around your school. Ask yourself, "Is this side of the school higher than other parts?"
4. Make a device to measure the strength of the wind by pushing the thumbtack into the eraser of a pencil and tying the thread around the thumbtack.
5. Choose two times of the day that you plan to conduct this experiment.
6. Measure the power of the wind using your device. Hold the device in the air at different locations around your school. Observe the blowing thread. The higher the thread blows, the higher the wind energy at that location.
7. Rate the wind energy 1-5, with 1 being the lowest and 5 being the highest. Be sure to record your observations on your chart.
8. Repeat this procedure at all the locations. Record the results.
9. Note the time of day and the weather conditions at the time of recording.

Date	Time	Weather	Location (N, S, E, W)	Thread height

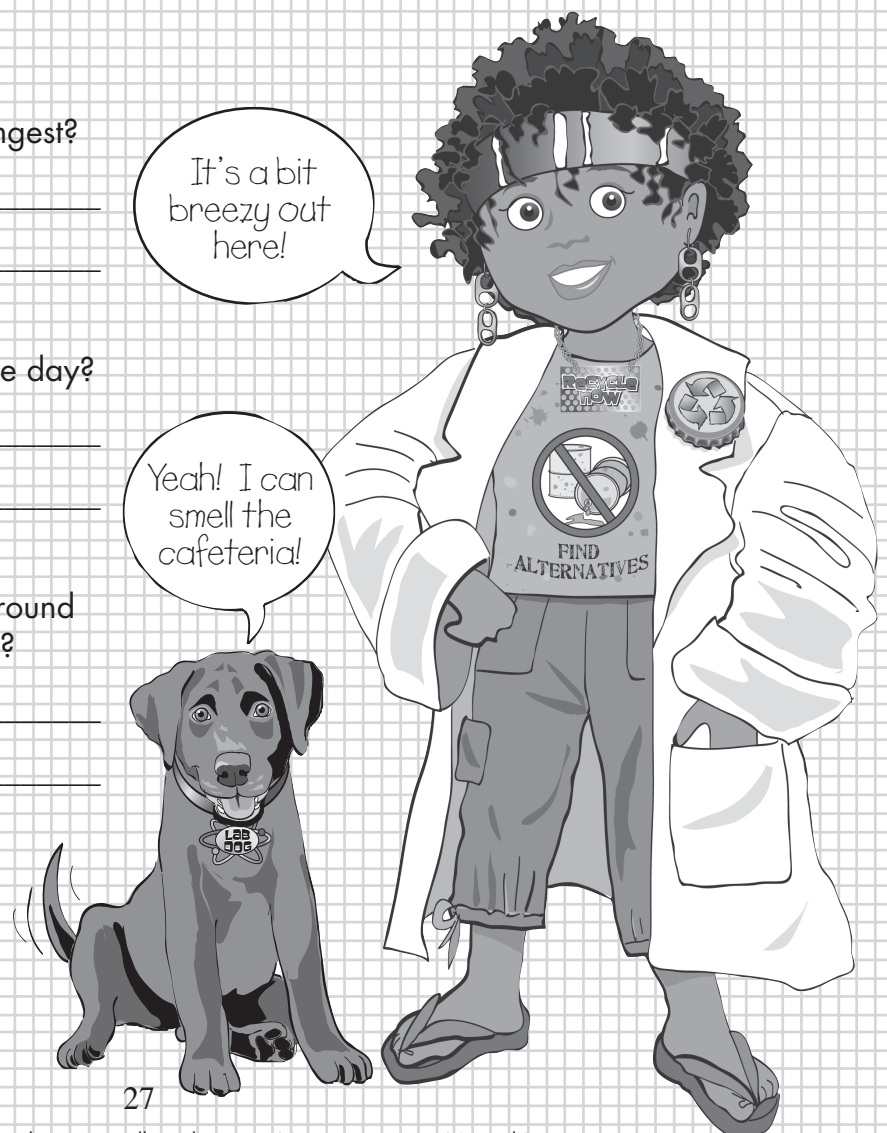
Results:

1. At what location was the wind strongest?

2. Was this true at different times of the day?

3. Where would you put a windmill around your school to provide the most energy?

5. Turn to page 28 and answer the questions.



What Did I Learn?

Here's your chance to describe what you learned in your science fair experiment!

1. When I started my project, what was I trying to find out?

2. What were my actual results?

3. Did my research method give me quality results? Why or why not?

4. What would I do differently if I did this project again?

