

Temperature Hunt

Description

Supervised groups of students search for the coldest and warmest locations in the garden or school yard.

Objective

To measure several different temperatures to identify some of the factors that cause temperature variations in the environment.

Materials

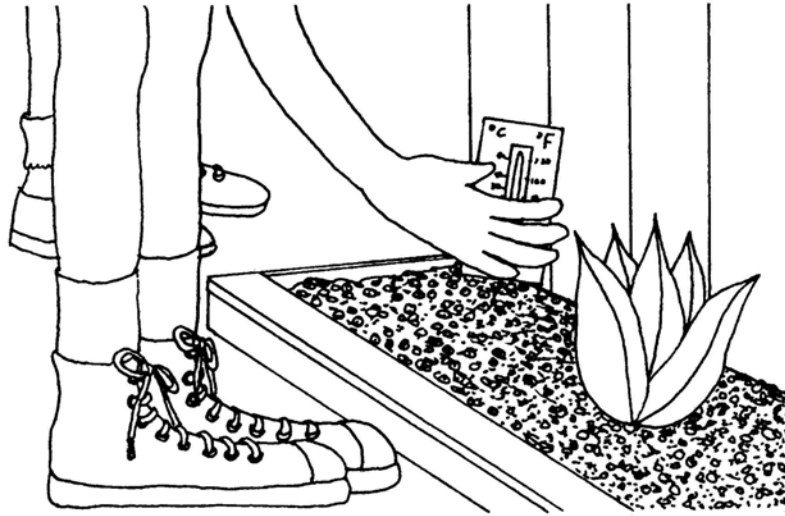
One thermometer for each group
Life Lab journals



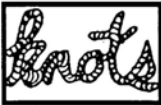
If you were outside right now, do you think you could find some places that are warmer than others? What conditions make the temperature different in two places? (List responses on the chalkboard.) Do you think it would be easy to find the warmest place around the school? The coldest place? What conditions will you look for in each case?



1. Take the class outside into the garden or school yard. Ask them to name places where they would expect to be hot or cold.
2. Place thermometers in two or three places in turn. While waiting for the thermometers to register, ask the students to name factors they think may be influencing the temperature at each spot. Make sure that factors such as the following are considered: presence of shade or direct sunlight, surface color, wind-exposure. Show students the thermometers and explain how they will use them to discover the hottest and coldest locations.
3. Organize the students into small groups, each supervised by an intern or aide.
4. Tell students that the object of the temperature hunt is to try to find the hottest and coldest spots in the immediate area. Remind them to be creative! The most extreme temperatures may not necessarily be in the most obvious places.



5. Ask each group to test the temperature at four places —two that they think will be hot and two that they think will be cold.
6. At each location, the adult supervisor will take the temperature reading. Students record location, temperature, and factors affecting temperature in their journals.
7. After all the readings are taken, gather the class together and compare findings.



Where were the coldest and hottest readings taken? What was the difference in temperature between the coldest place and the hottest? How do you think the temperatures will change during the day?



Have students come up with different temperature experiments in the garden. Be sure that each test is fair, with only one variable in each experiment.