

Title: CATCH A RAINBOW
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Grade Level: K-2

Concepts:
1. Energy

Disciplines:
1. Science
2. Art

Objective:

Utilizing sunlight, water and the reflective quality of a mirror, students will be able to observe and record the composition of this most valuable form of energy

Rationale:

Living in a tropical climate, the conditions necessary to create a rainbow, namely simultaneous sunlight and rain, occur frequently. Light is one form of energy produced by the sun. Sunlight is a mixture of all the colors of the rainbow. Water breaks up sunlight into these colors. Holding a mirror under water, students can simulate the refractive quality of sunlight on water, making a rainbow appear on a sheet of paper.

Materials Needed:

You can make a rainbow appear without any rain. To do it you will need clear bowls, small mirrors, pieces of white paper, and sets of watercolor paints or crayons.

Directions/Activity:

Working in pairs, students should fill the bowl with at least two inches of water. Place it in the bright sunlight. Put the mirror in the water and tilt until sunlight strikes it. Hold a sheet of white paper about two feet away from the bowl. Do not let the paper block the sunlight. Tilt the mirror toward the paper. Sunlight reflected from the mirror will form a rainbow when it strikes the paper. Move the paper around slowly until you can see the colors on it. While one student holds the paper, the other can record the rainbow with watercolors or crayons.

In a general discussion, ask children if they know how very important the sun is to all living things basically, all plants need sunlight and all our basic foods come directly or indirectly from plants.

Teacher Reference:

Adapted from National Geographic WORLD, July 1981.