Heat Absorption Activity

Kyla Wilkinson, Student Intern, Summer 2023

Goal: To learn about solar energy and heat absorption.

Ages/Grades:

Elementary students, ages (4-8)

Length:

20 minutes.

Materials:

- Ice cubes
- White, black and different coloured pieces of paper
- Recommended article to explain heat absorption by colour:
    - https://kidadl.com/facts/do-different-colors-absorb-heat-differently-how-and-why

Activity:

1. Explain solar energy and how the sun's rays can be reflected, absorbed or pass through objects. Explain that the darker the colour the more heat will be absorbed and the lighter the colour the more thermal energy can transmit through the object.
2. Ask students to make predictions of which colour they think will make the ice melt fastest and which will melt the slowest.
3. Place the sheets of paper outside on a hot day in direct sunlight. Place one ice cube on each sheet of paper.
4. Wait and watch as the ice cubes melt. Track the order in which they melt.
5. Have students compare their predictions to the results. Were they correct?

Photo of materials by Kyla Wilkinson, 2023.

Photo of results by Kyla Wilkinson, 2023.