

Conducting Heat Outdoor Activity

Grade Level: Third

Time: 45 minutes to 1 hour (weather depending)

Objective:

TLW (the learner will) observe that certain colors will absorb heat faster than other colors.

TLW will form a hypothesis in their science notebooks about what they predict will happen during the experiment.

TLW will write a conclusion (result) in their science notebooks concerning whether their hypothesis was correct or incorrect.

Materials: Ice cubes

Science notebooks (see below for sample template)

Black and white construction paper

(other colors if you want to broaden the experiment)

Hot spring/fall day

Safe area where experiment will not be bothered

Camera (if you desire to take pictures)

Procedures:

- 1. The teacher will explain that students will try to predict (hypothesis) what will happen during the experiment. Some questions that may be posed include:
 - a. What are some things that can melt?**
 - b. What causes things to melt?**
 - c. Do you think some colors get hot faster than others?**
 - d. What colors do you think get hot faster than others?****
- 2. TTW (the teacher will) explain that the experiment will test to see which color of construction paper will help the ice cube melt the fastest.**
- 3. TLW be allowed time to record their thoughts hypothesis) in their science notebooks.**
- 4. TLW will share their predictions with the class.**

- 5. TTW will gather materials outside with class and set up the experiment. The teacher should pre-determine an amount of time that the experiment will take place**
- 6. The construction paper should be place in a safe, secluded area where the sun with shine directly on the paper. (Make sure that the wind does not blow the papers away).**
- 7. Place ice cubes on the paper and allow them to sit for a length of time. (Playtime would be a great option while the experiments take place).**
- 8. After time has expired, the class returns to observe what effects the sun has had on the paper and the ice cubes.**
- 9. Hopefully, the result will be the ice cube on the black paper has melted much faster than the ice cube on the white paper.**
- 10. The teacher should explain to the students why the results are valid. Conduction is the movement of heat from one place to another. (The sun to the black paper caused the ice cube to melt quickly. This was because the black paper absorbed “took in” heat faster than the white paper).**
- 11. TLW be allowed to record the experiment results in their science notebooks and conclude whether their predictions were correct.**

