

4.2 SHADE CREATORS

APPROXIMATE TIME: 40 minutes

PREPARATION:

1 copy of Activity Sheet 1.1
for each student

GOAL:

To have students understand how the quality and quantity of shade differs by having them construct their own shade structures.

LEARNING OUTCOMES:

After completing this activity, students will be able to:

- Describe what makes a good shade structure
- Describe the different varieties of shade (weak, scattered, and solid)

ACTIVITY:

Divide the students into groups and take them outside to find small objects that they could use to build a mini shade structure. Back in the classroom, instruct the students to build their structure and draw a sketch of it on their worksheets. Then, make the classroom as dark as possible and, with a flashlight, go around to each of the structures and simulate the sun by flashing it around the structure. Have the students pay attention to the quantity and quality of shade that their structures provide and have them answer the questions on their worksheets regarding shade. Discuss with the class how they could improve their structures and why some were better than others.

ANSWERS:

Answers will vary.

SUPPLIES PROVIDED:

- Activity Sheet 4.2, Shade Creators

OTHER SUPPLIES NEEDED:

- flashlight

4.2 SHADE CREATORS

NAME:

HOUR:

Seeking shade is a great way to protect yourself from the sun while outdoors. Can you design an ideal shade structure – one that provides solid shade and still allows a view and as much movement as possible?

With your group, search around your school grounds for small objects that you could use to create your mini shade structure. Back in the classroom, use the objects to build your miniature model.

Draw a sketch of your shade structure:



Your teacher will turn off the lights in the classroom and use a flashlight to imitate the sun and see how well your structure would really protect someone.

1. What happened when the teacher shined the flashlight around your structure to imitate different times of day?

2. What were the strengths of your structure?

3. What were the weaknesses of your structure?

4. How could you improve your structure to make it more protective?
