

DISTANCE MAKES A DIFFERENCE.

OBJECTIVE: Students will demonstrate how distance can make the sun look small with a model of the Sun.

Invite Learning: Have student come to chalkboard and draw a picture of something they consider to be very large. Then ask students: "Will this object always look large?"

Make a Connection: To assess prior knowledge of your students, have them make clay models of the Sun and Earth. Save the models for a baseline assessment that you can use later to check for understanding.

Materials: (per group) metric ruler, paper plate.

ACTIVITY:

1. Hold up plate. Have partner measure across plate with ruler directly on the plate.
2. Move back six steps. Partner should not move.
3. Partner measures how big plate is again. Do by holding ruler in front of plate.(See hint, below).
4. Ask: What happens to size of plate? Do you see any differences?

Hint: Can use any size paper plate. Children can cut out circles instead of using plates. Show the children how to measure plate when it is close to you by placing the ruler directly on it, then how to measure plate when it is farther away by holding ruler in the air. Remind children to hold rulers still while measuring. Only the students with plates should move.

Direct Instruction: Teacher monitors students while they are beginning their activity. Helping when needed. Monitoring children as to make certain they are following directions accordingly.

Ask for Evidence: Ask these (and other) questions to your students. What tells you that the sun is much bigger than it looks? Are big things always smaller when they are far away? How do you know? Why do you think that is?

Close: Check for understanding: to follow up baseline assessment (Make a Connection) ask children to refashion their clay models. Look for increased understanding of relative size in the two bodies.

Anticipatory Set: Song: "I'll Follow The Sun" Beatle's. Show Magic School Bus-Video of the Sun.

Comprehension: Students should understand that by moving plate farther away it made the Sun appear smaller.

Multicultural Link: (ESL/Bilingual) How is the sun important to other cultures of people. Research in Library.

Mathematics/Science Link/Humanities Link: Students will compile a list of things the sun powers.

School-to-Career: Talk/discuss about how farming depends on the sun.

Individual Journal Assignment: Write a poem or riddle about the sun.

Homelink: Make a list of foods that you have eaten that were produced from the sun.