

Solar and Lunar Eclipse Lesson Plan

Teacher

Date

School

SLE # ESS.10.6.8: Compare and contrast

solar eclipse and lunar eclipse

Objectives:

Content: I will be able to compare and contrast solar eclipses and lunar eclipses.

I will be able to model a solar eclipse.

I will be able to model a lunar eclipse.

Language: I will be able to use the vocabulary words *rotate*, *revolve*, *orbit*, *solar eclipse*, and *lunar eclipse* while working with my group.

Assessment: Teacher will be able to assess students throughout the activity and also through the use of an activity sheet.

Technology/Materials: Tootsie Pops (1 per student), Coconut Flavored Dum Dum lollipops (1 per student), black construction paper, binder clips (to help hold construction paper up), flashlight (1 per group)

Vocabulary: rotate, revolve, orbit, solar eclipse, lunar eclipse

Bloom's: Remembering Understanding Applying Analyzing Evaluation Creating

Questions: What are the two types of eclipses? How are they similar? How are they different? Describe the positioning of the sun, moon, and earth during a solar eclipse. Describe the positioning of the sun, moon, and earth during a lunar eclipse. Predict what would happen to the shadows if you were to move the sun further away from the Earth and moon. Predict what would happen to the shadows if you were to move the sun closer to the Earth and the moon.

High Yield Strategies: Identifying similarities & Differences Summarizing & Note Taking Cooperative Learning

Reinforcing Effort & Providing Recognition Setting Objectives & Providing Feedback Generating & Testing Hypotheses

Cues, Questions & Advanced Organizers Homework & Practice Nonlinguistic Representations

Instructional Strategies:

Set: Activate prior knowledge by asking question listed above. Show United Streaming video: "The Spacefiles: The Inner Solar System: Eclipses and Auroras".

Model: Show students how to use flashlight and different sized playground balls to model eclipse.

Guided Practice/Strategies: Put students into groups of 2 or 3. Show the students the materials for their exploration and explain how they will be creating a model of the two eclipses. Allow for the students to use the materials to model eclipses projecting the shadows onto the different lollipops. Have the students set up the black paper as a backdrop to absorb excess light. This will allow for more darkness in the room.

Intervention Strategies: Remodel use of materials as needed. Walk throughout the room to facilitate learning.

Accommodations & Modifications (IEPs): Allow students to show or draw their results. Group students as needed.

Independent Practice/Activities: Students will be able to use the materials to explore creating a model of lunar and solar eclipses. Students will then complete an activity sheet.

Enrichment Activities:

Closure: Students will write in their journal or draw the position of the materials in order to

create the different eclipses. Students can write about what they observed during the activity.

Homework: None