

One World, One Sky Planetarium Show Field Trip – Post-Visit Lesson

Grade level : 3-4 year olds

Duration: 20 Minutes

Essential Questions

- What can you see in the sky at night?
- What happens when an object blocks all or part of light that shines on it?

Learning Outcomes

- The children will create a light and shadow play that explores the night sky.
- Explore the idea of constellations.
- Explore what parts of a shadow puppet let light pass through and what parts block light to create a shadow.

Materials

- Construction paper
- Scissors
- Hole punch
- Craft sticks or straws
- tape

Lesson

1. Introduction – [5 minutes]

The teacher will review the One World, One Sky Planetarium Show Field Trip

- What did Big Bird, Elmo and Hu Hu Tshu see in the sky?
- How did they take a trip to the Moon?

- Could we create a shadow and light play to recreate the story?
- What puppets will we need? (sun, moon, constellations, rocket, Elmo, Big Bird Huh Shu, kite, soccer ball, buildings)

2. Make shadow puppets [20 minutes]

Cut construction paper into shapes to create shadow puppets. Experiment with flashlights to see if the puppets cast good, detailed shadows. Use hole punches to create eyes, mouth, stars, and places where you want the light to shine through. Create shadow puppets to represent Big Bird, Elmo, Hu Hu Tshu, the Sun, the Moon, the Big Dipper constellation, The North Star (our friendship star)the Earth, the Sesame Street buildings, a rocket, and other elements from the show.

3. Put on shadow play (15 minutes)

Use a strong light source such as overhead projector or slide projector and shadow puppets – projected on a white sheet or screen.

Extensions

- Read *Moon Bear's Shadow* by Frank Asch. What did Moon Bear find out about his shadow?
- Go on a shadow walk outside in the morning. Take photographs of the shadows that you find. Go out again in the afternoon. Take pictures of the shadows of the same objects. Do you notice any differences? What is the cause of these changes?
- Create a matching game. Take photographs of small toys and their shadows. Print and laminate the photographs to create a matching game. Can you match the object to its shadow?
- Explore shadows using flashlights and shadow boxes in the classroom. To make a shadow box, line the inside of a cardboard box with white paper. The box will create enough darkness to allow you to experiment with light and shadows. Use small toys, pieces of paper, bubble wrap, color paddles and other small objects to

explore the different kind of shadows that can be created. What happens to the shadow when the flashlight is close to the object? What happens when it is farther away?

- Use an overhead projector to explore shadows. The shadows will project on the wall or on a screen. The students can place small objects on the overhead projector. They can also stand in the light of the projector to cast the shadow of their bodies on the wall.



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