

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

Grade level : 3-4 year olds

Duration: 20 Minutes

Essential Questions

- What can you see in the sky in the day?
- What can you see in the sky at night?
- What are sources of light?

Learning Outcomes

- The sky looks different in the day and night.
- Some objects can be seen in the sky during the day, some at night. Some objects can be seen both day and night.
- Some objects give off light, other objects do not.

Materials

- Book: *The Sun is My Favorite Star* by Frank Asch
- Paper or felt cut outs:
sun, cloud, rain drop, bird, airplane, rainbow, moon, star, flower, cat, tree

Lesson

1. Introduction – [5 minutes]

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

- Introduce National Air and Space Museum, using Field Trip Story
- What can you see in the sky in the day?
- How is the night different from the day?
- When can we see the sun?
- Teacher will read *The Sun is My Favorite Star* by Frank Asch

2. *Day and Night Chart* [10 minutes]

The teacher will introduce a chart with three columns – day sky, night sky, both.

- Teacher will show children cut outs of different objects and ask about each one, “Do you ever see this in the sky? In the day or night?” Then place the object in the column corresponding to the answer the children give.
- Children can play with the chart and sort again by themselves or in small groups.

3. *Sources of light* [5 minutes]

Use the same objects to sort again. This time ask, “Does this object give off light?” Sort into two categories – light sources, not light sources.

Extensions

- Go outside on different days and notice what you can see in the sky. Is the sky always the same in the day? How does it change?
- Make pretend telescopes using paper towel tubes. Decorate the tube on the outside. Use it to look at objects in the classroom and the sky. Remember...never look directly at the sun! It is so bright it can burn your eyes.
- Can you ever see the moon in the day time? Look for the moon. If you find it, notice what shape it is. Can you draw the shape of the moon?
- Discuss: If the sun is a star, why does it appear different from other stars in the sky? (We are much, much closer to the sun. The other stars are very far away) Experiment with looking at objects and light sources close up and far away. Look at a light source such as a large flashlight, overhead projector, or even a car headlight close-up. Be careful not to look directly at bright lights. Draw a picture what the light source looks like when you are close to it. Then take the light source to a large room and move as far away from it as you can. How does the appearance of the light change? Draw a picture of the light source from far away. Take a look at some images of what the sun looks like when you get even closer to it. The National Air and Space Museum's Public Observatory has images of the sun.
<http://www.nasm.si.edu/exhibitions/POpbservatory.cfm>



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What can you see in the sky?

day	night	both

light source

not light source



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