

## **Lesson Plan:**

### **First Grade Science: Moon Phases**

#### **A: Standards**

i. **Key Content Standard:**

1-ESS1-1.: Use observations of the sun, moon, and stars to describe patterns that can be predicted.

- SEP: Analyzing and Interpreting Data
- DCI: The Universe and its Stars: patterns of the motion of the sun, moon, and stars in the sky can be observed, described, and predicted.
- CC: Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.

i. **Learning Objective/Goal:** The students will (**DO**     ) to (**LEARN**     ).

The students will observe the moon during the daytime to understand that the moon cycle has patterns.

#### **C. Assessments:**

- Students will draw a picture of the moon in their science journals. I will be looking for a drawing that matches the drawing on the chart that I created with the whole class. Part of the moon should be shaded in and labeled “shaded portion”, and part should remain white and be labeled “illuminated”. Students may have other labels including “sky, airplane, cloud, bird, etc.”
- Above the drawn picture of the moon, students will write the lesson objective: “I can observe the moon during the day and night.”

#### **D. Lesson Resources/Materials (e.g., student handouts, manipulatives, PPTs, text pages, special supplies) Attach copies of any student handouts or worksheets:**

30 Index Cards

30 Pencils

Picture of visible third-quarter moon during the day on projector (back up)

2 Charts: One for initial predictions on what we usually see in the sky during the day, and one to draw the moon as we observed it outside in front of class.

30 Worksheets with an empty circle, for students to shade in their observation.

Vocabulary words for pocket chart

Picture of moon cycle for November to show class during introduction.

## **Introduction:**

- Call students to rug. Introduce first poster: Let's think about what we can see outside during the daytime that we don't see during the nighttime. Think about all of the different objects that you see, individual think time. Turn and talk.
- Now, think about what you can see in the sky **both** during the day and night. Turn and talk.
- We are going to draw a picture of what you all usually see in the sky during the day. (Pass microphone around)
- Great thinking class! We are going to go outside for an observation of the sky, but first I want to show you a picture.
- Show picture of moon in daytime. Ask the students if they have ever seen the moon during the daytime? Do you think we will be able to see the moon today?

## **Body of Lesson:**

- Ask Focus Q: *What time of day can we observe the Moon?* (Let a few students share their answers)
- Explain our activity: Looking for the objects that we discussed and drew on the poster. Also, look around and see if you can find the moon to draw the shape it is in today. **Don't look into the sun.** Draw a quick picture of everything that you see in the sky. Do not draw anything on the ground including the blacktop, grass, or buildings.
- Tell students to bring a pencil and pass out index cards.
- Go outside to middle of blacktop by handball courts. Look West?
- Make sure students are drawing pictures on index cards. Outside for 10 minutes then back inside.
- Review initial poster and check off items that the students saw. Ask why we did not see everything that we predicted? "Did you observe \_\_\_ outside?"

- Show students picture of moon during day again and ask: Could you see the moon? Why do you think we could not see it today? Shape/size/color?
- Show moon calendar. Ask the students if this calendar reminds them of another calendar they are working on in science? What do they observe on the calendar?
- Review vocabulary- Have students repeat the words after me and observe pictures.
- Repeat student objective: I can observe the moon during the day and night.
- Shade in the moon on poster.
  - Ask: Who can describe the shape of the moon we see?
  - Who thinks they know what happened to the part of the moon we cant see? The shaded part? Did it disappear? Or it is hidden?
- Students go back to their desks to draw their own moon on their worksheets and fill in the sentence I can observe the moon during the day and night. Model more labeling of picture (?)
- Once finished, class repeats LO again: I can observe the moon during the day and night.
- Tell class to turn and tell partner what they learned today.

**Conclusion:**

- Students stand up and find space around the room for the Moon song.