Phases of the Moon

Students will continue to learn about and demonstrate their knowledge of the Phases of the Moon by creating a 3-D model. Although this lesson is specifically tailored for Grade 6, it can be adapted to suit any grade level 5-8. Complete the lesson by following the instructions found in each section.



Learning Goals

- 1. Students will learn all 8 phases of the moon including the name and what they look like.
- 2. Students will learn why there are phases of the moon.

Materials

Student	Handout [A]- Phases of the Moon Diagram
Handouts	Handout [B]- Documenting in Spaces
Technology Requirements	InternetMobile device, tablet, or laptop
Video/Audio Clips	Phases of the Moon
Additional	Sticky Chart Paper
Materials	Any materials for the moon diagram (see Pg. 3)

Teacher Prep

- Before the lesson begins, place large sticky chart paper around the room (enough for the number of groups you will have).
- Find and load the Youtube video for the lesson.
- Have all materials for the moon diagram ready to go and ready to list off to students so they can write them on their worksheets.

Introduction

Explain to students that today they are going to be discussing and demonstrating their knowledge of the phases of the moon.

Ask for volunteers to answer the following questions:

- 1. Does anyone know why we have different phases of the moon?
- 2. What are the different phases of the moon called?

Video

Show students the video: Phases of the Moon

After the video is finished, have students group up (or you can put them into groups as the teacher) and see if they can write out and draw all the phases of the moon. They will do this on large sticky chart paper that you have placed around the classroom. Give them about 5-7 minutes to complete this task.

Group Work

Give students 5 more minutes at each sticky chart (have them rotate around the room) to fill in any blanks they can find on other groups' charts.

For reference, the charts should look something like this:



Class Discussion

Bring students back to a large classroom discussion to discuss. Call on students one by one to help fill in a large class chart at the front of the classroom. After the chart has been filled in, continue the conversation by asking the following questions:

- 1. Where did the idea of having months come from?
- 2. Why is it possible to see the moon? Is it because the moon has light like the sun?
- 3. Why are there phases of the moon? Why can't we see the entire moon all the time?

Before proceeding to the group project, have students get out their science notebooks and create a correct moon diagram that they can reference at a later time.

Group Project

Using the same groups as before, have students get back together and create a model of the phases of the moon. Now, there are so many ways they can do this, but here are some ideas.

- Oreos
- Playdough
- Paint Swatches
- Construction Paper
- Pictures of students dressed up as the phases

- Hand Drawn (if there are any very skilled drawers in your classroom)
- Shadow Box
- Shoe box diagram
- Styrofoam

Other materials that may be needed:

- Shoe boxes
- Acrylic Paint

It's totally up to you as the teacher how you want this to play out. If you want every group using the same materials, that's fine. If you want every group using different materials, that's fine too!

See activity instructions on the next page.

Handout [A]- Phases of the Moon Diagram

Purpose

Your goal is to create a phases of the moon diagram. You can use **ANY** of the materials listed below. *Please have students write them in below as you tell them what they can use*

Requirements

- □ All 8 phases of the moon must be represented
- $\hfill\square$ All 8 phases of the moon must be labeled with their name

Materials

□	

Procedure

- 1. Get back together with your group. If you have a difficult time working with anyone in your group, please inform the teacher for a potential change.
- 2. Look at the materials list and make a plan with your group. Check off the materials you would like to use. **Make sure you have a solid idea about what you would like to do before going up to get your materials.** **YOU DO NOT NEED TO USE ALL MATERIALS OFFERED.**
- 3. Send one student to get your materials.
- 4. Begin the construction of your diagram. <u>Remember: Your diagram must meet the</u> requirements above or it will be considered incomplete.
- 5. Make sure to persevere. Good ideas in your head might not work out how you think they are going to.
- 6. Once you are satisfied with your diagram and have met all of the requirements, please post a picture of your boat on Spaces and answer the reflection questions.

Handout [B] - Documenting in Spaces

Teacher Tip! The instructions for this lesson involve adding to the Class or Individual Space in Spaces. You can adapt the instructions if you'd prefer to make this an Activity.

- 1. Students will document their learning in Spaces by following these guidelines:
 - a. Click + Create > Choose Camera >Take a photo of your group's Phases of the Moon diagram.
 - b. Add a Title > Write a description of your diagram explaining what materials you and your group used to create it.
 - c. Post a Description > Have students answer one or more of the following prompts:
 - i. Did you like this activity? Why or why not?
 - ii. What was the most difficult part of creating the diagram? Easiest?
 - iii. Did you learn anything while working on your diagram?
 - d. Click 🖌 Next
 - e. Choose the Class Space or Individual Space
 - f. Click 🖌 Post