03/26/2021

Lesson Plan Template

Date: _____

Grade: 5th	**Subject:** Science
Materials: - Skewers - Styrofoam Balls - Flash Lights - Moon Phase Graphic Organizer - Butcher Paper (To cover any windows)	**Technology Needed:** - Yes, there will be videos provided from MysteryScience.com on Moon Phases.
Instructional Strategies: ☐ Direct instruction ☐ Guided practice ☐ Socratic Seminar ☐ Learning Centers ☐ Lecture ☐ Technology integration ☐ Other (list) ☐ Peer teaching/collaboration/ cooperative learning ☐ Visuals/Graphic organizers ☐ PBL ☐ Discussion/Debate ☐ Modeling	**Guided Practices and Concrete Application:** ☐ Large group activity ☐ Independent activity ☐ Pairing/collaboration ☐ Simulations/Scenarios ☐ Other (list) Explain: ☐ Hands-on ☐ Technology integration ☐ Imitation/Repeat/Mimic
Standard(s) 5-ESS1-2 Construct a graph to reveal patterns of daily changes in length (metric) and direction of shadows, length of day and night, and the seasonal appearance of some stars in the night sky. - ESS1.B: Earth and the Solar System -The orbits of Earth around the sun and of the moon around Earth, together with the rotation of Earth about an axis between its North and South poles, cause observable patterns. These include day and night; daily changes in the length and direction of shadows; and different positions of the sun, moon, and stars at different times of the day, month, and year.	**Differentiation** **Below Proficiency:** Student Z will be able to do this lesson. The teacher will help them fill out their worksheet, as it can be very complicated. This student will also be with a partner for the activity, which will help with following the directions. **Above Proficiency:** Student A will be able to do this lesson, but they can try to fill out the phases themselves. This will not only challenge them, but it will help them use their resources. **Approaching/Emerging Proficiency:** Student B will also be able to do this lesson. This student might need the teachers help to fill out what they need on their sheet but also might be able to be challenged by filling it out themselves. **Modalities/Learning Preferences:** • **Visual:** Students in this category will be able to do this lesson, but this will be much more auditory. The students will be able to listen to the video, but the activity will be much harder to grasp. Creating a guide that they can feel with their fingers can help this situation. This can help them feel the difference between the phases while also learning the same thing. The teacher will be able to go through each phases individually with them as well. • **Auditory:** • **Kinesthetic:** • **Tactile :**
Objective(s) By the end of the lesson, students will model how the moon phases look through a hands-on activity and show their understanding through answering questions referring to the simulation. **Bloom's Taxonomy Cognitive Level:** Understand: Students will classify and recognize the different moon phases through the activity. Apply: Students will apply what they learn about moon phases to demonstrate why the moon phases change. Analyze: Students will examine the different moon phases through the hands-on activity.	
Classroom Management- (grouping(s), movement/transitions, etc.) Students will be instructed what they will be doing through the teachers rules and the video that will be shown to them. The students will find a partner to complete their activity. The students will transition when the teacher tell them to. The transition should be a 5th grade transition and there should be no running.	**Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)** Students will be expected to follow the behavior expectations. With the transitions, if students are not following the rules, then they will be starting over on transitions. The 5th graders will need to listen to the rules and what supplies they are able to grab. If students are not following the procedures or rules, they may lose their privileges on the activity.

Minutes	Procedures
	Set-up/Prep: - Make sure the room that students will be doing this activity is pitch black. - Have videos ready to play. - Get Styrofoam balls and skewers. - Prepare what students will fill out for their end of activity. - Get the worksheet that students need for filling out and keeping track of the different phases.

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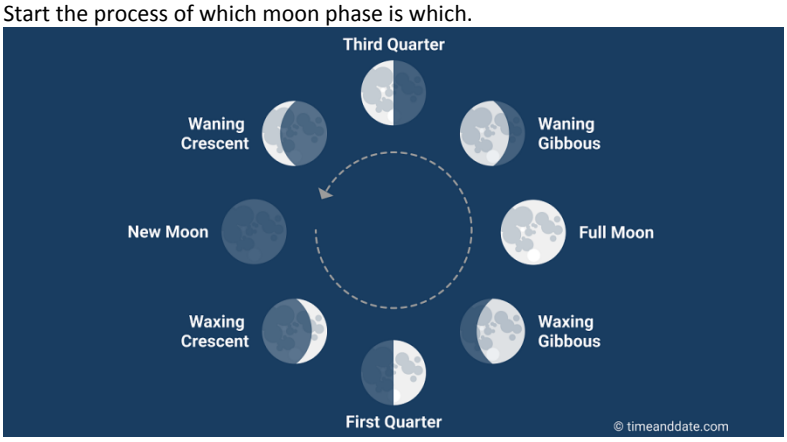
Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)

- Open the activity by showing students the videos of the different moon phases.
- Talk with the students about the video.
- Ask what the students noticed in the video.
- What did you see?
- What was interesting?

Explain: (concepts, procedures, vocabulary, etc.)

- Start the process of which moon phase is which.



- Example of the moon phase process that students will go through.
- The students will fill out the work sheet that they will get during their learning time.
- We will go through each one as a class, as it may be confusing and I want students to learn the best they can.
- Once we are finished, we will transition to the activity.

Explore: (independent, concreate practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)

- Students will now begin learning about the activity that they will be doing.
- To begin, students will watch the video that is proved.
- The video will explain what the activity will include.
- Students will then be directed to match up with a partner.
- Once they have their partner, they will be directed to get their supplies.
- With getting a flashlight, they will not be able to turn it on until the teacher tells them to. If they do not follow this rule, then they will lose the flashlight until I give it back or have to wait. Students need to listen to the rule and keep their responsibility.
- Students will then be with their partner in the dark room. One student will be holding a skewer with the Styrofoam ball on top while their partner will hold the flashlight towards the partner.
- The partner with the "moon" will slowly spin around in a circle. The partner with the flashlight will hold still.
- This tactic is used so that the student with the "moon" will see the shadows across the moon and see the moon phases changing.
- Once the first partner is done seeing the moon phases, the partners will switch.
- This activity is for the students to visualize how the moon phases change.
- When observing the students, ask some what they see.
- What is happening to the moon?
- What is changing?

Review (wrap up and transition to next activity):

- Once students are finished with the activity, they can put their things away and sit back down in their spots.
- Students will then be going through what they learned in the activity.
- Asking students "What did you notice about the activity?"
- What phases did you see?
- Discuss with the students what they saw. Cold call if necessary.
- Move on to the next activity.

Formative Assessment: (linked to objectives, during learning)

- **Progress monitoring throughout lesson (how can you document your student's learning?)**

With the formative assessment, students will be filling their worksheet

Summative Assessment (linked back to objectives, END of learning)

The students will get a small quiz at the end of the unit to see what they know. This will help with them gaining a basic understanding from the lesson and seeing if the activity helped with their learning.

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that is needed for understanding the different phases. The students will be filling this in either with the teacher or themselves, depending where the class is at. There is differentiation in the class, they may need to go through it with the teacher instead of doing it themselves. But having a class discussion is helpful to see what some of the students learned. Giving an exit slip with a couple questions that we learned from the lesson would be the best option in this case. I will then be able to see where the students are at through their questions. If the students did not get their understanding, then we would have to review it again the next day.	Students will also be doing their big science test later, so the worksheet will help them prepare for this.

Reflection (What went well? What did the students learn? How do you know? What changes would you make?):

What went well?

- Students did great at following the directions that were given.
- Student learned a lot from the videos that gave some great explanations and visuals.
- Students were engaged with the activity and even remembered each moon phase when doing the activity.
- Students make awesome observations and created good discussion when I would stop the video to ask them questions.
- This activity was really fun and the students really liked it.

What did the students learn?

- The students learned why the moon is not always round.
- They learned that the moon orbits the earth.
- They learned the different moon phases and why each one is different.
- They learned the moon cycle is 28 days.
- They learned that the moon phases help us with time.

How do you know?

- I know that the students were able to grasp the concept of what we were doing because the students were having great observations and using the language that was included in the lesson during their discussion.
- The students were also really good during the activity being able to identify each moon phase and discussing what we were seeing when we did the activity.

What changes would you make?

- I would make sure that the rules were explained a bit more or even written down. Some of the students were being too silly or not listening to my rules, which had them not being able to use their flashlight for a couple minutes. I would even possibly have partners already picked because some students take the time during partner time to not follow directions.

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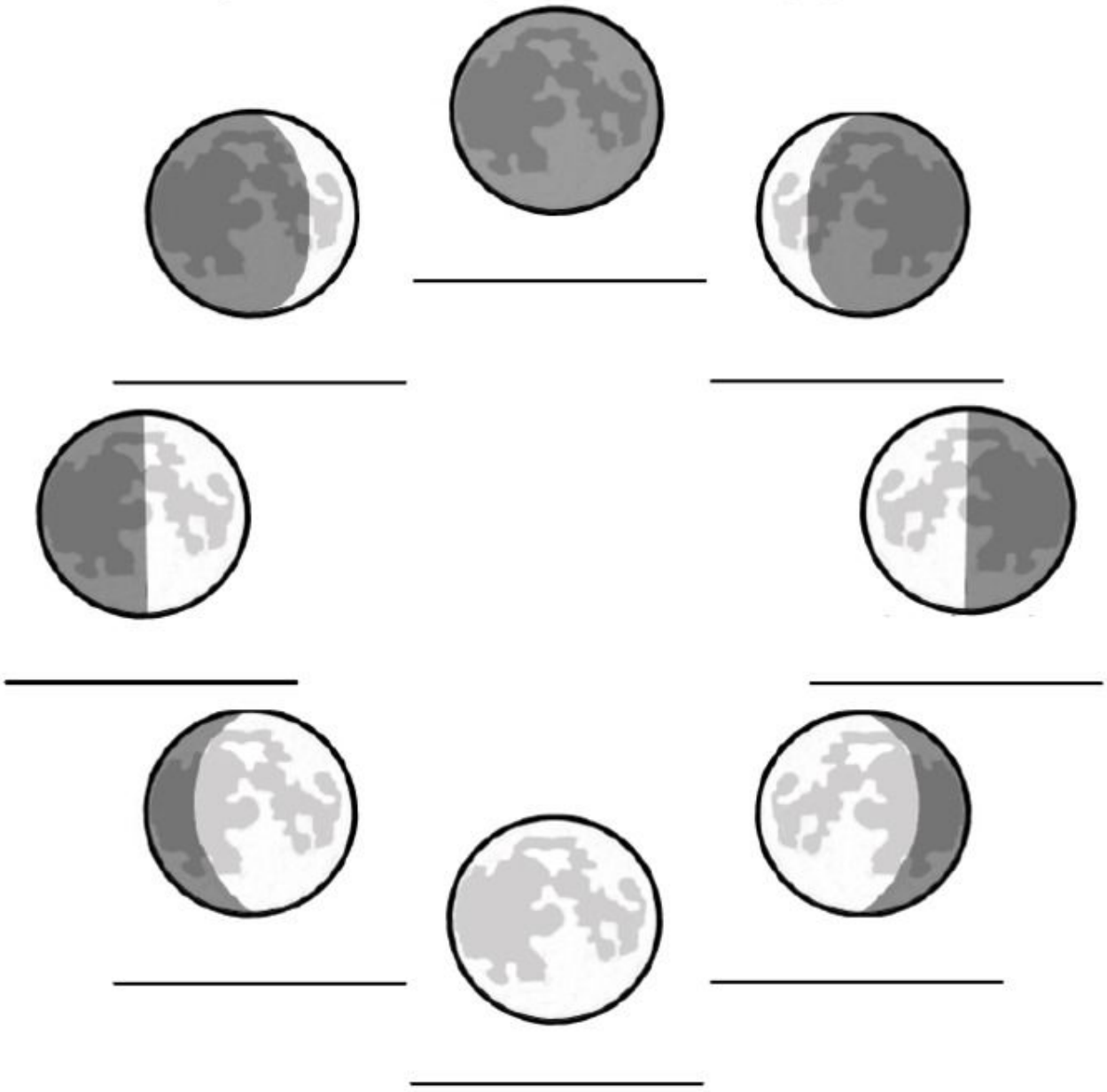
Name _____

Phases of the Moon



new moon	full moon
first quarter	last quarter
waning crescent	waxing crescent
waning gibbous	waxing gibbous