District Lesson Plan Template

Teacher: Mr. Edwards **Date: 9/16-20/24** **Subject: Science** **Period: 1-3**

COS Standard:
6 .ESS .1 Create and manipulate models (e.g., physical, graphical, conceptual) to explain the occurrences of day/night cycles, length of year, seasons, tides, eclipses, and lunar phases based on patterns of the observed motions of celestial bodies.

Outcome(s)/Objective(s)/I can statement

- I can construct an evidence-based explanation of how the relative positions of the sun and Earth result in observable phenomena, including day and night cycles, length of year, and seasons.
- I can construct an evidence-based explanation of how the relative positions of the sun, moon, and Earth result in observable phenomena, including lunar cycles, eclipses, and tidal cycles.

ACTIVATING LEARNING STRATEGY/STRATEGIC TEACHING STRATEGIES:

☐ KWL	☐ Word Splash	☐ Anticipation Guide	☐ Lecture	☐ Graphic Organizer/VLT	☐ Poem, Rhymes, etc.
☐ Survey	☐ Possible Sentence	☐ Think-Pair-Share	☐ Reading	☐ Pictograph	☐ Acronyms/Word
☐ First Word	☐ Concept Map	☐ Vocabulary Overview	☐ Model	☐ Diagram	☐ Other: _____
☐ Word Map	☐ Frayer Model	☐ Daily Language Practice (DLP)_____	☐ Hands-on	☐ Mind Map/Visual Guide	

Engagement Strategies:

☐ - Collaborative Group Work	☐ - Writing to Learn	☐ - Literacy Groups	☐ Other:_____
☐ - Questioning Techniques	☐ - Scaffolding Text	☐ -Classroom Talk	☐ - T.W.I.R.L.

Technology Integration: ☐ Smart board ☐ Document Camera ☐ IPADS ☐ Mac Books X Computers ☐ Kindles ☐ Interactive Tablets ☐ Digital/ Video Camera
☐ Clickers ☐ ACCESS ☐ Computer Program:_____ ☐ Other:__ _____

This weeks vocabulary: orbit, rotation, revolution, tilted axis, high tide, low tide, gravity, tidal bulge, lunar eclipse, solar eclipse, full moon, new moon, quarter moon, gibbous, waxing, waning, Earth/moon alignment, Earth-moon-Sun system, physical model, graphical model, conceptual model, crescent, celestial

PROCEDURAL CONTENT (application)

	Monday	Tuesday	Wednesday	Thursday	Friday
Essential Question	How can models be used to demonstrate the rotation and revolution within the Earth-moon-Sun system?	What is responsible for the day/night cycle on Earth?	What motion corresponds to one year on Earth?	What is the relationship between the orbital and rotational periods of the moon and Earth?	What is the relationship between Earth's tilted axis of rotation and the seasons?
Daily Objective(s) I Can Statement	I can construct an evidence-based explanation of how the relative positions of the sun and Earth result in observable phenomena, including day and night cycles, length of year, and seasons. I can construct an evidence-based explanation of how the relative positions of the sun, moon, and Earth result in observable phenomena, including lunar cycles, eclipses, and tidal cycles.	I can construct an evidence-based explanation of how the relative positions of the sun and Earth result in observable phenomena, including day and night cycles, length of year, and seasons. I can construct an evidence-based explanation of how the relative positions of the sun, moon, and Earth result in observable phenomena, including lunar cycles, eclipses, and tidal cycles.	I can construct an evidence-based explanation of how the relative positions of the sun and Earth result in observable phenomena, including day and night cycles, length of year, and seasons. I can construct an evidence-based explanation of how the relative positions of the sun, moon, and Earth result in observable phenomena, including lunar cycles, eclipses, and tidal cycles.	I can construct an evidence-based explanation of how the relative positions of the sun and Earth result in observable phenomena, including day and night cycles, length of year, and seasons. I can construct an evidence-based explanation of how the relative positions of the sun, moon, and Earth result in observable phenomena, including lunar cycles, eclipses, and tidal cycles.	I can construct an evidence-based explanation of how the relative positions of the sun and Earth result in observable phenomena, including day and night cycles, length of year, and seasons. I can construct an evidence-based explanation of how the relative positions of the sun, moon, and Earth result in observable phenomena, including lunar cycles, eclipses, and tidal cycles.
Preview (Before) Warm-up-Hook	Bell Ringer - Work on metric conversion problems	Bell Ringer - Work on metric conversion problems	Bell Ringer - Work on metric conversion problems	Bell Ringer - Work on metric conversion problems	Bell Ringer - Work on metric conversion problems

Instruction (During) I Do- We Do- Y'all Do- You Do-	**I Do:** Introduction to Earth's orbit and axis tilt using a globe and lamp model. **We Do:** Walk through the relationship between Earth's orbit and a 365-day year. **Y'all Do:** Group discussion about how different orbits affect seasons. **You Do:** Students write reflections or short answers based on the discussion.	**I Do:** Introduce the phases of the moon and eclipses using diagrams and images. **We Do:** Group activity modeling solar and lunar eclipses. **Y'all Do:** Students work in groups to position their model to show how lunar phases and eclipses occur. **You Do:** Write a short explanation of how lunar phases happen.	**I Do:** Use a visual presentation (e.g., a digital simulation or video) to explain how Earth's tilt causes different seasons. Emphasize that as Earth orbits the sun, different parts of the Earth receive varying amounts of sunlight, resulting in seasonal changes. **We Do:** As a class, analyze a diagram of Earth's orbit around the sun, pointing out how the tilt affects the distribution of sunlight on different parts of the Earth. **Y'all Do:** In small groups, students will discuss how seasons differ in various parts of the world (e.g., comparing northern and southern hemispheres). **You Do:** Individually, students answer questions that prompt them to apply what they've learned about the seasons (e.g., "What would happen to seasons if Earth's tilt were increased or decreased?").	**I Do:** Use an online interactive model or video to demonstrate Earth's rotation and revolution, showing how these movements cause the apparent motion of celestial bodies in the sky. **We Do:** As a class, discuss why the sun rises in the east and sets in the west, using the model to illustrate Earth's rotation. **Y'all Do:** In small groups, students work together to explain how the positions of the sun, moon, and stars change throughout the day and night. Each group can focus on a different celestial body. **You Do:** Each student independently writes a brief explanation of why the moon appears to change positions throughout the night.	**I Do:** Review the key concepts from the week (lunar phases, eclipses, seasons, and the motion of celestial bodies) using a digital quiz or interactive review game (e.g., Kahoot). **We Do:** The class discusses any lingering questions from the week's lessons, focusing on improving their understanding of the Earth-sun-moon system. **Y'all Do:** Groups work on finalizing their models of the Earth-sun-moon system, incorporating everything they've learned about lunar phases, eclipses, and seasons. **You Do:** Each student completes an individual exit ticket explaining one key takeaway from the week's lesson (e.g., "What causes the phases of the moon?" or "Why do we have seasons?")

Small Groups	Students work in groups to create physical models using a lamp (sun), globe (Earth), and a smaller ball (moon) to demonstrate the Earth-sun-moon system.	Each group continues to work on the Earth-sun-moon model, ensuring that they can demonstrate both lunar phases and eclipses.	Each group continues to work on the Earth-sun-moon model, ensuring that they can demonstrate both lunar phases and eclipses.	Each group continues to work on the Earth-sun-moon model, ensuring that they can demonstrate both lunar phases and eclipses.	Each group continues to work on the Earth-sun-moon model, ensuring that they can demonstrate both lunar phases and eclipses.
After/ Homework	None for Monday; preparation for Tuesday's activity.	Reflection: How does Earth's tilt and orbit affect what we see in the sky?	Get materials for project	Reflection exercise: Ask students to look at the sky at night and observe the position of the moon and stars. They will record their observations and note any changes in position.	get materials for project
Assessment (Formative): X Class work ☐Notebook ☐Homework X quizzes ☐Tests ☐Computer activities X Collaborative work X Project/ Other:					

Assessment (Summative): ☐ Quizzes ☐**Tests** ☐ Group activities ☐ Project based ☐ Other:Lab Write Up

Proficiency Scale

Summarizing: ☐ 3-2-1 ☐ Ticket out the Door ☐ The Important Thing ☐ Cue Cards ☐ Teacher Questions ☐ Student Summary ☐ Other:

Score 4.0	
Score 3.0	
Score 2.0	
Score 1.0	