

Year 7 Science - Lesson Plan

Date: Monday 26th May 2014

Topic: Astronomy; Lesson: Eclipses

Text Reference: PS7 Chapter 9, Earth in Space

Learning objectives:

- Review day/night, seasons misconceptions
- Review moon phases.
- Explain eclipses
- Research eclipses through the eyes of different cultures

STUDENT ACTIVITY			TEACHER ACTIVITY	HOMEWORK / COMMENT
<p>3. Solo: Eclipses worksheet</p> <p>Play around here to see how it works:</p> <p>http://astro.unl.edu/classaction/lunarcycles.html</p> <hr/> <p>4. Solo: Eclipses through the eyes of different cultures.</p> <p>(Research activity)</p> <hr/>	<p>10min</p>	<p>10 min</p> <p>5min</p> <p>5min</p> <p>25min</p> <p>1min</p> <p>1min</p>	<p>1. Hand out homework – review misconceptions</p> <p>2. Collect moon worksheet Review phases of the moon: Video: Phases of the moon song https://www.youtube.com/watch?v=AQRNzep e4wILesson wrap up</p> <p>3. Eclipses: draw on the whiteboard What is an eclipse? When do eclipses happen? Solar and Lunar eclipse Explain Umbra/Penumbra</p> <p>Lunar eclipse: https://www.youtube.com/watch?v=wuhNZeJ HeBg</p> <p>Solar eclipse: https://www.youtube.com/watch?v=RQJ6rrsZl JM</p>	<p>2. Engage: Moon Video (1:30) https://www.youtube.com/watch?v=i235Y2HRksA</p> <p>HOMEWORK Q: research the following:</p> <ol style="list-style-type: none"> 1. Finish research on eclipses. 2. Answer discussion questions. <p>The red coloring arises because sunlight reaching the Moon must pass through a long and dense layer of the Earth's atmosphere, where it is scattered.</p>

Discussion Questions (complete as homework with reference to the diagrams you filled out in class)

During a lunar eclipse:

Which bright object is in shadow? Which object is casting the shadow?

Does everyone in the world see it? Who can't see a lunar eclipse?

What is the phase of the moon during a lunar eclipse?

During a solar eclipse:

Which bright object is covered up? Which object is blocking the sunlight?

Does everyone in the world see it? Who can't see a solar eclipse?

What is the phase of the moon during a solar eclipse?

Do you see lunar eclipses at night or during the day? What about solar eclipses?

During a solar eclipse, what would you see if you stood on the Moon and looked at Earth?

What is the phase of the moon during a solar eclipse? And during a lunar eclipse?

Why don't we see a lunar eclipse during every full moon?

Do other planets have eclipses?

**5. Wrap up –
Homework reminder**