

Year 7 Science - Lesson Plan

Date: 12th May 2014

Topic: Astronomy; Lesson1: The Solar System

Text Reference: PS7 Chapter 9, Earth in Space

Learning objectives:

- Review existing knowledge about the solar system
- Understand the structure of solar system - planets
- Find out the approximate distances of the planets that orbit the sun
- Explain some features of planets – size, surface, moons, diameter, distance from sun, composition/atmosphere

STUDENT ACTIVITY		TEACHER ACTIVITY	HOMEWORK / COMMENT
<p>1. Working in pairs: Establishing existing knowledge</p> <p>From your existing knowledge about the solar system record the names of planets on posted notes provided. Can you write 3 facts next to each? Now arrange them in order that you think they belong in.</p> <hr/> <p>3. Solo: Planet grid</p> <p>Teacher to do the first planet with the class and demonstrate how to use the software.</p> <p>Complete the Planet Grid worksheet by referring to the following website: http://www.solarsystemscope.com/</p> <p>Stop after 20 minutes and move onto the next task, finish as homework.</p> <hr/>	<p>2min</p> <p>5 min</p> <p>7 min</p> <p>20min</p>	<ul style="list-style-type: none"> • Introduce topic for this unit – Astronomy • What are we going to learn • Introduce first activity • Give students 5 minutes – this is to inform them how much they know/don't know and establish their existing knowledge. <p>2. Video after activity 1: play video to check for correctness of the order. Why was Pluto demoted to dwarf planet? What is the Kuiper belt? Do you know your way around our galactic neighborhood? Stop video briefly when we get to planets to give students time to check their work.</p> <p>https://www.youtube.com/watch?v=z_RAEE Smsrs</p> <p>3. Before starting planet grid – Mnemonic device to remember the planets orbiting the Sun. The first letter of each word gives you the first letter of the planets, in order: My Very Energetic Mother Just Served Us</p>	<p>Remind students about homework – to have minimum 5 planets complete</p> <p>Remind that this work will be marked.</p>

<p>4. Working with others: Pocket solar system</p> <p>T: People often think that the planets in space that orbit around the sun are evenly spaced. Follow the instruction to find out. Make your own pocket solar system.</p> <p>Work with a partner and complete the pocket solar system. Both you and your partner are to make one. Help each other in following the instructions. Teacher to start the task with the students.</p> <p>Same pairs as for activity one? Or different? Colleen to help me with this pls.</p> <hr/> <p>Solo: (Extension) Complete text questions PS7 p. 333 – Q6a,b,c 7 and 8</p>	<p>20-25 min (rest of period)</p>	<p>Nachos (write this on board during the video). Set up software for planet grid to be ready to go!</p> <p>Give myself 5 minutes to wrap up the lesson. Homework expectations. Clean up.</p> <p>In 2008, famed Astrophysicist Neil deGrasse Tyson was asked by Time Magazine to cite what he considered the most astounding fact he ever learned about the universe. His reply focused on the interconnectedness of all life on Earth to each other and to the rest of the universe, through our shared chemistry.</p>	
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