

Teacher(s)	Allen	Subject group and discipline	Science		
Unit title	The Universe	MYP year	1	Unit duration (hrs)	10

Inquiry: Establishing the purpose of the unit

Key concept	Related concept(s)	Global context
Identity,time,place and space	Evidence and patterns	Identities and Relationships
Statement of inquiry		
Images help compare and contrast vast systems.		
Inquiry questions		
<p>Factual— What are known characteristics of planets?</p> <p style="padding-left: 40px;">What is a tool that I could use to find the constellations found in the Northern Hemisphere?</p> <p>Conceptual— Describe the structural differences between rocky and gaseous planets?</p> <p>Debatable- Based on information we have, could there be life on other planets?</p>		
Objectives	Summative assessment	
<p>Criterion A: Knowing and Understanding</p> <p>i. outline scientific knowledge</p> <p>ii: apply scientific knowledge and understanding to solve problems set in familiar situations and suggest solutions to problems set in unfamiliar situations.</p> <p>iii. interpret information to make scientifically supported judgements</p>	<p>Outline of summative assessment task(s) including assessment criteria:</p> <p>Goal-</p> <ul style="list-style-type: none"> Your goal is to gain knowledge about a planet that is assigned to you as well as tour the room to learn about other planets. <p>Role-</p> <ul style="list-style-type: none"> You are a planetary expert who has come to the class to explain 	<p>Relationship between summative assessment task(s) and statement of inquiry:</p> <p>Students will be using the items in the summative assessment. Students will explain how planets are made, what they look like, how they move, and where they are located.</p>

	<p>information about a particular planet.</p> <p>Audience-</p> <ul style="list-style-type: none"> You need to teach students who are learning about planets for the first time. <p>Situation-</p> <ul style="list-style-type: none"> The challenge involves creating a poster that is attention getting and a presentation that is 2 minutes long. <p>Product-</p> <ul style="list-style-type: none"> You will create a poster and presentation in order to teach others about your planet. <p>Standards and Criteria-</p> <ul style="list-style-type: none"> Your product must have at least 10 facts about your planet and a picture of your planet for students to see. 	
<p>Approaches to learning (ATL)</p>		
<p>Social Skills: Delegate and share responsibility for decision-making</p> <p>Self Management: Practice focus and concentration</p> <p>Thinking: Revise understanding based on new information and evidence</p>		

Action: Teaching and learning through inquiry

Content	Learning process
<p>State Performance Indicators</p> <p>SPI 0507.6.1 Distinguish among the planets according to their known characteristics such as appearance, location, composition, and apparent motion.</p> <p>SPI 0507.6.2 Select information from a complex data representation to draw conclusions about the planets.</p> <p>SPI 0507.6.3 Identify methods and tools for identifying star patterns.</p>	<p>Learning experiences and teaching strategies</p> <p>See attached unit plan</p>
	<p>Formative assessment</p> <p>Tests, group discussions, interactive notebook, journaling, observations, reflective writing, label planets in notebook, create foldables, orally quiz over planets and tools used to observe the night sky, come up to board and label planets, create model of solar system in hallway, identify differences between rocky and gaseous planets</p>
	<p>Differentiation</p> <p>Peer tutoring, pre-labeling, modified grading, guided vs. inquiry</p>
<p>Resources</p> <p>Textbook, Brainpop, Teacher created flipchart, teacher created tests, teacher created diagrams, teacher tube, youtube, Uncovering student ideas in science probes</p>	

Reflection: Considering the planning, process and impact of the inquiry

Prior to teaching the unit	During teaching	After teaching the unit
<p>Give pre-test over standards to find prior knowledge, 40% of the students were proficient or advanced before we started.</p>	<p>During teaching, I used a variety of methods for teaching to make sure I reached each student with their specific learning type.</p>	<p>Using the post-test, I was able to see that now 85% of my students are proficient or advanced in this standard.</p>