

Stage 1 - Desired Results				
<p>ESTABLISHED GOALS (CCSS)</p> <p>RST 9.3 - Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.</p> <p>RI 9.4 - Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to <i>grades 9-10 texts and topics</i>.</p> <p>High School Modeling Standard</p>	<i>Transfer</i>			
	<p><i>Students will be able to independently use their learning to...</i></p> <p>Illustrate & label a model of the earth’s interior Identify seasonal patterns and their causes Convert between time zones</p>			
	<i>Meaning</i>			
	<p>UNDERSTANDINGS <i>Students will understand that...</i> The earth is composed of several distinct layers. Earth’s position and motion in relation to the Sun causes the seasons. There is a need for different time zones around the globe.</p>	<p>ESSENTIAL QUESTIONS: How do we know about the different layers of the earth? What are their characteristics? How does the tilt of the earth affect the seasons? How does earth’s distance from the Sun affect the seasons? How do you convert between time zones?</p>		
	<i>Acquisition</i>			
<p><i>Students will know...</i> The difference between the crust, mantle, outer core, & inner core. The tilt of the earth and its revolution around the sun cause the seasons. There is a new time zone approximately every 15° Longitude.</p>	<p><i>Students will be skilled at...</i> Creating a scale model of earth’s interior. Identifying the position of the earth during each season. Converting between time zones</p>			
Stage 2 - Evidence				
Evaluative Criteria	Assessment Evidence			
PERFORMANCE TASKS	<p>CURRICULUM EMBEDDED PERFORMANCE ASSESSMENT (PERFORMANCE TASKS): Creative scale model, including labels, of the interior of the earth including all main layers and sub layers.</p> <p>Make accurate measurements and calculations to determine the densities of various different objects and substances.</p> <p>Given specific problems, accurately convert between various time zones.</p> <p>From a model or diagram, identify the positions of the earth and sun during each of the seasons.</p>			
CLAIMS	CLAIM 1	<u>CLAIM 2</u>	CLAIM 3	<u>CLAIM 4</u>
DEPTH OF KNOWLEDGE LEVELS	<u>DOK 1</u>	DOK2	DOK 3	<u>DOK4</u>
ACHIEVEMENT LEVEL DESCRIPTORS	<u>ALD 1</u>	ALD 2	ALD 3	<u>ALD 4</u>

Stage 3 – Learning Plan

Earth’s Layers Data Table

Notes/discussion – Earth’s Interior, Earth’s positions and motion, Time Zones

Density of earth LAB

Earth Interior Project

Time Zones worksheet

DRAFT