

**Stage 1 Desired Results**

<p><b>ESTABLISHED GOALS:</b></p> <p>Science: Soil, weathering &amp; erosion, chemistry, conservation, types of rocks</p> <p>Math: percentages, decimals</p> <p>ELA: Informational reading/writing about types of rocks</p> <p>Social Studies:</p>	<b>Transfer</b>	
	<p><i>Students will be able to independently use their learning to... (What relevant activity and/or performance will students be asked to do that applies the required skills and knowledge?)</i></p> <p><b>Friday, December 5th is <a href="#">World Soil Day</a>, and the FAO has declared that 2015 was the International Year of Soils.</b></p> <p>Phenomena: Land degradation directly impacts the health and livelihoods of an estimated 1.5 billion people. Our most significant non-renewable geo-resource is productive land and fertile soil. Each year, an estimated 24 billions tons of fertile soil are lost due to erosion. An estimated 36 billion tons of soil eroded per year, is at least two times lower than previous annual soil erosion reference values.</p> <p>A few issues can start when topsoil becomes degraded. Flooding is perhaps the most dramatic result. When a landscape can't hold water, rainfall can only run off the surface and eventually wind up int he ocean. It will also cause erosion and take a great deal of soil with it.</p>	
	<b>Meaning</b>	
	<p><b>UNDERSTANDINGS</b></p> <p>The importance of soil for planting</p>	<p><b>ESSENTIAL QUESTIONS</b></p> <p>Are we running out of soil?</p> <p>How much topsoil is lost each year in the US?</p> <p>What will happen if soil disappears from the earth?</p>
	<b>Acquisition</b>	
<p><i>Students will know...</i></p>	<p><i>Students will be skilled at...</i></p>	



Stage 2 - Evidence	
Evaluative Criteria	Assessment Evidence
	PERFORMANCE TASK(S):  Written piece about types of rocks/types of soil  Sharing
	OTHER EVIDENCE:
Stage 3 - Learning Plan	
<b>Summary of Key Learning Events and Instruction</b>  <i>What activities, experiences and lessons will lead to achievement of the desired results and success at the assessments?            How will the learning plan help students with Acquisition, Making Meaning and Transfer?            How will the unit be sequenced and differentiated to optimize achievement for all learners?</i>	
<b>WHERE TO</b> <ul style="list-style-type: none"> <li>● Where</li> <li>● Hook</li> <li>● Equip &amp; Experience</li> <li>● Rethink</li> <li>● Evaluate</li> <li>● Tailor</li> <li>● Organize</li> </ul>	Read Plant Something for ME and discuss  Go out to the playground and look at places where plants do not grow (can take iPad pictures to bring back to room). Pair and share/discuss why plants do not - share out. Discuss what helps make soil fertile.  What video about dirt: <a href="https://www.youtube.com/watch?v=if29mjcd5bc">https://www.youtube.com/watch?v=if29mjcd5bc</a> <a href="https://www.youtube.com/watch?v=p166fVxwyuY">https://www.youtube.com/watch?v=p166fVxwyuY</a> <a href="https://www.youtube.com/watch?v=uimJY25uMR8">https://www.youtube.com/watch?v=uimJY25uMR8</a>  Science: Parts of soil & chemicals, types of rocks <a href="https://www.youtube.com/watch?v=mg7XSjcnZQM">https://www.youtube.com/watch?v=mg7XSjcnZQM</a>  Math: %, pie graphs

UbD Template 2.0 (<http://jaymctighe.com/resources/downloads/>)

