Science Planning

**Unit 3: Earth’s Weather Patterns and Climate (8-9 weeks)**

**Week 6 Big Idea: Earth’s atmosphere and unequal heating keeps temperatures stable enough to sustain life**

Week 6 –2/10 – 2/13

2/11 - YWBAT develop a model and construct an explanation

Success is:

Phenomena: why is the Atacama Desert so dry?

* Use the slides presentation to introduce the students to the Atacama Desert.
* On the final slide, give students time to record the phenomenon in their notebooks and begin a notice/ wonder T-chart.
* Show the video of the Atacama.
  + <https://www.youtube.com/watch?v=CDnvqZyx0Wc>
* Discuss and make a class chart of things that they noticed and what they're wondering. Call attention to the fact that we are investigating causes for the dryness. Students should try to ask questions that will help them investigate the causes.

2/12 - YWBAT develop a model and construct an explanation

Success is: construct an explanation that includes direct/indirect light from the sun and how this causes unequal heating of the earth

Phenomena: the Atacama Desert is the driest on earth.

* We are trying to determine what causes the Atacama Desert to be so dry. Some of your ideas dealt with heat. Here is some data to help us understand how heat may or may not be involved
* Teacher displays NASA's Earth Eyes and we observe patterns and make a list of observations
  + <https://drive.google.com/file/d/0B-a5TRleEh90alhuTWtEa0ZKa00/view>
* Pose the question: why do you think average temperatures are the way they are on our planet?
  + Class discussion and brief model of seasons simulation from earlier in the year
* Try climate and latitude sort
* What do you notice about the Atacama in this temperature map? Why might that be the case?
* Exit ticket: construct a written and drawn explanation for why the earth is unequally heated
  + Video, if needed: <https://www.youtube.com/watch?v=7fd03fBRsuU>