Science Planning

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

**Week 5 Big Idea: Earth’s atmosphere and unequal heating keeps temperatures stable enough to sustain life**

Week 5 – 2/3 to 2/7

2/4 - YWBAT plan and carry out an investigation

Success is: make predictions using collected data

Phenomena: there are patterns that are used to predict changes in weather

* Weather patterns assessment

2/5 - YWBAT analyze data and find patterns

Success is: conclude that Earth is different from other planets in temperature, water, and atmospheric gases

Phenomena: Earth is the only planet that sustains life

* Propose the phenomena and brainstorm answers and more question
* Students look at data to look for patterns to answer question: what makes Earth unique and what allows it to have life? <https://docs.google.com/document/d/1Fj5i8EKcF1piL49c_CuhGVOQrgmqgrVxoLK6ylMvhvs/edit>
* Teacher explains why Mars, Venus and Mercury can't sustain life which leads students to figure out that earth is stable and does not have temperatures that are too high or low
* Exit ticket: what do you think makes earth different from other planets and what is it that is allowing life to be sustained on Earth

2/7 - YWBAT obtain, evaluate and communicate information

Success is: develop explanations and models from evidence that include an explanation of the earth’s atmosphere and how the natural greenhouse gases keep the temperature stable

Phenomena: Earth does not have as dramatic changes in temperature as other planets

* Students read pages 94-98 to come up with a 'why' for the phenomena
* Students use reading to construct explanation and a model of earth's energy and matter that allows a stable temperature
* New question posed: why doesn't the Earth overheat?
  + discuss
* Students adjust models and explanations