Science Planning

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

**Week 1 Big Idea: Water is cycled through Earth’s systems.**

Week 2 –1/13- 1/17

1/14 - YWBAT use models to construct explanations

Success is: correctly explain Earth’s systems and how energy from the sun, density, and gravitational forces are the driving factors

Phenomena: water is cycled through Earth’s systems

* Student draw an 11x17 graphical model of water cycle from memory (20 mins)
  + Must have: 2 transfers and reservoirs evidence of gravitational force, solar energy, density and living organism transfer
* Students observe each other's diagrams looking for similarities and differences (10 minutes)
* Students make adjustments to own diagrams (10 minutes)

1/15 - YWBAT develop a model

Success is: correctly explain how water cycles through Earth’s systems using a model

* Assessment

1/17 YWBAT obtain, evaluate, and communicate data

Success is: write a description that includes that weather happens where two air masses collide, known as boundaries

Phenomena: Weather occurs along boundaries of two air masses

* Students watch video of thunderstorms moving in and make a list of questions: <https://www.youtube.com/watch?v=Ms-276iEwuM>
  + record questions on chart paper
* Teacher projects Weather Underground\* on board and class observes and questions in radar view. Then, students observe and question in front view: <https://www.wunderground.com/wundermap>
  + discuss
  + \*use jpegs if real time weather is mostly clear
* Students determine patterns and make a list of questions they want to investigate in their notes
* Exit ticket: students write to describe the relationship between fronts and weather
  + explanation should include that weather happens where two air masses collide, known as boundaries