**Science 10 Energy of the Earth Mini Labs:**

**Instructions:**

* Complete the 4 mini labs
* Answer the questions for each lab as complete sentences and with as much detail as possible.

**Lab 1: Water Level Mini Lab**

**Procedure:**

* In this lab you need to fill a beaker with water (the size of the beaker does not matter).
* Mark the level of the water and check the level each day for a week.

**Questions:**

1. Why is the water level changing?
2. Why is this important to the Earth as a system?

**Lab 2: Snow and Boiling Water Mini Lab**

**Procedure:**

* PRECAUTION: be careful with the boiling water and do not touch the beaker where the boiling water is in direct contact with the beaker
* Fill your 250 mL beaker halfway with boiling water.
* Then place a watch glass or petri dish with snow over top (do not over fill).
* Make sure the snow and boiling water are not in direct contact.
* Leave the experiment for 10 minutes then check on the results.

**Questions:**

1. What is forming on the bottom of the watch glass/petri dish?
2. Why is this important to the Earth as a system?

**Lab 3: Cloud Lab**

**Procedure:**

* Fill your 250 mL beaker with 200 mL of water.
* Scrunch up a paper towel and place it on top of the water (make sure the paper towel is large enough so that part of it stays dry.
* Apply 20 drops of food coloring to the paper towel.
* Observe what happens to the water.

**Questions:**

1. What happens to the food colouring?
2. What does the food colouring represent?
3. Why is this important to the Earth as a system?

**Lab 4: Lava Lamp Mini Lab**

**Procedure:**

* Fill your 50 mL beaker with 20 mL of water
* Add the equivalent amount of oil to create 2 distinct layers.
* Add 5 to 10 drops of food colouring.
* Add ½ a polident or effervescent table.
* Observe

**Questions:**

1. What happens to the water and oil mixture?
2. What process does this represent?
3. Why is this important to the Earth as a system?