

ACTIVITY #3

SETTLE-IT-OUT

OBJECTIVE:

- Demonstrate the separation of solids and liquids.
- Students will understand the three phases of matter.
- Students will understand that two different phases will mix.
- Students will understand that the solid and liquid material will separate and divide into two different phases over a given time period.

BACKGROUND:

Sedimentation- the act by which matter settles to the bottom of a liquid. Fragmented material settles or deposits out of the water or air. This experiment will allow students to visually monitor what happens when they mix soil with water. The dirt will settle to the bottom of the vial. The students will observe the two components mixed, and over a time period they will see the solid settle-out onto the bottom of the vial.

MATERIALS:

- 4 Vials of Soil
- Tap Water

MATERIALS PROVIDED

Vials of Soil

PROCEDURE:

1. Add a small amount of water into the vial with soil.
2. Shake vial well.
3. Record observations.
4. Allow the vial to set on a flat surface for one day. Do not shake or disturb the vial.
5. Record observations after one day.

QUESTIONS:

1. What did you see when you first shook the vial?
2. What happened over time?
3. Describe what you saw in 5 minutes.....10 minutes..... 1 day.
4. Draw a picture of what you observed before, during and after you ran the experiment.

NAME _____

1. *What did you observe when you shook the vial?*

2. *What happened after 5 minutes?*

3. *What happened after 10 minutes?*

4. *What happened after 1 day?*

5. *Draw a picture of what you saw before, during and after the experiment?*

| <i>BEFORE</i> | <i>DURING</i> | <i>AFTER</i> |
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