Fantastic 4

Maggie Magnificent

Date 8-31-11 Period 8

Separating Mixtures

Purpose (Learning Target)

Students will be able to perdict the outcome of seperating mixtures.

Hypothesis:

1. What do you think will happen to the mixture after you shake the contents and allow them to settle? I think the denser materials will settle first near the bottom in the order of gravel, sand, clay, red dirt, and perlite.

Materials:

1. Five soils, (red dirt, gravel, perlite, sand, loma clay)
2. 3 pints of water
3. jar with lid.

Etc.

Procedure:

1. Observe characteristics rand make perdictions.
2. Place 5 sails in jar, add water and shake vigorously after sealed.
3. After 15 minutes evaluate and compare data results.

Data/Results/Observations: Copy blank table found in lab paper

Perdicted Order	Actual Order
Gravel	Gravel
Sand	Clay
Clay	red dirt
Red Dirt	sand
Perlite	Perlite

gravel - pink rocks size of pinki nail
perlite - felt like dippin dots small soft foam
sand - soft smooth
loma clay - clumpy crumbs of rock
red dirt - thick, settle, sticky

Analysis (Levels 1-3 are required) Possible /Received

Level 1: Define Mixture A mixture is when 1 1

2 or more substances are distinguised from each other because they are seperated by pysical means.

Level 2: Explain why the substances in the mixture settled in the order in which they did? In the mixture the substances were seperated by the order of gravel, clay, red dirt, sand, and perlite. 1 1

Level 3: Using data support why the mixture settled the way it did? 1 1

After reviewing the data I think the mixture settled the way it did because of having more density in the different materials.

Level 4 (Optional) 1 1

Compare in detail the results of this lab to an outside occurrence.

The results in this lab reminded me of peaches and cream. After you pour whipped cream and peach juice together the juice and whipped cream seperate from each other.

Total 4 ____

Yum!

Conclusion (Required)

1. Conclusions must be written in paragraph form. Do not number or bullet a conclusion.

Topic Sentence 2. Restate the purpose / question/ problem.

Introduction 3. Tell whether you accept or reject the hypothesis based on the results from this experiment.

4. What did you learn in this lab?
5. Now I wonder? (What are possible further experiments or questions that you could ask based on this experiment?)

In this experiment I predicted the outcome of seperating mixtures. My hypothesis was half way correct. I accept that denser materials settle first however, my order was different then the end result. If I had a scale I could have accurately measured the material density better. From this lab I learned that materials with more density sink faster because of gravity causing it to settle. After seeing the results of this experiment I now wonder if denser liquids would effect the way the materials settle.