Pineview Elementary School

Mrs. McCray **Topic: The Unmixable Sea**

Purpose:

To demonstrate that liquids have different properties.

Hypothesis:

When oil and water are combined the combination will cause an explosion.

Materials:

Spring Water
Purified Water
Cooking oil (canola)
Blue food coloring
Red food coloring
2 clear plastic bottles (8 oz)

Procedures:

Fill 1/2 of the plastic bottles with water (one with spring water; other with purified water). Add several drops of food coloring to each bottle . Shake the bottle to disperse the food coloring. Top up the bottles with oil. Tip the bottle upside down; shake, watch what happens.

Data:

Oil and colored water poured into a container. Oil floats on top of the water layer. Shaking breaks the oil into smaller blobs and mixes them but the separation quickly resumes once the shaking stops.

Results:

The oil and water remain separate because their densities are different. Oil is the least dense of the liquids, so it floats to the top.

Conclusion:

Oil and water don't mix. The water molecules stick together. This causes the oil and water to form two separate layers. Oil molecules are not attracted to water molecules.

Acknowledgements:

Students of Mrs. McCray's Pre-Kindergarten classroom

Pineview Elementary School

Mr.Cjay Topic: Sink or Float Experiment

Purpose:
Activity driven to introduce students to the concept of buoyancy and density

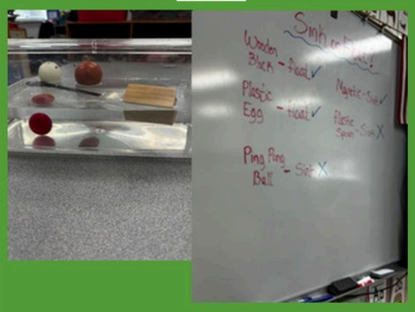
Hypothesis:
-Plastic Spoon: Sink
-Wooden Block: Float
-Magnet Ball: Sink
-Plastic egg: Float
-Ping Pong Ball: Sink

Materials:

1. Clear container filled with water
2. Variety of Objects:
- plastic spoon
- Wooden block
- Magnet ball
- Ping Pong Ball
- Plastic Egg

Procedures:
- Ask students to predict whether objects will sink or float
- Sort items by predictions
- Place items in water and observe what happens
- Sort items again based on new observations
- Discuss Results

Data:



Results:
- Plastic Spoon: Incorrect
- Wooden Block: Correct
- Magnet Block: Correct
- Ping Pong Ball: Incorrect
- Plastic Egg: Correct

Conclusion:
Our results concluded that we were correct 3 out of the 5 trials. Personally, I was proven wrong about the block and disagreed that it would float contrary to their belief.

Acknowledgements:
I would like to thank my students for working together as a team and making inferences based on the information given to them about density and buoyancy.

Pineview Elementary School

Ms. Banks Pre-K class TOPIC: Innovation Through Design

Purpose:

Create the longest paper chain possible using a single sheet of construction paper in 15 minutes.

Hypothesis:

How can we make the longest chain using 1 sheet of paper?

Materials:

1. 1 sheet of construction paper per group
2. Scissors
3. Stapler

Procedures:

1. Divide the class into equal groups (6 people per group)
2. Each group selected a piece of paper.
3. Decided which way to cut the paper in order to get more strips.
4. Cut strips and link them together with staples.

Results:

Group A: 20 strips green paper
Group B: 16 strips orange paper
Both groups cut paper length-wise, free hand cutting without measuring strip width.

Conclusion:

Both groups cut the paper length-wise to get long strips. However, Group A cut the initial strips again to get more strips. Creating more strips produced a longer chain.

Acknowledgements:

I would like to thank my Pre-K class as well as my Paras, Mrs. Green and Mrs. Jennings for being willing participants in this experiment.