

Teacher's Guide

Physical and Chemical Changes Lab Stations

Students will:

- “construct an explanation to classify changes in matter as physical changes (including changes in size, shape, and state) or chemical changes that are the result of a chemical reaction (including changes in energy, color, formation of a gas or precipitate)”.
- rotate through 6 stations to classify changes as physical or chemical and explain their reasoning.

There are six investigations that can be used as:

- stations (students will work in groups and rotate)
- demonstrations
- and more

1. Salt and Water Mixture
2. Rusted Nails
3. Brownd Banana
4. Cornstarch and Water Mixture
5. Baking Soda and Vinegar
6. Crumpled Paper

Simple materials you will need for these stations:

- small beaker or clear cup
- water
- salt
- plastic spoons
- paper towels
- rusted and non-rusted nails
- magnifying glass (optional)
- a brownd banana
- a plate
- cornstarch
- bowl/container
- rubber gloves (optional)
- graduated cylinder (100 ml)
- funnel
- baking soda
- vinegar
- measuring spoon
- paper



Included:

- 6 station directions (editable text)
- student sheet (editable)
- sample answer key
- teacher's guide
- teacher tips (set-up and more)

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Physical and Chemical Changes Lab Stations

Students will:

- "construct an explanation to classify (including changes in size, shape, and of a chemical reaction (including ch precipitate)".
- rotate through 6 stations to classify their reasoning.

There are six investigations:

- Stations (students will w
- demonstrations

Teacher Tip

Station 1: Salt and Water

Materials Needed:

- small beaker
- salt
- spoon for stirring
- paper towel

Setup:

- Place the
- Also include
- Students v

* You or your student group comes to

Station 2: Rusted Nail

Materials Needed:

- rusted nail
- non-rusted nail
- magnifying glass

Setup:

- Place be
- Also include
- wish.

Station 3: Browned Banana

Materials Needed:

- a browned banana
- a plate

Setup:

- Place the browned banana on a plate.

Station 4: Cornstarch and Water

Materials Needed:

- cornstarch
- water
- spoon
- paper towel

Setup:

- Pre-mix 2 parts cornstarch to 1 part water.
- Test it with hands.
- Make sure students use towels on hands.
- Students can

Station 5: Baking Soda and Vinegar

Materials Needed:

- graduated cylinder
- funnel
- baking soda
- vinegar

Setup:

- Set up the
- baking s
- Also keep

* This station

Station 6: Crumpled Paper

Materials Needed:

- Sheets of paper

Setup:

- Provide flat sheets for the station. You may use a computer, construction paper, or cardstock.
- You can also set up a funnel.

Station One

Station Two

Station Three

Station Four

Station Five

You will need:

- graduated cylinder
- funnel
- baking soda
- vinegar
- measuring spoon
- paper

1. Place the graduated cylinder on a flat surface.

2. Pour the vinegar into the graduated cylinder.

3. Add the baking soda to the graduated cylinder.

4. Observe the reaction.

Station Six

You will need:

- sheets of paper
- basket (optional)

1. Place the sheets of paper in a basket.

2. Pour the sheets of paper into the basket.

3. Add the sheets of paper to the basket.

4. Observe the reaction.

Physical and Chemical Changes Stations

Name _____

Date _____

Station	Observations	Physical or Chemical Change	Explanation
1			
2			
3			
4			
5			
6			

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