



Vinegar and Baking Soda #1



1. Pour 30 ml of vinegar into your mixing glass.
2. Take the temperature of the vinegar and record it on your lab sheet.
3. Look at the physical properties of the vinegar and baking soda and record your hypothesis on your lab sheet.
4. Mix 1 teaspoon of the solute (baking soda) into the mixing glass and stir. Set the timer for one minute, as it counts down, record your observations on your lab sheet.
5. When the timer goes off, take the temperature of your solution and record the data.
6. Decide whether you observed a physical change or a chemical reaction then record your findings with evidence supporting your choice.
7. Record whether your hypothesis was correct on your lab sheet.
8. Each group member will take turns to help clean up and prepare the lab station for the next group by doing the following:
 - a. 1 person refills the solvent.
 - b. 1 person rinses the mixing glass, the stirring stick, the tray, and the thermometer.
 - c. 1 person sets up the tray, closing all lids, straightening the instruction page and ensuring all the items needed for the lab are available.
 - d. 1 person dries the wet equipment then throws the used towels in the garbage.
 - e. Everyone pushes in their chair, checks the floor for trash, then quietly stands behind their chair to let the teacher know they are ready to rotate



Water & Calcium Chloride #2



1. Pour 30 ml of water into your mixing glass.
2. Take the temperature of the water and record it on your lab sheet.
3. Look at the physical properties of the water and Calcium Chloride. Then record your hypothesis on your lab sheet.
4. Mix 1 teaspoon of the solute (Calcium Chloride) into the mixing glass and stir. Set the timer for one minute, as it counts down, record your observations on your lab sheet.
5. When the timer goes off, take the temperature of your solution and record the data.
6. Decide whether you observed a physical change or a chemical reaction then record your findings with evidence supporting your choice.
7. Record whether your hypothesis was correct on your lab sheet.
8. Each group member will take turns to help clean up and prepare the lab station for the next group by doing the following:
 - f. 1 person refills the solvent.
 - g. 1 person rinses the mixing glass, the stirring stick, the tray, and the thermometer.
 - h. 1 person sets up the tray, closing all lids, straightening the instruction page and ensuring all the items needed for the lab are available.
 - i. 1 person dries the wet equipment then throws the used towels in the garbage.
 - j. Everyone pushes in their chair, checks the floor for trash, then quietly stands behind their chair to let the teacher know they are ready to rotate.



Water & Baking Soda #3



1. Pour 30 ml of water into your mixing glass.
2. Take the temperature of the water and record it on your lab sheet.
3. Look at the physical properties of the water and baking soda. Then record your hypothesis on your lab sheet.
4. Mix 1 teaspoon of the solute (Baking Soda) into your mixing glass and stir. Set the timer for one minute, as it counts down, record your observations on your lab sheet.
5. When the timer goes off, take the temperature of your solution and record the data.
6. Decide whether you observed a physical change or a chemical reaction then record your findings with evidence supporting your choice.
7. Record whether your hypothesis was correct on your lab sheet.
8. Each group member will take turns to help clean up and prepare the lab station for the next group by doing the following:
 - a. 1 person refills the solvent.
 - b. 1 person rinses the mixing glass, the stirring stick, the tray, and the thermometer.
 - c. 1 person sets up the tray, closing all lids, straightening the instruction page and ensuring all the items needed for the lab are available.
 - d. 1 person dries the wet equipment then throws the used towels in the garbage.
 - e. Everyone pushes in their chair, checks the floor for trash, then quietly stands behind their chair to let the teacher know they are ready to rotate.



Hydrogen Peroxide & Sugar #4



1. Pour 30 ml of hydrogen peroxide into your mixing glass.
2. Take the temperature of the hydrogen peroxide and record it on your lab sheet.
3. Look at the physical properties of the hydrogen peroxide and sugar. Then record your hypothesis on your lab sheet.
4. Mix 1 teaspoon of the solute (sugar) into the mixing glass and stir. Set the timer for one minute, as it counts down, record your observations on your lab sheet.
5. When the timer goes off, take the temperature of your solution and record the data.
6. Decide whether you observed a physical change or a chemical reaction then record your findings with evidence supporting your choice.
7. Record whether your hypothesis was correct on your lab sheet.
8. Each group member will take turns to help clean up and prepare the lab station for the next group by doing the following:
 - f. 1 person refills the solvent.
 - g. 1 person rinses the mixing glass, the stirring stick, the tray, and the thermometer.
 - h. 1 person sets up the tray, closing all lids, straightening the instruction page and ensuring all the items needed for the lab are available.
 - i. 1 person dries the wet equipment then throws the used towels in the garbage.
 - j. Everyone pushes in their chair, checks the floor for trash, then quietly stands behind their chair to let the teacher know they are ready to rotate.



Vinegar and Salt #5



1. Pour 30 ml of vinegar into your mixing glass.
2. Take the temperature of the vinegar and record it on your lab sheet.
3. Look at the physical properties of the vinegar and salt. Then record your hypothesis on your lab sheet.
4. Mix 1 teaspoon of the solute (salt) into the mixing glass and stir. Set the timer for one minute, as it counts down, record your observations on your lab sheet.
5. When the timer goes off, take the temperature of your solution and record the data.
6. Decide whether you observed a physical change or a chemical reaction then record your findings with evidence supporting your choice.
7. Record whether your hypothesis was correct and record your answer on your lab sheet.
8. Each group member will take turns to help clean up and prepare the lab station for the next group by doing the following:
 - k. 1 person refills the solvent.
 - l. 1 person rinses the mixing glass, the stirring stick, the tray, and the thermometer.
 - m. 1 person sets up the tray, closing all lids, straightening the instruction page and ensuring all the items needed for the lab are available.
 - n. 1 person dries the wet equipment then throws the used towels in the garbage.
 - o. Everyone pushes in their chair, checks the floor for trash, then quietly stands behind their chair to let the teacher know they are ready to rotate.



Hydrogen Peroxide & Active Yeast #6



1. Pour 30 ml of hydrogen peroxide into your mixing glass.
2. Take the temperature of the hydrogen peroxide and record it on your lab sheet.
3. Look at the physical properties of the hydrogen peroxide and active yeast. Then record your hypothesis on your lab sheet.
4. Mix 1 teaspoon of the solute (active yeast) into the mixing glass and stir. Set the timer for one minute, as it counts down, record your observations on your lab sheet.
5. When the timer goes off, take the temperature of your solution and record the data.
6. Decide whether you observed a physical change or a chemical reaction then record your findings with evidence supporting your choice.
7. Record whether your hypothesis was correct and record your answer on your lab sheet.
8. Each group member will take turns to help clean up and prepare the lab station for the next group by doing the following:
 - a. 1 person refills the solvent.
 - b. 1 person rinses the mixing glass, the stirring stick, the tray, and the thermometer.
 - c. 1 person sets up the tray, closing all lids, straightening the instruction page and ensuring all the items needed for the lab are available.
 - d. 1 person dries the wet equipment then throws the used towels in the garbage.
 - e. Everyone pushes in their chair, checks the floor for trash, then quietly stands behind their chair to let the teacher know they are ready to rotate.

Name _____ Date _____

Physical and Chemical Change Lab



#1 Vinegar and Baking Soda



Initial temperature of solvent: _____

Hypothesis: _____

Mix the two substances together:

What did you see? _____

Were there any smells that changed? _____

How did the outside of the container feel? _____

Did you hear anything? _____

What was the temperature after mixing for 1 minute? _____

Was it a physical change or a chemical reaction and why? _____

Was your hypothesis correct? _____



#2 Water and Calcium Chloride



Initial temperature of solvent: _____

Hypothesis: _____

Mix the two substances together:

What did you see? _____

Were there any smells that changed? _____

How did the outside of the container feel? _____

Did you hear anything? _____

What was the temperature after mixing for 1 minute? _____

Was it a physical change or a chemical reaction and why? _____

Was your hypothesis correct? _____



#3 Water and Baking Soda



Initial temperature of solvent: _____

Hypothesis: _____

Mix the two substances together:

What did you see? _____

Were there any smells that changed? _____

How did the outside of the container feel? _____

Did you hear anything? _____

What was the temperature after mixing for 1 minute? _____

Was it a physical change or a chemical reaction and why? _____

Was your hypothesis correct? _____



#4 Hydrogen Peroxide and Sugar



Initial temperature of solvent: _____

Hypothesis: _____

Mix the two substances together:

What did you see? _____

Were there any smells that changed? _____

How did the outside of the container feel? _____

Did you hear anything? _____

What was the temperature after mixing for 1 minute? _____

Was it a physical change or a chemical reaction and why? _____

Was your hypothesis correct? _____



#5 Vinegar and Salt



Initial temperature of solvent: _____

Hypothesis: _____

Mix the two substances together:

What did you see? _____

Were there any smells that changed? _____

How did the outside of the container feel? _____

Did you hear anything? _____

What was the temperature after mixing for 1 minute? _____

Was it a physical change or a chemical reaction and why? _____

Was your hypothesis correct? _____



#6 Hydrogen Peroxide and Active Yeast



Initial temperature of solvent: _____

Hypothesis: _____

Mix the two substances together:

What did you see? _____

Were there any smells that changed? _____

How did the outside of the container feel? _____

Did you hear anything? _____

What was the temperature after mixing for 1 minute? _____

Was it a physical change or a chemical reaction and why? _____

Was your hypothesis correct? _____