

Flame Test Lab- Physical & Chemical Changes

Directions:

1. Put on safety goggles and put long hair up.
2. Fill a beaker half way with water to dispose of the used wooden splints.
3. Set up a Bunsen burner. Your teacher will light the burner when you are ready.
4. Obtain a wooden splint. Dip it in the chemical.
5. Hold the stick in the flame and record what occurs. (Do not hold it in the flame long enough to catch the stick on fire!!!) Dip in water to extinguish.
6. Repeat step 5 for all of the chemicals using a new wooden splint each time.
7. **Clean up your lab area-** throw away used wood splints, dump out the water, wash the beaker.

Chemical Salt	Physical Properties (at least 2)	Chemical Properties (Is it flammable? What color will it burn?)
Barium Chloride		
Copper II Sulfate		
Sodium Borate		
Copper (II) Chloride		
Strontium Chloride		
Lithium Chloride		
Potassium Chloride		
Cobalt Chloride		

The following questions are a review of chemical and physical changes. They are not all directly related to the lab.

1. Explain how to identify a physical change.
2. List and explain the keys to identifying a chemical change.
3. Give 2 examples of physical changes.
4. Give 2 examples of chemical changes.
5. Explain the difference between a change and a property.

Questions:

1. What would these colored salts be used for?

Video: Chemical Reactions

Directions: Answer the questions and complete statements from viewing the video.

1. Everything is made of _____.
2. When do chemical reactions happen?
3. Water is _____ parts "H" and _____ part "O".
4. What makes iron rust and our blood red?
5. Car and motorcycle engines are controlled by what chemical reaction?
6. Baking soda =
7. $C_2H_4O_2$ is what?
8. What is sodium chloride?
9. What is the name given to people who manufacture and use fireworks?
10. There are _____ elements that make up the things that we love.
11. Who was the Swedish chemist that invented dynamite?
12. What is the list that shows our 92 elements?
13. Cow's milk contains what element?
14. The symbol for potassium on the periodic table is _____.
15. Na on the periodic table is the symbol for what?
16. What two elements are used to make a laser pen light?
17. In the song "Don't Try This at Home" what makes compounds?