

Name: _____

Date: _____

Chemical Reactions & Changes

Classwork Unit 5 - Topic 1

Is the *PROPERTY* physical or chemical? Sort each of the following properties into the appropriate category.

- Color
- Boiling Point
- Burns a hole in Aluminum foil
- Conducts electricity
- Malleable
- Changes color when reacting with vinegar
- Density
- Forms bubbles
- Does not react with hydrochloric acid
- Creates a gas when mixed with ethanoic acid

Physical:

1. _____
2. _____
3. _____
4. _____
5. _____

Chemical:

1. _____
2. _____
3. _____
4. _____
5. _____

Tell whether the following represent chemical or physical **properties**.

1	Silver nitrate is a white solid	
2	Silver nitrate is soluble (dissolves) in water	
3	Silver nitrate kills bacteria	
4	A solution of silver nitrate conducts electricity	
5	Silver nitrate solution reacts with sodium chloride to form a precipitate (liquid that has become a solid) of silver chloride.	
6	Silver nitrate has a high melting point.	

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More Physical vs. Chemical Changes:Tell whether the following systems represent chemical or physical **changes**.

1	Silver nitrate turns black on exposure to light.	
2	A solution of silver nitrate is made more dilute by the addition of water.	
3	$\text{Ag}(\text{NO}_3) + \text{NaBr} \rightarrow \text{AgBr} + \text{Na}(\text{NO}_3)$	
4	Silver nitrate melts when much heat is applied.	
5	Water is evaporated from a solution of silver nitrate	
6	Silver nitrate kills bacteria in newborn's eyes.	

Writing and Balancing Equations - write the word equations below as chemical equations and balance them.

1	zinc + lead (II) nitrate yield zinc nitrate + lead
2	aluminum bromide + calcium chloride yield aluminum chloride + calcium bromide
3	potassium chlorate when heated yields potassium chloride + oxygen gas
4	copper + sulfuric acid yield copper (II) sulfate + water + sulfur dioxide
5	hydrogen + nitrogen monoxide yield water + nitrogen