

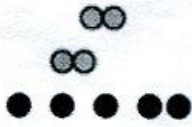
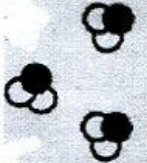

Put your lab report letter from Friday's Lab in the box

Purpose:

How can we define every possible change that matter can undergo?

WARMUP (in notes, copy and complete using the word choices on the whiteboard):

If you had three spoonfuls and they looked like this, what three names would you give them?

This is a <i>MIXTURE</i>	This is a <i>SUBSTANCE</i>	<i>"ELEMENT"</i>
		

Physical Changes – changes where the intensive properties of the matter are still the same afterwards

Examples: tear up paper
melt ice
smash a rock
evaporate metal

Chemical Changes – changes where the matter has changed intensive properties afterwards

Examples: burning paper
squash turning into feces
your breath turning from oxygen into CO_2

Intensive Properties are properties that stay the same no matter what quantity of the substance is present.

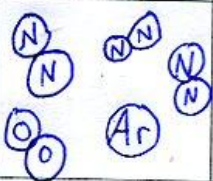
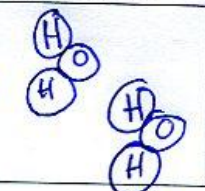
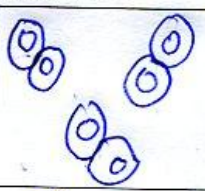
example
color
density

antiexample
mass
length

Elements

If every particle is the same AND every circle in that particle is the same, we call it AN ELEMENT.

EXAMPLE:

air is a mixture	water is a compound	oxygen is an element:
		


Properties are things such as melting point, density, and color.

Only the ^{boxes} ~~boxes~~ on the ~~left~~ (right) have clearly defined properties.

(that's because the variable composition of the box on the left makes its properties an unpredictable mix of properties)

hints for tonight's homework:

Physical Changes vs Chemical Changes
East HS Chemistry
Mr. Genest



Name n
Period we
a s r s

In a physical change, the original substance still exists, it has only changed in form. In a chemical change, a new substance is produced. Energy changes always accompany chemical changes.

Classify the following as being a physical or chemical change.

1. Sodium hydroxide dissolves in water. physical change
2. Hydrochloric acid reacts with potassium hydroxide to produce a salt, water and heat. Chemical change
3. A pellet of sodium is sliced in two. PHYSICAL CHANGE
4. Water is heated and changed to steam. PHYSICAL CHANGE
5. Potassium chlorate decomposes to potassium chloride and oxygen gas. CHEMICAL CHANGE