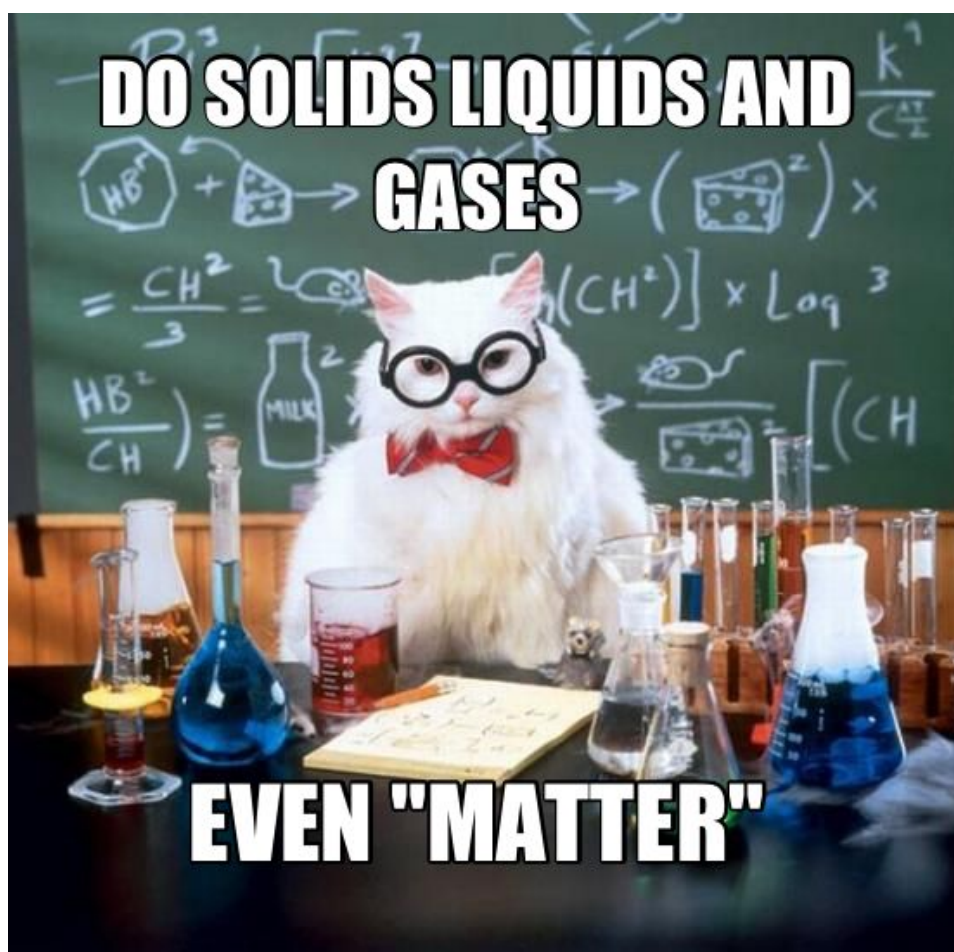


Name:

Introduction to Matter Activity

Objective: Model 1 represents the classification of matter. Using the model, you will visit each station and determine if the substances are elements, compounds, heterogeneous or homogeneous mixtures. There are 2 substances at each station and they may or may not be of the same classification. Once you have completed your chart, you will analyze your data and answer the questions.



Name:

MODEL 1

Matter

Can NOT be separated by physical means

CAN be separated by PHYSICAL means

PURE SUBSTANCES (each piece looks the same – PURE!)
-each piece has exact same composition.

MIXTURES (each piece is different – not pure)

Can NOT be separated by chemical means

Separated by chemical means, only

Same composition throughout

Different composition throughout

ELEMENT (simplest form of matter)

Example: Na, Cl₂

COMPOUND or MOLECULE
(2+ different elements chemically combined)

Example: NaCl (table salt), H₂O (water)

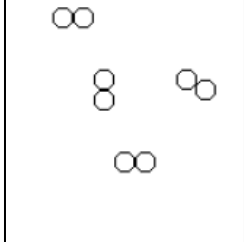
HOMOGENEOUS MIXTURE (uniform throughout—no separation)

Example: saltwater, iced tea or any solution

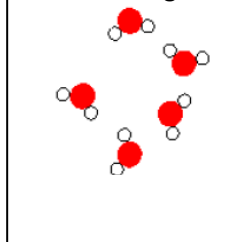
HETEROGENEOUS MIXTURE (not uniform throughout— a separation)

Example: Italian dressing, concrete, soil, chocolate chip cookie

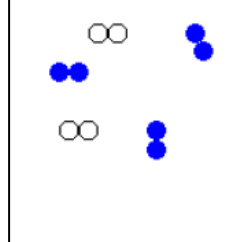
Particle Diagram



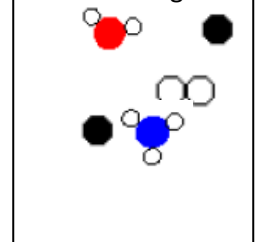
Particle Diagram



Particle Diagram



Particle Diagram



Name:

Matter Activity

Station Number/ Identity of Substance	Description/Observations	Classification (Element, Compound, Homogeneous Mixture, Heterogeneous Mixture)	How do you know?
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Name:

13			
14			

Questions:

1. How could you tell a substance is an element?
2. What phases can elements be in?
3. How could you tell a substance is a compound?
4. What phases can compounds be in?
5. How could you tell a sample is a mixture?
6. What phases can mixtures be in?
7. How do you know the difference between a homogeneous and heterogeneous mixture?