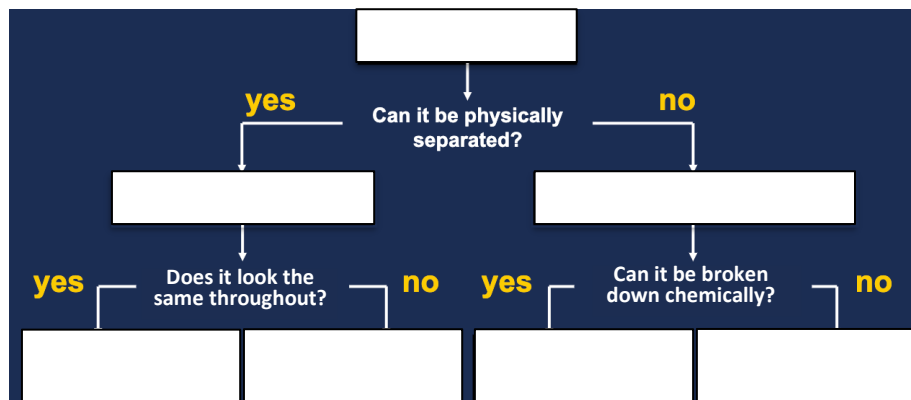


1. Classifying Matter
2. Elements of the Periodic Table

How do we classify matter?

If everything that has mass and takes up space counts as matter, then matter is almost everything! What are the _____ that we _____ matter into to better understand the world around us?



What is a pure substance?

- A _____:
- Made of _____ of particle (_____ or _____)
 - _____ (broken down) using physical methods
 - Elements and compounds, for example:

What is an element?

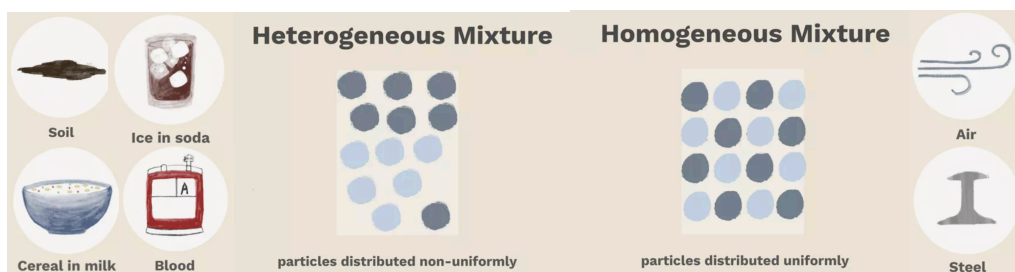
- An _____:
- Made up of only _____
 - _____ into a simpler type of matter
 - Found on the _____ of the Elements
 - Examples:

What is a compound?

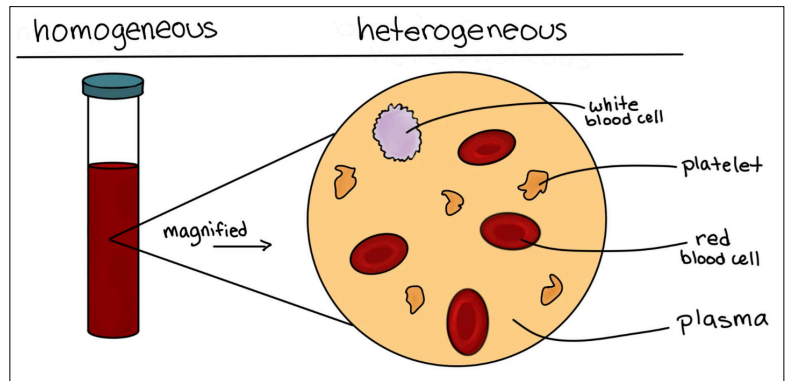
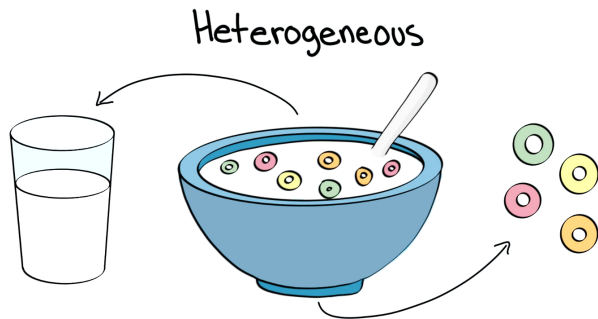
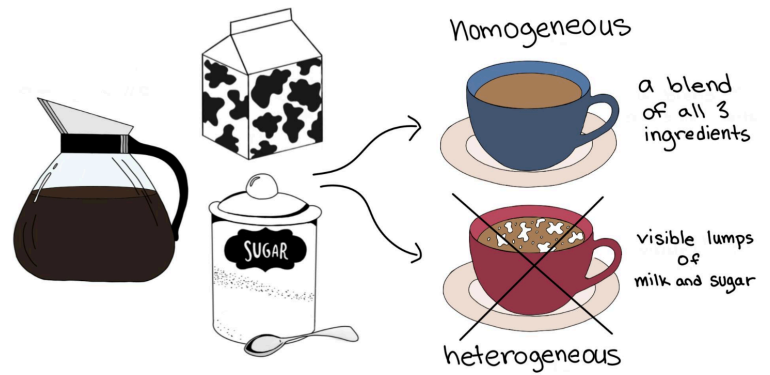
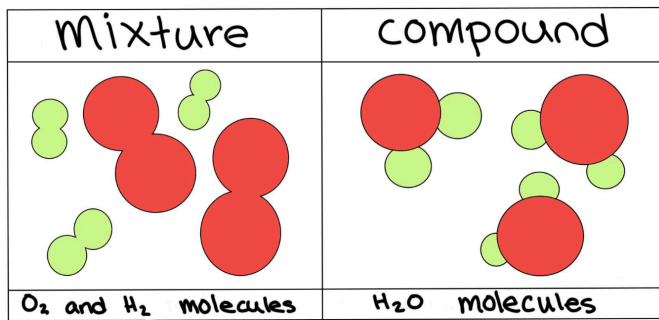
- A _____:
- Made up of _____ bound (attached) together
 - _____ into atoms (elements) by _____ methods
 - Examples:

What is a mixture?

- A _____:
- Consists of _____ substances _____
 - _____ by physical methods
 - Can be classified as heterogeneous or homogeneous:
 - _____ = the _____ throughout, e.g.
 - _____ = _____ throughout, e.g.



Heterogeneous vs Homogeneous Mixtures (images by Gabi Slizewska)



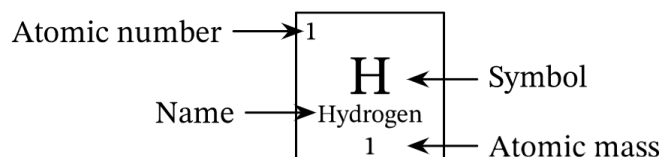
Practice: Classify the following as an element (E), a compound (C), or a mixture (M):

Water	Oxygen
Silver	CO ₂
Made up of only one type of atom	Has different properties throughout
Ketchup	Magnesium
Can be homogeneous or heterogeneous	A pure substance made up of two or more atoms
Lemonade	Salad

Brainstorm: Can you name 4 different elements off the top of your head?

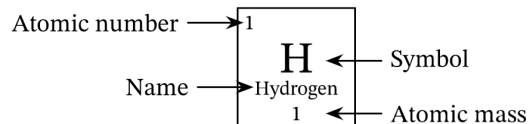
How do we organize information about the elements?

- We use the Periodic Table of the Elements
- Each element has a different _____ and _____
- Each element has a different number of _____, _____, and _____, which are the particles that make up atoms, called _____ particles



Periodic Table Scavenger Hunt!

To answer the questions below, draw the **atomic number**, **element symbol** and **element name** in the boxes provided.



1. Find 3 elements named after countries.

2. Find an element named after a continent.

3. Find 3 elements named after planets.

4. Find 5 elements whose symbols **do not** match their names (for an example, find Tungsten)

5. Write the name of an element that **starts** with the following letters:

A		F		L		R	
B		G		M		S	
C		H		N		T	
D		I		O		U	
E		K		P		V	