

# Physical and Chemical Properties



THE EARTH IS ONE LARGE  
MIXTURE OF MOLECULES IN  
GASES, LIQUIDS AND SOLIDS.

# All substances have properties... Including people!

**Example:**

**People can be  
identified by  
their ...**



Face (shape, expressions)	Voice	Height	Finger prints
Eye color	Hair color	Teeth	DNA

# What are properties?

- Matter has observable and measurable qualities.
- We can use general properties to identify substances.
- Two basic types of properties of matter: **Physical** properties and **Chemical** properties:



# Physical Properties

- Physical properties are used to identify, describe and classify matter.
  - Characteristic of a substance that can be observed (using your senses) without changing the substance into something else.

Hardness	Texture	Color
Odor	Taste	Temperature

# More EXAMPLES - Physical

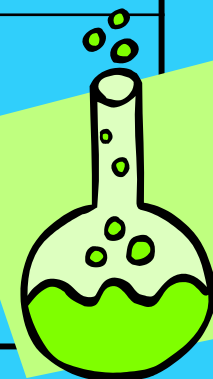
- size, shape, freezing point, boiling point, melting point, magnetism, viscosity, density, luster and many more.

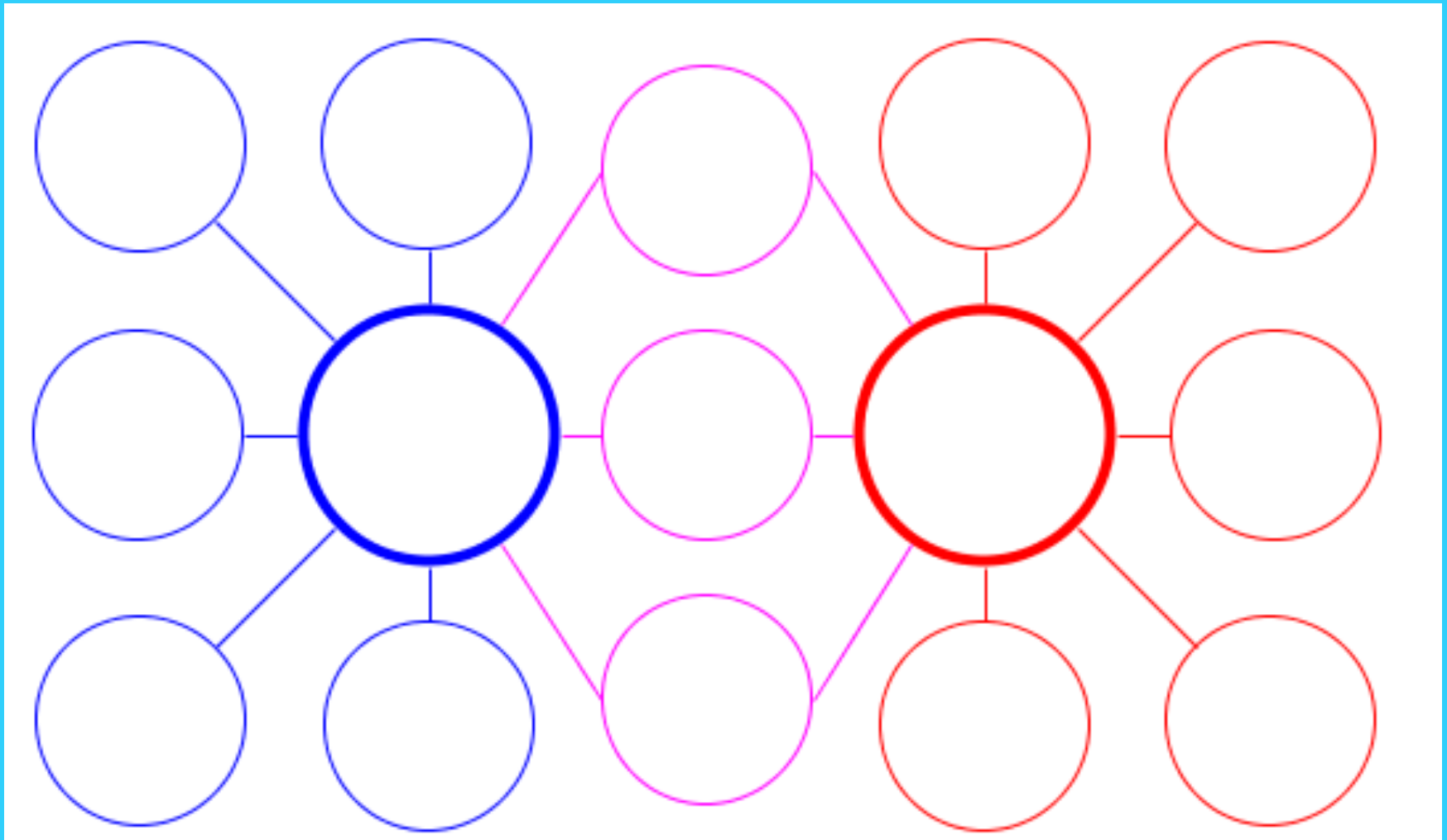


# Chemical Properties

- Chemical properties are characteristics involved when a substance interacts with another substance to **change** its chemical make-up.

Flammability	Rusting	Creating gas bubbles
Creating a new chemical product	Reactivity with water	pH





Draw a double bubble map in your notes to compare and contrast physical and chemical properties.