

Name: _____

Date: _____ Core: _____

Properties of Matter Guided Notes

Matter is

_____ (made of atoms and takes up space)

_____ is made up of atoms

Each atom is _____ and has certain ways it behaves, looks, smells, etc. These are known as its _____

There are three main states of matter: _____, _____, and _____

Physical properties are characteristics that can be observed _____ changing the substance

Physical properties are described using our _____

Examples of **physical properties**...

- _____ - red, black, colorless

- _____ - square, round irregular

- _____ - what could we compare the smell too?

- _____ - does it draw, pull, or repel objects?

- _____ - does it hold up to pressure? Is it easily scratched?

- _____ - what does the object feel like?

- _____ - the ability to reflect light (dull, shiny)

- _____ - the ability to be reshaped

- _____ - the amount of matter in an object

Characteristic properties are _____ properties that _____ based on the amount of substance.

Name: _____

Date: _____ Core: _____

Characteristics properties are used to identify _____

Examples of **characteristic properties**...

- _____ - the amount of mass per volume (the amount of stuff in the space an object takes up)

Density Formula: $\frac{mass}{volume}$

Units: _____ - for **gasses and liquids**

_____ - for **solids**

-Temperature at which the substance changes states i.e. when it _____ or _____

- _____ point- the temperature where liquid changes states to gas

- _____ point- the temperature where solid becomes liquid, this is the same temp where the substance will freeze

Why isn't mass a characteristic property?

Physical Changes- When a substance goes through a **physical change** the substance _____

Examples- _____,

Chemical Properties- properties that can only be observed by _____ the original substance into a new one

- _____ be observed in normal circumstances

Examples of Chemical Properties...

- _____ -how easily will a substance ignite?

Name: _____

Date: _____ Core: _____

- _____ - when exposed to oxygen it chemically reacts to form things like rust or the browning of an apple

- _____ - how acidic or basic a substance is when dissolved in water

Chemical Changes- A substance goes through a **chemical change** when a substance goes through a _____ and becomes a _____ substance with new properties

Examples- _____,
