Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_

PROPERTIES OF MATTER PPT NOTES

What is Matter?

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**– anything that has \_\_\_\_\_\_\_\_\_\_\_\_\_and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Everything you can see and touch is made of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Only things that aren’t matter are forms of energy – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* <https://www.brainpop.com/science/matterandchemistry/measuringmatter/preview.weml>

Mass

* **Mass** – the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in a substance or object.
* SI units – grams \_\_\_\_\_\_\_\_, kilograms\_\_\_\_\_\_\_\_\_\_\_\_\_

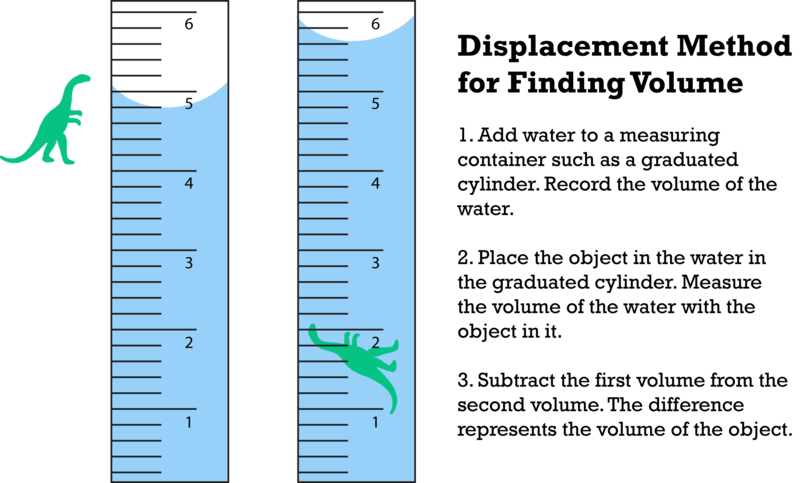
Mass vs Weight

* The more \_\_\_\_\_\_\_\_\_\_\_\_\_an object contains, the more it \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**– a measure of the force of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pulling on an object.
* A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is used to measure the force pulling down
* SI unit – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (N)
* Example: 1kg weighs 9.8 N (2.2 lb)

Volume

* **Volume** – the amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_matter takes up
* Liquids measured in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Irregular shaped objects use water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Measured in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, mL, m3, cm3

Displacement Method



Properties of Matter

* Physical Properties
  + describe matter \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ changing its identity
* Examples
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, shape, size, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, melting point, and boiling point

Density

* **Density** – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_property, represents how tightly \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_particles of matter are.
* D = Mass/Volume

Chemical Properties

* describe how a material will react to form \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Examples
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(can burn)
  + can corrode (metals combine with metals 🡪 dull, brittle
  + can sour
  + forms precipitate (solid forms from 2 liquids)
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with acid
  + effervesces (forms \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_of gas, NOT BOILING)

Recativity

* **Reactivity** – the ability of matter to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with other substances.
* Example –\_\_\_\_\_\_\_\_\_\_\_\_ reacting with\_\_\_\_\_\_\_\_\_\_\_ to produce rust.