

Name: _____ Date: _____

CHEMISTRY **Describing Matter**

Part 1: Drag and drop. Drag and drop the important term on the line next to its definition or description. Each term is used only once.

| | | | |
|---------|-----------|-------------------|-----------|
| Atom | Extensive | Nucleus | Substance |
| Density | Intensive | Physical property | Volume |
| Element | Mass | Protons | Weight |

- 1 The quantity of matter in an object.

- 2 The 3-dimensional space that matter occupies.

- 3 The heaviness of an object or matter as felt inside the gravity field of a planet or moon. The downward force by gravity on an object.

- 4 A property matter that depends on “how much” of the matter. Properties that describe physical size or physical amount.

- 5 A property of matter because of the type of material it is made of. The unique property of a type of matter.

- 6 Mass divided by volume. A measure of the compactness of matter.

- 7 Matter that has a uniform and defined composition (what it is made of).

- 8 A quality or condition of matter that can be measured or observed without changing the composition of the substance.

_____ 9 The smallest, indivisible unit of matter that still retains the characteristics of the element.

_____ 10 The dense core of an atom. It contains protons and neutrons.

_____ 11 A pure substance that is made of only one type of atom.

_____ 12 All atoms of the same element have the same number of _____ in their nucleus.

Part 2: Intensive vs. Extensive Properties. Compare the matter. Do they have the same extensive property or the same intensive property? Extensive properties define a quantity. Intensive properties define unique characteristics because of composition. On the line next to the item,

- type **I** for intensive only
- type **E** for extensive only
- type **B** for both if there are common intensive and extensive properties
- type **N** for neither if there is no common intensive or extensive property.
- Only type the letter.

_____ 13 A 10 kg granite rock and a 10 kg basalt rock.

_____ 14 50 liters of water and 20 liters of water.

_____ 15 40 grams of chalk and 30 grams of chalk.

_____ 16 1 kg basketball and 0.10 kg golf ball.

_____ 17 10 liters of hydrogen gas and 10 kg of air.

_____ 18 20 meters of rope and 20 meters of string.

_____ 19 50 grams of clear glass and 30 grams of clear plastic

_____ 20 100 kg human and 50 kg tree.

_____ 21 2 kg polyethylene helmet and 1 kg polyethylene knee pads

_____ 22 40 pounds of zinc and 40 pounds of iron.