

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.