

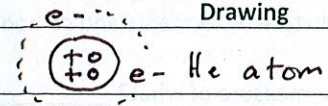
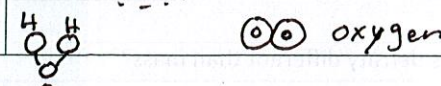
Study Guide 1 - Matter Test

ANSWERS
EARLY

Directions: Draw labeled charts to explain how the terms below differ from one another.

1. Atom and Molecule

a. Draw a chart that includes a definition of each, and a drawing of each

	Definition	Drawing
Atom	Smallest unit of Matter; building block	 He atom
Molecule	two atoms chemically combined	 oxygen

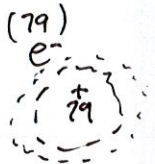
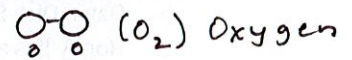
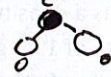
2. Element and Compound

a. Draw a chart that includes a definition of each, a real example of each and a drawing of each

Element - pure substance made of only 1 kind of atom | Gold | Au

Compound - pure substance made of 2 or more different elements

Carbon Dioxide



3. Solution, Colloid and Suspension

a. Draw a chart that gives the particle size for each, a real example of each and a short description of each.

- (Sprite) Solution < 2 nanometers - homogeneous mixture - can't see particles; can't filter particles
- (Milk) Colloid 2-500 nm - homogeneous mixture; opaque; can't filter particles out
- (Sediment stick) Suspension > 500 nm - heterogeneous mixture; particles settle to bottom; (oil and vinegar)

4. Heterogeneous and Homogeneous Mixtures

a. Draw a chart that gives the definition of each, an example of each and a colored drawing of each

Heterogeneous Mixture - more than 1 substance; not chemically combined
(TRAIL MIX) not distributed evenly

Homogeneous Mixture - at least 2 substances; not chemically combined; distributed evenly throughout



5. Solute and Solute Solvent

a. Draw a chart that gives the definition of each, a real example of each and a drawing of each.

Solvent - the liquid that does the dissolving (H₂O)

Solute - the solid particles that get dissolved (salt)



6. What is the smallest building block of matter? An Atom

7. Name two ways that elements differ from one another. Each different element is made of a different kind of atom. Those atoms vary in size, weight and

8. To make lemonade you need sugar, lemon juice, and water.

- a. What is the solute? Sugar
- b. What are the solvents? lemon juice and H₂O

chemical and physical properties