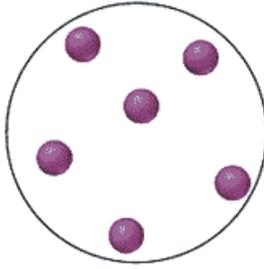


Let's Practice!

Part I Directions: Identify each of the following images as an element, compound, or mixture!



Type of matter? _____ ***Element*** _____

How do you know?

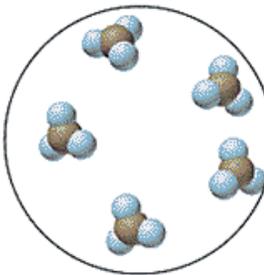
Only one type of atom



Type of matter? _____ ***Element*** _____

How do you know?

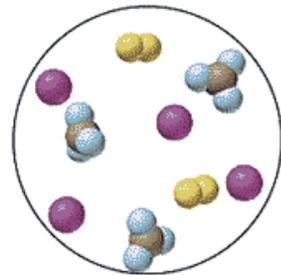
Only one type of atom



Type of matter? _____ ***Compound*** _____

How do you know?

More than one type of atom, chemically bonded together

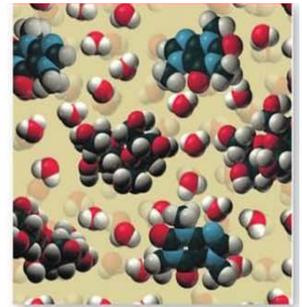
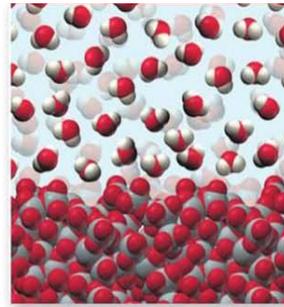
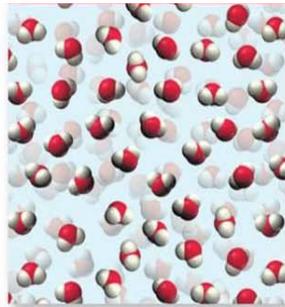
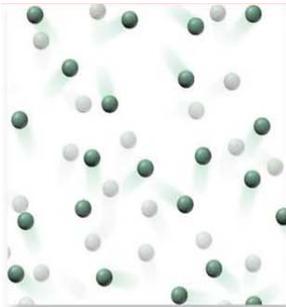


Type of matter? _____ ***Mixture*** _____

How do you know?

More than one type of atom, physically mixed together

Part II Directions: Identify each of the following images as an element, compound, or mixture, and give at least three examples of each (that were NOT already provided in your notes!)

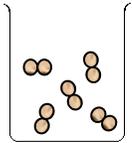


Type of Matter	Atom	Compound	Heterogeneous mixture	Homogeneous mixture
Examples	1. 2. 3.	1. 2. 3.	1. 2. 3.	1. 2. 3.

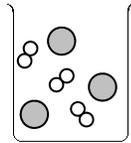
Directions: Identify the following as: element (E), compound (C), heterogeneous mix (He) or homogeneous mix (Ho).

- a. Table salt **C** b. Nitric acid (HNO₃) **C** c. Sugar (Glucose) **C**
 d. Carbon Dioxide (CO₂) **C** e. Milk **Ho** f. Air **Ho**
 g. Nitrogen gas (N₂) **E** h. Zinc (Zn) **E** i. Pulpy orange juice **He**

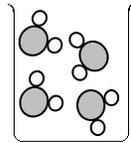
Directions: Use the particle representations below to answer questions 1-5. Answer choices may be used more than once.



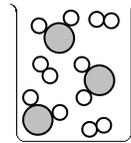
A



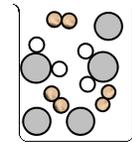
B



C



D



E

1. Compound **C**
 2. Nitrogen, N₂ **A**
 3. Mixture of two elements **B**
 4. Mixture of water, H₂, and carbon **E**
 5. Element **A**
 6. Mixture of water, H₂O, and hydrogen H₂ **D**

Directions: Choose the best possible answer for each question.

1. Which of water, iron, ammonia, chromium, radon, and silicon are chemical compounds as opposed to elements?

- A** chromium and water **B** only water **C** radon and ammonia
D ***water and ammonia*** **E** iron and silicon

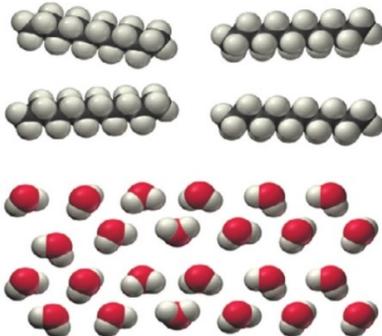
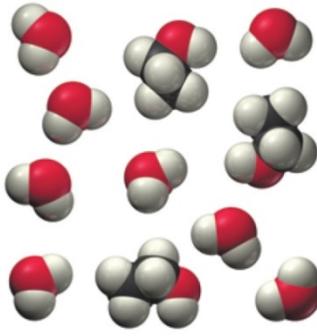
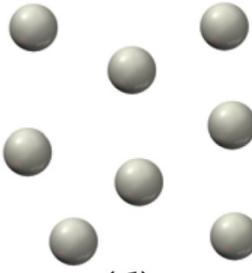
2. An example of a heterogeneous mixture is

- A** bronze. **B** ***concrete.*** **C** brass. **D** water.

3. How is a mixture different from a compound?

- A** Particles of a mixture are combined chemically.
B Components of a mixture can only be separated chemically.
C ***Components of a mixture can be separated by physical means.***
D Composition of a mixture may be constant.

Directions: Complete the table below. (There should be one of each type of matter!)

 <p>(a)</p>	<p>Type of matter: _____ <u>Compound</u> _____</p> <p>Can this sample be separated by physical means? Justify your answer.</p> <p><i>Can't be separated by physical means. Red and black particles can only be separated by breaking the chemical bonds between them.</i></p>
 <p>(b)</p>	<p>Type of matter: _____ <u>Heterogenous mixture</u> _____</p> <p>Can this sample be separated by physical means? Justify your answer.</p> <p><i>The two types of matter are not chemically attached, so it must be a mixture. The two types are not mixed together thoroughly, so a sample taken from the top will be different from a sample taken from the bottom. That makes the mixture heterogenous.</i></p>
 <p>(c)</p>	<p>Type of matter: _____ <u>Homogenous mixture</u> _____</p> <p>Can this sample be separated by physical means? Justify your answer.</p> <p><i>The two types of matter are not chemically attached, so it must be a mixture. The types are mixed together thoroughly, so the mixture must be homogenous.</i></p>
 <p>(d)</p>	<p>Type of matter: _____ <u>Element</u> _____</p> <p>Can this sample be separated by physical means? Justify your answer.</p> <p><i>There is only one type of atom.</i></p>