Directions: Read Section 1 Classifying Matter and answer the questions below.

1. What two properties does all matter have?
2. Look closely at the picture on page 23 of the reading. What can you see in this picture that is not matter? Explain your answer.
3. Fill in the graphic organizer to show the three main groups of matter.

 

1. How are atoms and molecules related?
2. A particular molecule has two hydrogen atoms and two oxygen atoms. How do you know that this not a molecule of water?
3. How many total atoms are in three molecules of table sugar?
4. Use a periodic table to label the elements in a molecule of indigo. C16H10N2O2
5. What two kinds of matter are pure substances?
6. How are mixtures and pure substances related?
7. How do homogeneous and heterogenous mixtures differ?
8. Generally, you must stir a can of paint before you use it. Is paint miscible or immiscible? Explain your answer.
9. Why is Co an element, but CO a compound? (Hint: Use a periodic table to answer this question.)

Define the following terms:

1. Atom
2. Compound
3. Element
4. Matter
5. Mixture
6. Molecule
7. Pure substance

Fill in the concept map below to show the relationship between the following: compound, element, mixture, pure substance.

 