Additional notes for lect 2:
How much are you dissolving?

1 pt extra credit printing

_____is the amount of solute dissolved in the solvent. A lot of times, it is in grams per milliliter of solvent, or g/ml _____ = less solute _____ = more solute
If the solute is colored, then a dilute solution is usually pale, whereas a concentrated solution is dark.

Speed it up!

There are 3 methods to make a particle dissolve faster:
_____- stirring or shaking causes the particles to separate and spread more quickly
_____ - causes particles to more more quickly and separate
_____ - increases the amount of contact between the solute and solvent and causes better mixing

Video Notes:
1. _____
_____
2. _____
_____
3. _____
_____
5. _____
_____
6. _____
_____
7. _____
_____
8. _____
_____

Mini-Lab: Nuts & Bolts

Container	Drawing	Circle ONE:	Explanation
A		Element Compound Mixture	.
B		Element Compound Mixture	
C		Element Compound Mixture	
D		Element Compound Mixture	.
E		Element Compound Mixture	.
F		Element Compound Mixture	.
G		Element Compound Mixture	.
H		Element Compound Mixture	.
I		Element Compound Mixture	.

Possible explanations: all one type of atom, no bonds, random sorting, can be separated, attached bonded, identical, 2 identical/2 not bonded, each pair has identical parts

COMPOUNDS AND MIXTURES

1 How is a compound different from a mixture?

A Mixtures are created through physical changes; compounds are created through chemical reactions
B Compounds are created through physical changes; mixtures are created through chemical reactions
C Mixtures, on average, are heavier than compounds
D Compounds, on average, are heavier than mixtures

2 What occurs during a chemical reaction?

A Atoms of two or more elements are destroyed
B Atoms of two or more elements oppose one another
C Atoms of two or more elements bond together
D Atoms of two or more elements trade protons

3 What is true of a mixture?

A It is always thicker than the two chemicals that go into it
B It retains the properties of the substances that make it up
C It can never be separated into its constituent substances
D It is produced through chemical reactions

4 Based on the information from the movie, what can you conclude about the most common chemical compound on earth?

A It's oxygen
B It's hydrogen gas
C It's carbon dioxide
D It's water

5 What is true of a compound?

A It does not always retain the properties of the substances that make it up
B It must have water as one of its components
C It requires heat energy to make
D It requires electrical energy to make

6 Which of the following two ingredients can combine to make a compound?

A Salt and water
B Hydrogen and oxygen
C Eggs and butter
D Sugar and water

7 Which of the following is a heterogeneous mixture?

A 
B 
C 
D 

8 Which of the following is an example of a chemical element?

A Salt
B Water
C Sugar
D Sodium

9 Where can you find a common homogenous mixture?

A 
B 
C 
D 

10 The elements of a heterogeneous mixture can be distinguished visually. What does this mean?

A That two separate elements have been mixed together
B That the components of the mixture cannot be separated
C That you can see the different component parts of the mixture
D That heterogeneous mixtures combine solids and liquids

METALS

1 If someone described a coin as "lustrous," what would he mean?

A It was durable
B It was tarnished
C It was hard
D It was shiny

2 What can you infer from the fact that metals are good conductors of electricity?

A Electrical appliances made of metal are dangerous
B Most electrical wiring is made of metal
C All non-metallic objects, like water and the human body, are poor electrical conductors
D Metals also make good insulators

3 Which of the following objects is the most malleable?

A 
B 
C 
D 

4 If someone said a particular metal had "hardness," what would she mean?

A It can't be bent easily
B It can't be stretched out easily
C It can't be scratched easily
D If you bend it, it won't go back to its original shape

5 How is mercury different from every other metal on the periodic table?

A It's liquid at room temperature
B It doesn't conduct electricity
C It has no luster
D It is totally inelastic

6 Elements with positive valences usually _____ electrons.

A Donate
B Accept
C Have no
D Create

7 Which of the following is an example of oxidation?

A 
B 
C 
D 

8 If you needed native metals, which tool would be most useful?

A A Geiger counter
B A shovel
C A furnace
D A large magnet

9 How are ores different from native metals?

A Ores are usually found underground; native metals are usually found aboveground
B Ores contain mixtures of minerals, native metals are often pure
C Ores tend to be more valuable than native metals
D Ores are usually found in deposits, native metals are usually found in veins

10 What is the best synonym for "alloy?"

A Nonmetal
B Mineral
C Blend
D Stone