

### Chapter 3 Jeopardy Game

	Value	Question	Answer
Properties	200	What property of gases allows the particles to be pushed closer together?	Compressibility
	400	What kind of property describes the way a substance changes into other substances?	Chemical
	600	Gases and liquids have what kind of shape?	Indefinite
	800	Which state of matter generally has the highest density?	Solid
	1000	These are properties that DON'T depend on the amount of a substance.	Intensive
Changes	200	What kind of change does not alter the composition of a substance?	Physical
	400	What physical change occurs when crystals disappear into water?	Dissolving
	600	What kind of change occurs when a color change is observed?	Chemical
	800	What law is described by "Mass of reactants = Mass of products?"	Conservation of Mass
	1000	Boiling water is what kind of change?	Physical
Mixtures	200	Are mixtures chemical or physical combinations?	Physical
	400	When substances are mixed, what happens to their chemical properties?	Nothing
	600	What kind of mixture consists of two or more distinct phases that are relatively easy to separate?	Heterogeneous
	800	Filtration is an example of what kind of technique?	Separation
	1000	What is a mixture of two metals, such as brass, called?	Alloy
Elements/ Compounds	200	What is the smallest representative particle of an element?	Atom
	400	What is composed of two or more atoms chemically bonded?	Molecule
	600	Elements and compounds are both what kind of substance?	Pure
	800	Which law describes the ratios of elements in a given compound?	Definite Proportions
	1000	What kind of substance is created when a compound is broken down chemically?	Elements
Periodic Table	200	What are the columns in the periodic table called?	Groups/ Families
	400	How many periods are there in the periodic table?	7
	600	Name an element that should have properties similar to O.	S, Se, Te or Po
	800	What is the name of the group that contains bromine (Br)?	Halogens
	1000	What is the group of elements along the staircase called?	Metalloids
Potpourri	200	What kind of material is tylenol (acetaminophen)?	Compound
	400	What family of elements is generally unreactive?	Nobel Gases
	600	Name one element that is a liquid at room temperature	Br or Hg
	800	What is the physical property by which sand and salt were initially separated?	Solubility of salt
	1000	In which period do the Lanthanoids belong?	6 <sup>th</sup>

Final Jeopardy Category: Law of Multiple Proportions

Which of the following pairs of compounds does NOT illustrate the Law of Multiple Proportions:  
 $\text{CH}_4/\text{C}_3\text{H}_8$ ,  $\text{PCl}_3/\text{PCl}_5$ ,  $\text{FeS}/\text{FeSO}_4$ , or  $\text{Cu}_2\text{O}/\text{CuO}$ ?

Answer: **FeS/FeSO<sub>4</sub>** (no O in first compound)