## Chemistry Honors—Fall Final Format

# Part I: Chemistry Content (30 points)

60 multiple choice questions on physical and chemical properties, significant figures, metric conversions, scientific measurement, atomic models, atomic structure, chemical nomenclature, chemical quantities, chemical reactions, and chemical equations

These will be similar to the multiple choice questions on chapter tests and guizzes

### Part II: Science Comprehension (15 points)

Several paragraphs about a chemical element and series of short answer questions about the element

## Part III: The Periodic Table (10 points)

A data table to complete with information about atomic number, atomic mass, and numbers of protons, electrons, and neutrons in selected elements

# Part IV: Graphing (15 points)

A data table with chemical information about elements or compounds and instructions for constructing a graph and performing calculations about the information

# Part V: Chemistry Problem Solving (20 Points)

Ten chemistry problems to solve involving metric conversions, atomic and molar mass, percent composition, moles, Avogadro's number, and Avogadro's number

#### Part VI: Equations (10 Points)

Five chemical reactions to identify and balance

#### Terms to know

atom	grams	period	alkali metals
proton	liters	family	alkaline earth metals
electron	meters	ion	transition metals
neutron	density	ion charges	rare earth metals
nucleus	volume	ionic compound	halogens
mass	temperature	polyatomic ions	noble gases
weight	Celsius	acetic acid	diatomic
gas	Kelvin	hydrochloric acid	$H_2$
liquid	Democritus	nitric acid	$O_2$
solid	Dalton	carbonic acid	$N_2$
physical property	Thomson	sulfuric acid	Cl <sub>2</sub>
chemical property	Rutherford	phosphoric acid	$Br_2$
physical change	cathode ray tube	covalent compound	$I_2$
chemical change	gold foil experiment	percent composition	$F_2$
significant figures	atomic number	element names	
metric conversions	atomic mass	element symbols	synthesis
precipitate	mass number	toxicity	decomposition
accuracy	formula mass	chemical reaction	single replacement
precision	molar mass	reactant	double displacement
percent error		product	combustion