

Fall 2014 Final Exam Practice Problems - CHUNK #1 – Topics 1-9		
Topic	Q #	Question
1	1	Put 0.00345 in scientific notation
	2	Put 29800000 in scientific notation
	3	What is wrong with the following number that was supposed to be put in sci. notation? $24.6 \times 10^3$
2	4	Which prefix represents 1000?
	5	Which prefix represents 1/10?
	6	What is the “base unit” for length? For volume? For mass?
3	7	How many centimeters are in 340.2 kilometers? (remember KHDBDCM)
	8	How many millimeters are in 29.4 meters?
4	9	What is the mass of 72 mL of a liquid, whose density is $1.8 \text{ g/cm}^3$ ?
	10	If the density of a liquid is $13.2 \text{ g/mL}$ , what is the mass of 8.4 mL?
	11	Would an object with a volume of $3.5 \text{ cm}^3$ and a mass of 2.4 g float or sink? Justify with numbers!
5	12	Convert 4 mi/hr into m/s
	13	Convert 19.2 mi/min into m/hr
	14	Convert 52 m/s into mi/hr
6	15	List 5 examples of physical changes.
	16	List 5 examples of chemical changes.
	17	What is the definition of a physical change?
	18	What is the definition of a chemical change?
7	19	What is the definition of atomic mass?
	20	What does the atomic number tell you?
	21	How many neutrons does an atom of silver have?
	22	How many protons, neutrons, and electrons does each atom have? Cl Ba C Ne
8	23	What is an isotope?
	24	What is the difference between Carbon-12, Carbon-13, and Carbon-14?
	25	How many protons, neutrons, electrons does Bromine-80 have compared to Bromine-83?
	26	Which version of Bromine above is the more common isotope? How do you know?
9	27	What is an electron orbital?
	28	Sketch pictures of an “s” orbital and a “p” orbital.
	29	How many electrons can an orbital hold?
	30	How many electrons can a set of s orbitals hold? A set of p orbitals? A set of d orbitals? A set of f orbitals?

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