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| 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 x 103 |
| **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 g/cm3? |
| 10 | If the density of a liquid is 13.2 g/mL, what is the mass of 8.4 mL? |
| 11 | Would an object with a volume of 3.5 cm3 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? ClBa 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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