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| Fall Final Exam Practice Problems - CHUNK #1 – Topics 1-7 | | |
| Topic # | Q # | Question |
| **1** | 1 | Who were the 8 scientists that were covered in class that contributed to the development of different atomic models? What did they each contribute? |
| 2 | Sketch and name the seven atomic models that were covered in class. |
| 3 | Describe Rutherford’s Gold Foil experiment and what it proved. |
| 4 | What does the Quantum model say about the nature of electrons in an atom? |
| **2** | 5 | Put 0.00345 in scientific notation |
| 6 | Put 29800000 in scientific notation |
| 7 | What is wrong with the following number that was supposed to be put in sci. notation? 24.6 x 103 |
| 8 | What is wrong with the following number that was supposed to be put in sci. notation? 0.54 x 102 |
| **3** | 9 | Which prefix represents 1000? |
| 10 | Which prefix represents 1/10? |
| 11 | What is the “base unit” for length? For volume? For mass? |
| 12 | What is the mnemonic we use for metric system? |
| **4** | 13 | How many centimeters are in 340.2 kilometers? (remember KHDBDCM) |
| 14 | How many millimeters are in 29.4 meters? |
| 15 | Convert 2.7 kg into grams. |
| 16 | Convert 0.85 mg into decagrams. |
| **5** | 17 | What is the definition of atomic mass? |
| 18 | What does the atomic number tell you? |
| 19 | How many neutrons does an atom of silver have? |
| 20 | How many protons, neutrons, and electrons does each atom have?  ClBa C Ne |
| **6** | 21 | What is an isotope? |
| 22 | What is the difference between Carbon-12, Carbon-13, and Carbon-14? |
| 23 | How many protons, neutrons, electrons does Bromine-80 have compared to Bromine-83? |
| 24 | Which version of Bromine above is the more common isotope? How do you know? |
| **7** | 25 | What is a mole? |
| 26 | Why do we use “the mole” in chemistry class? |
| 27 | Describe how to calculate molar mass for a molecule. Do you round your atomic masses or not? Why? |
| 28 | What is the molar mass of Ag? |
| 29 | What is the molar mass of Ca(OH)2 |
| 30 | What is the molar mass of K2SO4 |
| 31 | What is the molar mass of (NH4)2S, |

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