Practice Problems Set #1

**DIRECTIONS:**

* YOU MUST ANSWER **EVERY QUESTION** IN ORDER TO GET **ANY** CREDIT!!!
* **HIGHLIGHT EACH QUESTION NUMBER** ON YOUR NOTEBOOK PAPER SO I CAN QUICKLY SEE THAT YOU HAVE DONE ALL THE PROBLEMS. IF I CAN’T FIND AN ANSWER, YOU WON’T GET CREDIT FOR ANY OF THE PROBLEMS!!!!
* **HIGHLIGHT ANY QUESTION NUMBERS ON THIS PAGE THAT YOU WANT HELP WITH, HAVE QUESTIONS WITH, ETC‼!**

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| **Q #** | **QUESTION** |
| 1 | Put 14850 in scientific notation. |
| 2 | Put 0.000387 in scientific notation. |
| 3 | Put 5.28 x 104in standard notation |
| 4 | Put 8.75 x 10-3 in standard notation. |
| 5 | What is the metric prefix that represents 1000? |
| 6 | What is the metric prefix that represents 0.01? |
| 7 | How many millimeters are in 29.4 decameters? |
| 8 | How many kilometers are in 3405.2 centimeters? |
| 9 | Convert 4 mi/hr into m/s |
| 10 | Convert 19.2 mi/min into m/hr |
| 11 | Convert 52 m/s into mi/hr |
| 12 | What is the definition of a physical change? |
| 13 | What is the definition of a chemical change? |
| 14 | List 5 examples of physical changes. |
| 15 | List 5 examples of chemical changes. |
| 16 | What is the definition of atomic mass? |
| 17 | What does the atomic number tell you? |
| 18 | How many protons, neutrons, and electrons does an atom of silver have? |
| 19 | How many protons, neutrons, and electrons does each atom have? ClBa C Ne |
| 20 | What element has 12 protons? |
| 21 | How many neutrons does 14C have? How many protons does it have? Electrons?  Repeat with Carbon-12. |
| 22 | What is an electron orbital? How many electrons can fit in an orbital? |
| 23 | Sketch pictures of an “s” orbital and a “p” orbital. |
| 24 | How many e- can fit in a set of s orbitals? In a set of p orbitals? d orbitals? f orbitals? |
| 25 | Sketch an orbital diagram for sulfur and one for chlorine. |
| 26 | What element is represented by the e- configuration of: 1s22s22p63s23p64s23d104p2 ? |
| 27 | What element is represented by the electron configuration of: 1s22s22p63s23p64s1 |
| 28 | Write the electron configurations for H, He, K, Ca, Zn, I, Kr |