***Lesson Plans for the Week of: 3/27/17 Teacher: Hough Course: Chemistry Period: 1,3,7/8***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Elements of  a Lesson | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| Objective/  Focus/  Essential  Question | CH.5b  Spiral review of use of ICE diagrams  Understand and apply Dalton’s Law of Partial Pressures | CH.5b  Understand and utilize the Ideal Gas Law (IDG) | CH.5b  Correctly identify the correct gas law or method needed to solve these types of word problems, then solve | CH.2f,g  Spiral Review: periodic table trends for atomic radius, ionization energy,  and electronegativity  Understand the following topics about the concept of shielding and its periodic table trend | CH.2e,g  --Draw electron configuration any of the first 20 elements  --understand the aufbau principle, Hund’s rule, and the Pauli Exclusion Principle |
| Lesson/Act.  Type of Presentation | Weekly memorization (name and formula):  CH4, C2H6, C2H4, C2H2, CH2O, C6H6  Bellwork: Solve an ICE problem (a Boyle’s Law example)  Go over another example  Whole Group: (continuation from previous class period)  There are 2 types of questions which utilize Dalton’s Law: model one of each  Individual:  Student Practice | Bellwork: ICE example (using Charles’ Law)  Whole group:  Address questions about previous day’s work  Introduce ideal Gas Law—concept and equation, plus value for R and importance of units: volume in L; pressure in atm; and temp in K  Model solving IGL problem  Individual:  Student practice | Whole group:  Identify cues which can help indicate which method to use when solving gas law problems  Individual:  Students will solve a variety of gas law problems | Bellwork: ionization energy trend question  Discuss  Review periodic table trends known so far (poorly on previous 2 tests)  Whole group:  Define electron shielding; and explain its periodic table trends  Examples from the periodic table will be given to help illustrate the trends | Whole group:  Explain how to determine and describe the locations of electrons in an atom:  a) explain how electrons are arranged in the atom (use a strange hotel with 4 floors and multiple subfloors as an example); Model how to determine the electron locations for a simple element like lithium  b) explain Aufbau principle, Hund’s Rule, and Pauli exclusion principle  c) Explain how to write the electron configuration for a given element  d) Hand out spdf diagram and explain how it can be used as a mnemonic  e) Model samples: H, He, nitrogen, copper  Individual:  e) Students write electron configuration for a few elements: beryllium, fluorine, sodium, chromium |
| Evaluation | Student work in class and on homework problems | Student work on practice problems | Accuracy of student work | Whole group formative assessment questions | Students write electron configurations for three elements |
| Extension/  Homework | Practice word problems utilizing Dalton’s Law: worksheet | Practice word problems utilizing this principle: worksheet |  |  | Students write electron configurations: p. 136#8,9 |

MATERIALS:

Monday: Dalton’s Law worksheet

Tuesday: IDG worksheet

Wed.: Mixed gas laws worksheet

Thursday: periodic table trend worksheet

Friday: spdf diagram