

33. When a metal bonds with a nonmetal a(n) (**ionic, covalent**) bond forms.

When two nonmetals bond a(n) (**ionic, covalent**) bond forms.

34. In a chemical equation the reactants are found to the \_\_\_\_\_ of the arrow, and the \_\_\_\_\_ are found to the right.

35. In this equation  $\text{MgCO}_3 \longrightarrow \text{MgO} + \text{CO}_2$ , the reactants are: **MgCO<sub>3</sub>** **MgO** **O<sub>2</sub>**  
and the products are: **MgCO<sub>3</sub>** **MgO** **CO<sub>2</sub>**

36. You set up an experiment to test the hypothesis that plants grow faster in Red light. The constants in this experiment are the pot type, the amount of water, and the fertilizer. Look at the picture, what else should be constant?



37. In the experiment above, what is the IV?

38. You test a bunch of different softball bats to see which one will make your softball go the farthest.

The different bats are the **Independent** variable, and the distance the ball goes is the **Dependent** variable.

39. Select True or False next to each statement. All nonmetals (except hydrogen)

- a. \_\_\_\_\_ are found pure in nature.
- b. \_\_\_\_\_ are liquids at room temperature
- c. \_\_\_\_\_ are all very reactive
- d. \_\_\_\_\_ are found right of the zig-zag line on the periodic table.

40. The prefix **co** means to \_\_\_\_\_. The type of bond formed when electrons are shared is a(n) \_\_\_\_\_ bond.

41. Select Physical change or Chemical change for each.

- a. \_\_\_\_\_ adding heat makes a solid melt
- b. \_\_\_\_\_ rusting
- c. \_\_\_\_\_ burning a log
- d. \_\_\_\_\_ chopping a log
- e. \_\_\_\_\_ putting a paper clip in acid
- f. \_\_\_\_\_ bending a paper clip
- g. \_\_\_\_\_ breaking a glass

42. The table at the right shows that as student height (**increases, decreases**), student weight (**increases, decreases**).

Student Height	Student Weight
5'4"	132
5'6"	145
5'7"	152
5'9"	160
5'11"	178