

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: **MgCO₃ MgO O₂**
and the products are: **MgCO₃ MgO CO₂**

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