

Chemistry

Bonding Reactions

1. Write the electron dot symbol for each of the following elements.

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|--------------|--------------|-------------|-------------|
| a) aluminum | f) sulfur | k) zinc | p) cesium |
| b) fluorine | g) magnesium | l) copper | q) mercury |
| c) helium | h) lithium | m) antimony | r) titanium |
| d) potassium | i) arsenic | n) xenon | s) krypton |
| e) nitrogen | j) scandium | o) astatine | t) iron |

2. For each of the following bonding reactions, predict the type of bond to be expected. Then, use electron dot symbols to show the electron change that takes place during the reaction.

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|----------------------------|---------------------------|
| a) potassium + fluorine → | m) zinc + tellurium → |
| b) magnesium + chlorine → | n) beryllium + sulfur → |
| c) hydrogen + sulfur → | o) lanthanum + chlorine → |
| d) lithium + arsenic → | p) iron + fluorine → |
| e) rubidium + oxygen → | q) chromium + iodine → |
| f) aluminum + iodine → | r) hydrogen + antimony → |
| g) hydrogen + phosphorus → | s) potassium + sulfur → |
| h) calcium + tellurium → | t) boron + nitrogen → |
| i) sodium + bromine → | u) magnesium + silicon → |
| j) lithium + oxygen → | v) gold + bromine → |
| k) calcium + fluorine → | w) scandium + oxygen → |
| l) hydrogen + selenium → | |