

Name:

Date:

CHEMICAL BONDS

IDENTIFY IT

When chlorine (Cl) forms an ionic bond, it gains an electron to become Cl^- . Calcium (Ca) loses two electrons in ionic bonds, becoming Ca^{2+} . Write the ionic states for each of the following elements. If the element is non-reactive, write "n."

Chlorine Cl^-

Fluorine

Calcium Ca^{2+}

Oxygen

Lithium

Aluminum

Neon

Argon

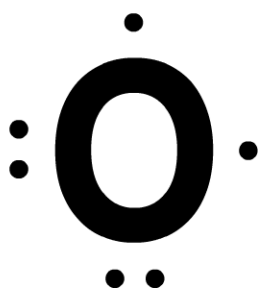
Magnesium

Sulfur

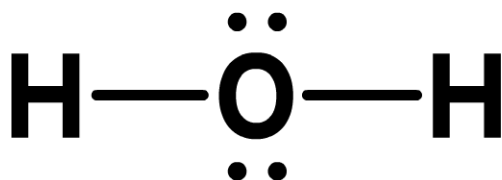
DRAW IT

Lewis structures represent an atom's outer electron shell as a set of up to eight dots (see oxygen, below). Pairs of shared electrons in covalent bonds are represented as lines (see water, below). Ammonia is a compound in which nitrogen is covalently bonded to three hydrogen atoms. Draw its Lewis structure.

OXYGEN



WATER



AMMONIA