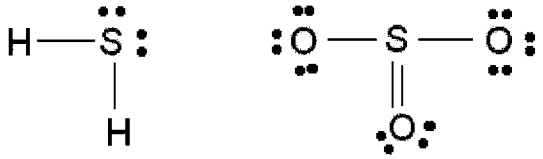
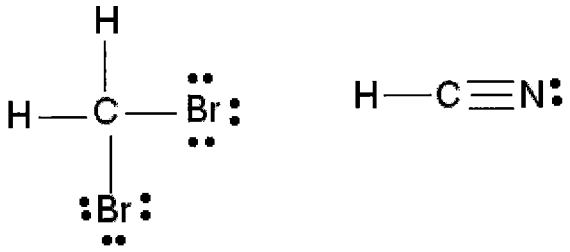
Key

Answers



2.



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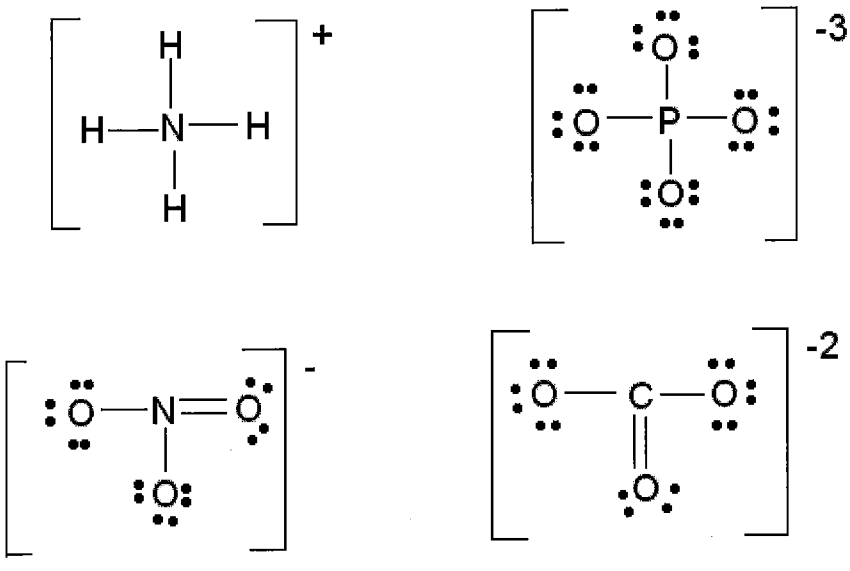

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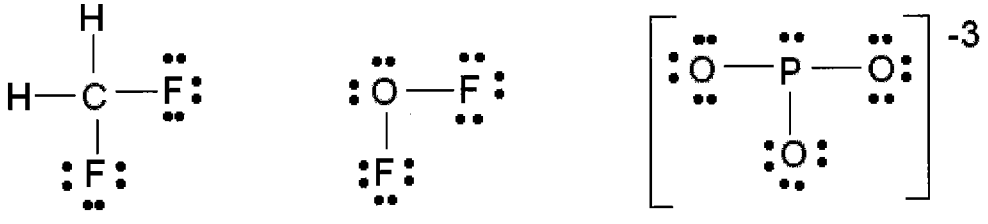

5. $\delta^+ \ \delta^-$ C-Cl ⟶ $\delta^+ \ \delta^-$ N—O ⟶ $\delta^+ \ \delta^-$ H—O ⟶

6. _polar covalent_ i. The C–O bonds in CO_2.

nonpolar covalent ii. The bonds in F_2.

ionic iii. The bonds in K_2O.

nonpolar covalent_ iv. The C–C bonds in C_3H_8

metallic__ v. The bonds in Ba.

polar covalent vi. The bonds in H_2O.

7. CO_2 is nonpolar because the two polar bonds are equal and opposite so cancel out

H_2O is polar because the bonds are not opposite and don't cancel out

SO_3 is nonpolar because the bonds are all the same and cancel out, the outer atoms all the same

CCl_4 is nonpolar because the bonds are all the same and cancel out, the outer atoms all the same

$CHCl_3$ is polar because the bonds are not the same and don't cancel out, the outer atoms are different