

Lewis Structure Worksheet

Read the **Instructions for Drawing Lewis Structures** worksheet carefully and complete Lewis structures for each of the following molecules:. Remember, the first atom in the name that isn't H is the "central" atom, where applicable.

Group A: SimpleAtoms/ Molecules

He	Ar	H ₂	F ₂	HCl
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CH ₄	NH ₃	H ₂ O	SiF ₄	PCl ₃
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Group B: Polyatomic Ions Don't forget to take the charge into account when counting electrons, and to enclose the structure in square brackets. Indicate the charge on the ion with a superscript outside the brackets.

OH ⁻	ClO ₃ ⁻	PO ₄ ³⁻	SO ₃ ²⁻
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Group C: Multiple (Double and Triple) Bonds Note: these structures require double or triple bonds in order to fulfill the octet rule for all atoms.

O ₂	N ₂	CO	CO ₂	HCN
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Group D: Molecules with Multiple Central Atoms These contain a “backbone” of carbon atoms with the other atoms arranged around the C atoms.

C ₂ H ₆	C ₃ H ₈	C ₂ H ₅ OH	C ₂ H ₄	C ₂ F ₂
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