







VSEPR Hold 'Em Top Hands

1. Four of a Kind

A correct match of all four properties. Four "Aces" beats all other hands. Kings follow, then Queens, Jacks, Tens, and so forth.

K Lewis Structure  trigonal planar	K Bond Angle 120°	K Lewis Structure  bent	10 Lewis Structure  bent	10 Bond Angle ≈104.5°
K Lewis Structure  tetrahedral	K Bond Angle 109.5°	K Lewis Structure  trigonal pyramidal	10 Lewis Structure  trigonal pyramidal	10 Bond Angle 90°, 120°, 180°







2. Full House

A match of three properties plus a match of two other. The highest three card match wins.

J Lewis Structure  tetrahedral	J Bond Angle 107°	J Lewis Structure  square pyramidal	9 Lewis Structure  trigonal bipyramidal	9 Bond Angle 90°, 120°, 180°
J Lewis Structure  tetrahedral	J Bond Angle 109.5°	J Lewis Structure  trigonal pyramidal	9 Lewis Structure  trigonal pyramidal	9 Bond Angle 90°, 120°, 180°

3. Three of a Kind

A correct match of three properties. The highest card wins.

Q Lewis Structure  tetrahedral	Q Bond Angle 109.5°	Q Lewis Structure  tetrahedral	7 Lewis Structure  T-shaped	7 Bond Angle 180°
Q Lewis Structure  tetrahedral	Q Bond Angle 109.5°	Q Lewis Structure  tetrahedral	7 Lewis Structure  T-shaped	7 Bond Angle 180°







4. Two Pair

A match of two properties plus a match of two others. The highest pair wins.

Q Lewis Structure  tetrahedral	Q Bond Angle 109.5°	Q Lewis Structure  tetrahedral	4 Lewis Structure  trigonal planar	4 Bond Angle 120°
Q Lewis Structure  tetrahedral	Q Bond Angle 109.5°	Q Lewis Structure  tetrahedral	4 Lewis Structure  trigonal planar	4 Bond Angle 120°

5. Pair

A match of two properties. Highest pair wins.

7 Lewis Structure  trigonal bipyramidal	7 Bond Angle >180° <90°	7 Lewis Structure  trigonal bipyramidal	6 Lewis Structure  octahedral	6 Bond Angle 90°
7 Lewis Structure  trigonal bipyramidal	7 Bond Angle >180° <90°	7 Lewis Structure  trigonal bipyramidal	6 Lewis Structure  octahedral	6 Bond Angle 90°


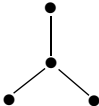
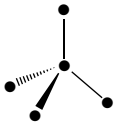





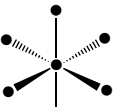


6. High Card

The highest card wins.

10 Lewis Structure  trigonal planar	8 Lewis Structure  tetrahedral
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VSEPR Card Deck

"Suites"

	Lewis Structure	Molecular Structure	Molecular Geometry	Bond Angles
A	X—M—X		linear	180°
K	$\begin{array}{c} \text{X} \\ \\ \text{X}-\text{M}-\text{X} \end{array}$		trigonal planar	120°
Q	$\begin{array}{c} \text{X} \\ \\ \text{X}-\text{M}-\text{X} \\ \\ \text{X} \end{array}$		tetrahedral	109.5°
J	$\begin{array}{c} \text{X} \\ \\ \text{X}-\ddot{\text{M}}-\text{X} \end{array}$		trigonal pyramidal	≅107°
10	X— $\ddot{\text{M}}$ —X		bent	≅104.5°
9	$\begin{array}{c} \text{X} \\ \\ \text{X}-\text{M}-\text{X} \\ / \quad \backslash \\ \text{X} \quad \text{X} \end{array}$		trigonal bipyramidal	90°/120°/180°
8	$\begin{array}{c} \text{X} \\ \\ \text{X}-\ddot{\text{M}}-\text{X} \\ \quad \backslash \\ \quad \quad \text{X} \end{array}$		seesaw	>180° <90° and <120°
7	$\begin{array}{c} \text{X}-\ddot{\text{M}}-\text{X} \\ \\ \text{X} \end{array}$		T-shaped	>180° <90°
6	$\begin{array}{c} \text{X} \quad \text{X} \\ \backslash \quad / \\ \text{X}-\text{M}-\text{X} \\ / \quad \backslash \\ \text{X} \quad \text{X} \end{array}$		octahedral	90°/180°
5	$\begin{array}{c} \text{X} \\ \\ \text{X}-\ddot{\text{M}}-\text{X} \\ / \quad \backslash \\ \text{X} \quad \text{X} \end{array}$		square pyramidal	<90°
4	$\begin{array}{c} \text{X}-\ddot{\text{M}}-\text{X} \\ / \quad \backslash \\ \text{X} \quad \text{X} \end{array}$		square planar	90°