

## Molecular Geometry – Chem 30A - Fossum

# groups e- on central atom	Bond angle	# lone pairs on central atom	Shape	Sketch	Polarity IF outer atoms are identical (if outer atoms are not identical, it's polar) (If it only contains nonpolar bonds, it's nonpolar)
2	180°	0	Linear		<b>nonpolar</b> (shape is symmetric)
3	120°	0	Trigonal Planar		<b>nonpolar</b> (shape is symmetric)
3	<120°	1	Bent		<b>polar</b> (shape is not symmetric)
4	109.5°	0	Tetrahedral		<b>nonpolar</b> (shape is symmetric)
4	<109.5°	1	Trigonal Pyramid		<b>polar</b> (shape is not symmetric)
4	<109.5°	2	Bent		<b>polar</b> (shape is not symmetric)