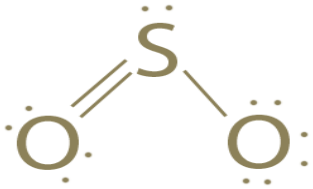
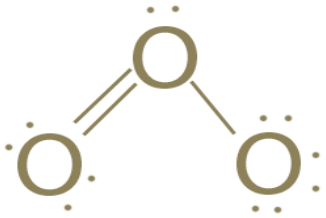
sulfur dioxide

Formula	SO_2
Hybridization	sp^2
Shape	bent
Bond Angle(s)	<120°
Polarity	polar
# sigma bonds	2σ
# pi bonds	1π
Bond Order	1½



ozone

Formula	O_3
Hybridization	sp^2
Shape	bent
Bond Angle(s)	<120°
Polarity	polar
# sigma bonds	2σ
# pi bonds	1π
Bond Order	1½



carbon dioxide

Formula	CO_2
Hybridization	sp
Shape	linear
Bond Angle(s)	180°
Polarity	non
# sigma bonds	2σ
# pi bonds	2π
Bond Order	2

carbon monoxide

Formula	CO
Hybridization	sp
Shape	linear
Bond Angle(s)	180°
Polarity	polar
# sigma bonds	1σ
# pi bonds	2π
Bond Order	3

carbon disulfide

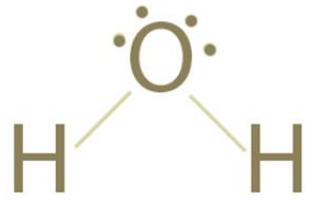
Formula	CS_2
Hybridization	sp
Shape	linear
Bond Angle(s)	180°
Polarity	non
# sigma bonds	2σ
# pi bonds	2π
Bond Order	2

carbon diselenide

Formula	CSe_2
Hybridization	sp
Shape	linear
Bond Angle(s)	180°
Polarity	non
# sigma bonds	2σ
# pi bonds	2π
Bond Order	2

dihydrogen monoxide

Formula	H_2O
Hybridization	sp^3
Shape	bent
Bond Angle(s)	104.5°
Polarity	polar
# sigma bonds	2σ
# pi bonds	0π
Bond Order	1

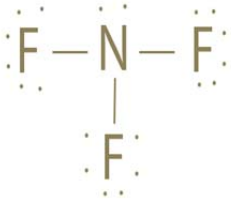


arsenic pentafluoride

Formula	AsF_5
Hybridization	dsp^3
Shape	trigonal bipyramidal
Bond Angle(s)	90° & 120°
Polarity	non
# sigma bonds	5σ
# pi bonds	0π
Bond Order	1

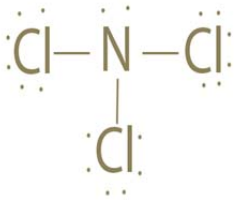
nitrogen trifluoride

Formula	NF_3
Hybridization	sp^3
Shape	trigonal pyramidal
Bond Angle(s)	~107°
Polarity	polar
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1



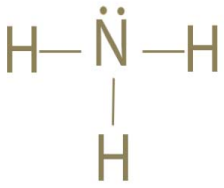
nitrogen trichloride

Formula	NCl_3
Hybridization	sp^3
Shape	trigonal pyramidal
Bond Angle(s)	~107
Polarity	polar
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1



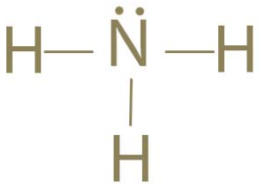
ammonia

Formula	NH_3
Hybridization	sp^3
Shape	trigonal pyramidal
Bond Angle(s)	107°
Polarity	polar
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1



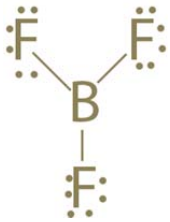
nitrogen trihydride

Formula	NH_3
Hybridization	sp^3
Shape	trigonal pyramidal
Bond Angle(s)	107°
Polarity	polar
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1



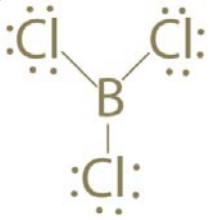
boron trifluoride

Formula	BF_3
Hybridization	sp^2
Shape	trigonal planar
Bond Angle(s)	120°
Polarity	non
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1



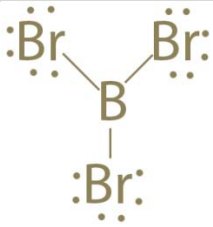
boron trichloride

Formula	BCl_3
Hybridization	sp^2
Shape	trigonal planar
Bond Angle(s)	120°
Polarity	non
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1



boron tribromide

Formula	BBr_3
Hybridization	sp^2
Shape	trigonal planar
Bond Angle(s)	120°
Polarity	non
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1

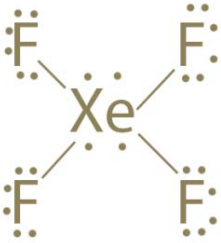


boron triiodide

Formula	BI_3
Hybridization	sp^2
Shape	trigonal planar
Bond Angle(s)	120°
Polarity	non
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1

xenon tetrafluoride

Formula	XeF_4
Hybridization	d^2sp^3
Shape	square planar
Bond Angle(s)	90°
Polarity	non
# sigma bonds	4σ
# pi bonds	0π
Bond Order	1

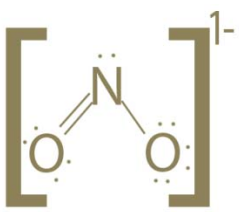


chlorine trifluoride

Formula	ClF_3
Hybridization	dsp^3
Shape	T-shaped
Bond Angle(s)	90° & 180
Polarity	polar
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1

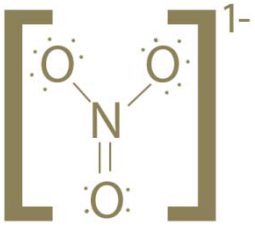
nitrite

Formula	NO_2^{1-}
Hybridization	sp^2
Shape	bent
Bond Angle(s)	<120°
Polarity	polar
# sigma bonds	2σ
# pi bonds	1π
Bond Order	1½



nitrate

Formula	NO_3^{1-}
Hybridization	sp^2
Shape	trigonal planar
Bond Angle(s)	120°
Polarity	non
# sigma bonds	3σ
# pi bonds	1π
Bond Order	1⅓



nitronium ion

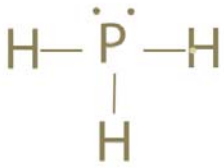
Formula	NO_2^{1+}
Hybridization	sp
Shape	linear
Bond Angle(s)	180°
Polarity	non
# sigma bonds	2σ
# pi bonds	2π
Bond Order	2

phosphorus trifluoride

Formula	PF_3
Hybridization	sp^3
Shape	trigonal pyramidal
Bond Angle(s)	107°
Polarity	polar
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1

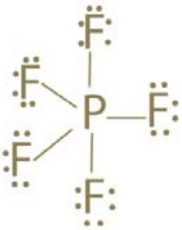
phosphorus trihydride

Formula	PH_3
Hybridization	sp^3
Shape	trigonal pyramidal
Bond Angle(s)	107°
Polarity	polar
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1



phosphorus pentafluoride

Formula	PF_5
Hybridization	dsp^3
Shape	trigonal bipyramidal
Bond Angle(s)	90° & 120°
Polarity	non
# sigma bonds	5σ
# pi bonds	0π
Bond Order	1



hydrogen chloride

Formula	HCl
Hybridization	sp^3
Shape	linear
Bond Angle(s)	180°
Polarity	polar
# sigma bonds	1σ
# pi bonds	0π
Bond Order	1

hydrogen fluoride

Formula	HF
Hybridization	sp^3
Shape	linear
Bond Angle(s)	180°
Polarity	polar
# sigma bonds	1σ
# pi bonds	0π
Bond Order	1

hydrogen iodide

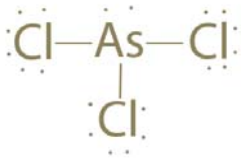
Formula	HI
Hybridization	sp^3
Shape	linear
Bond Angle(s)	180°
Polarity	polar
# sigma bonds	1σ
# pi bonds	0π
Bond Order	1

hydrogen bromide

Formula	HBr
Hybridization	sp^3
Shape	linear
Bond Angle(s)	180°
Polarity	polar
# sigma bonds	1σ
# pi bonds	0π
Bond Order	1

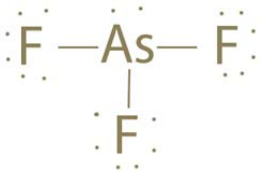
arsenic trichloride

Formula	$AsCl_3$
Hybridization	sp^3
Shape	trigonal pyramidal
Bond Angle(s)	~107°
Polarity	polar
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1



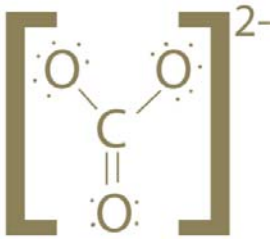
arsenic trifluoride

Formula	AsF_3
Hybridization	sp^3
Shape	trigonal pyramidal
Bond Angle(s)	~107°
Polarity	polar
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1



carbonate ion

Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	



Formula	CO_3^{2-}
Hybridization	sp^2
Shape	trigonal planar
Bond Angle(s)	120°
Polarity	non
# sigma bonds	3σ
# pi bonds	1π
Bond Order	1 1/3

diatomic chlorine

Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	

Formula	Cl_2
Hybridization	sp^3
Shape	linear
Bond Angle(s)	180°
Polarity	non
# sigma bonds	1σ
# pi bonds	0π
Bond Order	1

diatomic bromine

Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	

Formula	Br_2
Hybridization	sp^3
Shape	linear
Bond Angle(s)	180°
Polarity	non
# sigma bonds	1σ
# pi bonds	0π
Bond Order	1

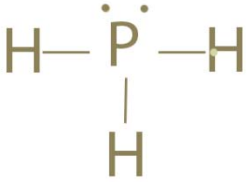
diatomic iodine

Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	

Formula	I_2
Hybridization	sp^3
Shape	linear
Bond Angle(s)	180°
Polarity	non
# sigma bonds	1σ
# pi bonds	0π
Bond Order	1

phosphine

Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	



Formula	PH_3
Hybridization	sp^3
Shape	trigonal pyramidal
Bond Angle(s)	107°
Polarity	polar
# sigma bonds	3σ
# pi bonds	0π
Bond Order	1

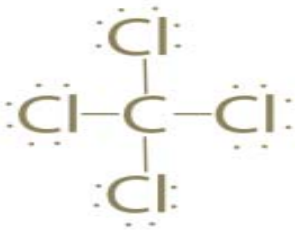
diatomic fluorine

Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	

Formula	F_2
Hybridization	sp^3
Shape	linear
Bond Angle(s)	180°
Polarity	non
# sigma bonds	1σ
# pi bonds	0π
Bond Order	1

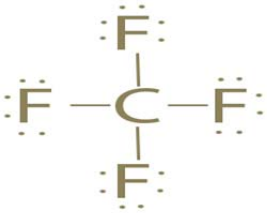
carbon tetrachloride

Formula	CCl_4
Hybridization	sp^3
Shape	tetrahedral
Bond Angle(s)	109.5°
Polarity	non
# sigma bonds	4σ
# pi bonds	0π
Bond Order	1



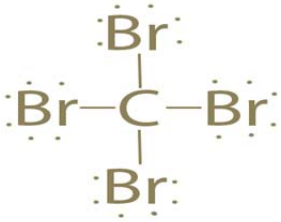
carbon tetrafluoride

Formula	CF_4
Hybridization	sp^3
Shape	tetrahedral
Bond Angle(s)	109.5°
Polarity	non
# sigma bonds	4σ
# pi bonds	0π
Bond Order	1



carbon tetrabromide

Formula	CBr_4
Hybridization	sp^3
Shape	tetrahedral
Bond Angle(s)	109.5°
Polarity	non
# sigma bonds	4σ
# pi bonds	0π
Bond Order	1



beryllium difluoride

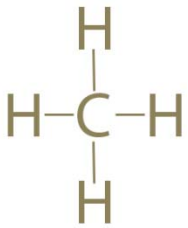
Formula	BeF_2
Hybridization	sp
Shape	linear
Bond Angle(s)	180°
Polarity	non
# sigma bonds	2σ
# pi bonds	0π
Bond Order	1

beryllium dihydride

Formula	BeH_2
Hybridization	sp
Shape	linear
Bond Angle(s)	180°
Polarity	non
# sigma bonds	2σ
# pi bonds	0π
Bond Order	1

methane

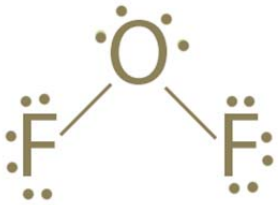
Formula	CH_4
Hybridization	sp^3
Shape	tetrahedral
Bond Angle(s)	109.5°
Polarity	non
# sigma bonds	4σ
# pi bonds	0π
Bond Order	1



Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	

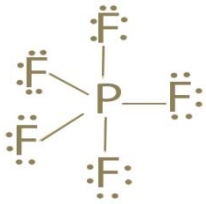
Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	

oxygen difluoride



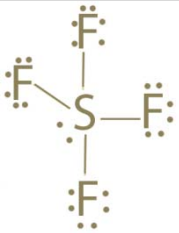
Formula	OF_2
Hybridization	sp^3
Shape	bent
Bond Angle(s)	~104.5°
Polarity	polar
# sigma bonds	2σ
# pi bonds	0π
Bond Order	1

phosphorus pentafluoride



Formula	PF_5
Hybridization	dsp^3
Shape	trigonal bipyramidal
Bond Angle(s)	90° & 120°
Polarity	non
# sigma bonds	5σ
# pi bonds	0π
Bond Order	1

sulfur tetrafluoride

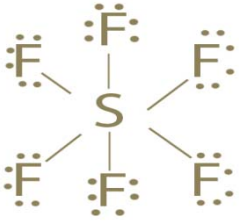


Formula	SF_4
Hybridization	dsp^3
Shape	See-saw
Bond Angle(s)	90° & <120°
Polarity	polar
# sigma bonds	4σ
# pi bonds	0π
Bond Order	1

xenon difluoride

Formula	XeF_2
Hybridization	dsp^3
Shape	linear
Bond Angle(s)	180°
Polarity	non
# sigma bonds	2σ
# pi bonds	0π
Bond Order	1

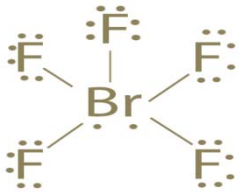
sulfur hexafluoride



Formula	SF_6
Hybridization	d^2sp^3
Shape	octahedral
Bond Angle(s)	90°
Polarity	non
# sigma bonds	6σ
# pi bonds	0π
Bond Order	1

bromine pentafluoride

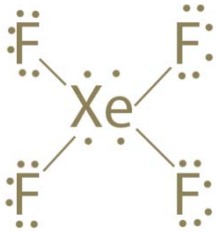
Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	



Formula	BrF_5
Hybridization	d^2sp^3
Shape	square pyramidal
Bond Angle(s)	90°
Polarity	polar
# sigma bonds	5σ
# pi bonds	0π
Bond Order	1

xenon tetrafluoride

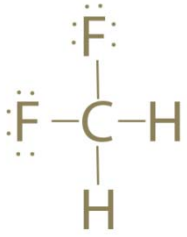
Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	



Formula	XeF_4
Hybridization	d^2sp^3
Shape	square planar
Bond Angle(s)	90°
Polarity	non
# sigma bonds	4σ
# pi bonds	0π
Bond Order	1

difluoro-methane

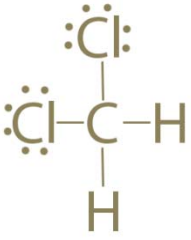
Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	



Formula	CF_2H_2
Hybridization	sp^3
Shape	tetrahedral
Bond Angle(s)	109.5°
Polarity	polar
# sigma bonds	4σ
# pi bonds	0π
Bond Order	1

dichloro-methane

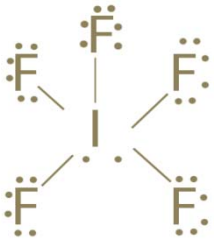
Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	



Formula	CCl_2H_2
Hybridization	sp^3
Shape	tetrahedral
Bond Angle(s)	109.5°
Polarity	polar
# sigma bonds	4σ
# pi bonds	0π
Bond Order	1

iodine pentafluoride

Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	



Formula	IF_5
Hybridization	d^2sp^3
Shape	square pyramidal
Bond Angle(s)	90°
Polarity	polar
# sigma bonds	5σ
# pi bonds	0π
Bond Order	1

Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	

Formula	
Hybridization	sp^3
Shape	
Bond Angle(s)	°
Polarity	
# sigma bonds	σ
# pi bonds	0π
Bond Order	

Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	

Formula	
Hybridization	sp^3
Shape	
Bond Angle(s)	°
Polarity	
# sigma bonds	σ
# pi bonds	0π
Bond Order	

Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	

Formula	
Hybridization	sp^3
Shape	
Bond Angle(s)	°
Polarity	
# sigma bonds	σ
# pi bonds	0π
Bond Order	

Formula	
Hybridization	
Shape	
Bond Angle(s)	
Polarity	
# sigma bonds	
# pi bonds	
Bond Order	

Formula	
Hybridization	sp^3
Shape	
Bond Angle(s)	°
Polarity	
# sigma bonds	σ
# pi bonds	0π
Bond Order	