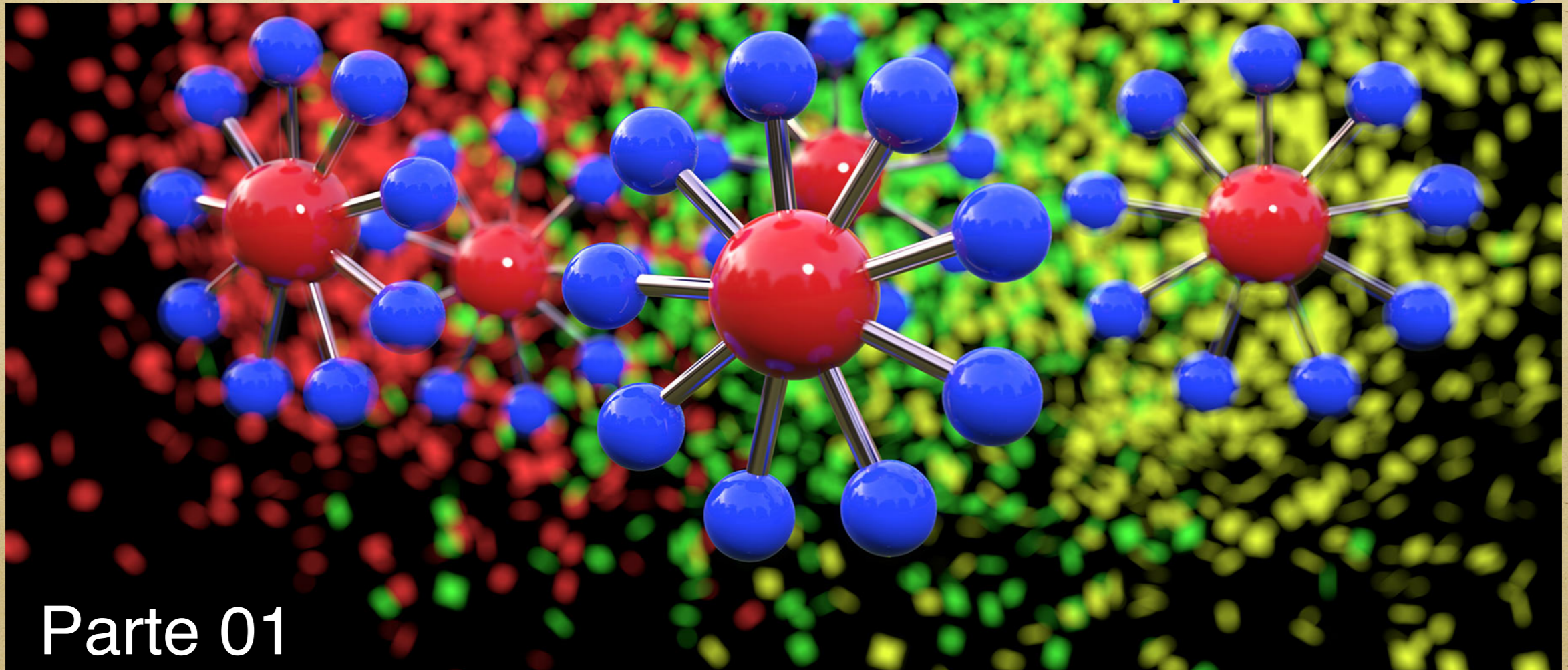


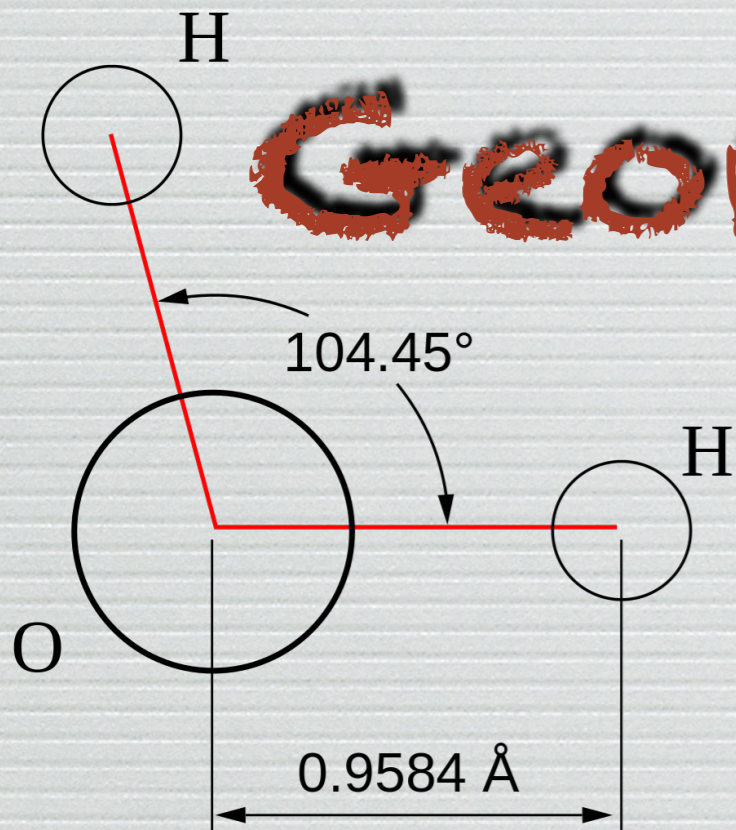
Geometria Molecular

alexquimica.blog



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Geometria Molecular



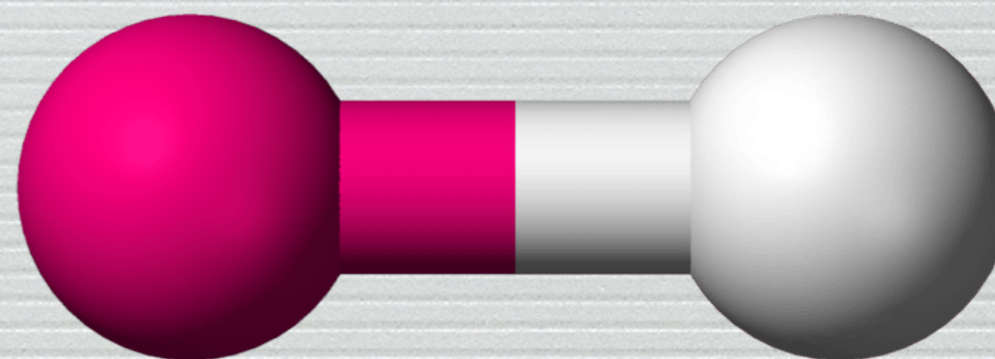
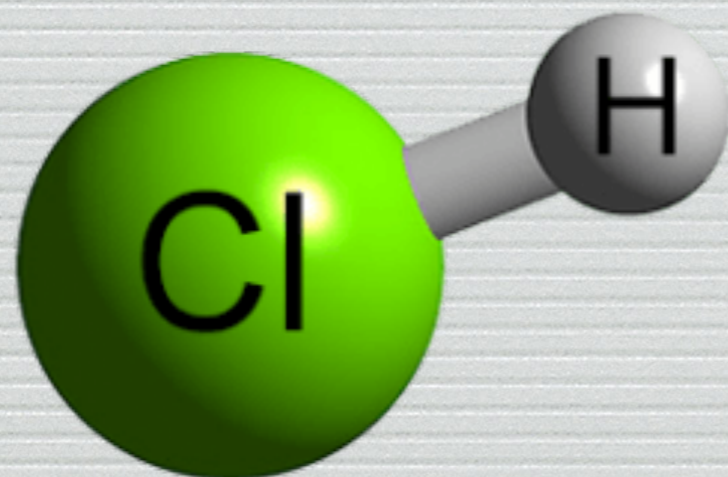
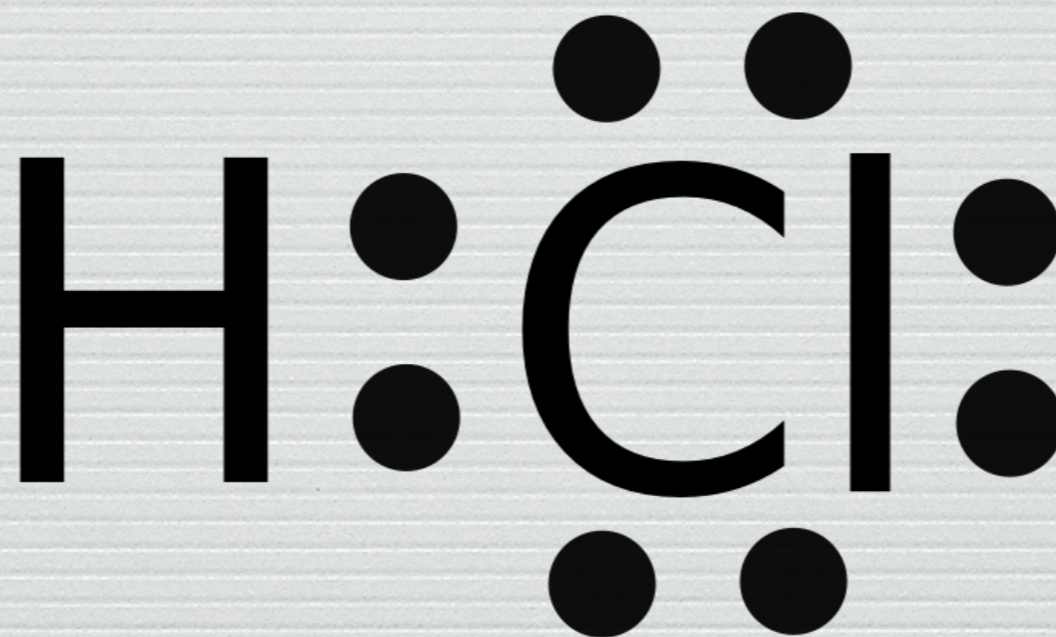
É definida como a forma como os átomos estão espacialmente dispostos na molécula.

A geometria será definida pela repulsão dos pares eletrônicos na camada de valência (**VSEPR, em inglês**), que considera o ângulo tridimensional máximo de afastamento possível entre os ligantes, também chamado **ângulo de diedro**.

Técnicas como espectroscopia e difração de raios X são utilizadas para a determinação experimental de ângulos de ligação.

HCl

Cloroeto de hidrogênio

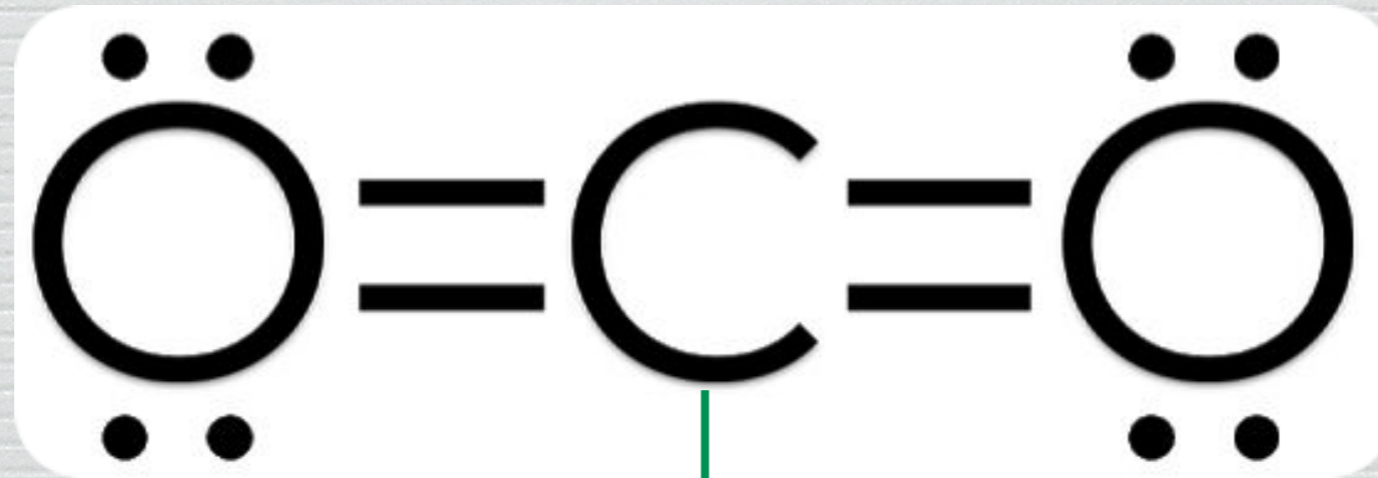


Geometria linear

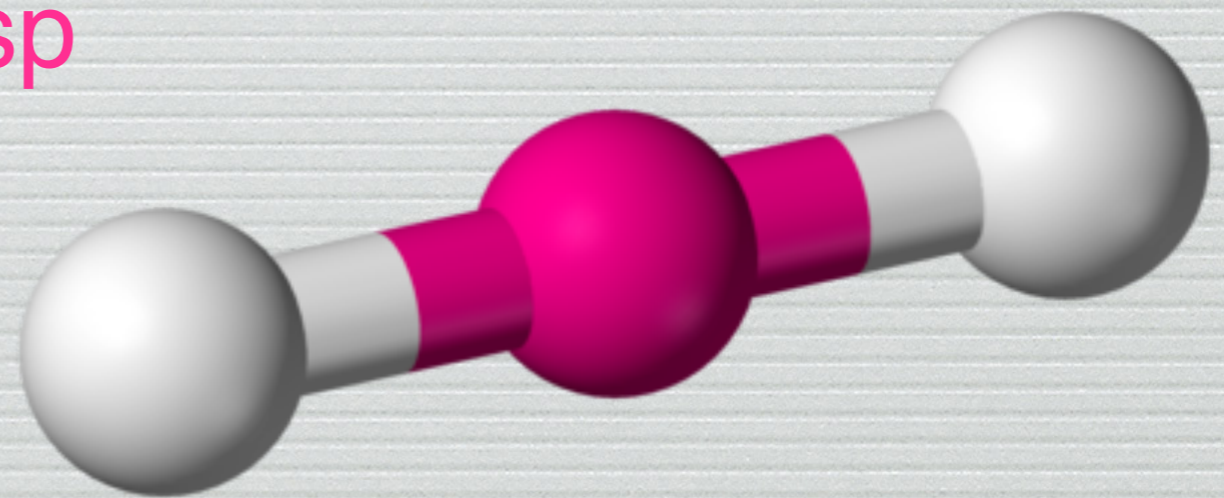
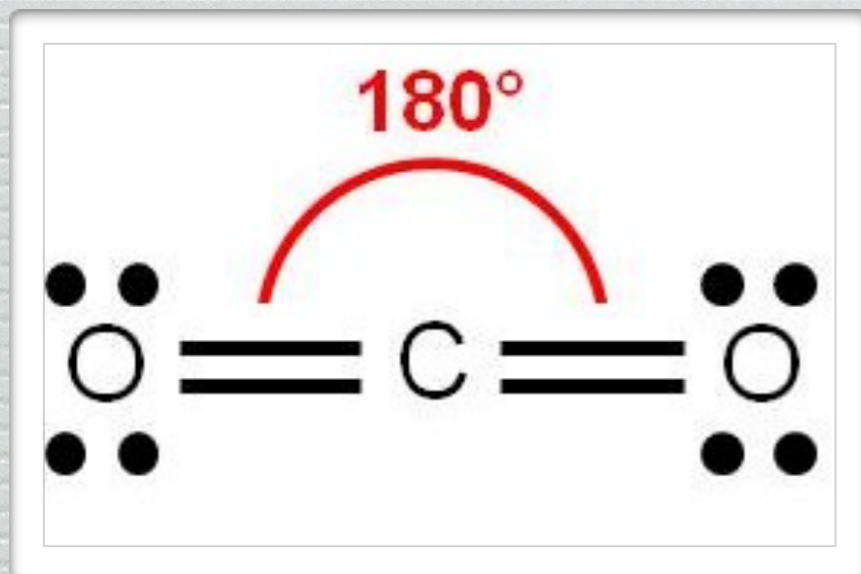
(180°)

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CO₂ Dióxido de carbono

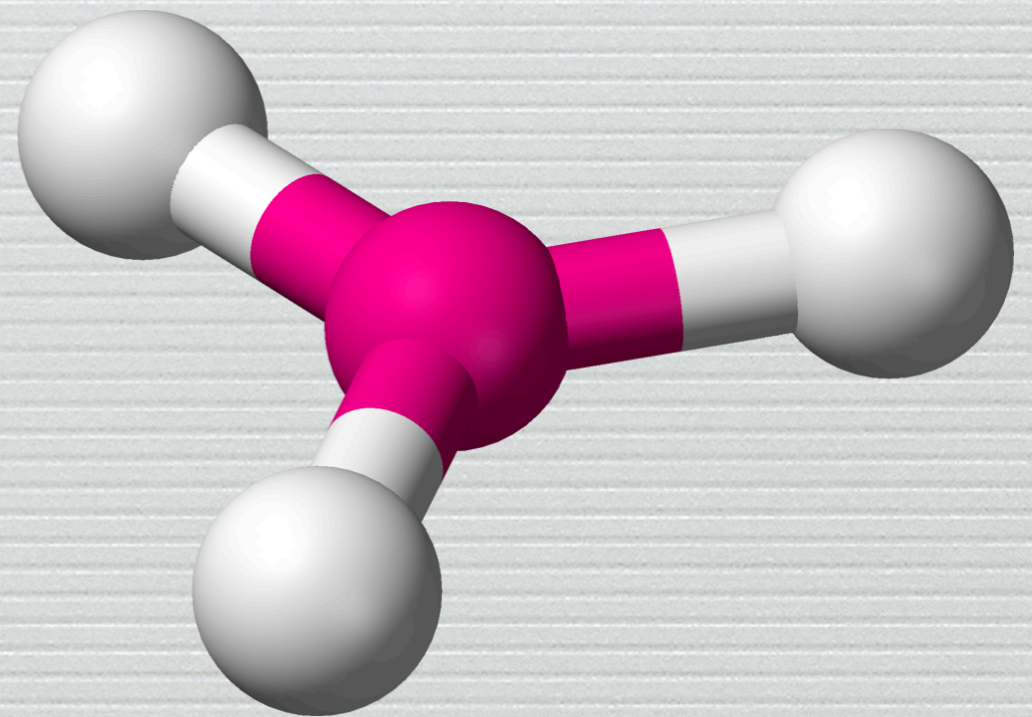
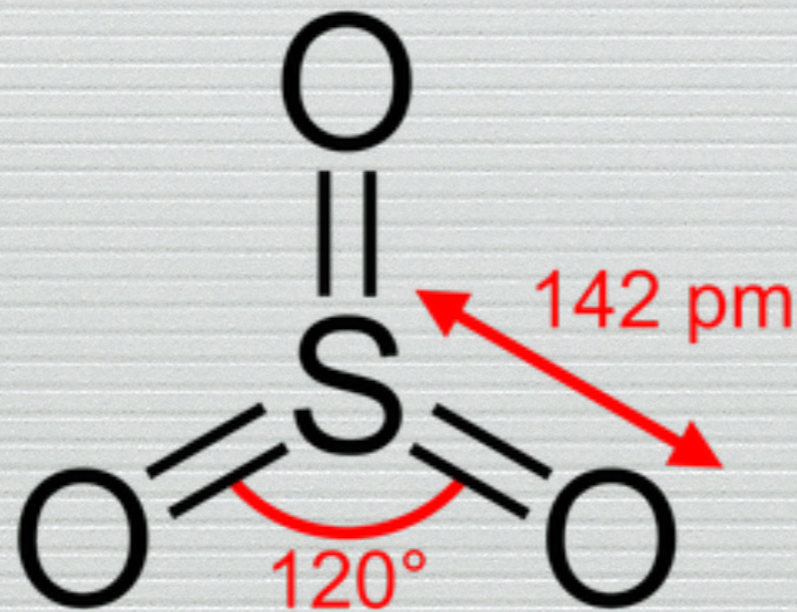
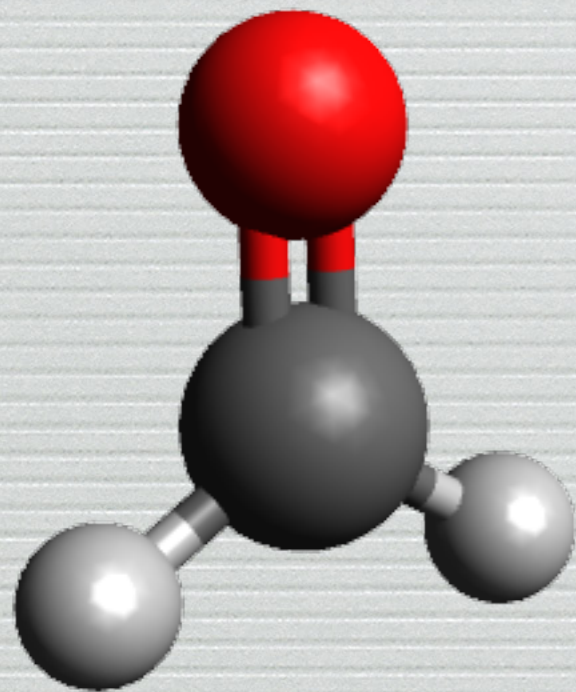
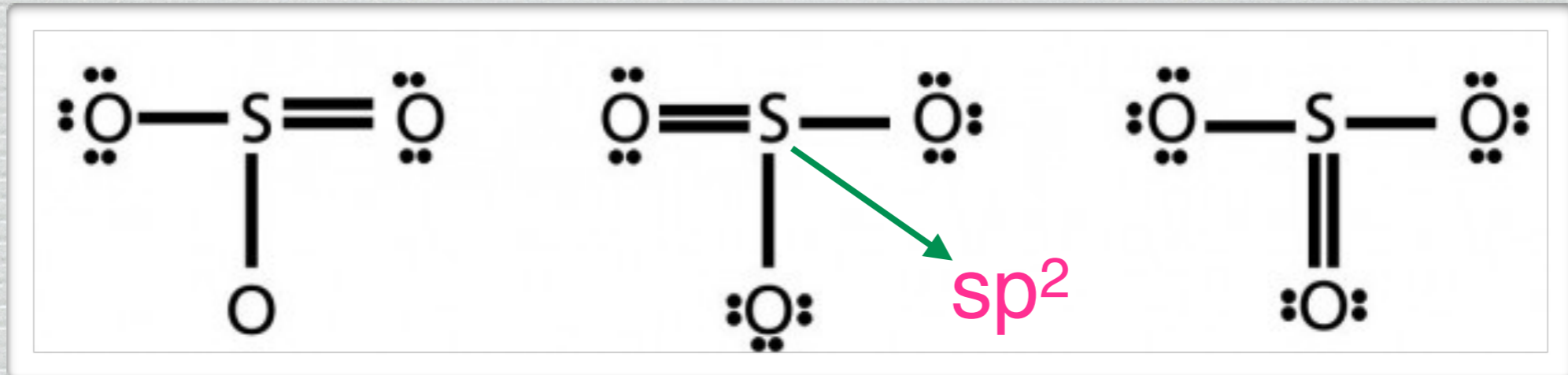


sp



Geometria linear
(180°)

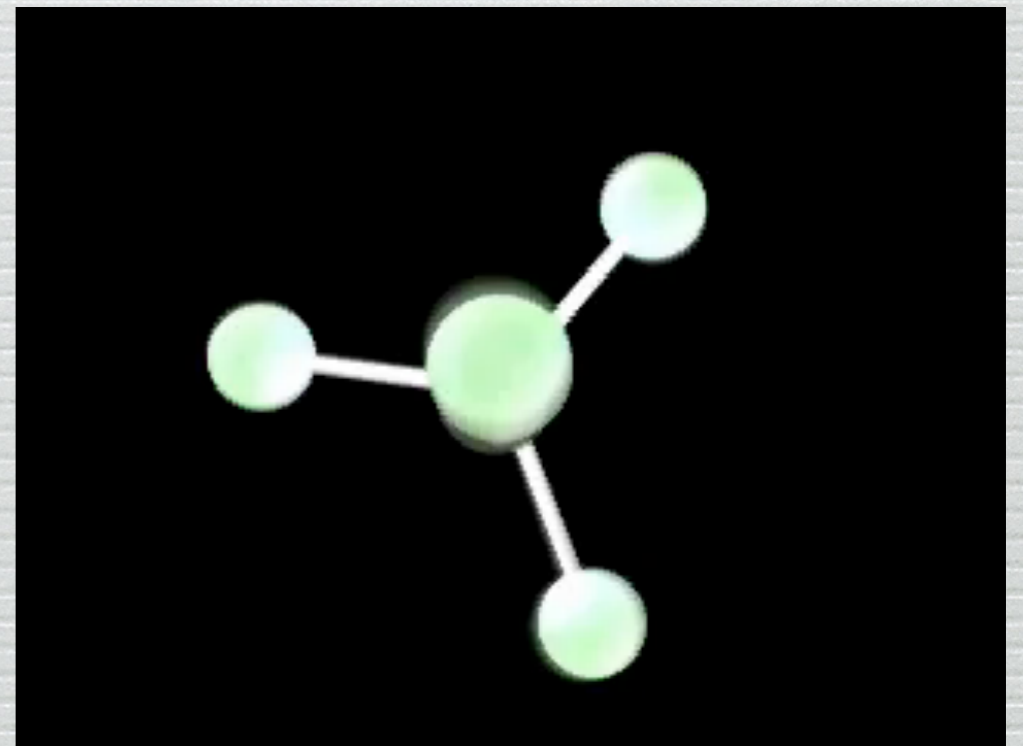
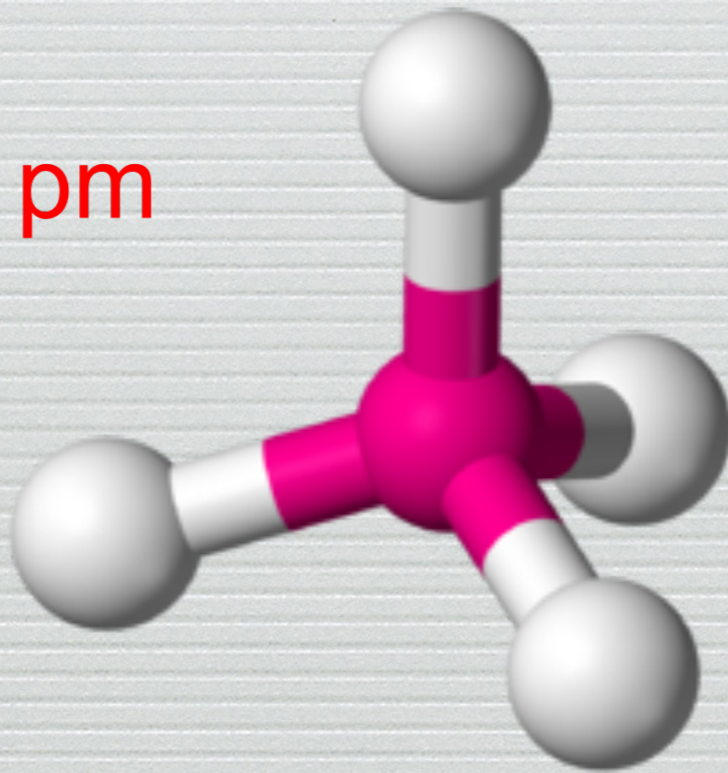
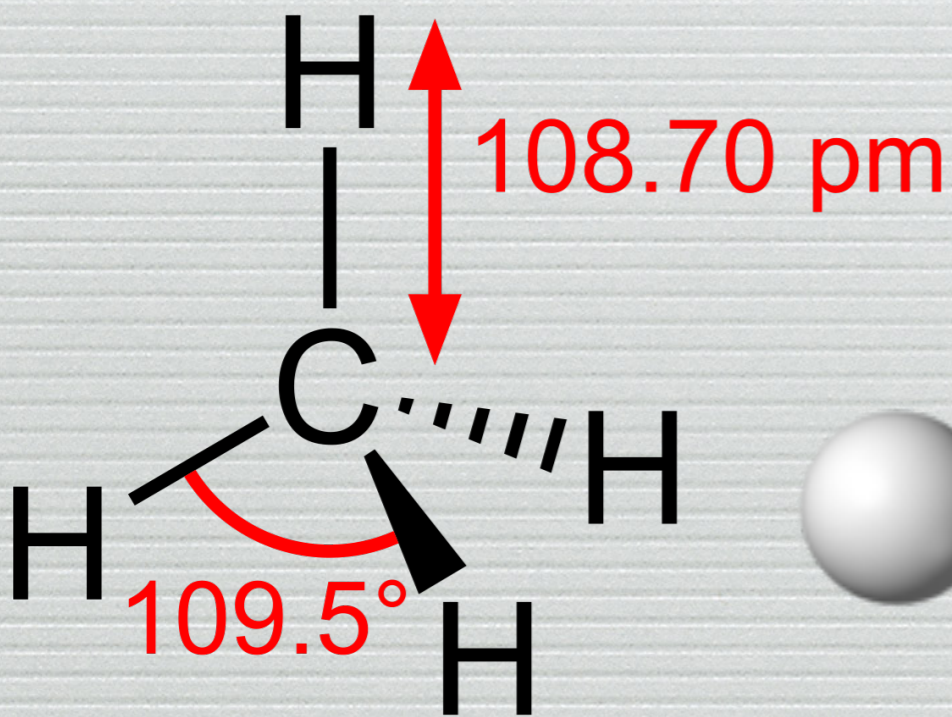
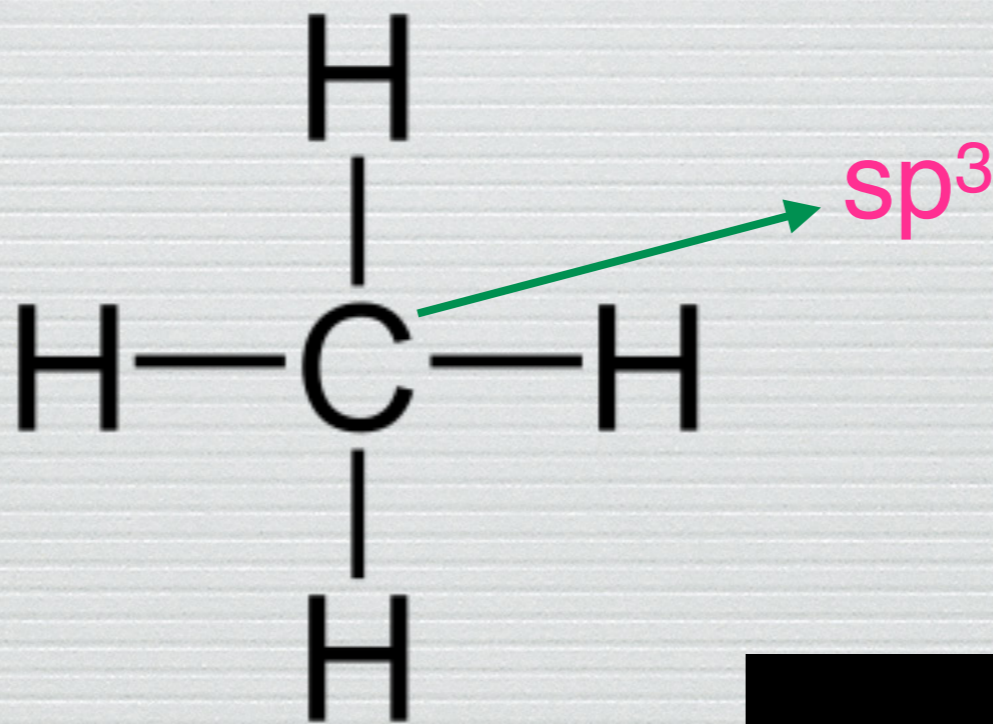
SO₃ Trióxido de enxofre



trigonal plana ou triangular
(120°)

CH₄

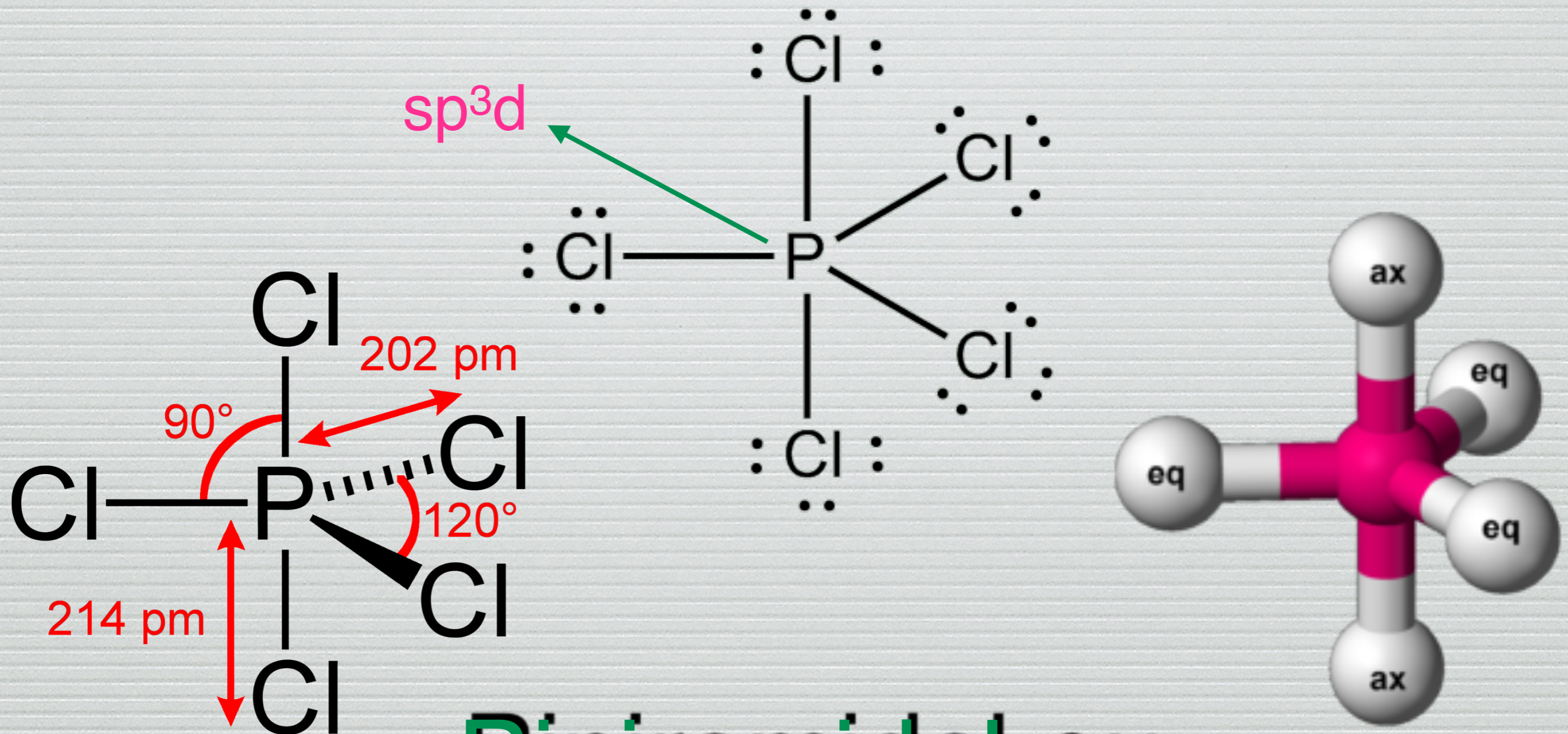
Metano



Tetraédrica

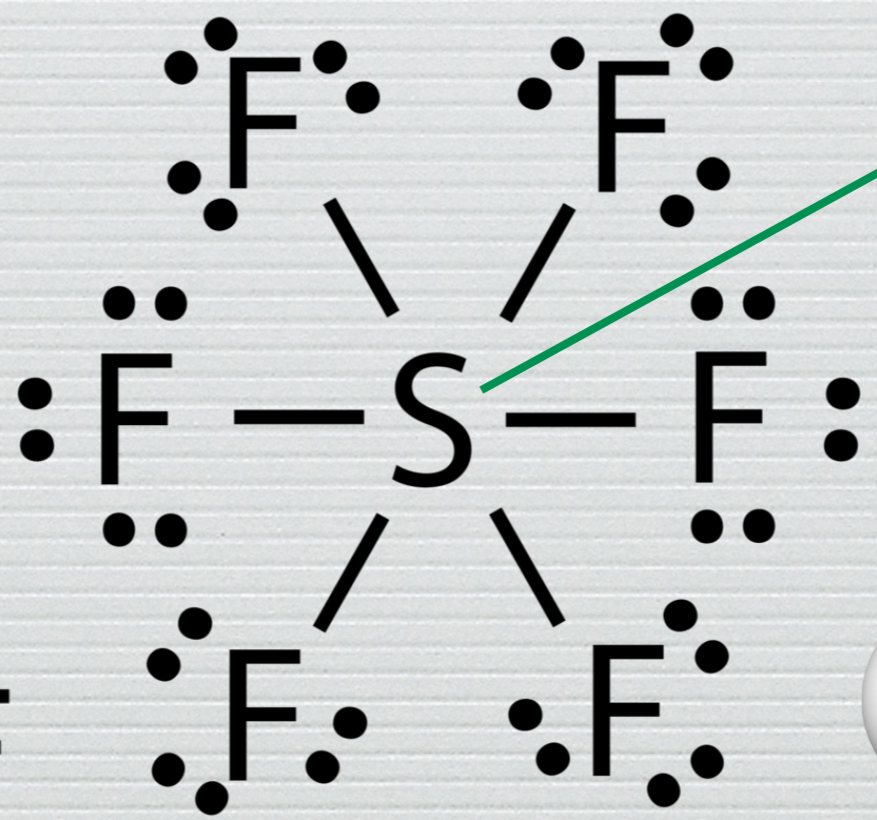
(109°28')

PCl₅ Pentacloreto de fósforo

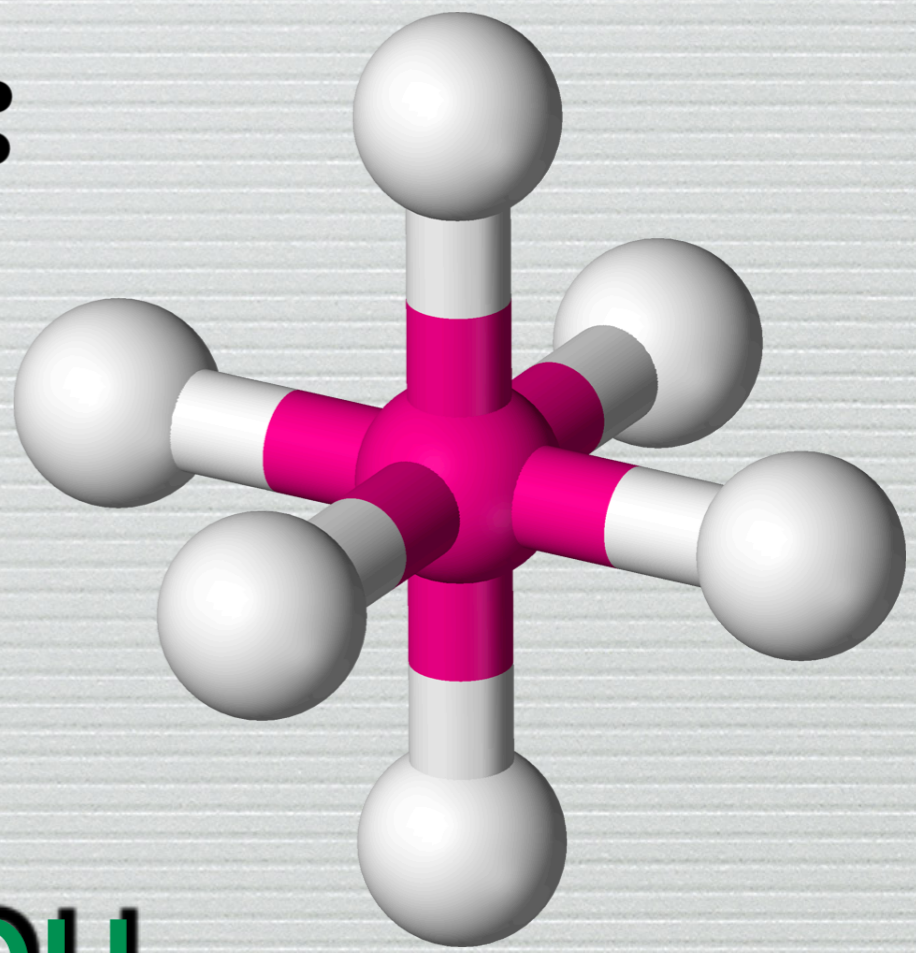
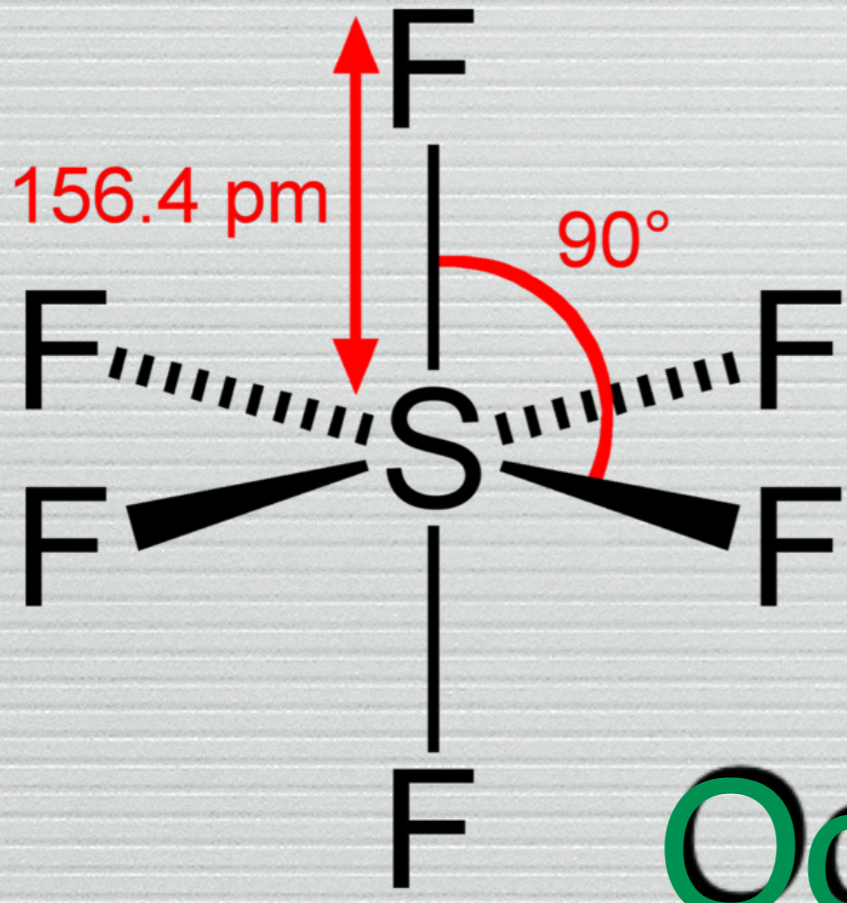


Bipiramidal ou
Bipirâmide trigonal

SF₆ Hexafluoreto de enxofre



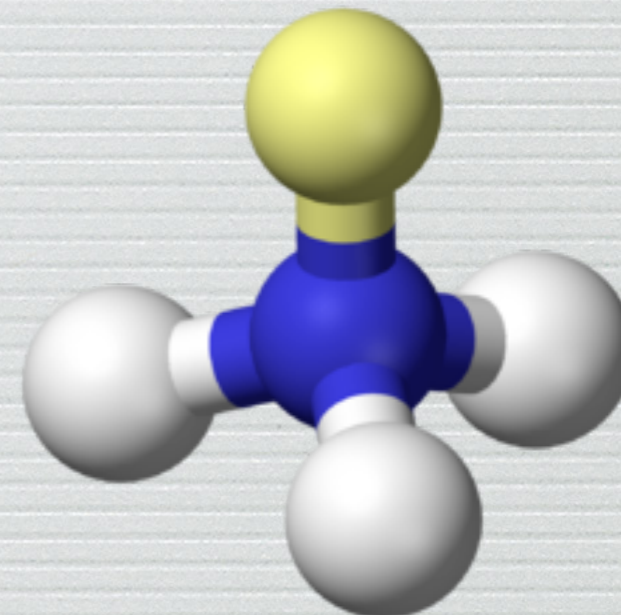
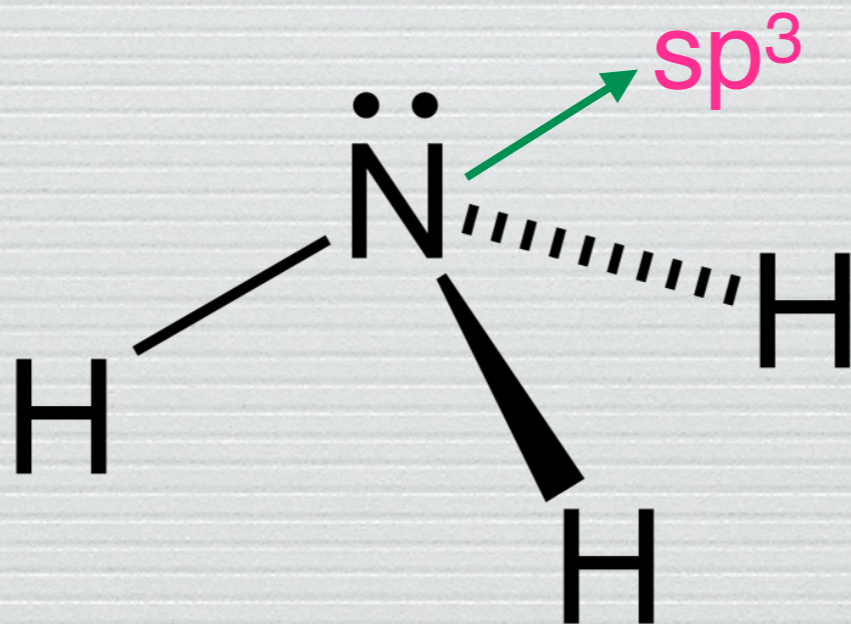
sp³d²



Octaédrica ou
Bipirâmide quadrada

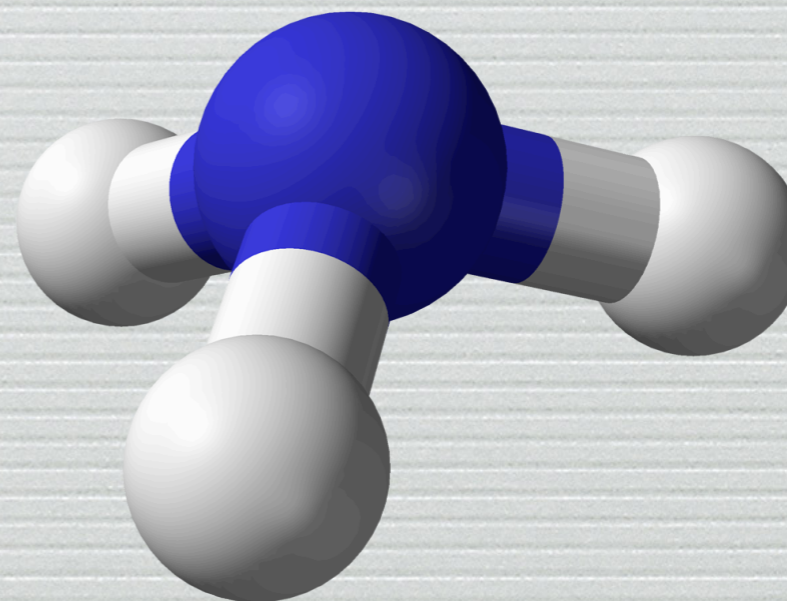
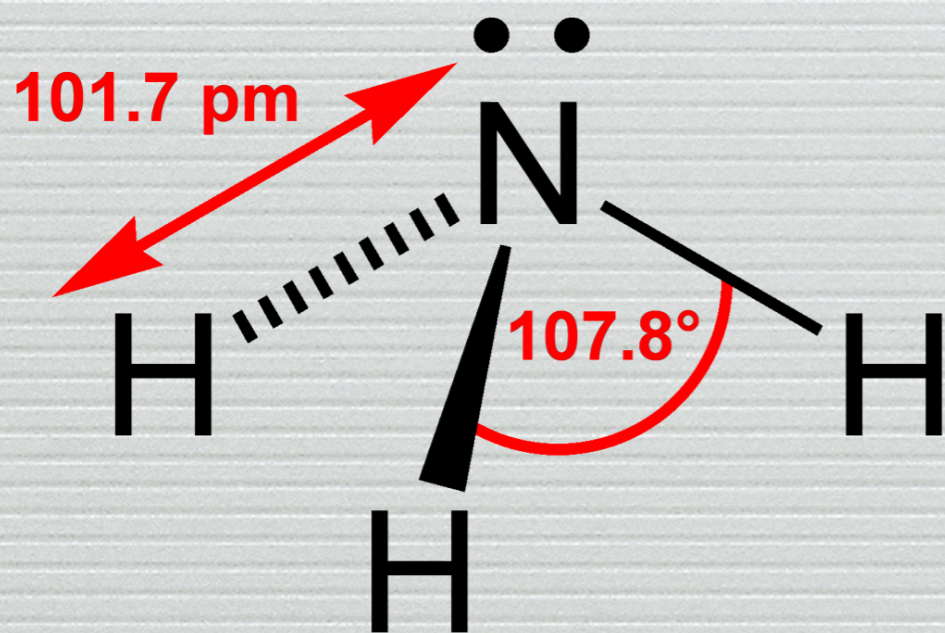


Amônia



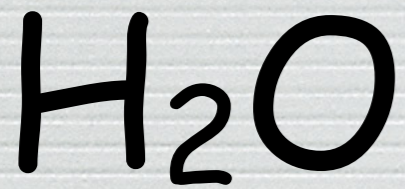
Tetraédrica

(4 pares eletrônicos)

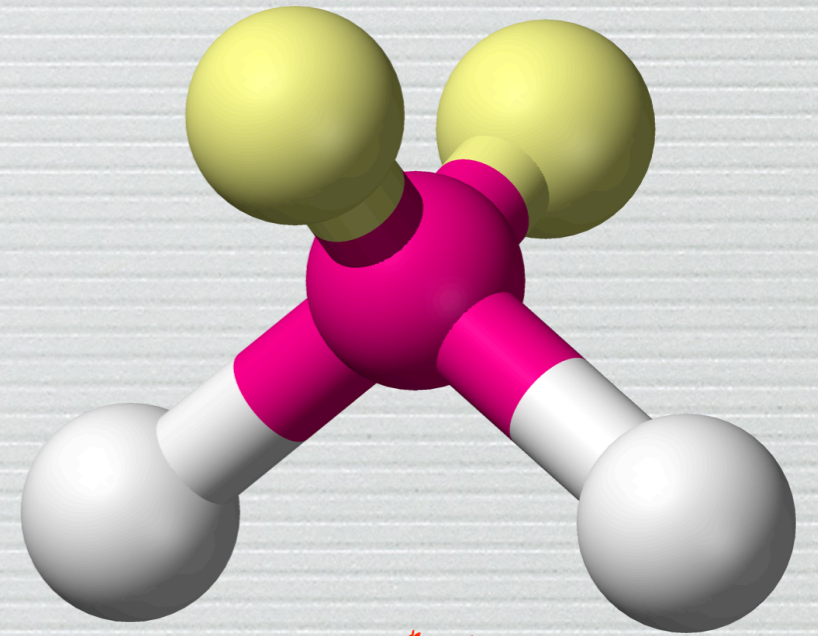
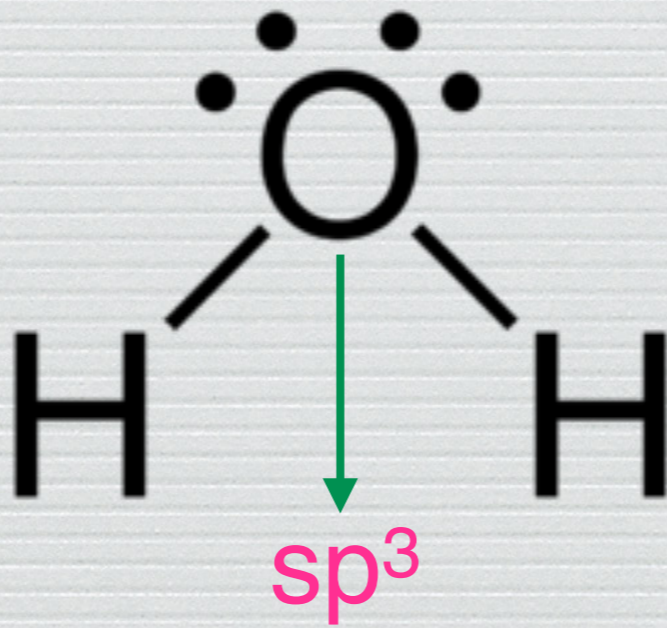


Piramidal

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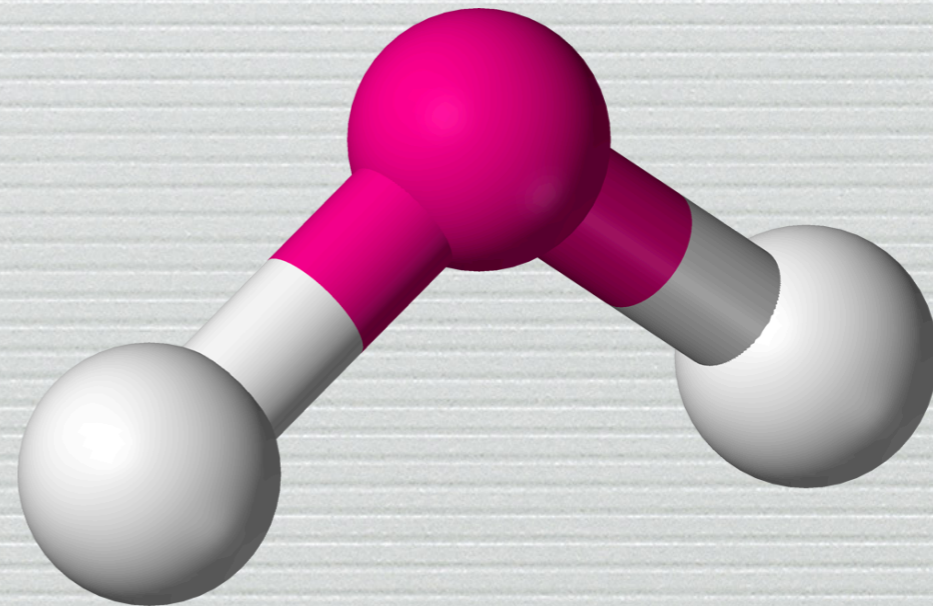
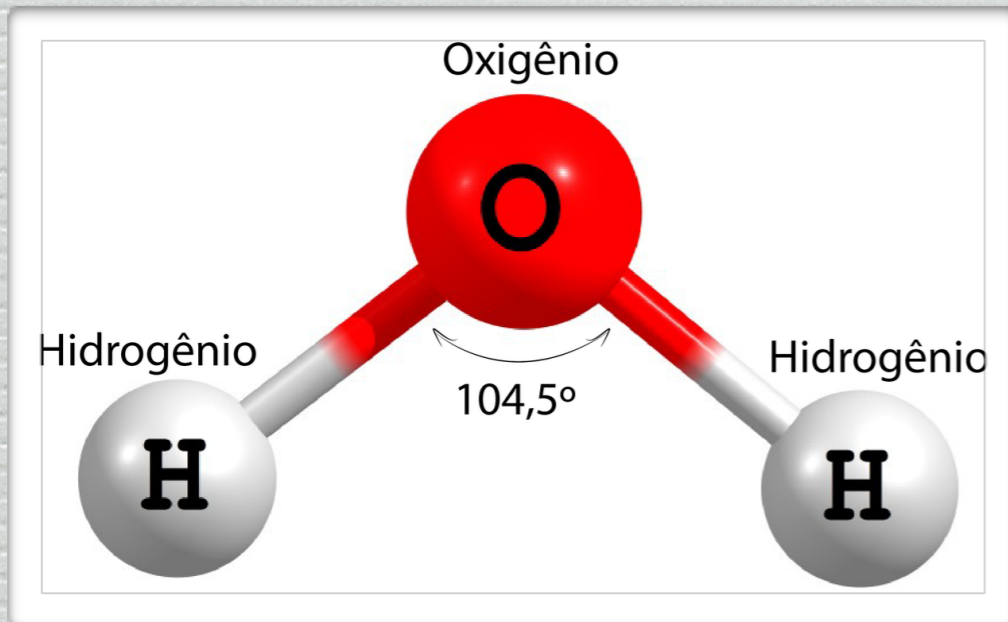


Água



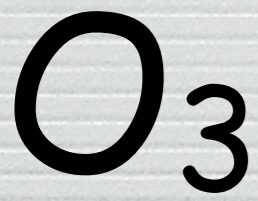
Tetraédrica

(4 pares eletrônicos)

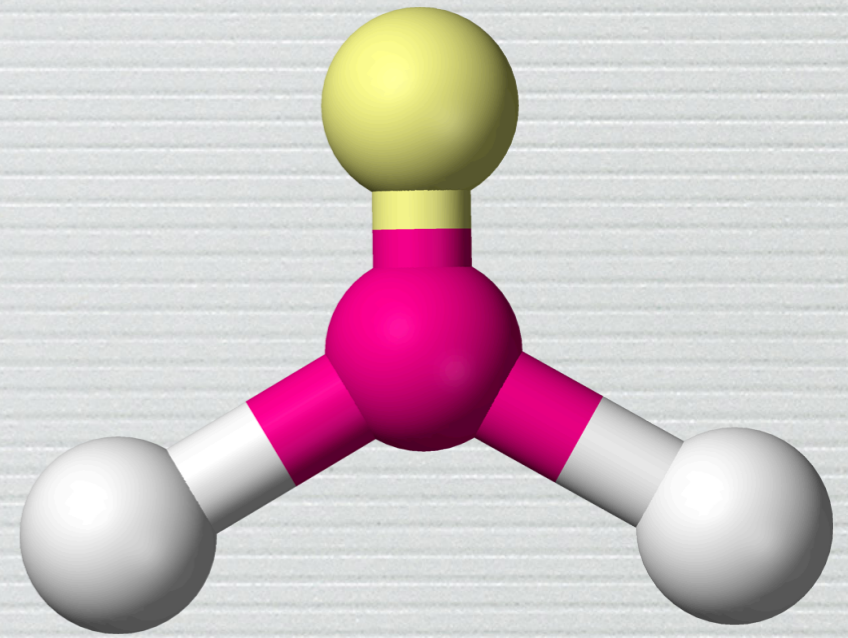
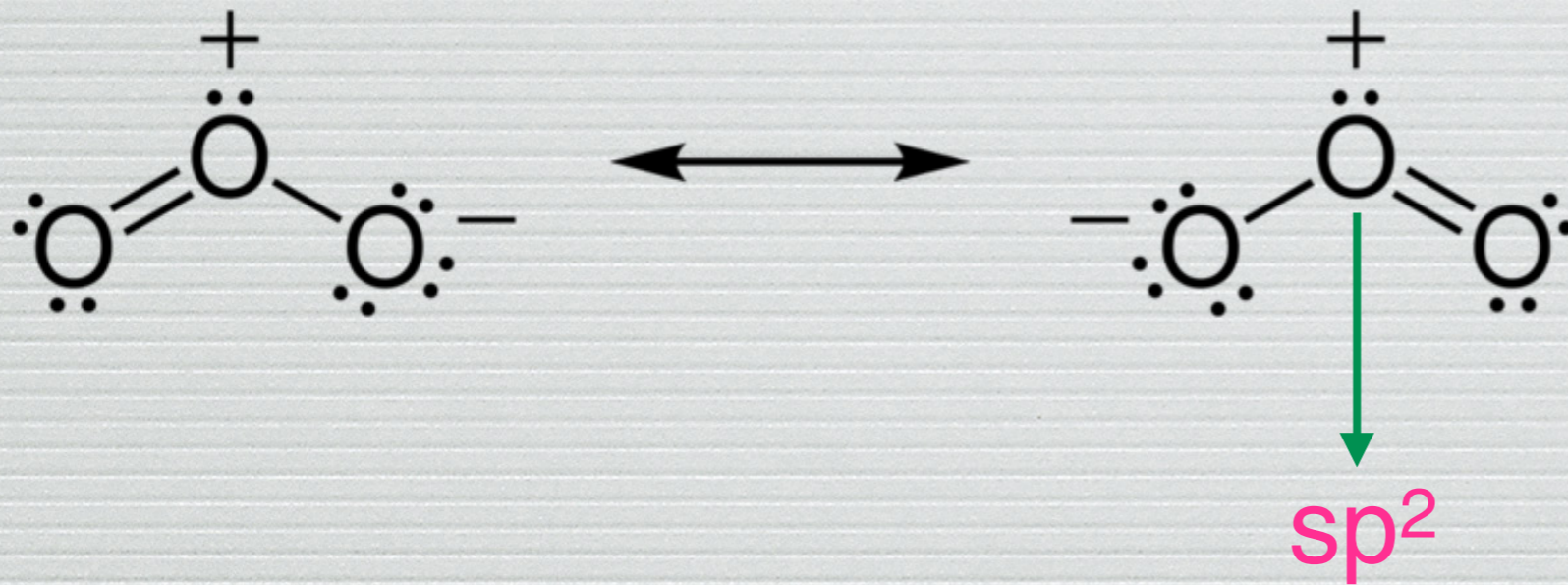


Angular

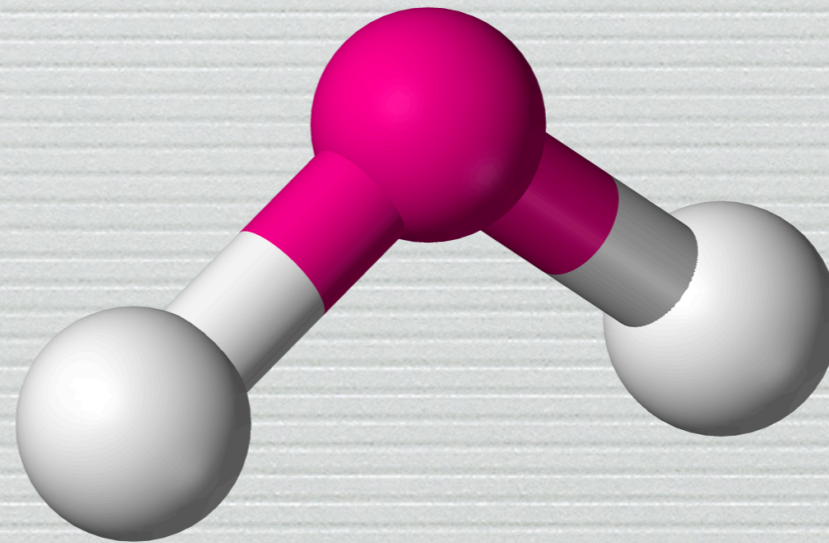
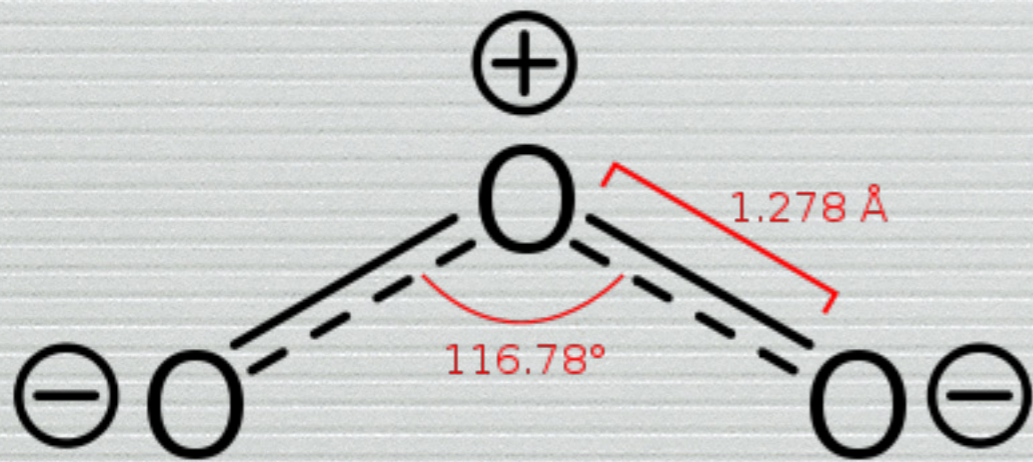
Prof: Alex



Ozônio



Trigonal plana
(3 pares eletrônicos)

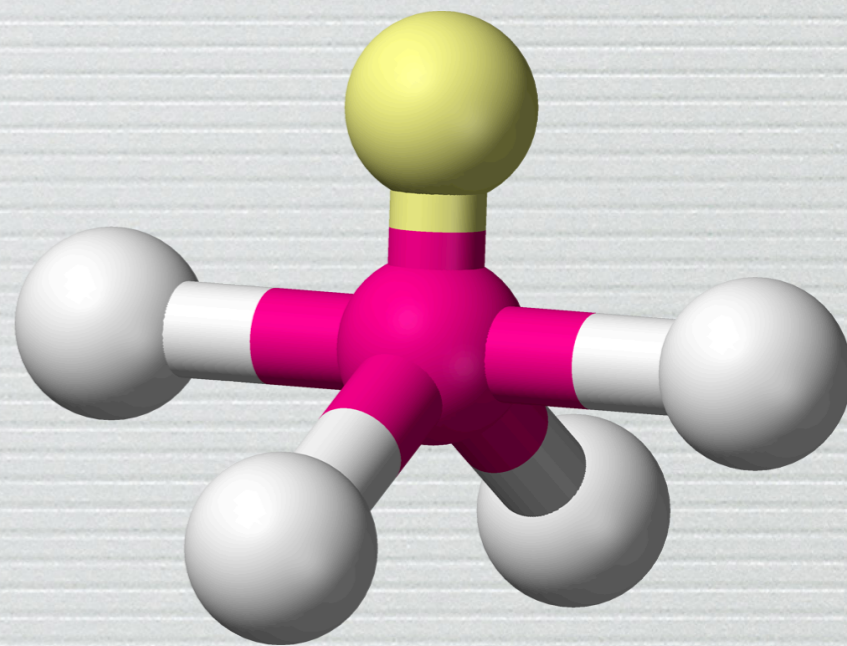
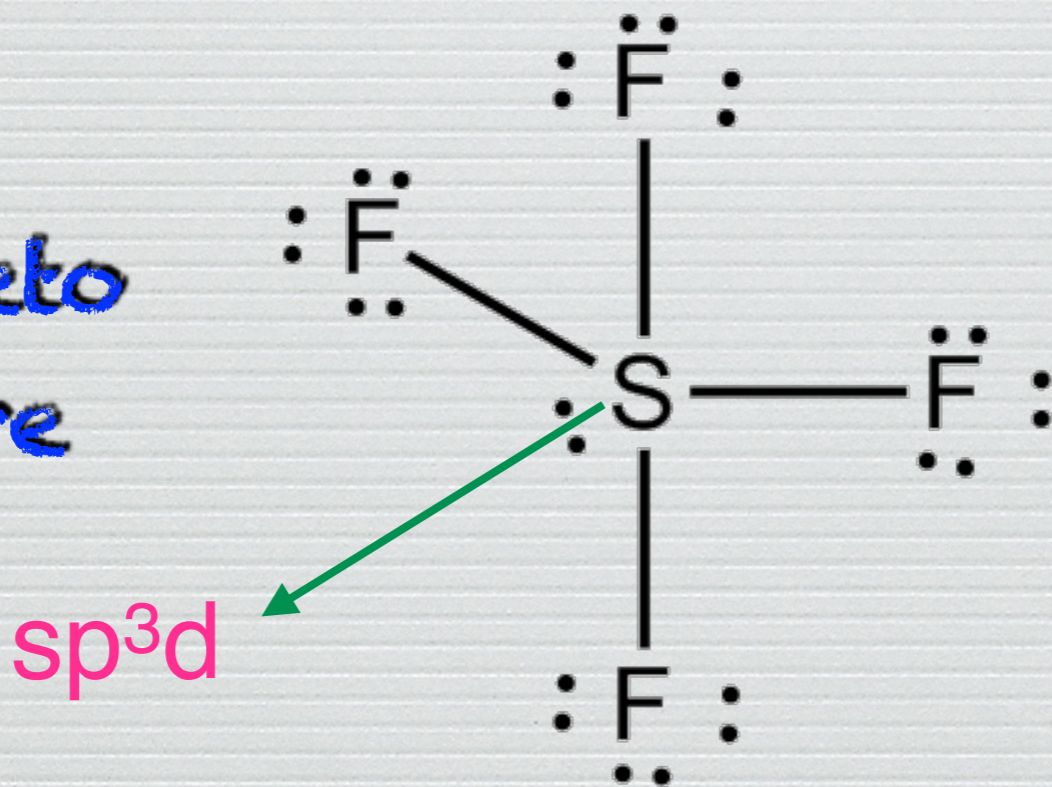


Angular

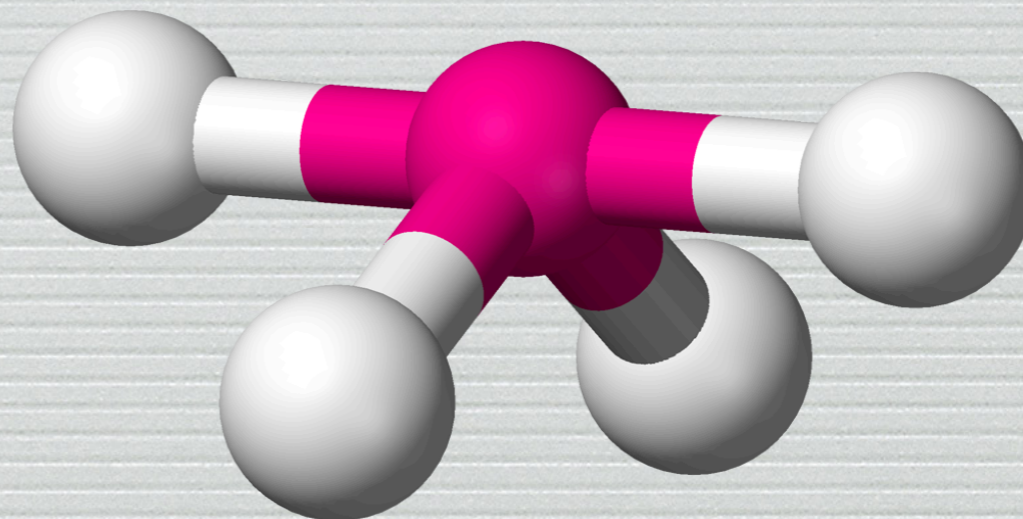
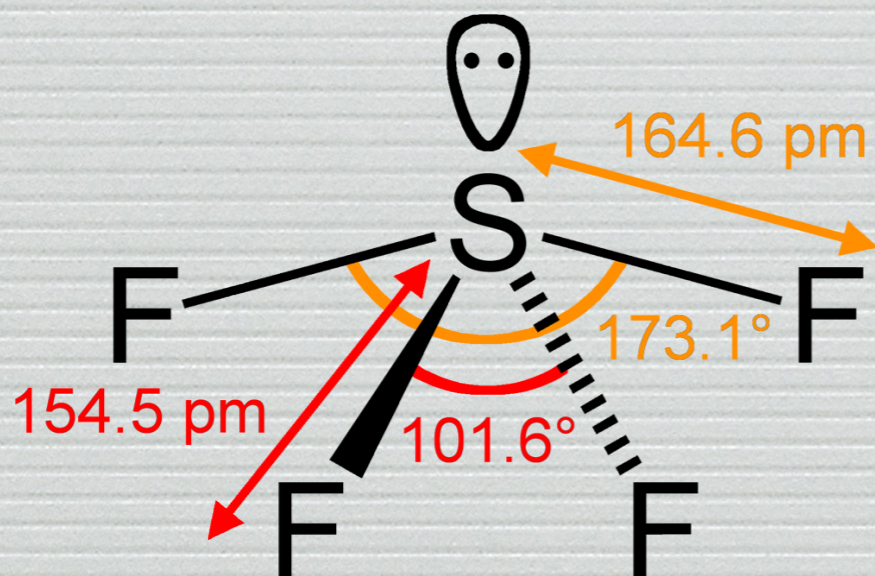
Prof: Alex



Tetrafluoreto
de enxofre



Bipiramidal
(5 pares eletrônicos)

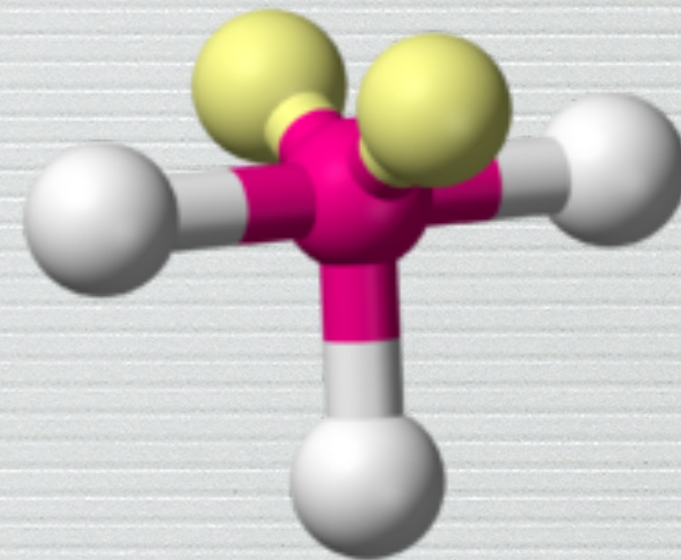
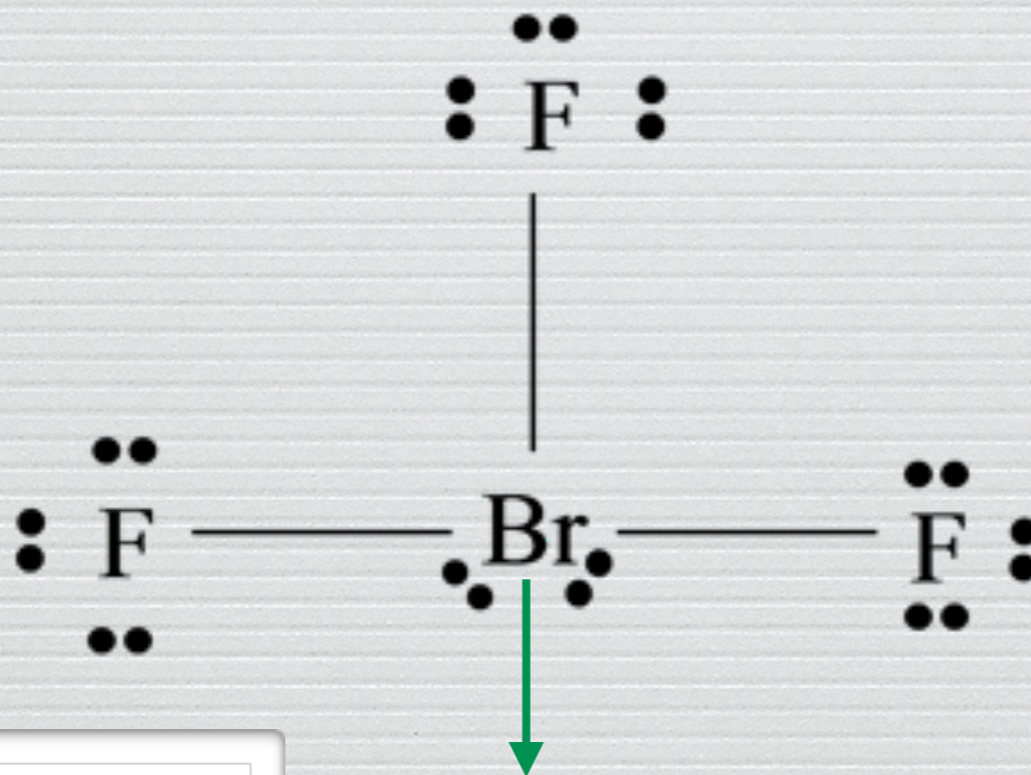


Gangorra

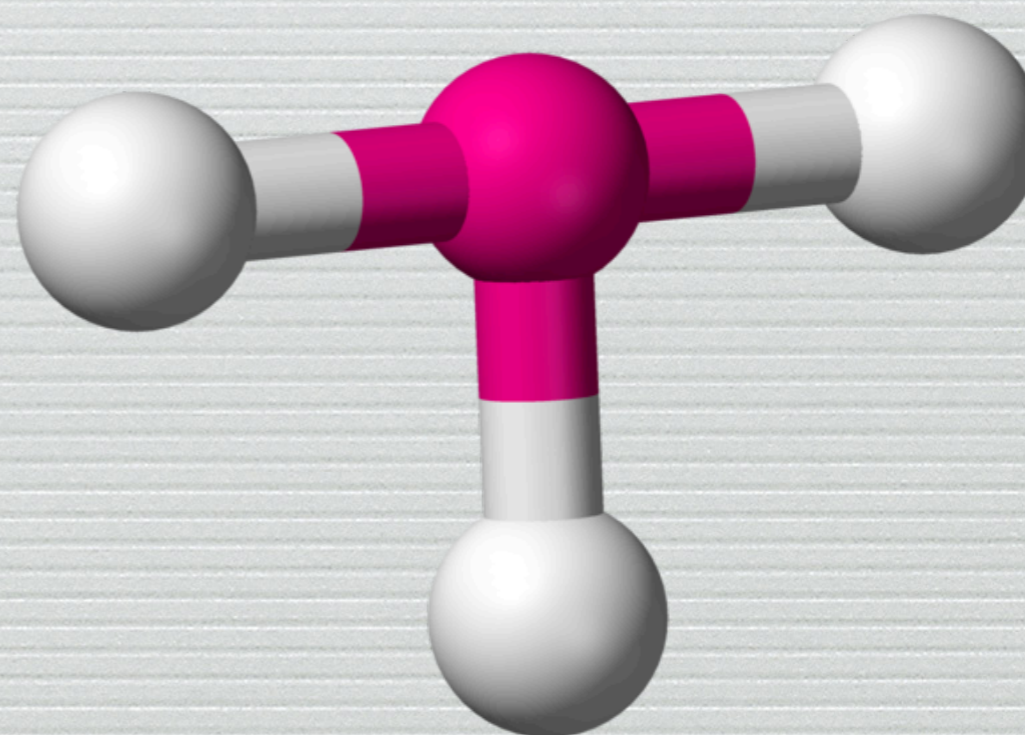
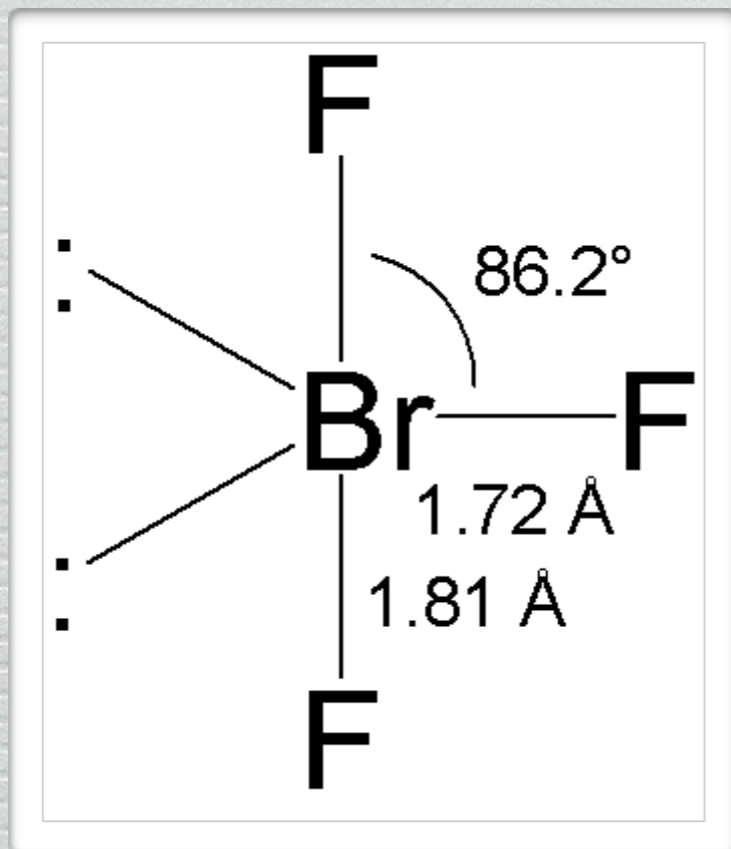
Prof: Alex



Trifluoreto
de bromo



Bipiramidal
(5 pares eletrônicos)

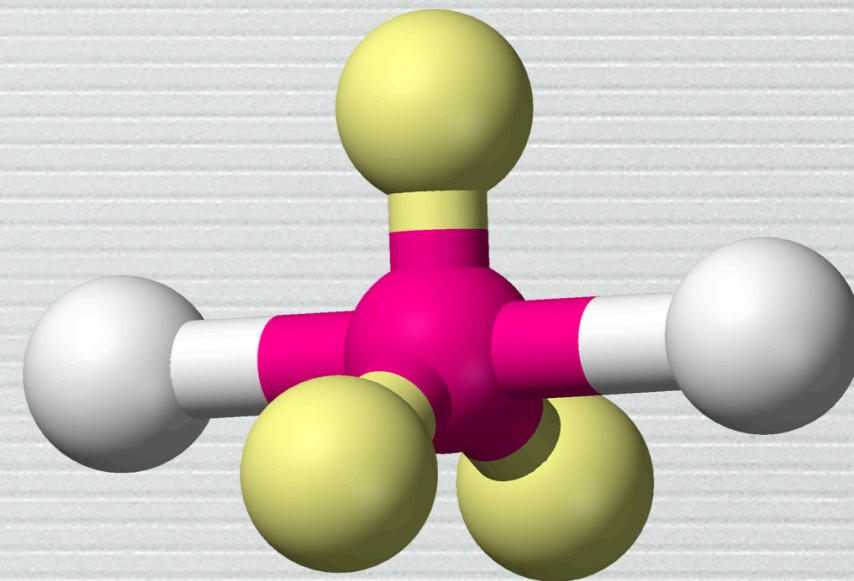
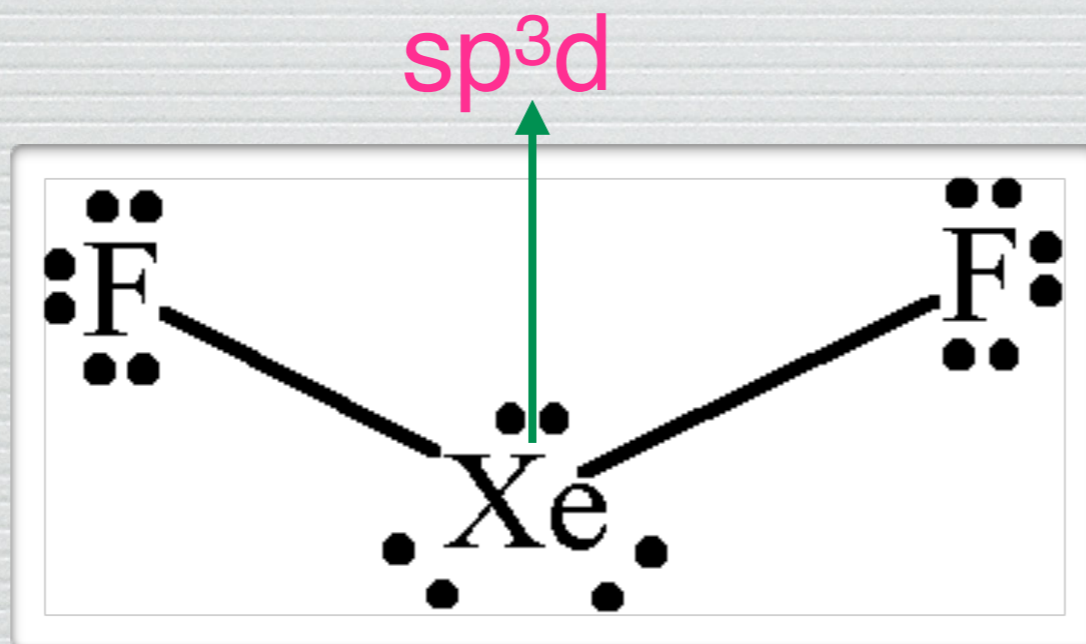


Geometria T

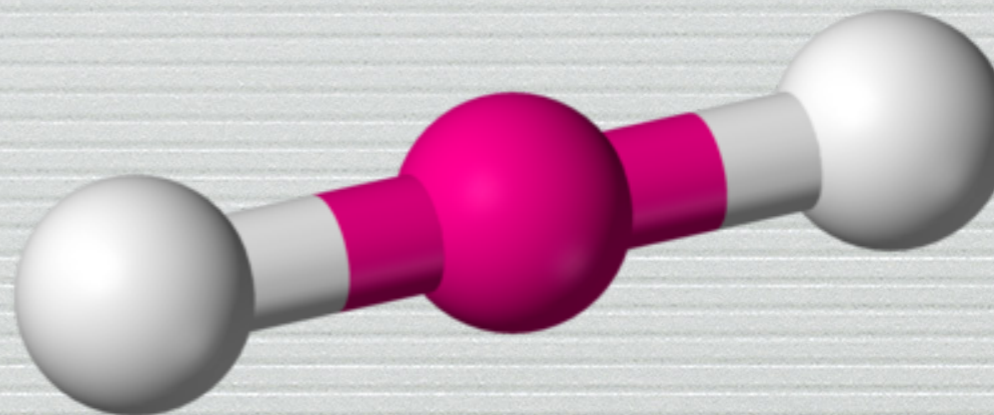
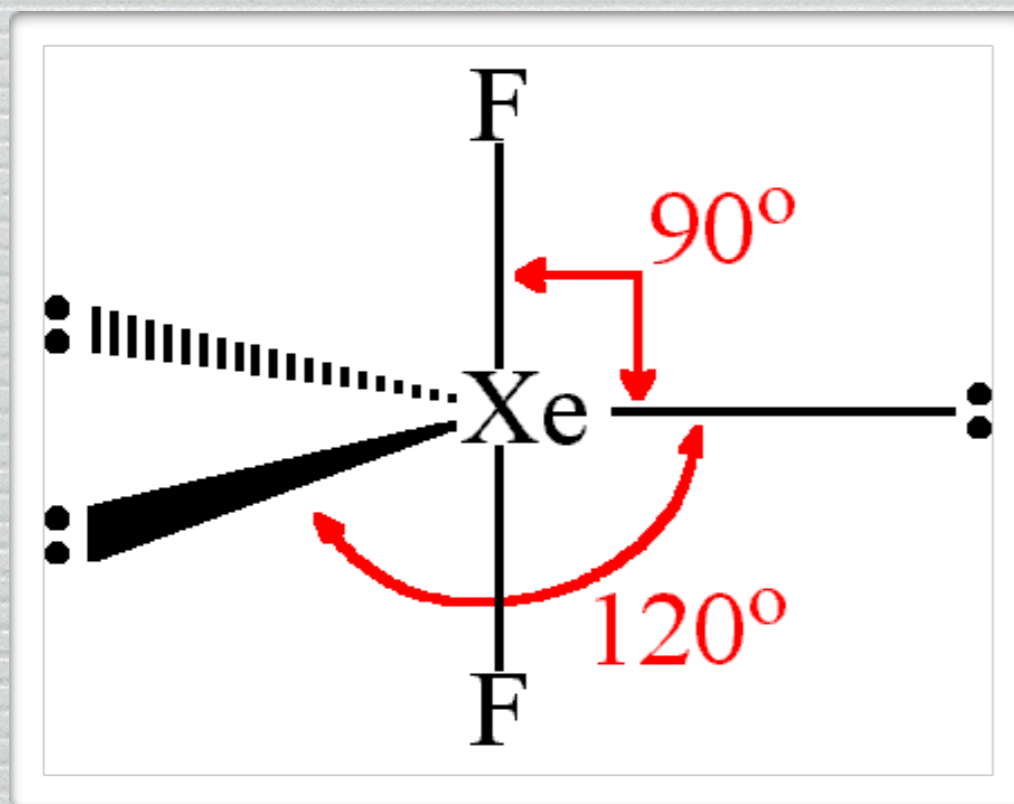
Prof: Alex



Difluoreto
de xenônio

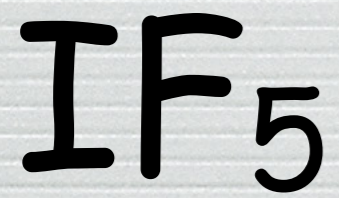


Bipiramidal
(5 pares eletrônicos)



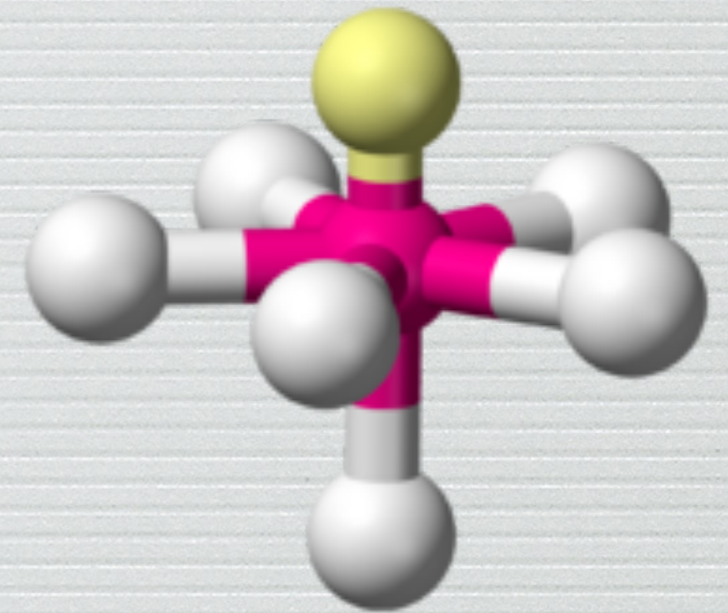
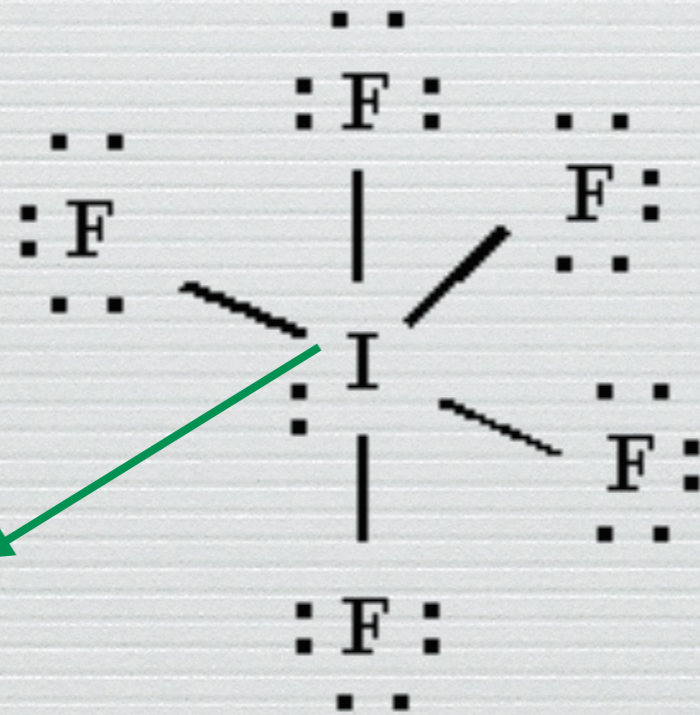
Linear

Prof: Alex



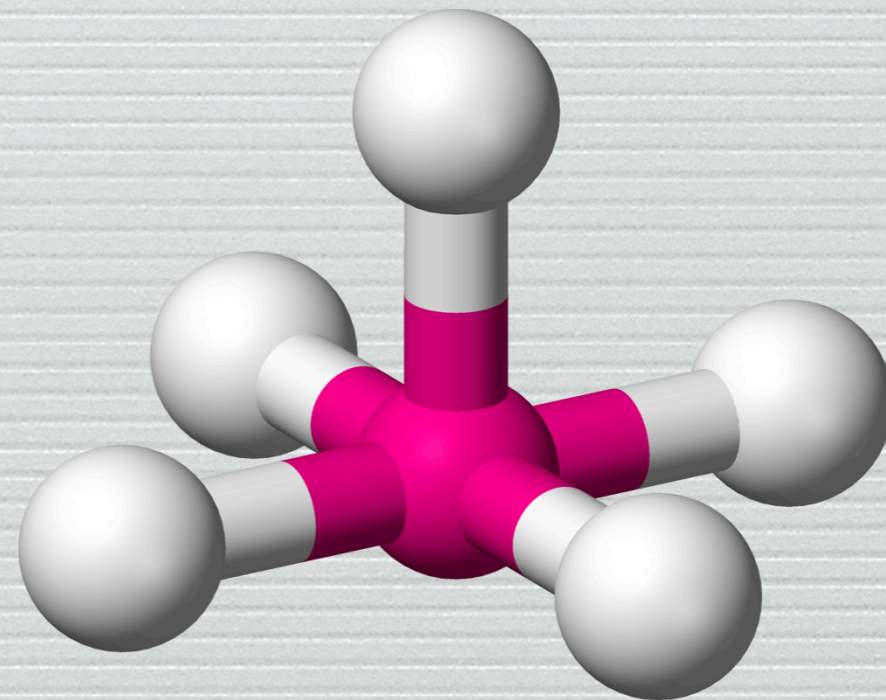
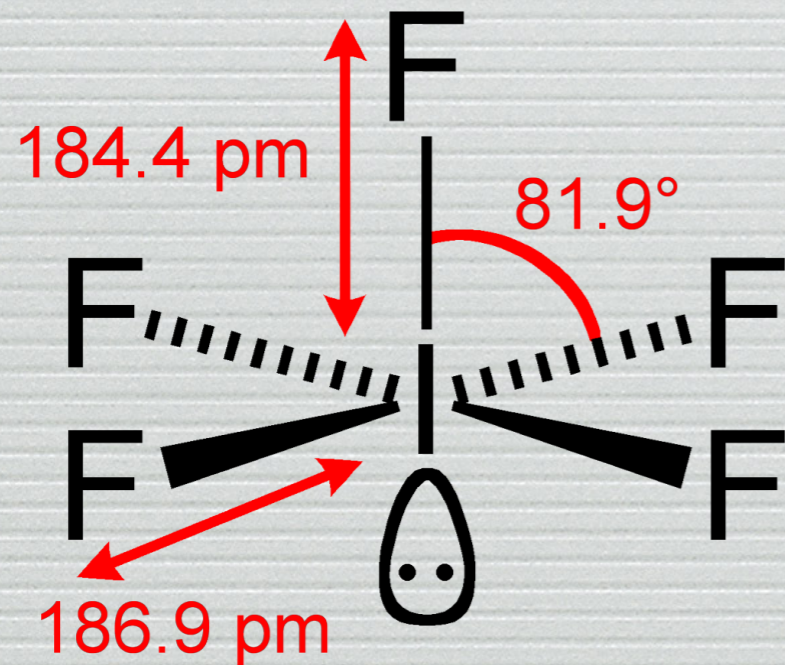
Pentafluoreto
de iodo

sp^3d^2



Octaédrica

(6 pares eletrônicos)

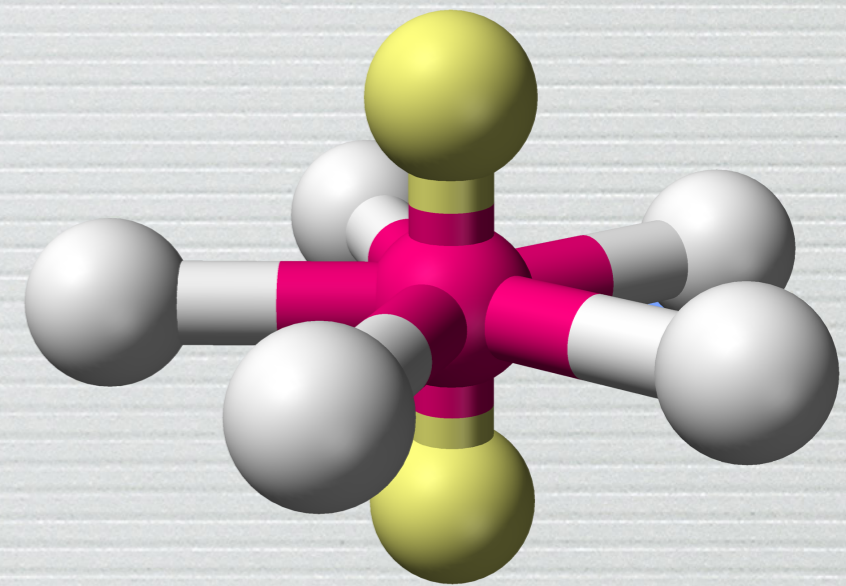
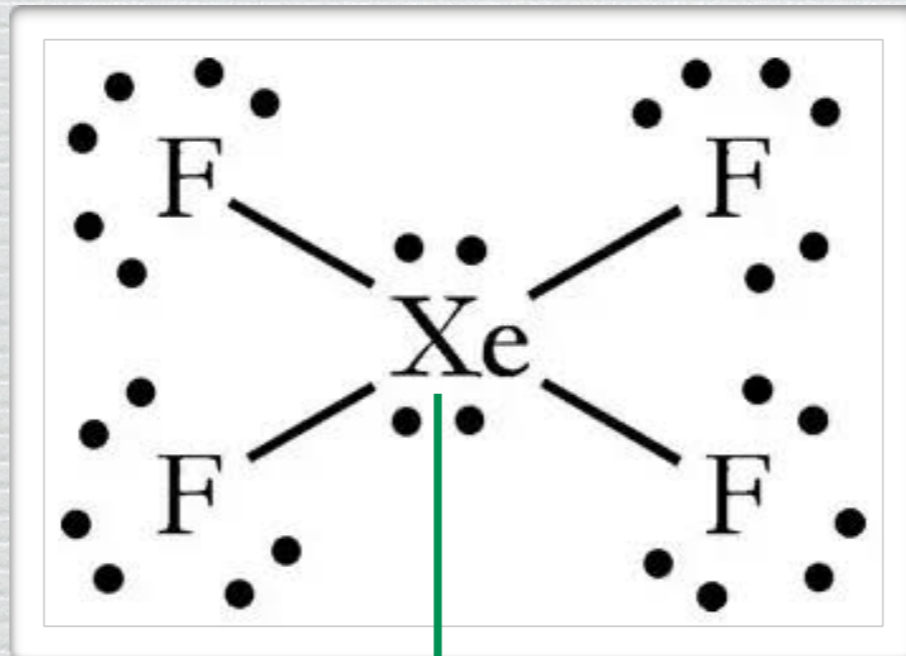


Pirâmide quadrada

Prof: Alex

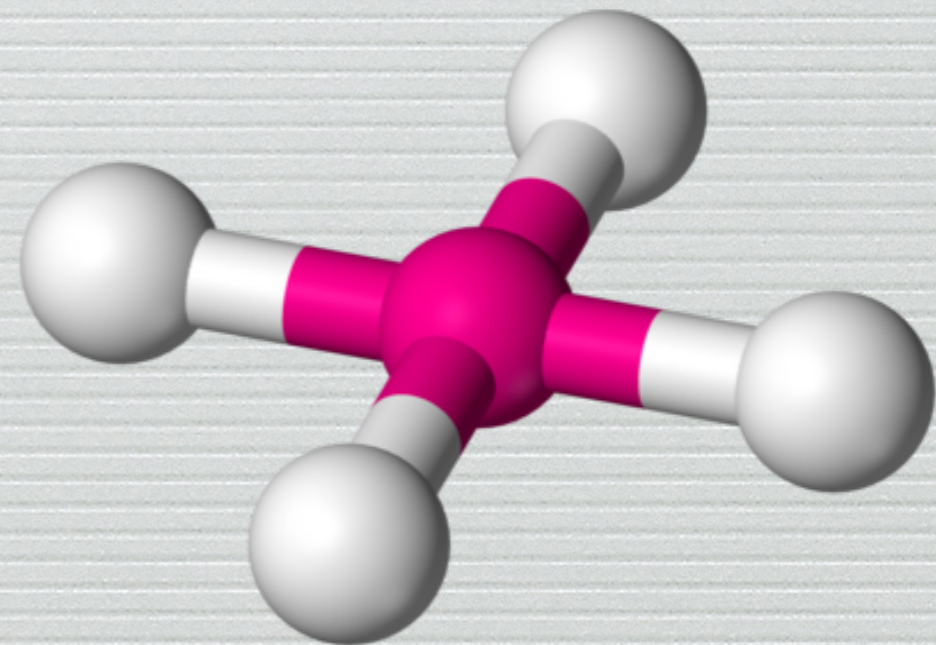
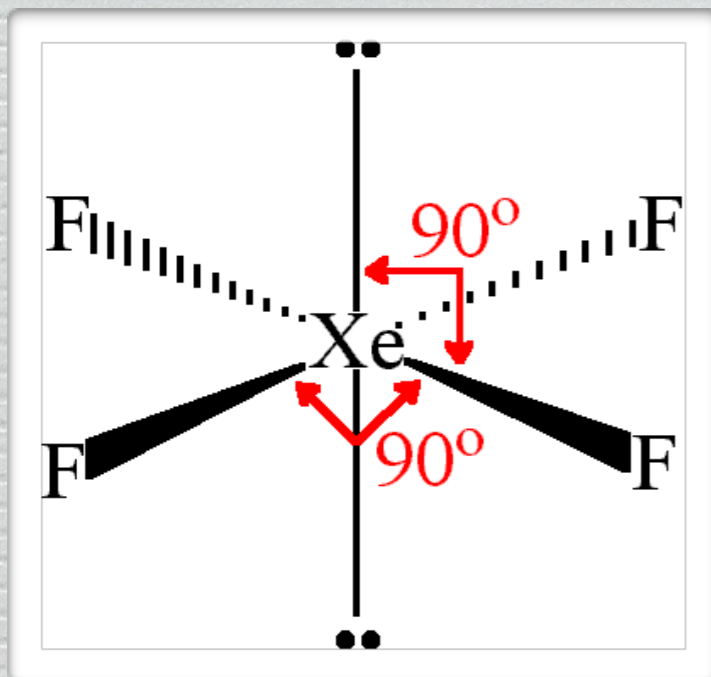


Tetrafluoreto
de xenônio



Octaédrica
(6 pares eletrônicos)

sp^3d^2



Quadrado planar

Prof: Alex