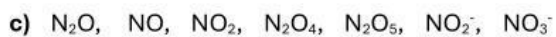


1. Classify the following substances as basic oxides, acid oxides.

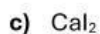
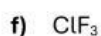
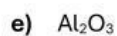
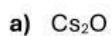
SO ₂	Na ₂ O	CO	Cl ₂ O ₇	P ₂ O ₃	SO ₃
Li ₂ O	CaO	P ₂ O ₅	B ₂ O ₃	Ag ₂ O	Cr ₂ O ₃
K ₂ O	SrO	BaO	CuO	MgO	PbO
CO ₂	ZnO	N ₂ O ₃	N ₂ O ₅	TeO ₂	NO
FeO	NO ₂	As ₂ O ₃	SeO ₂	As ₂ O ₃	B ₂ O ₃

Basic oxides	Acid oxides

2. Give the oxidation numbers of all the elements in the following molecules and ions:



3. Give oxidation numbers for the atoms in these molecules and ions:



4. Write the chemical equations for the formation of the oxides listed in the previous diagram and write the oxidation numbers for each atom. Follow the example

Basic oxide formation	Acid oxide formation
$\overset{0}{Ca} + \overset{0}{O_2} \rightarrow \overset{+2}{Ca}\overset{-2}{O}$	$\overset{0}{C} + \overset{0}{O_2} \rightarrow \overset{+4}{C}\overset{-2}{O_2}$