

## Main Ions Year 8

### Group 6

CrO<sub>4</sub><sup>2-</sup>: chromate  
Cr<sub>2</sub>O<sub>7</sub><sup>2-</sup>: dichromate

### Group 7

MnO<sub>4</sub><sup>-</sup>: permanganate

### Group 14

CO<sub>3</sub><sup>2-</sup>: carbonate  
CN<sup>-</sup>: cyanide

### Group 15

NO<sub>2</sub><sup>-</sup>: nitrite  
NO<sub>3</sub><sup>-</sup>: nitrate

PO<sub>4</sub><sup>3-</sup>: (ortho) phosphate

AsO<sub>4</sub><sup>3-</sup>: (ortho) arsenate

### Group 1

H<sup>-</sup>: hydride

NH<sub>3</sub>: ammonia

CH<sub>4</sub>: methane

B<sub>2</sub>H<sub>6</sub>: borane

### Group 16

O<sup>2-</sup>: oxide  
OH<sup>-</sup>: hydroxide  
S<sup>2-</sup>: sulfide  
SO<sub>3</sub><sup>2-</sup>: sulfite  
SO<sub>4</sub><sup>2-</sup>: sulfate

### Group 17

F<sup>-</sup>: fluoride  
Cl<sup>-</sup>: chloride  
ClO<sup>-</sup>: hypochlorite  
ClO<sub>2</sub><sup>-</sup>: chlorite  
ClO<sub>3</sub><sup>-</sup>: chlorate  
ClO<sub>4</sub><sup>-</sup>: perchlorate  
Br<sup>-</sup>: bromide  
BrO<sup>-</sup>: hypobromite  
BrO<sub>2</sub><sup>-</sup>: bromite  
BrO<sub>3</sub><sup>-</sup>: bromate  
BrO<sub>4</sub><sup>-</sup>: perbromate  
I<sup>-</sup>: iodide  
IO<sup>-</sup>: hypoiodite  
IO<sub>3</sub><sup>-</sup>: iodate  
IO<sub>4</sub><sup>-</sup>: periodate

### The more common oxidation states

H: ±1	<u>Group 1:</u>	<u>Group 2:</u>	<u>Group 13</u>	<u>Group 14</u>	<u>Group 15</u>	<u>Group 16</u>	<u>Group 17</u>
	+1	+2	B, Al: +3	C, Si: +2, ±4	N: -3 to +5 P, As: ±3, +5	O: -2 S: -2, +4, +6	F: -1 Cl, Br, I, At: ±1, +3, +5, +7
			<u>Group 6</u>	<u>Group 7</u>	<u>Group 8-10</u>	<u>Group 11</u>	<u>Group 12</u>
			Cr } +2 to +6	Mn } +2 to +7	Fe, Co, Ni: +2, +3	Cu: +1, +2 Ag: +1 Au: +1, +3	Zn: +2 (Hg)