Fill in the blanks IB students for a better understanding of the material presented!

Oxidation state

There are some _____ that nearly always have the same oxidation state. These can be used to calculate the _____ states of the atoms to which they are bonded.

_____, for example has an oxidation state of -1 when bonded to a metal (more electropositive element) and +1 when bonded to a more _____element (non-metal). _____is nearly always -2 (the exception is when it is in the form of the peroxide ion, $O\text{-}O_2^-$, it has an oxidation state of -1).

Group ___ and 2 metals have an oxidation state of +1 and +2 respectively.

Naming compounds

As we have seen, some chemical elements have a variable _____ number. The only way to know an element's oxidation number is to work it out from known oxidation numbers. To avoid confusion in the name, elements with _____oxidation numbers have the number included.

The oxidation state or number of any element within a compound is shown by a _____numeral immediately after the element in question. Roman numerals are used to avoid confusion. The numerals are only used in the names of the compounds, NOT the formulae

Oxidation Reactions

These are reactions where _____are transferred from one species (atom, molecule or ion) to another. We can write '_____' equations to show only what happens to the species losing electrons or a different 'half' equation to show the species gaining electrons. Logically when a species loses or gains electrons, it must change its oxidation number or state.

The whole _____ and reduction equation (redox equation) is put together by balancing the number of electrons on both sides in each half-equation and adding them together (when the electrons cancel out).

Reactivity

It is possible to organise a group of similar chemicals that undergo either _____or reduction according to their relative _____. Oxidation (and reduction) is a competition for _____.The oxidising species (agents) remove electrons from other species and can force them to become reducing agents (releasers of electrons)

A good example of this competition for electrons is the behaviour of metals. Metals always react by losing electrons (oxidation); they are reducing agents. However if a metal is in competition with metal ions of a different element, the more reactive metal can oblige the less _____metal (in the form of ions) to accept electrons. This is called a displacement reaction.

Answers in order:

Elements, oxidation states, Hydrogen, electronegative, Oxygen, Oxidation, variable, roman, electrons, half, oxidation, oxidation, reactivity, reactive