

# Worksheet 4.6

## Chemical mnemonics

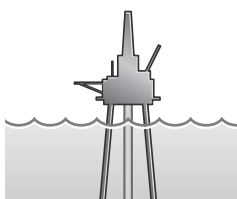
A mnemonic is a memory aid used to help long-term memory. Learning a particular memorable word or phrase helps us remember a definition or a set of ideas.

In chemistry, probably the most used mnemonic is 'OIL RIG'. This helps us remember the changes that can take place in oxidation and reduction.

Oxidation is the ..... of electrons.

Reduction is the ..... of electrons.

**REMEMBER OIL RIG**



Here is a less familiar mnemonic that can help us remember a key feature of certain elements. These elements are the ones which normally exist as **diatomic molecules** in nature. Each word of this phrase begins with the symbol of an element if we capitalise every word.

The mnemonic is:

**I Have No Bright Or Clever Friends!**

**1** List the symbols and names of the seven elements that exist as diatomic molecules.

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.....

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**2** What does the word 'diatomic' mean?

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**3** Which of these elements can also exist as triatomic molecules? Give the name commonly used for this triatomic form of the element and its formula.

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- 4 What type of chemical bonding is present in all these molecules? Draw the structures of a molecule of chlorine, oxygen and nitrogen showing the number of bonds between the atoms in each case.

Chlorine:

Oxygen:

Nitrogen: