

Recognizing Cognates and Compounds

Cognates are English words with a very similar form and meaning to Spanish words. Example: **electronics** = electrónica

There are also semi cognates, which are similar to Spanish in form and meaning. Example: **current** = corriente (corriente eléctrica / común, normal)



Warning! There are also false cognates, which are similar to Spanish words in form but with a different meaning.

Example: **actual** = real

once = una vez

ACTIVITY ONE:

Scan the text and circle as many cognates as you can find. There are more than 15.



Electricity

Electrical processes all involve the flow of electric charges, which come in two types, positive and negative. The electrons in atoms carry a negative charge and the nuclei of atoms carry a positive charge. Electrons are very much lighter than atoms and are easier to move around, so most charges arise when electrons are moved from one place to another. An electric current is a flow of electric charges. Electricity is not used up, the amount of electric charge never changes. It just moves from one place to another.

Electric currents are driven by an electromotive force or **e.m.f.** This is often driven by a battery, in which case the force arises because it is chemically more favorable for the electrons to be in one terminal of the battery than the other; there is a potential difference between the two terminals. This current is called direct current or **d.c.** because it flows in only one direction. Michael Faraday discovered that a changing magnetic field also drives a current. A dynamo changes the magnetic field through a coil of wire by spinning the coil in the field so that one time the field passes through the coil in one direction and at a later time in the other. The field alternately increases and decreases, so an alternating **e.m.f.** is produced which drives the current first one way and then the other. This is called an alternating current or **a.c.**

Electricity can also be produced naturally and the most dramatic occurrence is lightning.

Adapted from: Kingfisher Science Encyclopedia