WATER

Three-quarters of the Earth's surface is covered in water. This makes water the most common material on the Earth. Like other substances, water can exist as a liquid, as a gas, or as a solid. Water in the form of a gas (water vapour) is commonly called ***steam.*** Solid water is ***ice.*** We can change one form into another form by simply changing the conditions, for example by heating it up or cooling it down. The change from one form to another is usually called a ***change of state.*** Changes of state are examples of a physical change. They don't involve making new substances.

Single substances are either compounds or elements. What about water? From the chemical point of view water has many points of interest, because it enters into chemical reactions which are of fundamental importance. Water not only reacts with many substances but it also has a marked influence upon many chemical reactions.

Well, water can be decomposed. So it can't be an element, can it? Decomposition of water can be made by electric current. In this way two volumes of hydrogen and one volume of oxygen are obtained. So we can say that water is ***a compound of hydrogen and oxygen.*** The chemical name for water is ***hydrogen oxide.*** Right? Is it possible to make water from its elements? The answer is - yes! In fact, it's quite easy to do (but rather dangerous).

Hydrogen's the water former, remember? When it's burnt in air, water is formed. The "artificial water" formed in this way is exactly the same as "natural water". The experiment can be made in the laboratory, but only by the teacher, and with strict safety precautions.