Paper

Everybody daily uses paper for annotations, to draw or for example to arts and crafts. But we also use paper on the toilet (in The Netherlands they use 22,000 km of toilet paper each day), to pay and to read. For example newspapers, magazines and books. They are all made of paper. But where is paper been made of? And did people use paper in early days?

History

Before the writing system was invented, people drew in caves. Later, when the writing was developed, people wrote on everything: for example on clay tablets, animal bones and on the shield of a turtle. The Romans did this otherwise. They used wooden plates with wax on it. In this wax they could write with a sharp stud. If they didn’t need the note any longer, they smoothed the wax and they could write again. In Egypt one used papyrus to write. Papyrus was made of woven reed, but it was very sensitive to moisture. In Europe people used therefore the more robust parchment, which was made of the skins of animals.

The first paper as we know it nowadays was made in China. And not by people but by wasps! Wasps build their nests of a kind of cardboard, by mixing their saliva with fibers of plants. If the slurry which then is created dries, it changes in a type of hard cardboard. A Chinese watched the work of these wasps and he copied this by blending fibers, tree bark and water to a slurry and let this dry. Thanks to the Chinese this technology would spread to the rest of the world.

In the Netherlands paper was manufactured on a large scale from the 17th century. Therefore they used rags (old clothes) which they put into a barrel for a long time together with water, so that this substance could be dissolved. The fibers that were created in this way, mixed up with the water. With a special strainer the pulp was removed from the barrel. The water was squeezed out of the paper and afterwards they let the paper dry. After drying the paper it was first immersed in glue so that it would not fall apart.

The present time

Nowadays paper is no longer produced by hand, but this happens with machines into factories. For getting fibers, they also do not use (almost) rags anymore, but mainly wood and old paper! Old paper is again dissolved in water where the paper will be cleaned and ink is removed. The pulp is than new made paper.

Applications

Paper is not only used to write on. Paper can also be used to build houses and even bicycles. Maybe you cannot imagine that paper can be incredibly strong. It can even hold water, as it is manufactured in the right way.