

# Research

## How is amber made?

When some coniferous trees are damaged they produce a sticky substance called resin that protects them from insects and diseases. This resin falls to the ground and hardens in moist places such as riverbeds, lagoons and seabeds. Amber is fossilized resin that has lain undisturbed for millions of years. Most of the world's amber is between 30 and 90 million years old.

## Where is amber found?

Amber is found in many places all over the world – in Europe, in the Caribbean, in South America, in North America, in China and Malaysia. In Europe, amber is found in Sicily, on the east coast of England, and (most importantly) in the Baltic region. There is no amber in Ireland. The most important source of amber is the Baltic region of Europe. All of the amber used in Ireland during the Bronze Age had to be imported, mostly from the Baltic region.

## Did you know?

Insect and plants sometimes became trapped in the resin as it fell. Because amber is transparent the trapped insects and plants remain visible when the resin fossilized into amber. Sometimes creatures as large as frogs and lizards were trapped by the resin. Because they are so well preserved in the amber, it is sometimes possible to extract the DNA of these organisms. Through studying these trapped creatures and plants scientists can learn a lot about what the earth was like millennia ago.

## Is amber valuable?

Baltic amber has been traded since about 3000 BC. Amber trading routes were well established in the Bronze Age and remained important right through to medieval times. Pliny the Elder who lived in Ancient Rome wrote that 'Among luxury goods it is valued so high that an amber human figurine, no matter how small, costs much more than men (slaves) in their prime.' Amber remained popular throughout the centuries and is still used today to make jewellery and to decorate precious objects.

## How is amber mined?

During prehistoric time, amber was probably gathered along the shoreline of the Baltic Sea where it was deposited by large waves and strong tides. Amber could also be gathered in lakes and rivers where it was deposited. Today, most amber is mined from the earth, either through open cast mining on the surface of the earth or in tunnels.

## What else is amber used for?

Amber has been used as a medicine since prehistoric times. It was seen as a medicine in Ancient Greece and Rome, where it was used to treat illnesses such as sore throat and swollen glands. It was commonly used to make medicines up until the early twentieth century. It is still used as part of Chinese medicine. Some people believe that amber beads protect them from illness.