Rock Around Hastings

Now is your chance to be a geologist for a day!

What is a geologist?

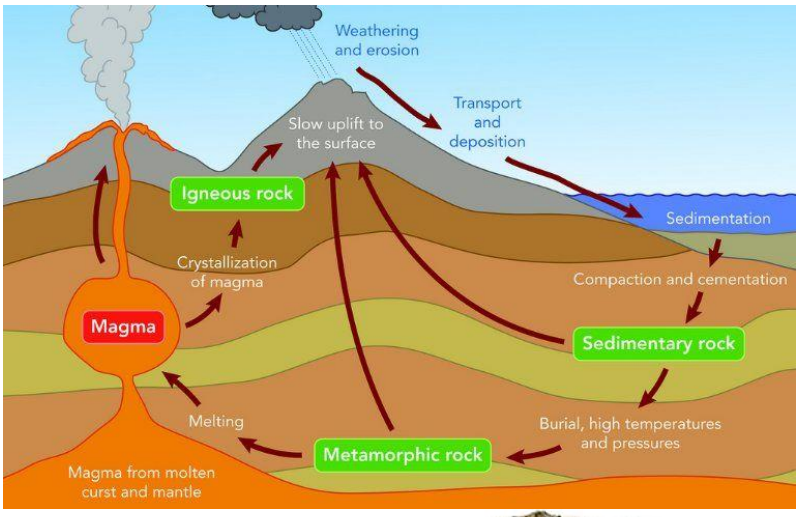
Geologists look at rocks to learn about the history of rocky planets and moons. They also look for things that we can use that are found in rocks, such as metals. The museum's curator of natural sciences is a geologist.

This activity will help you learn about different kinds of rocks. It involves looking for rocks in your garden or local area and recording what they are like. The aim is to create a map of rocks found in and around Hastings and use them to reveal secrets about the past.

What are rocks?

Rocks are what planet earth, our home is made of. They record the history of the earth going back in time billions of years. They are also part of what we call the *Rock Cycle* (Right).

They are found everywhere, and every place, including Hastings, has its own unique variety of rocks.



Types of rock

Igneous rocks – Igneous rocks are formed by volcanoes and molten rock rising from the hot insides of the earth. An example is granite (see photo) which is made of lots of interlocking crystals. Granite often used in buildings and kerbstones because it is very strong. Granite is also famously used to make the stones for the sport of curling!

Metamorphic rocks – these are rocks that have been changed by heat and pressure deep down in the earth's crust. A bit like baking a cake! An example is called schist (see photo). Lots of houses have a roof made of a metamorphic rock called slate. Perhaps yours does too? Slate is ideal for rooves because it is not porous and prevents water getting through.

Sedimentary rocks – these can be made of sand, mud and pebbles and sometimes have fossils of animal and plants in them. They are usually formed in layers in rivers, lakes, seas. In the photo to the right is some local sandstone. The dark vertical marks are fossilised plant roots.

1. Find a rock Find up to 3 rocks in your garden but ask your parents first and get them to help. Look on the surface or dig. (In case you don't have garden, find them while out on a walk or use local rocks you have already but beach pebbles are not allowed as they are important natural sea defences). Clean the rocks and wash your hands afterwards.	**Example Recording form** *Write down the grid reference, post code for your house or location in Hastings.* *Write here:*
2. How big is the rock? Use a ruler to measure how big it is by the length, width and depth in mm.	*Write here:*
3. It is rough or smooth? Feel your rock to find out what the texture is like.	*Write here:*
4. What is the rock made of? Is it made of crystals, chalk, mud, bits of shell, sand or pebbles?	*Write here:*
5. What kind of rock do you think it is? Is it a sedimentary, igneous or metamorphic rock? Check out BBC bitesize for more help: https://www.bbc.co.uk/bitesize/topics/z9bbkqt/articles/zsgkdmn	*Write here:*
6. Number your rocks  Start with your initials then add a number to it. For example, my initials are PH so I would use PH1 for my first rock, and PH2 for the next rock.	**A.** Write this number on a small piece of paper. **B.** Cut the number out. Ask an adult to help. **C.** Attach the number to each rock with glue. **D.** Write the number here:

Cataloguing your rocks

1. Find a safe place to keep your rocks in a box padded with tissue paper or similar. Make sure you can see your rocks in the box when you take the lid off.

2. On some paper write down the number with a description of each rock, where it was found along with the storage location. This is now your catalogue. Keep it safe!

Optional: If you like, draw pictures of your rocks in a notebook and label with key features such as the size and texture.