Get Rocking! Age 5–7

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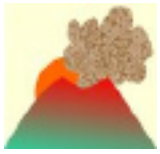


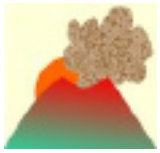
Being a rock hound

A **rock hound** is what **geologists** call people who collect **rocks**! Like hounds, who were used as hunting dogs because of their sense of smell, rock hounds are always on the trail - of a new rock!

because of their sense of smell, rock hounds are always on the trail

Start your rock collection in your own garden or a nearby park. Look for rocks that are different, that catch your eye - always be on the lookout. Beaches and other places you might visit on holiday are always good places to pick up a special **pebble** to add to your collection.

Think of interesting ways to show off your rock collection. Clear plastic jars are easily labelled, or use a tool box with lots of different compartments. You could make a special box out of egg boxes or you might prefer having a shelf in your bedroom specially for the best. Always try to label your rocks with useful information such as where and when you found it.



Rock friends

Sort your rocks according to how 'hard' you think they are

Sort your **rocks** according to how 'hard' you think they are simply by looking at them. This is an important first step in identifying rocks. Test out your suspicions by trying to break the rock in a cloth bag with a hammer - always wear eye protectors and ask for adult help. Look at how the rock breaks – some will not break at all! Then sort the rocks again according to how hard they are – did you guess right?

Scratching, listening and labeling

Scratching also helps test hardness - the hardest rock will make a mark on all the others and the softest one will be marked by all your rocks. This is '**mohs**' scale of hardness' which **geologists** use to identify rocks. It is most likely that the hardest rock you find will be made from **quartz** and other hard **minerals** such as **feldspar** and the softest rock from **limestone**. The softest rock in the world is made from **talc** and the hardest from **diamond** – only another diamond will scratch a diamond – but don't try this with any diamonds you find around the house!

Listen to your rock – do they make different sounds when you drop them on to a hard surface (outside)?

Did you know that the first rocks brought from the moon were called **armacolite** after the three astronauts: Neil Armstrong, Buzz Aldrin and Michael Collins who were on that first flight. You could give your rocks similar names based on yourself, your friends or the place where you found the rock "**Callumite**, **gransgardenite**".

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Rocks from rivers

water flows at different speeds

In your garden find some **soil**, an old piece of guttering and a watering can.
Put some soil into the gutter and set it at an angle to the ground.
Gently pour water on to the soil and watch what happens to as it 'flows' out onto the ground. Try again adding water at different speeds, with the drainpipe at different angles and with soil found at different levels in your garden
(dig a neat hole!).

The same patterns of **sand** can be found in **sandstone** - which is really a **rock** made out of sandy **sediment**. This shows that it was part of a river system with small **particles** being transported in water over long distances before settling out and changing - under pressure, into sandstone. This is called **sedimentary** rock.

Chill out

15,000 years ago - which is just a few seconds in the history of the earth

To imitate the action of a **glacier** in your garden why not freeze a container of water mixed with some **sand** and **pebbles**. Put your mini glacier at the top of your gutter of **soil** and see what happens. Try simply leaving a glacier on top of a pile of soil. This is what happened to Scotland not that long ago! Well - 15,000 years ago - which is just a few seconds in the history of the **earth**.

Meet Seddy – he's a rock you can rely on

Fill a plastic container with pebbles, sand twigs and leaves

Fill a plastic container :
(get an adult to cut the top off a clear plastic fizzy drinks bottle).
Fill it with **pebbles**, **sand**, twigs and leaves and add 1/2 cup Epsom salts (available from chemists) add water until there is about 5cm left at the top and then shake the container thoroughly.

Leave the container for a few hours and then pour out the excess water .

Let the mixture dry out completely and hey presto! Your own **sedimentary rock** !

