

Starter Activity: Shaking the Rocks

Show the pupils samples of several different rocks and tell them you are going to put them all together into the plastic container, put the lid on and shake them hard for 15 seconds.

Ask the pupils

'What do you expect to happen?'



Figure 1: Shaking the rocks (Elizabeth Devon)

Possible answers

- it will be very noisy
- the rocks will break up
- some of the rocks will break up
- the container will crack

Put the rocks into the plastic container, put the lid on and shake it hard for 15 seconds.

When you take the lid off, dust will often come out (do not inhale this). Pour the contents on to a piece of paper. It will be clear that some of the rocks have been broken up more than others. (A useful teaching point – do not throw away plastic containers in rivers or on beaches since they can survive for a long time.)

Ask the pupils

'Where on Earth might rocks get shaken up/knocked about like this?'

Possible answer

On a beach during a storm; in a river in a flood.

Explain that the rest of the lesson will be trying to find out:

- why some rocks are harder than others;
- what this tells us about rocks and;
- what the effect of this is on the world in which we live.