



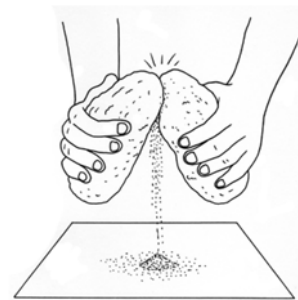
Making Sediments & Rocks - Teacher Notes

The natural processes of weathering and erosion break down rocks and transport the sediments that are formed. These sediments may make up part of soils or go on to form new sedimentary rocks. Students are perhaps unaware of what makes up soil and you can get them to make their own sediments from rocks.

First, you'll need some 'friable' rocks - this simply means they can be easily crumbled or broken into small particles. Readily available rocks, such as limestone or sandstone, are often quite friable. Lay down some newspaper or use a large tray and get students to rub the rocks together to break them down. If you can find some, it would be best to provide students with a range of different coloured rocks to show where different coloured soils come from. If you have problems sourcing rocks, pieces of house brick could be used as a substitute.

Once the students have made these sediments, you may like to grind them into a fine powder using a mortar and pestle, add some water and use them to paint a picture. If you have white or pale sediments, consider using black or other coloured paper.

SAFETY NOTE: Rubbing the rocks together may cause particles to flick off so it's advisable to get students to wear safety goggles and perhaps gloves due to the rough surfaces on rocks. Hands should be thoroughly washed with soap after this activity to ensure any minerals that may upset little tummies are not ingested.





Making Sediments & Rocks - Teacher Notes

One of the natural processes involved in the formation of sedimentary rocks is called cementation. This involves naturally occurring minerals acting like the cement used in construction to stick sediments (broken rock) together. You can easily make 'sandstone' using sand and an Epsom salt solution.



Make a solution by dissolving one part Epsom salts in two parts water. One-third fill a paper cup with clean sand and stir in enough Epsom salt solution to make the sand completely wet. Let the wet sand mixture sit undisturbed in a warm spot for an hour or so then carefully decant off any water that rises to the top. You may have to repeat this process several times. Keep the cup in the warm spot where it won't be disturbed for about a week, or until the sand has completely dried out. Don't cover the cup so the water can easily evaporate. When the sand is completely dry, tear away the paper cup to reveal your 'sandstone'. For added interest you may like to add in some shells or plastic toys to represent fossils that could then be excavated by the students or make some impressions or dinosaur footprints in the 'sandstone'.

