

1.C.

SCIENCE ACTIVITY: How Sedimentary Rocks are Formed

TIME NEEDED: 30 mins

AGE: KS1 / KS2 – Years 2, 3, 4

LEARNING OUTCOMES

Knowledge: Explaining the formation of the Jurassic Coast



MATERIALS

Playdough, 4-5 different colours. If you like you can make this at home: <https://www.diynatural.com/homemade-playdough/> Make 3 different colours by adding food dye. Turmeric and kitchen spices can also be used, but watch out for the hot chilli!!

ACTIVITY

- Keep the playdough in different colours, each piece about the size of a large bouncy ball. Each represents a different type of rock. Break the different colours into small pieces. This represents soil and the process of erosion.
- Bring the pieces of each colour together in a pile and flatten them with your palm. This forms a layer of rock.
- Put the different coloured layers together one on top of each other. These represent a build up of different strata, like the layers at West Bay, Dorset.

https://upload.wikimedia.org/wikipedia/commons/9/96/West_Bay%2C_East_Cliff_and_beach_-_geograph.org.uk_-_1364941.jpg



- Push the layers up from underneath. This represents an earth movement, such as an earthquake. In the formation of the Alps millions of years ago the South Dorset Ridgeway was formed, as the result of being pushed upwards. It is known as an Alpine ripple.
- Here is the Lulworth Crumple on the Dorset Coast. Note how the layers became crumpled or tipped.



- It is through such movements that we are able to see so many different layers of rock on coasts such as the Dorset Jurassic Coast.

