The geology of the Jurassic Coast

Video summary	Before watching the video	During the video
The 'Jurassic Coast' in southern England spans nearly 200 million years of Earth's history and three geological time periods. The clip explains the different rocks that can be found along this coastline - Cretaceous, Jurassic and Triassic - and why they formed. Slices of cake are used to demonstrate how the rocks have formed over time and how it is possible to see them all in the landscape.	Locate the Jurassic Coast on a map of the UK and ask students to write a locational description. Look at images of the Jurassic Coast and the landforms found there and ask students how they think it was formed. Show images of the rock types and ask students why they think they are different. **Introduce key terms such as:** **Geologist:** A scientist who studies geology. **Geological time period:** A division of Earth's history based on significant geological events and rock formations spanning from Earth's formation to the present day. **Erosion:** The process where natural forces like wind, water, or ice wear away and transport soil, rock, and other materials from one location to another.	You may wish to stop at relevant points during this short film to pose questions and check understanding or wait until the end. Useful questions might include: • Where is the Jurassic Coast? • How many years of history are evident along the Jurassic Coast? • What types of rocks can be found along the Jurassic Coast, which periods do they come from? • How long ago were the Triassic rocks laid down? • What happened during the Jurassic period? • What was it like in the Cretaceous period?

After watching
Discuss with students whether their predictions were correct about how the Jurassic Coast was formed. Look at a diagram of geological time periods to show the changes over time from Earth's formation to present day, this will help students to see just how long ago this stretch of coastline was formed.

Compare images of the Triassic, Jurassic and Cretaceous stretches of coastline. What similarities and differences can be seen? Individual landforms such as Old Harry's Rocks and Durdle Door could be picked out and the formation of those landforms could be discussed. Students could draw the different landforms and annotate them to explain their formation. The skill of drawing a field sketch could also be practiced.

A geology map of the Jurassic coastline could also be studied to find out more about the range of rocks found along this stretch of this coastline. Locations east and west of this could be examined to see how their geology is different to that of the Jurassic coastline.

Curriculum notes	Where next?	Links
This topic appears in Geography at KS3 (Coasts) and KS4 / GCSE (Coastal landscapes) in England, Wales and Northern Ireland and National 4/5 in Scotland.	Along the Jurassic coast there are a wide range of famous coastal landforms such as Lulworth Cove, Durdle Door, Old Harry's Rocks and Chesil Beach. Students could investigate the range of landforms creating a storyboard or a flow chart of their formation using key geographical terminology. This is a great opportunity for students to further their understanding of coastal processes and the impacts of geology on the coastline.	Dorset Coastline: https://www.bbc.co.uk/bitesize/guides/zyfd2p3/revision/3 Coastal landforms: https://www.bbc.co.uk/bitesize/guides/zyfd2p3/revision/1 Geology maps: https://www.bbc.co.uk/bitesize/guides/z87sqty/revision/4