

# Linking the Past to the Present



Ages	Subject	Topics	Resources
7-11 years	Science Geography Maths	Rocks Time Climate Change	Globe, atlas, Jurassic Coast map, worksheets from the activity pack

According to the theory of continental drift, the world was made up of a single continent through most of geologic time. That continent eventually separated and drifted apart, forming into the seven continents we have today. This gradual shift and movement of the continents happened due to the mechanism of plate tectonics. On the Jurassic Coast, the rocks chart an extraordinary story of shifting continents and climate. In this activity, children explore the links between ancient environments of the Jurassic Coast and modern-day analogues. Over the course of 185 million years, the rocks along the Dorset and Devon coast showcase a story of hot, arid deserts, tropical jungles and white sandy beaches. This story is revealed to children through an activity that matches picture clues to climate graphs.



## **Teachers' Materials**

Each group will need a set of picture cards and climate graphs printed out from the materials. Some children may need assistance in interpreting the data on the graphs and how it relates to the climatic conditions in the picture clue. It may also be helpful to collect some holiday brochures (e.g. from Namibia, Thailand and the Maldives) with glossy pictures to showcase the environments that are being discussed.

## **Practicalities**

The activity can be delivered in a classroom environment.

## **Discussions**

At the start of the Triassic period (250 million years ago), the world was dominated by a supercontinent called Pangaea. Across this supercontinent climate was variable and the area of land which would eventually become East Devon was dominated by a dry, arid desert with animals and plants that could survive in these harsh conditions. Over time as the Pangaea shifted and broke up, sea levels rose and created a new deep-sea environment for life to evolve. These marine clays and limestones would come to dominate the landscape around West Dorset. As sea levels fell, hot tropical swamps and lagoons dominated the landscape that would become eventually become Purbeck.

## **Extensions and Adaptations**

A further extension of this activity could focus on the mechanisms of plate tectonics and how that manifests itself in today's world (e.g. tsunamis, volcanoes).

## **Links to Other Resources**

Linking the Past to the Present links well to the following resources:

- Rock Detectives
- What is the Jurassic Coast?
- Jurassic Coast Timeline
- What Makes the Best Building Stone?