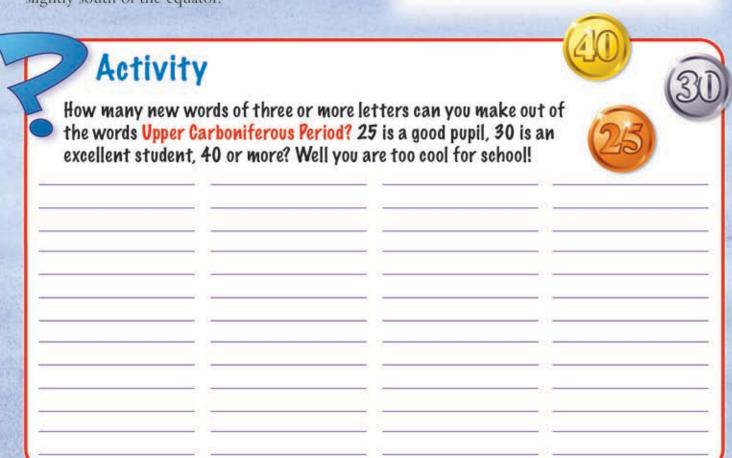




The Cliffs of Moher rise majestically out of the Atlantic Ocean to heights of around 215 metres. But how many football pitch lengths do you think that is? The answer is about 117 men standing on top of each other's shoulders, that's two football pitches standing on end!

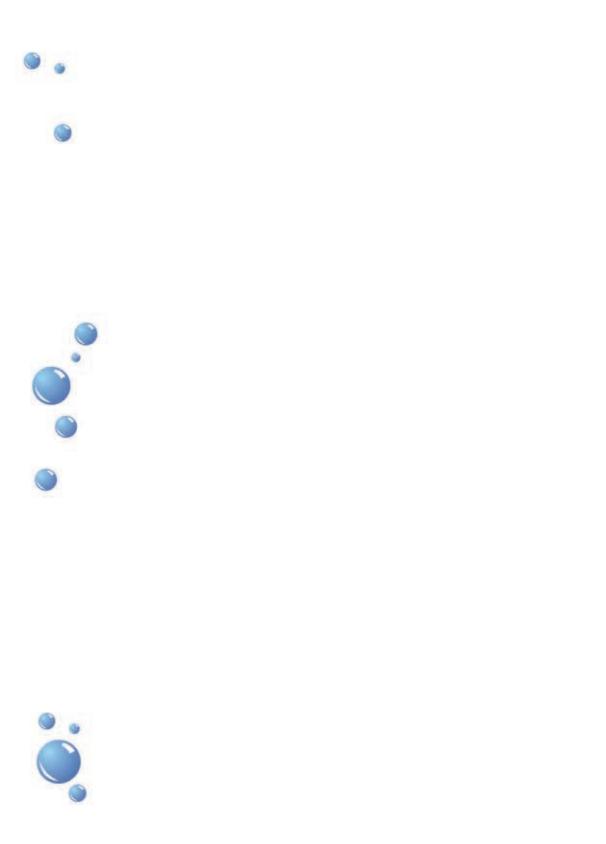
The cliffs stretch the coastline for 8 km and you can see many different layers in the rock. Why not draw a section of the cliff and count how many distinct layers you can see? Shade the layers to show the different thicknesses and colours of each one.

Some of these layers were laid down around 320 million years ago in a time known as the Upper Carboniferous Period. At this time the area was at the mouth of a very large river and mud and sand were dumped by it here. The temperature would have been much warmer then, as it was only slightly south of the equator.



## Draw the Cliffs of Moher 320 million years ago

Why not try and imagine how the Cliffs of Moher would have looked 320 million years ago? It was under water then and the climate would have been much warmer. Imagine the sounds, the weather and the creatures roaming around. What sounds did you hear when you visited?



## Waves in Action

How do you think a wave is formed? Circle the correct answer below:

1. Friction between wind and the sea. 2. Friction between waves and the sea. 3. Friction between wind and the waves.

Swashbuckling Waves

Did you know that 'swash' is the upward movement of water hitting the shore? Amazing isn't it, but backwash is the downward movement of water moving away from the shore. Go and amaze your family and friends with that one!

**Pestructive and Constructive** Waves - can you tell the difference?

One of the waves deposits material on the shore. The other draws material away from the shore, often in storms. Guess which one is called 'destructive' and which one is called 'constructive'.

Destructive waves contribute to coastal erosion, but they have also helped to form the Cliffs of Moher.

## Coastal Erosion

The Cliffs of Moher rise like sheer walls of rock out of the Atlantic Ocean. They are often battered by fierce Atlantic winds and driving rain. Over millions of years huge chunks of rock have fallen into the sea, making it an ever-changing landscape. But the waves have played their part too - how high were they today?

