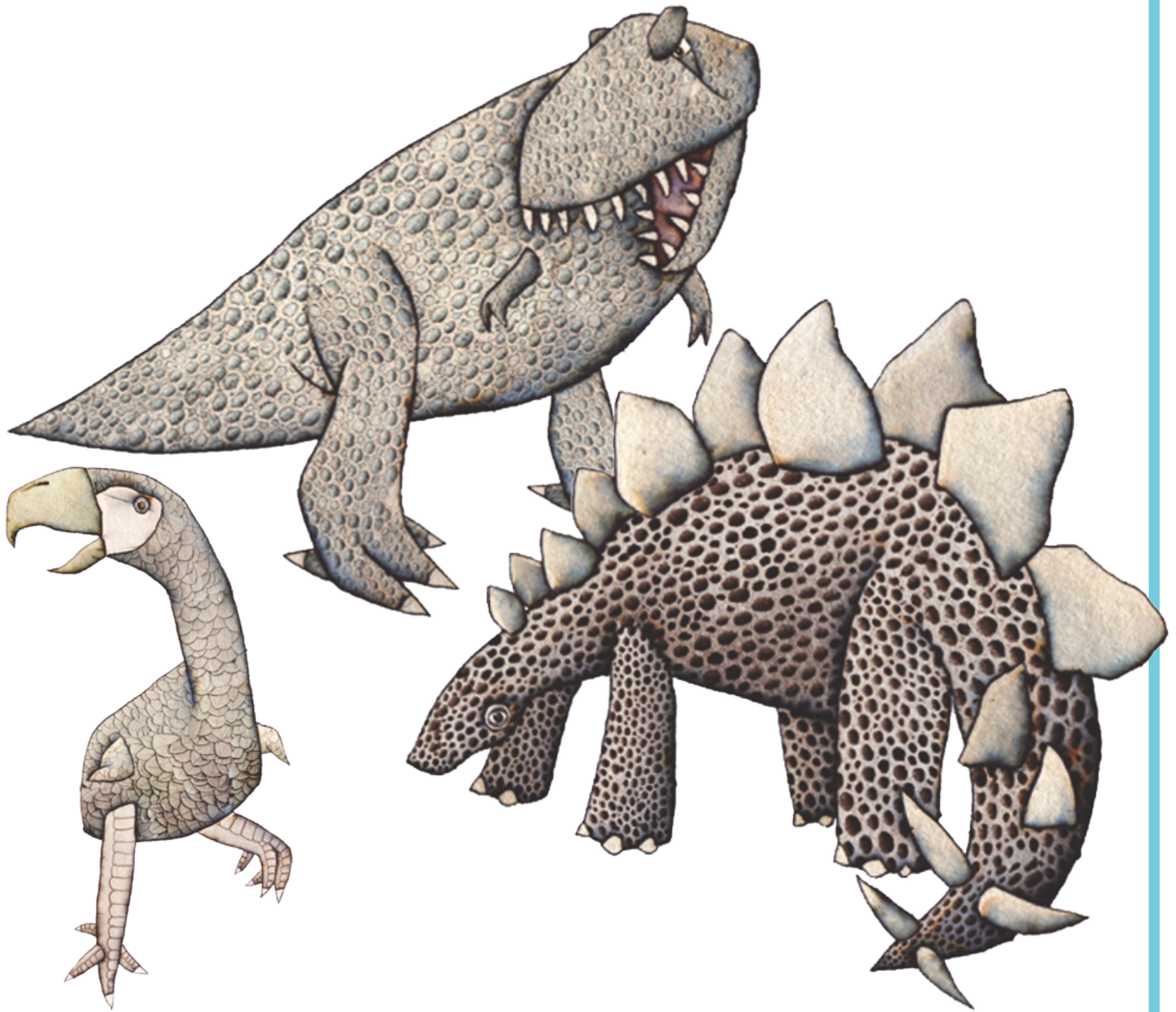


The Fossils Speak

Three Activities



These three activities were developed taking the students' interest and knowledge about one topic, namely dinosaurs, to introduce knowledge in a new topic on tectonic plates.

It is aimed at students aged 10+.

The Learning Outcome will be that students will be able to use map co-ordinates, gain an understanding of the movement of tectonic plates and climate.

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The Fossils Speak

Three Activities



Touch arrow to begin,
then i for information

Developed by Jan Garren of Kingsland School, Hackney
Illustrated by Michael Levett

Theme: Tectonic Plates

Age range: 10+

Context:

This activity was developed taking the students' interest and knowledge about one topic, namely dinosaurs, to introduce knowledge in a new topic on tectonic plates.

If you further develop this activity please share your changes by sending them to the address below for expanding our library.

Preparation:

Print out the A4 sheets.

Cut the Activity and Fossil Cards to size ready for the students to use.

Activities:

This topic has been divided into three major activities: Prediction (True or False), Map Work (The Fossils Speak) and Climate (Work on Climates). These activities are on the next pages. Each of the Fossil Cards has a sound spot where students can make their own recordings of their findings. The column labelled 'Notes' on the map page also has a "sound area" that can be used by pupils to record their results.

Teachers' Notes:

We have put map co-ordinates on the Fossil Cards, as well as location clues, to help students find the places. They can also use the index of an atlas or the internet.

We have found it useful to provide a cat drawn to scale on the Fossil Cards so that students can get an idea of the size of the creatures.

Learning Outcomes:

Students will be able to use map co-ordinates, gain an understanding of the movement of tectonic plates and climate. If you have found further learning outcomes please share them by emailing collaborate@mantralingua.com, quoting GeoFS01.0

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(You can purchase a professionally printed, sound-enabled version of this activity with pre-cut cards from www.mantralingua.com. Students can use PENpal to record and re-record aurally onto the pages and cards. Recordings can be saved and used for assessment, or shared with other classes and schools via "ShareLINK".)

Activity 1 – True or False

What do you know about Britain in the past? You may have done some work on fossils and dinosaurs before. Read the statements below and decide if they are TRUE or FALSE.

- 1 There used to be tropical forests in Britain.
- 2 Dinosaurs roamed through London.
- 3 600 ma ago the world was much hotter that it is today.
- 4 Britain used to be where the Falkland Islands are now.
- 5 A fossil of a koala bear was found in Canada.
- 6 The world used to be nearer the sun.
- 7 Hippopotami once basked in the River Thames.
- 8 Britain has travelled more than 3000miles/5000km over the last 600ma.
- 9 Volcanoes have erupted in Britain many times in the past.
- 10 Part of Britain used to be covered by the sea.

Now write down the statements that you think are true.

Activity 2 – The Fossils Speak!

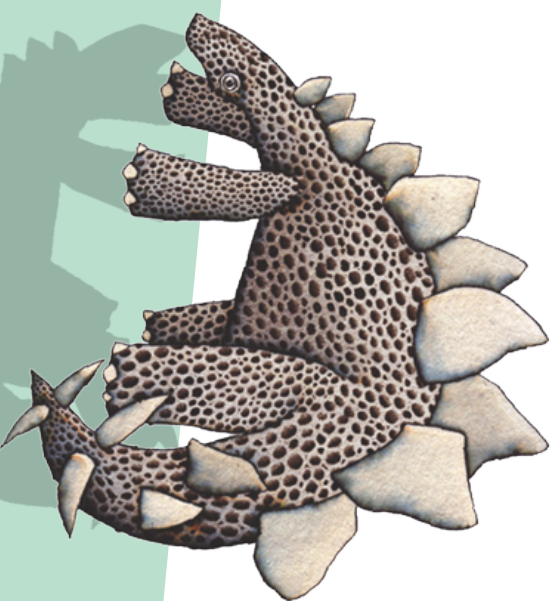
You will need to use the map of the world, which has been divided into grids.

Look at the fossil cards. Each one of them gives you some information about Britain's location in the past.

Using the grid references on the fossil cards, plot Britain's position at each given time. Do this by drawing a triangle on your world map at each point.

Write next to each triangle the name of the place and the number of years, e.g. 400ma Rio de Janeiro.

You can record any other information, into the "notes" section at the side.



Activity 3 – Work on Climates

The fossils have given you information about the climates in which the animals lived. Use the key below to shade the temperature chart at the side of your world map. Label each one.

- | | | |
|-----------------------|-----------|--------------------|
| <input type="radio"/> | Very hot | colour this red |
| <input type="radio"/> | Hot | colour this orange |
| <input type="radio"/> | Very warm | colour this purple |
| <input type="radio"/> | Warm | colour this blue |
| <input type="radio"/> | Cool | colour this grey |
| <input type="radio"/> | Cold | leave this white |

Think of a really good title for your map.

Now go back to the first activity you did and see if your predictions were true.

Cross out any statements you now think are wrong. Write down any statements you missed out. Now try and write some statements of your own.

Diatryma 117575

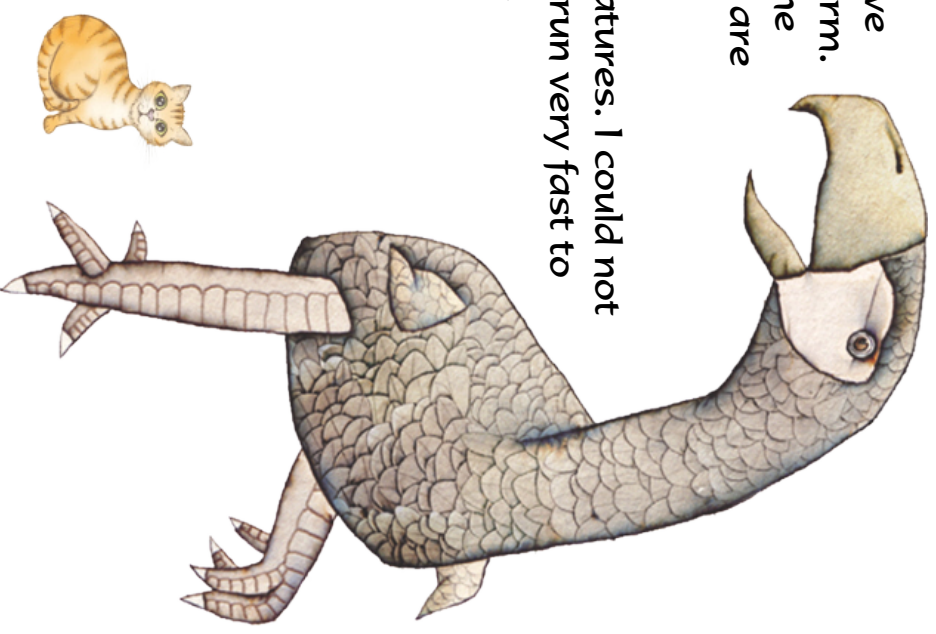
I am a Diatryma.

I lived 50 ma ago.

My fossil bones were found in Britain.

When I was alive Britain was warm. It was where the Azores islands are now.

I ate small creatures. I could not fly, but I could run very fast to catch my food.



Tyrannosaurus 112574

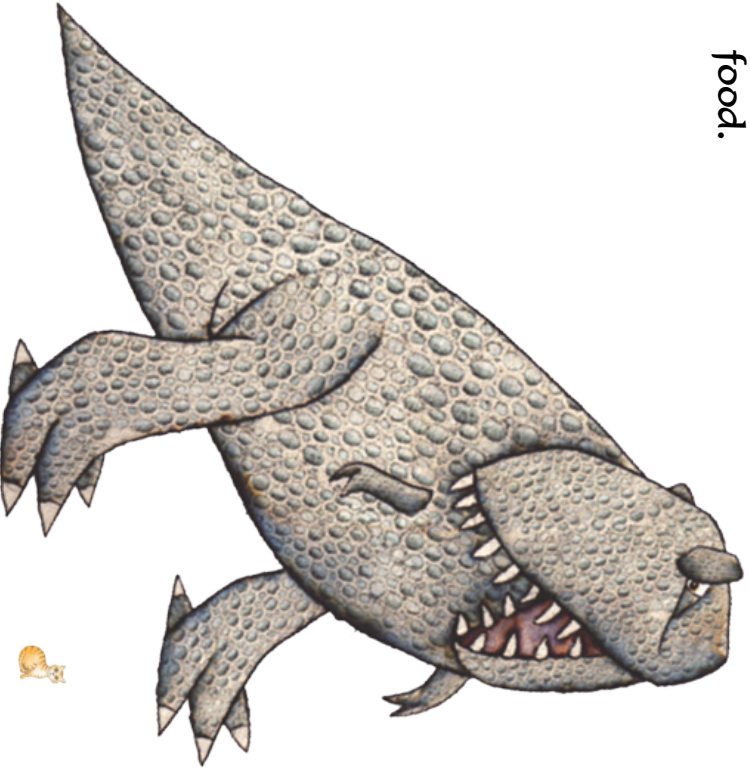
I am a Tyrannosaurus Rex.

I lived 100ma.

My fossil bones have been found in Britain.

When I was alive Britain was very warm. It was where Bermuda is now.

I was a fierce predator, and I hunted for food.



Trilobite 113567

I am a Trilobite.

I lived 600ma ago.

My fossil skeletons were found in Britain.

When I was alive Britain was warm. It was where Buenos Aires is now.

I lived on the sea bed in shallow water.

I crawled in the mud and ate tiny marine creatures.



Nautilus 114558

I am a Nautilus.

I lived 500ma ago and I still live today in warm seas.

My fossil shells have been found in Britain. When I was alive Britain was very warm. I was where Porto Alegre in Brazil is now.

I swam in the sea and ate small animals.



I am a cat!
You can find out how big the animals were by looking at how big I am in each picture.



Stegosaurus 111572

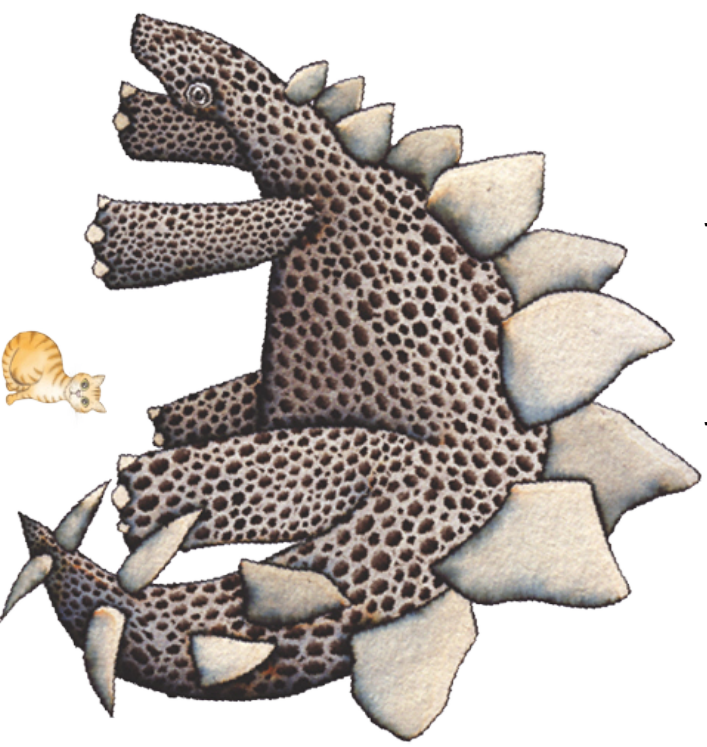
I am a Stegosaurus.

I lived 200 ma ago.

My fossil bones were found in Britain.

When I was alive Britain was very warm and quite humid. It was where the Bahamas are now.

I lived in swamps and ate plants.



Cynognathus 124569

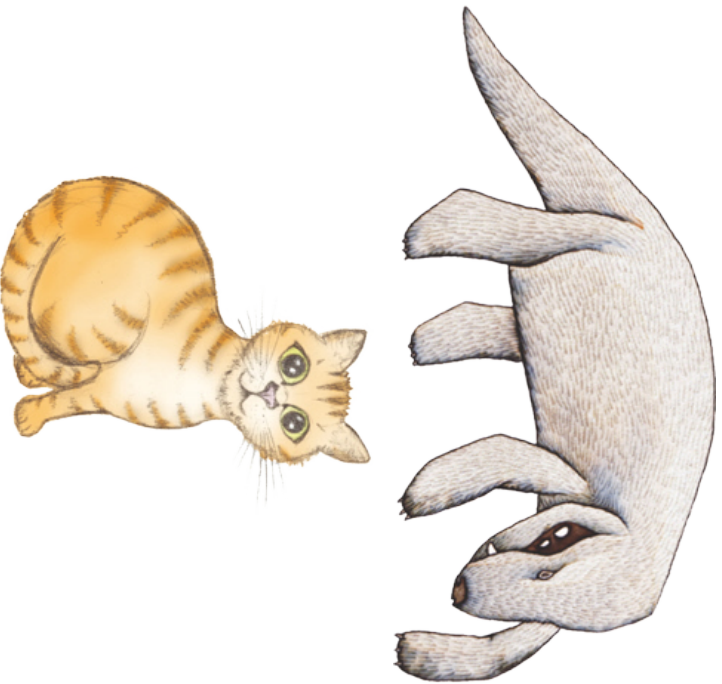
I am a Cynognathus.

I lived 250 ma ago.

My fossil bones have been found in Britain.

When I was alive Britain was a hot desert with salt lakes. It was where Khartoum is now.

I had a furry coat and I was warm blooded.



Palaeophonus 115560

I am a Palaeophonus.

I lived 400 ma ago, and I was the first animal to live on land.

My fossil skeletons have been found in Britain.

When I was alive, Britain was hot. It was where Rio de Janeiro is now.



Agnathid 111562

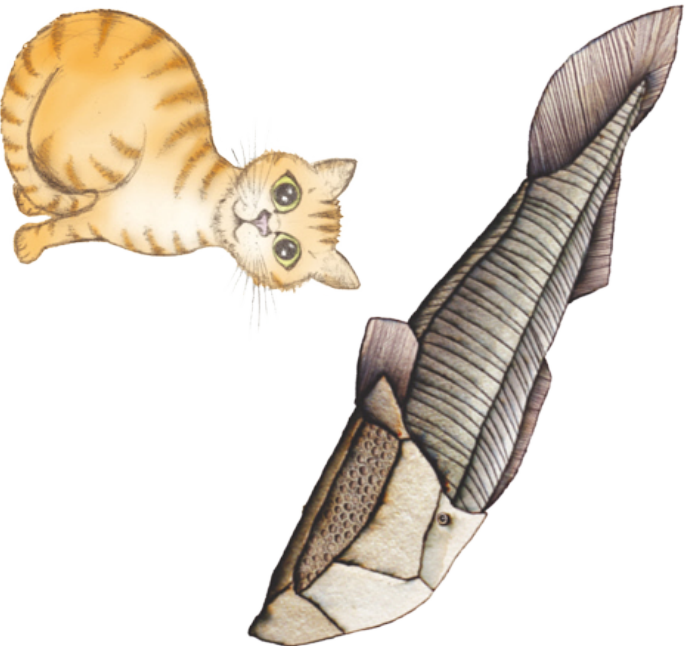
I am an Agnathid.

I lived 350 ma ago.

My fossil bones have been found in Britain.

When I was alive Britain was a hot desert.
It was where Lima in Peru is now.

I lived in freshwater lakes and ate other
small water creatures.



Labyrinthodont 112564

I am a Labyrinthodont.

I lived 300 ma ago.

My fossil bones were found in Britain.

When I was alive Britain was very hot and
rainy. It was where Mandao in the Amazon
is now.

I lived partly in water, partly on
land in tropical swamps.
I ate fish.

