

# Ideas and Evidence at the Sedgwick Museum of Earth Sciences



## *Teacher's Booklet*



**Suffolk**  
County Council



The Sedgwick Museum  
*of Earth Sciences*

## Acknowledgements

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Thanks also to Dudley Simons for photography and processing of the images of objects and exhibits at the Sedgwick Museum, and to Adrienne Mayor for kindly allowing us to use her mammoth and monster images (see picture credits).

### Picture Credits

Page 8 "Bag of bones" activity adapted from an old resource, source unknown.

Page 8 *Iguanodon* images used in the interpretation of the skeleton picture resource from [www.dinohunters.com](http://www.dinohunters.com)

Page 9 Mammoth skeleton images from 'The First Fossil Hunters' by Adrienne Mayor, Princeton University Press ISBN: 0-691-05863 with kind permission of the author

Page 9 Both paintings of Mary Anning from the collections of the Natural History Museum © Natural History Museum, London

Page 12 Palaeontologists Picture from the photographic archive of the Sedgwick Museum © Sedgwick Museum of Earth Sciences

Page 14 Images of *Iguanodon* from [www.dinohunters.com](http://www.dinohunters.com)

Page 15 "Duria Antiquior - a more ancient Dorsetshire" by Henry de la Beche from the collection of the National Museums and Galleries of Wales © National Museum of Wales

Page 17 Images of *Deinotherium giganteum* skull cast © Sedgwick Museum of Earth Sciences

Page 19 Image of red sandstone slab © Sedgwick Museum of Earth Sciences

# Introduction

Ideas and evidence was introduced as an aspect of school science after the review of the National Curriculum in 2000. Until the advent of the National Strategy for Science it was an area that was often not planned for explicitly.

Current changes to GCSE science mean that the emphasis has moved away from the giving of facts to be recalled in the exam hall to a process where we are aiming to develop pupils' scientific thinking. Key Stage three science is being reviewed at the moment, the new programme of study will strengthen this aspect of science to reflect the changes made at GCSE.

This project came out of a discussion between Annette Shelford and myself at the launch of the Science Learning Centre for the Eastern Region. The Sedgwick Museum contains an interesting array of exhibits that are a valuable resource for the teaching of ideas and evidence. The pack of materials looks at the teaching of ideas and evidence in the contexts of rocks and fossils.

The work in this pack concentrates on delivering the following objectives from Key stage three science ideas and evidence:

Pupils should be taught:

- that it is important to test explanations by using them to make predictions and by seeing if evidence matches the predictions
- About the ways in which scientists work today and how they worked in the past, including the roles of experimentation, evidence and creative thought in the development of scientific ideas.

The pack consists of two lessons prior to the visit to the Museum; these lessons set the scene for the visit. At the Museum pupils will take part in a circus of six activities. The pupils will be guided through their work by using the pupil booklet. The pack includes a third lesson to be taught after the visit to the Museum. This lesson allows pupils to consolidate the work they did at the Museum.



Shawn Peart  
**Secondary Consultant**  
**Suffolk County Council**

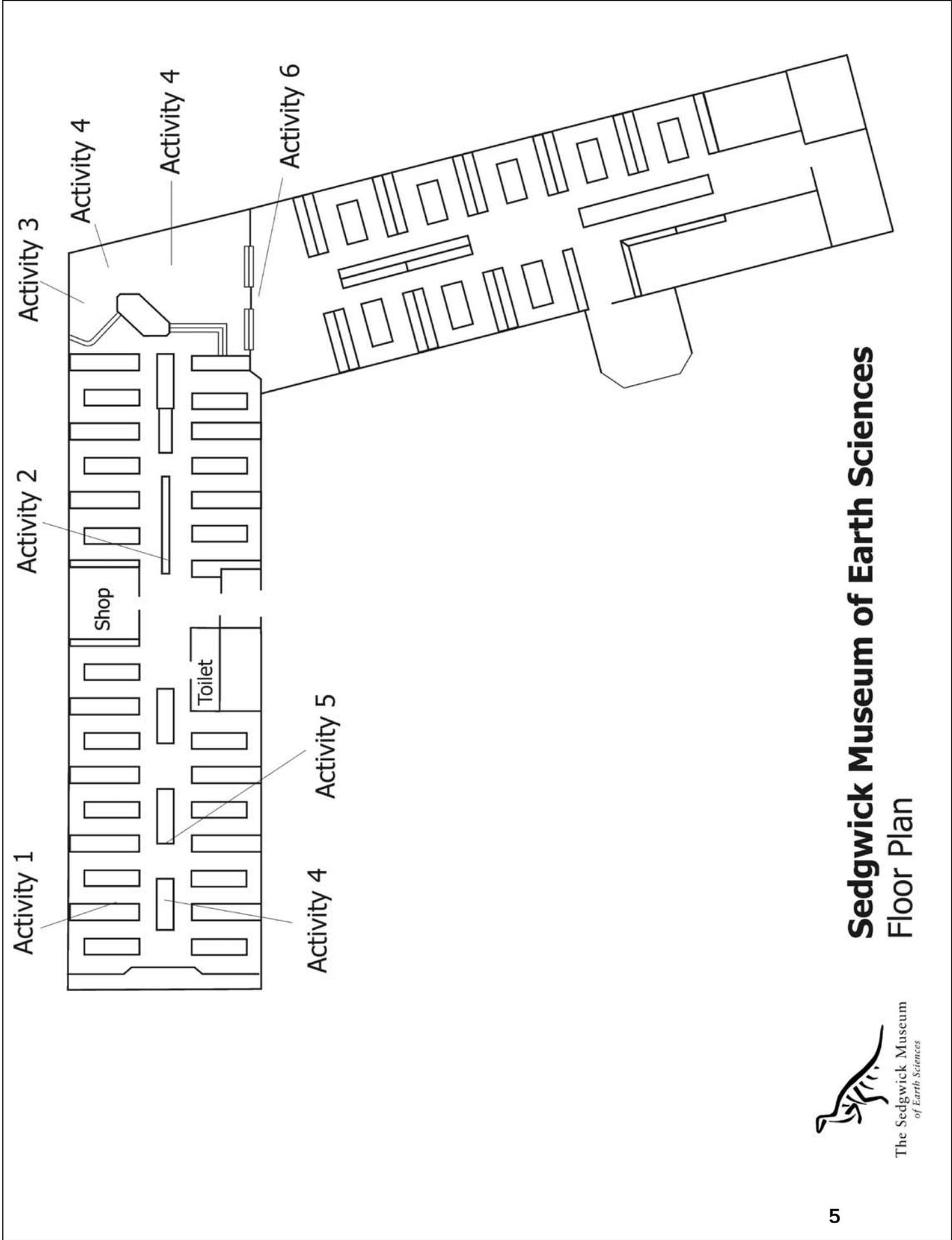
The Sedgwick Museum of Earth Sciences is a part of the Department of Earth Science at the University of Cambridge. The oldest of the University Museums in Cambridge, it exists to promote access to and stimulate learning through the collections in its care, and has a long history of being a friendly and accessible place of education for the whole community.

The Sedgwick Museum is a unique resource because of the highly specific nature of its collections and exhibitions. While geological collections (fossils, rocks and minerals) are often restricted to a single small exhibition space in local museums, the Sedgwick Museum is entirely dedicated to this subject area, allowing visitors to see an amazing range of objects collected from all over the world, though in particular the British Isles, and spanning the whole history of our planet and life on it. The unique gallery layout provides an opportunity to walk through time and gain an insight into the complex concepts of geological time and the changing face and environments of the Earth. New exhibitions explore geological processes such as volcanism, plate tectonics, weathering and the rock cycle.

During the development of new exhibitions, the Museum team has tried to ensure that all scientific ideas and concepts are presented with evidence to support them, mostly in the form of objects from the collections, but also images, text and data. Interpretive labels throughout the exhibitions are presented as idea and evidence statements. I am delighted that the teaching of science at KS 3 and 4 has become more focused on training pupils to think scientifically, and very glad that this opens up opportunities for exploring science through new routes, and in particular putting earth sciences, with all the amazing visual and tactile stimuli which come with it back into secondary science.



**Annette Shelford**  
**Education Officer**  
**Sedgwick Museum of Earth Sciences**



# Sedgwick Museum of Earth Sciences

## Floor Plan



# Planning a visit to the Sedgwick Museum

## Contact Details

Sedgwick Museum of Earth Sciences,  
Downing Street,  
Cambridge CB2 3EQ

Tel: (01223) 333456 (general enquires) or (01223) 766079 (education officer)

E: [sedgwickmuseum@esc.cam.ac.uk](mailto:sedgwickmuseum@esc.cam.ac.uk) (general enquires) or  
[annette@esc.cam.ac.uk](mailto:annette@esc.cam.ac.uk) (education officer)

Online: [www.sedgwickmuseum.org](http://www.sedgwickmuseum.org)

## Opening times

Monday – Friday 10.00 – 13.00, 14.00 – 17.00

Saturday 10.00 – 16.00

The Museum is closed during Christmas week and Bank Holidays. Please check the Museum website for other unscheduled closures.

## How to get to the Museum

The Museum is situated in the Department of Earth Sciences on the Downing Site on Downing Street in central Cambridge. The bus station is approximately a five minute walk, the railway station in about a twelve minute walk. A coach drop-off point is available on Downing Street directly opposite the Museum outside Crowne Plaza Hotel.

## Booking

Provisional bookings can be made via the telephone and email. Bookings will be confirmed by the education officer in writing (post or email). Please try to book at least thirty days in advance particularly for a taught session with the education officer, the Museum can only accommodate one school party at a time and is very busy at certain times of the year.

If you have not visited the Museum before, teachers are recommended to also book a pre-visit meeting at the Museum with the education officer for training, orientation and planning. These can occasionally be booked outside of opening hours or on Saturdays. Please ask.

## Numbers

We can reasonably accommodate parties of up to 35 pupils in a single visit. Please conform to your LEA guidelines in terms of pupil/ adult ratios for trips.

## **Entry charges**

Entry to the Museum and use of services and resources is free of charge.

We welcome donations of around £1 per head from parties visiting the Museum; this money helps to cover the cost of producing and printing leaflets and worksheets, as well as helping to sustain gallery resources such as the handling trolley.

## **Facilities available in the Museum**

### *Toilets*

There is a toilet with baby-changing facilities in the Museum near the main entrance opposite the shop. A wheelchair accessible toilet is available on the ground floor of the Earth Sciences Department.

### *Eating*

Sorry, we do not have a lunch room at the Sedgwick Museum. In good weather packed lunches can be eaten on the Archaeology Lawn 100m from the Museum within the Downing site.

### *Access*

Wheelchair access is available through the Department of Earth science, though this is limited by a small lift. Please ask for more details when you book. Museum staff are trained to work with visually impaired people and guide dogs are permitted.

### *Storage*

There is a coat rack inside the porch of the Museum for hanging up bags and coats. Valuable items should not be left, as we do not have secure storage.

## **Safety and appropriate behaviour during visits**

It is the responsibility of the group leader to make sure that the pupils are aware of safety points relevant to their visit and that behaviour and conduct should be of a high standard equal to that expected at school. Other adult helpers should also be made aware that it is their shared responsibility to maintain these standards during the visit.

A risk assessment for groups visiting the Museum is available on request from the Education Officer or can be downloaded from the website.

The Museum is a shared working environment where academic research and private study takes place, as well as family, tourist and school visits. As such, it is appreciated if noise can be kept to a reasonable level to prevent disruption to those working in offices nearby and other visitors. Whispering is not necessary, normal classroom voices are perfect.

Mobile phones should be turned off or switched to silent during taught sessions.  
Please do not eat or drink in the Museum.  
The Museum is a non-smoking building.

# Lesson one

## Learning Objective:

Pupils will:-

- Understand that scientists have to know how to ask questions to gather information
- Understand that there is often more than one solution to a problem and that science is not about right answers

It is anticipated that the pupils will be familiar with the outline of the project and their visit to the Sedgwick Museum before the start of this first lesson.

## Starter Activity

Tell the pupils that the first part of this lesson is about asking questions. Explain that scientists have to know how to ask the right sort of questions to gather information about the world. Tell the pupils that they need to find out two new pieces of information about the person sitting next to them. Pupils need to consider the questions that they asked to find out this information and be prepared to report back to the class.

## Main Activity

- Pupils are given a specimen of rock to question. Working in pairs the pupils investigate the object and write down as many questions as they can that they would like answered. During whole class discussion the teacher brings out the idea that the pupils are asking questions that can be answered in different ways i.e. through using their senses or by doing experiments.
- Working in pairs the pupils are given a bag of bones. The pupils are told to imagine that they are palaeontologists who have to reconstruct the skeleton of the animal. When completed pupils then move around the room and look at the skeletons produced by other groups. The children will see that the other groups have produced different skeletons from the same set of bones. This shows that there is more than one interpretation for the way the skeleton could be reconstructed. Discussion could also focus on the fact that there are other factors that could change our interpretation i.e. Are there any bones missing? Are all the bones from the same type of dinosaur? Or even from the same dinosaur.

## Plenary Activity

Explain that when the pupils visit the Museum they will see the skeleton of an *Iguanodon*. Show pupils the pictures illustrating how the interpretation of the

*Iguanodon* has changed over time. Take pupils' ideas about why the interpretation has changed over time. The most important thing for the pupils to realise is that ideas have changed as more information has been discovered or worked out. Fossil skeletons such as that of the *Iguanodon* are compared with those of modern animals to see if this will give any clues to how the animal may have looked and behaved.

Ask the pupils to look at the different interpretation of the mammoth skeleton. Which do you think was based on evidence and which was based on experience? Can the pupils explain how legends of giants might have arisen?

## Resources

Resources and images to support this lesson can be found in the folder "Lesson 1".

More information about mythological and historical interpretations of fossils:  
[www.strangescience.net/stmam2.htm](http://www.strangescience.net/stmam2.htm)

## Lesson two

### Learning Objective:

- Pupils will learn about the ways in which scientists worked in the past including the roles of experimentation, evidence and creative thought in the development of scientific ideas.

### Starter Activity

The class should be divided into groups of two or three pupils. Give half the groups one image and the other half, the other image. Tell the pupils nothing about the pictures. Ask the pupils to think of as many questions as they can about the pictures. It will be useful to tell the pupils that they can use the 5Ws to generate questions: **Who?** **What?** **Where?** **When?** and **Why?** These should be used as a 'jumping off points', the pupils do not have to stick to the 5Ws if they have other ideas for questions.

In whole class discussion ask some of the pupils to share their ideas for questions and help the class to work out what they can from the picture. Project the images with the labels onto the whiteboard. Ask the pupils to compare the two images and to note down the similarities and differences that they spot. Question the pupils to ensure that they try and work out what the differences

between the two images tell us about the women and the way that she was viewed.

It should be noted that at first glance the pictures appear the same but there are subtle differences. The pupils should notice the change in expression on the faces and the inclusion of two very obvious 'fossils' in one of the pictures. The picture by B.J Donne was painted in 1847 after Mary Anning died. It is likely that he used the earlier picture as inspiration. The inclusion of the fossils in the picture shows that fossils were important to the life of Mary Anning, that she was famous as a fossil hunter. It is interesting that Donne used the same hand gesture as the original painting which gives the impression that Mary Anning is pointing at the fossil at her feet. The earlier picture is in need of cleaning and conservation work- do the pupils think that there might be other details which could be revealed by this process? How might this change their responses to the image?

## **Main Activity**

Give pupils the quotes about Mary Anning. Ask pupils to sort the quotes into groups.

When the pupils have sorted the quotes into groups, ask them to explain their choices. Why have they put certain quotes together? The pupils may group positive and negative quotes. They may have grouped quotes that describe Mary Anning's physical appearance.

Ask the pupils to think about the quotes. Are there any quotes that contradict each other? Do they think that any of the people would be biased? For example, Gideon Mantell was another English fossil collector. Based on the evidence from these quotes, what do they think that Mary Anning was like? Do the pupils think that Mary Anning was a nice person or not? Ask the pupils to justify their answers.

Try to ensure that the pupils realise that Mary Anning was a women working in a very male orientated world. Women were viewed very differently in the early 1800's. Mary Anning would have needed to fight to get her ideas heard.

The quotes used in this activity come from the following website  
<http://www.lymeregismuseum.co.uk/fossils.htm>

## **Plenary Activity**

Explain to the pupils that Mary Anning's father had been a fossil collector who had collected fossils and sold them to tourists in Lyme Regis as curiosities. The Annings were a poor family and this was a way that the family could supplement

their small income.

At the Museum the pupils will see a number of specimens found by Mary Anning that were purchased from Mary Anning by Adam Sedgwick.

Tell pupils to imagine that they were living in Lyme Regis when Mary Anning was alive. What do you think of Mary Anning? What do you think about what she finds on the beach? How do you explain the fossils she finds? What do you think of all the visitors to the town? Pupils could work in pairs and imagine that they are conducting a radio interview with the local resident. It is important for the pupils to realise that the local resident would not understand the fossils and would probably have either mythical explanations or biblical explanations for them. They might think the fossils came from monsters! The resident might well be suspicious of Mary getting above her station in life. They could be suspicious of all the 'posh' people visiting the town, but they would be glad of the money that they would spend during their visit.

During this lesson it would be appropriate to give the pupils an overview of what they will see in the Museum and any instructions they will need for the day. The Museum's website is <http://www.sedgwickmuseum.org>

## **Resources**

Resources and images to support this lesson can be found in the folder "Lesson 2".

The following website contains a good biography of Mary Anning:  
[www.thedorsetpage.com/people/Mary\\_Anning.htm](http://www.thedorsetpage.com/people/Mary_Anning.htm)

Another good place to find information about Mary Anning:  
[http://www.discoveringfossils.co.uk/Mary\\_Anning.htm](http://www.discoveringfossils.co.uk/Mary_Anning.htm)

## Activity 1

### *Palaeontologists Picture*

#### **Objectives:**

Pupils will be taught:

- To interpret visual information.
- About the way in which palaeontologists make discoveries about new dinosaurs.

This activity uses the reading images strategy from the Secondary Strategy whole school project "Leading in Learning".

This photograph was taken in 1910. It shows the excavation of a fossilised woolly rhinoceros skull in a quarry in Barrington, a village 9 miles south west of Cambridge. Many fossilised mammal remains were found at this site, including the bones and teeth from hippos, lions, hyenas, giant deer, wolves, red and fallow deer, straight-tusked elephants, mammoths, foxes and aurochs. The area was quarried extensively for coprolites which are found in the Cambridge Greensand, the rock layer underneath the gravel deposits containing the fossils. If the area had not been quarried, these fossils would probably not have been discovered.



When the fossilised bones were discovered, Tom McKenny-Hughes, the Curator of the Sedgwick Museum, was very keen to collect as many as he could. He sent his assistant, C. E Grey to visit the coprolite pits regularly and work with the quarrymen to encourage them to collect the fossils they came across when they were digging. When very important, fragile fossils such as this skull were discovered, Grey supervised their excavation. In the photo he is working with E. Lloyd Jones, a fossil collector and academic (seated) and Arthur Hardman, one of the senior quarry workers.

Pupils will be asked to look at this picture in the Museum. The pupils will be presented with a copy of this image in the centre of a page. They will be asked to annotate the image explain what they think the image shows. The 5 W's could be used with the pupils to stimulate thinking i.e.

- Who are these people?
- Where have they come from?
- What are they doing?

- Why are they doing this?
- When is this happening?

Pupils will be encouraged to explain their thinking and will be asked to justify their thinking about the picture. The pupils should ensure that their annotations allow them to do this.

Higher ability pupils could be asked to go deeper than what they can actually see in the picture to what the image means. This will encourage the pupils to make more generalised links. They will move from the concrete to the abstract.

When the pupils have looked at the picture in detail they should be asked to suggest a title for the picture that encapsulates what the picture shows. The pupils will then be asked to justify their choice of title.

## **Resources**

A copy of the image "Palaeontologists Picture" can be found in the folder "Activity Images". This activity can also be carried out in the classroom.

## Activity 2

### *Iguanodon!*

#### Objectives:

Pupils will be taught:

- That our interpretation of fossil skeletons can change significantly through time as more evidence is discovered.

*Iguanodon* is an example of a fossil which has had more than one interpretation of how it looked. Pupils will have looked at the different interpretations in lesson one.

There is an *Iguanodon* in the Sedgwick Museum. Pupils will be asked to look at the exhibits in the Museum relevant to the *Iguanodon* and to write a ten question quiz about the dinosaur. The quiz will be for use by children visiting the Museum with their parents. The answers for the quiz should come from the exhibits in the Museum. The questions should involve pupils looking at both primary and secondary sources of evidence.



An early interpretation of *Iguanodon* by Richard Owen. This picture shows a model made of the dinosaur for a permanent exhibition at the Crystal Palace in 1854.

A modern interpretation of *Iguanodon*.



## Activity 3

### *Duria Antiquior*

#### Objectives:

Pupils will be taught:

- That the paintings provide secondary sources of evidence about life in the Jurassic period as it was understood at the time when the paintings were produced.
- That our ideas about and understanding of life in the Jurassic period has changed since the paintings were produced as we have found more evidence.

In this picture from 1831, Henry de la Beche shows clearly the contemporary interpretations of some of the Jurassic marine fossils discovered by Mary Anning and other collectors. The painting was called "Duria Antiquior" which means "A more Ancient Dorsetshire". The original drawing was intended as a humorous commentary on the excitement that the geological past was stirring up through the finds in Dorset. This explains why so many animals are packed into the illustrations, and why many are shown defecating!



Adam Sedgwick commissioned the artist Robert Farren to make a large copy of the illustration in around 1850. Sedgwick used this painting to illustrate his lectures on palaeontology. This painting is now on display in the Sedgwick Museum.

The illustration by la Beche represents a view of the past that was 'cleaned up' by Farren to re-purpose the image as a teaching resource! The pupils will notice that the original picture shows marine reptiles (ichthyosaurs, plesiosaurs and crocodiles) defecating. This was taken out of the copy so that it could be used for teaching by Sedgwick. This shows how a picture which starts of as a cartoon can become a defining interpretation.

Pupils will use the picture as a source of evidence. The picture tells us about Victorian ideas about marine reptiles and other creatures which lived in the Jurassic period, and the environment around them.

## **Resources**

A copy of the image "Duria Antiquior" can be found in the folder "Activity Images". This activity can also be adapted to be carried out in the classroom.

## Activity 4

### *Changing values*

#### Objectives:

Pupils will be taught:

- That the 'value' of a fossil is more than just what a museum or collector would pay for it.
- To make a judgement about the ethics of keeping fossils in private collections or giving them to museums.

Many of the specimens in the Museum were purchased by Adam Sedgwick from other collectors. He bought the specimens to use for teaching and research, and to make his Museum more informative.

Pupils are asked to look at the value of the specimens purchased by Adam Sedgwick. Pupils are then asked to think about the value of the specimens in the Museum. The prices below are what Sedgwick paid for the specimens and what they would be worth today

A Plesiosaur found by Mary Anning in Lyme Regis. This was £230 in 1841 which would be approximately £15,000 today.

An Ichthyosaur found by Mary Anning in 1843 which she sold to Sedgwick after writing to him about it. This was £20 in 1843 which would be approximately £1,500 today.

The "Irish Elk" was £140 in 1835 which would be approximately £11,000 today.

Values calculated using [www.measuringworth.com/ppoweruk/](http://www.measuringworth.com/ppoweruk/)

Pupils will understand that monetary value is only one way of valuing an object. If it is not possible to replace the object for example, go to a shop to buy another, does monetary value mean anything? The value of a fossil to a Museum is about what it can tell us about life in the past. The most important fossils are the ones that tell us the most, or which are rarest.

Pupils are asked to look at fossil skeletons in the Museum which Sedgwick purchased. They are asked to say which they think is most valuable and why.

Pupils are also asked to consider whether fossils should be available to be purchased (maybe auctioned?) by individual collectors or should go to a Museum.

## Activity 5

### *Deinotherium giganteum*

#### Objectives:

Pupils will be taught:

- About the role of creative thought in determining how prehistoric creatures might once have looked.
- To use the evidence from the skull to make predictions about how the head might have looked.

Pupils are asked to look at the skull of a fossil mammal called *Deinotherium giganteum*. They will then try to recreate what the creature's head might have been like. The skull on display is a cast of the original fossil made in metal and plaster. The pupils are given the following questions

1. Look at the teeth. Was this animal a carnivore, omnivore or herbivore? Explain your answer.
2. Look at the tusks on the lower jaw. How might the animal have used these?
3. Look at the skull carefully. What evidence is missing that would help us to understand what the animal looked like when it was alive?
4. Feel your own jaw. What do you have between your bones and your skin? Look at the back of the skull, what would have attached the lower jaw to the main part of the skull?
5. Are the teeth of this skull similar to any on display in nearby cases? Can you name an animal alive today that this animal might be related to? Why?
6. Why is there a large hole at the front of the skull?

The pupils are asked to draw their interpretation of the head of this animal when it was alive. The pupils are then asked, as an extension activity, to make predictions about what they think the body of the animal might have been like.

It is likely that pupils in the same group will have similar ideas about what the animal might have looked like. When pictures from different groups are compared back at schools pupils will be able to discuss the similarities and differences between their pictures and why these have arisen.

This should lead pupils to realise that scientists base their interpretations of what these animals looked like on evidence from the fossil bones that they find. We can not be sure what the animals really looked like. What we have is the theory that best fits the available evidence. Some myths and legends can be rationalised in this way. What evidence would ancient people have to base the interpretation

of fossil bones on? The most likely explanations would be that they would base their interpretation on what they knew, the human skeleton.

The pictures used in lesson one show how the discovery of a mammoth skeleton could give rise to legends about giants, for example the Cyclops in Greek mythology.

## **Resources**

A set of 11 images of the *Deinotherium* skull can be found in the folder "Activity Images". This activity can also be adapted to be carried out in the classroom.

## Activity 6

### *Tricky Tracks*

#### Objectives:

Pupils will be taught:

- To use evidence available from a rock slab to build a picture of the environment in which the rock formed, through reinforcing their knowledge and understanding of rocks and their formation.
- To develop an understanding of how scientists use different types of evidence to reconstruct sequential events from a single object.
- To use the Museum displays around them as an additional source of evidence through observation and comparison.

The pupils will be asked to look at the slab of red sandstone which has one surface patterned with fossil footprints and infilled mudcracks. They will investigate the sequence of events that lead to the formation of the rock using primary evidence available from the slab, their own understanding of rock formation, and by using further evidence from the exhibitions nearby in the Museum to complete the story. The pupils will use a storyboard to draw a cartoon recording the sequence of events as they interpret it using the evidence available.

The pupils will be set the following tasks and asked the following questions:

1. Make observations of the rock and describe its properties, using a labelled diagram.
2. What type of rock is the slab made of? Which group of rocks does it belong to? (Metamorphic, Igneous or Sedimentary?) What evidence can you use to reach your answers?
3. This type of rock is also forming today all over the world. Suggest three environments in which this type of rock might form.
4. The surface of the rock slab is patterned by two different sorts of markings. Look closely at each type of marking in turn and make a detailed, labelled sketch of each.
5. Look in the nearby exhibitions. Can you find any other rocks on display which will help you to identify the two sets of markings? What do you think they are?
6. Think about how the two sets of markings were formed. Did they form at the same time or did one come after the other? What is your evidence?

The pupils will then draw a storyboard showing the sequence of events which formed the rock in chronological order based on their investigation.

This activity will reinforce how careful observation provides the vital first step

towards understanding an object that is being investigated. It will also demonstrate that having an understanding of processes occurring and our observations of the world today are often the key to interpreting rocks and fossil.

## **Resources**

A copy of the image of the red sandstone slab (IMG\_0110) can be found in the folder "Activity Images".

## Lesson Three

### Objectives:

Pupils will:

- consolidate work carried out at the Museum.

Pupils will need to consolidate work from the pupil booklet after their visit to the Museum. This will involve the teacher talking through each activity with the class.

The folder "Images" contains copies of the photographs, paintings and photographs of the specimens which the children will have investigated during their visit to the Museum. These large format images are suitable for use with a digital projector or whiteboard.

Explain to the pupils that the activities they carried out at the Museum were all linked because they involved the interpretation of different types of evidence. This is what scientists do to make discoveries. When you write a conclusion to your experiments in school you are interpreting evidence from experimental results.

Pupils can choose an activity which will build on the activities carried out in this project.

1. Write an entry about the skeleton for an encyclopaedia of fossil vertebrates. Include information about how you interpreted it as a living creature. Where did the creature live? What did it eat? How did it move? What sort of an animal was it? Give your creature a name.
2. Imagine that you are a fossil collector who wants to purchase an *Ichthyosaur* skeleton from Mary Anning. Write a letter to Mary explaining why you should have the skeleton rather than Adam Sedgwick. Alternatively you could pretend you were Adam Sedgwick and write a letter explaining why you should have the skeleton.
3. Gideon Mantell found the first fossil identified as belonging to a dinosaur, it was an *Iguanodon* tooth. Use <http://www.dinohunters.com> to find out more about the discovery. Draw a cartoon strip to illustrate how the discovery was made.

