

**Session type:** Workshop  
**Duration:** 60 minutes  
**Key Stage:** KS2

---

### **Session Overview**

In Fantastic Fossils, your pupils will handle real life fossils from our oceans and be given the chance to imagine the animals they came from. In small groups, pupils will unearth their own fossils and piece them back together. After this we will investigate what we can and can't learn from a fossil, take a closer look at how extinct animals might have looked, and finally construct our own models from our fossil skeletons.

---

### **Learning Objectives**

1. Learn about fossils and where they come from
2. Discover and reconstruct a creature from the ancient seas
3. Find out what we can learn about animals from fossils

### **Learning Outcomes**

1. Describe the range of shapes, sizes and textures that fossils come in
  2. Explain how fossils are formed
  3. Use your knowledge of extant organisms to formulate an idea of what an extinct organism may have looked like
- 

### **Pre-Visit Suggestions**

- Research prehistoric marine animals (there are some great images of prehistoric fish online)
- Go for a nature walk in your school, observing and noting down any live animals, things that were alive (e.g. leaves, pinecones etc.), and things that have never been alive

### **Post-Visit Suggestions**

- Collect and explore different rock types, observe and comment on the differences between them
  - Look up other examples of prehistoric marine animals and create your own interpretations
  - Make and paint your own fossils at school using a Plaster of Paris kit
- 

**To book, or for more information:**

Call us now on 01752 275 233 or email [learning@national-aquarium.co.uk](mailto:learning@national-aquarium.co.uk)

[www.national-aquarium.co.uk](http://www.national-aquarium.co.uk)

**English: National Curriculum Links**

**Science:**

**1. Key Stage 2: Working Scientifically**

- a) Asking relevant questions and using different types of scientific enquiries to answer them
- b) Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- c) Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- d) Using straightforward scientific evidence to answer questions or to support their findings

**2. Key Stage 2: Evolution and inheritance**

- a) Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago [Y6]

**3. Key Stage 2: Animals, including humans**

- a) Identify that humans and some other animals have skeletons and muscles for support, protection and movement [Y3]
- b) Identify the different types of teeth in humans and their simple functions [Y4]

**4. Key Stage 2: Living things and their habitats**

- a) Recognize that living things can be grouped in a variety of ways [Y4]
- b) Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment [Y4]

**5. English:**

**Years 1-6: Spoken language**

- a) Listen and respond appropriately to adults and their peers
- b) Ask relevant questions to extend their understanding and knowledge
- c) Articulate and justify answers, arguments and opinions
- d) Maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments
- e) Use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas

---

**To book, or for more information:**

Call us now on 01752 275 233 or email [learning@national-aquarium.co.uk](mailto:learning@national-aquarium.co.uk)

[www.national-aquarium.co.uk](http://www.national-aquarium.co.uk)

**Welsh: National Curriculum Links**

**1. Skills across the Curriculum:**

- a) Developing thinking
- b) Developing communication

**2. Learning across the Curriculum:**

- a) Careers and the world of work

**Science: Key Stage 2**

**Enquiry Type:** Making Things

**3. Skills:**

- a) **Planning:** Find evidence, information and ideas
- b) **Developing:** Observe and measure

**4. Range:**

- a) Interdependence of organisms
  - The environmental factors that affect what grows and lives in different environments
  - How humans affect the local environment

**English: Key Stage 2**

**Strand:** Oracy

**5. Element:** Developing and presenting information and ideas

- a) Speaking
- b) Listening
- c) Collaboration and discussion

**Art and Design: Key Stage 2**

**6. Range:** Making

- a) Explore, experiment with and apply the elements of the visual, tactile and sensory language of art, craft and design
- b) Design and make:
  - two-dimensional images
  - three-dimensional objects and artefactsUsing a range of various materials for a variety of purposes

---

**To book, or for more information:**

Call us now on 01752 275 233 or email [learning@national-aquarium.co.uk](mailto:learning@national-aquarium.co.uk)

[www.national-aquarium.co.uk](http://www.national-aquarium.co.uk)

**Ocean Literacy Principles**

The Ocean Literacy Principles are international standards of education. The following Principles are achieved through this workshop:

- 1) The Earth has one big ocean with many features
- 2) The ocean and life in the ocean shape the features of Earth
- 3) The ocean is a major influence on weather and climate
- 4) The ocean makes Earth habitable
- 5) The ocean supports a great diversity of life and ecosystems
- 6) The ocean and humans inextricably interconnected
- 7) The ocean is largely unexplored

✓
✓
✓

To find out more, please visit our website: <http://www.national-aquarium.co.uk/education/lessonideas/>.

**NMA Generic Learning Outcomes**

The Generic Learning Outcomes are a collection of conservation guiding principles that the NMA aim to achieve in all aspects of our work. The following GLOs are achieved through this workshop:

**1). Knowledge & Understanding**

- a) Broaden knowledge of the marine environment and associated species.
- b) Deeper understanding of the relationship between myself and the seas.
- c) Raise awareness of the role that science plays in understanding our seas.

✓

**2). Skills**

- a) Develop observation skills.
- b) Formulate scientific questions based on observations.
- c) Develop communication (speaking and listening) and social (learning together, working together, meeting people) skills.

✓
✓
✓

**3) Attitudes & Values**

- a) Appreciate the value of the marine environment and develop respect and empathy for its inhabitants.
- b) Promote a positive view of science and scientists.
- c) Recognise that learning can be a positive process.

✓
✓

**4) Enjoyment, Inspiration, Creativity**

- a) Have fun with the National Marine Aquarium.
- b) Be surprised by the variety of marine life.
- c) Be inspired by the experience.

✓
✓

**5) Activity Behaviour and Progression**

- a) Motivation to go out and explore the marine environment further.
- b) Take steps to further understanding of the relationship between myself, my actions and the sea.
- c) Take action to reduce my negative impacts & increase my positive impacts on the marine environment.

✓

To find out more, please visit our website: <http://www.national-aquarium.co.uk/marine-conservation/>.

**To book, or for more information:**

Call us now on 01752 275 233 or email [learning@national-aquarium.co.uk](mailto:learning@national-aquarium.co.uk)

[www.national-aquarium.co.uk](http://www.national-aquarium.co.uk)