

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

Session Overview

Through participating in this workshop, pupils will get a close and detailed look at the external and internal anatomy of a squid through a teacher led dissection, understanding the role that science plays in learning about animals. This workshop gives an opportunity to explore what makes a squid different from other animals – including humans. Pupils will also take part in a discussion about the role of the animal care team at the NMA and the range of careers available.

This scientific workshop provides a hands-on memorable experience, getting the students fully immersed in learning about the anatomy and physiology of a squid.

Learning Objectives

1. Carry out a Scientific dissection
1. Learn about the different parts of a squid
2. Find out about careers involving animals

Learning Outcomes

1. Recognise the moral implications of carrying out a dissection
 2. Identify key anatomical features of a squid and compare to humans
 3. Discover the range of careers available which involve working with animals
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Pre-Visit Suggestions

- Learn about classification of different invertebrate and vertebrate groups
- Research different marine habitats and identify key adaptations that animals need to survive in those habitats
- Research what other animals can be found in these habitats and construct a food chain/web

Post-Visit Suggestions

- Draw a scientific diagram of a squid based on what pupils learned in the workshop
 - Compare the anatomy of a squid to an animal in a different habitat, identifying key similarities and differences. Investigate how each are adapted to suit their habitats
 - Carry out research on different careers that involve working with animals
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To book, or for more information:

Call us now on 01752 275 233 or email learning@national-aquarium.co.uk

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National Curriculum in England: Links

Science: Key Stage 2

1. Working Scientifically

- a) Asking relevant questions and using different types of scientific enquiries to answer them
- b) Setting up simple practical enquiries, comparative and fair tests
- c) Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- d) Using straightforward scientific evidence to answer questions or to support their findings

2. Animals, including humans

- a) Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat
- b) Identify that humans and some other animals have skeletons and muscles for support, protection and movement
- c) Describe the simple functions of the basic parts of the digestive system in humans
- d) Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood

3. Living things and their habitats

- a) Recognise that living things can be grouped in a variety of ways
- b) Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
- c) Give reasons for classifying plants and animals based on specific characteristics

English: Key Stage 2

4. 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

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National Curriculum in Wales: Links

1. Skills and Learning across the Curriculum:

- a) Learning across the Curriculum: Personal and social education (discussing morals)
- b) Learning across the Curriculum: Careers and the world of work (career options)
- c) Skills across the Curriculum: Developing communication (discussing findings)

Science: Key Stage 2

Enquiry Type: Exploring

2. Skills: Developing (using apparatus safely)

3. Range:

- a) Interdependence of organisms
 - the names, positions, functions and relative sizes of a human's main organs.
 - the plants and animals found in two contrasting local environments.
 - how humans affect the local environment.

English: Key Stage 2

Strand: Oracy

4. Element: Developing and presenting information and ideas

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

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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

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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.

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✓

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.

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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.

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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.

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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.

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

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