



Under the Sea Topic Overview



| Science | |
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| 1 | What is a habitat and who lives there? <ul style="list-style-type: none"> - Investigating the definition of a habitat - Identifying animals that live in different habitats, including marine habitats - Exploring how animals have adapted to their habitats, particularly underwater habitats |
| 2 | Who lives in the sea? <ul style="list-style-type: none"> - Identifying sea animals and the need to classify them - Classifying sea animals by groups: vertebrates, invertebrates, mammals, crustaceans, mollusks, amphibians and reptiles |
| 3 | What life processes to all organisms have in common? <ul style="list-style-type: none"> - Identifying the 7 life processes - Identifying differences in the life processes between land and sea animals, such as breathing and movement |
| 4 | What are the differences in how land and sea animals breathe? <ul style="list-style-type: none"> - Identifying respiration as a life process and exploring what it means - Exploring the different ways in which different animals breathe, such as land and sea mammals, fish and other sea creatures |
| 5 | What are the differences in how land and sea animals move? <ul style="list-style-type: none"> - Identifying movement as a life process and exploring why it is necessary for all animals - Comparing skeletons of humans and fish and how muscles are used for movement - Identifying how different sea animals move, including vertebrates, invertebrates, mollusks, crustaceans, etc. |
| 6 | What are the differences in how land and sea animals reproduce? <ul style="list-style-type: none"> - Identifying reproduction as a life process and exploring what it is - Investigating different ways in which organisms reproduce, mainly separating between animals who give birth to live young and animals that lay eggs - Exploring different ways in which sea animals reproduce |

| ICT | |
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| 1 | Creating a multimedia presentation about a particular sea creature <ul style="list-style-type: none"> - Exploring the features of multimedia presentations and how to use fonts, colours, links, text, sounds and images - Researching a chosen animal using books, CD ROMs and the internet - Planning and creating a multimedia presentation |
| 2 | Creating a digital storybook in a sea setting <ul style="list-style-type: none"> - Exploring the features of a good story and choosing characters, settings and problems - Combining text and images to create a digital storybook |

| Geography | |
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| 1 | Where are the major oceans and seas? <ul style="list-style-type: none"> - Defining oceans and seas - Identifying oceans and seas in relation to continents and countries |
| 2 | What are the geographical characteristics of oceans? <ul style="list-style-type: none"> - Investigating the characteristics of each of the 5 oceans in terms of temperature, size, depth, etc. - Exploring location on the globe in relation to the equator and poles as a reason for differences in temperature |
| 3 | How are oceans and seas used? <ul style="list-style-type: none"> - Investigating the uses of oceans and seas, such as for food, fuel, transport, tourism, minerals, mining and producing oxygen. - Exploring the harmful ways oceans are used by humans in terms of pollution |

| Art | |
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| 1 | Making paper plate fish <ul style="list-style-type: none"> - Exploring different ways of using paper plates to create fish shapes, including decoration methods - Designing and planning how to create a paper plate fish or other sea creature |
| 2 | Creating images to portray the myth of Atlantis <ul style="list-style-type: none"> - What is the myth of Atlantis? - Using stories to generate ideas for artwork - Creating a piece of artwork to represent the lost city of Atlantis |
| 3 | Making mosaics <ul style="list-style-type: none"> - Exploring what mosaics are and how they are made - Investigating different ways of making mosaics - Designing, making and evaluating a mosaic of a sea scene or animal |

| Music | |
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| 1 | Listening and responding to Saint-Saens' 'Aquarium' <ul style="list-style-type: none"> - Finding out who Saint-Saens was and what he did - Listening and responding to 'Aquarium' in a variety of ways - Identifying instruments and the different sounds they create |
| 2 | Composing musical sea poems <ul style="list-style-type: none"> - Investigating the sounds different types of instruments make - Matching sounds to mental images, such as waves crashing - Composing, preparing and performing a musical sea poem |

| Design & Technology | |
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| 1 | Designing, making and evaluating a model aquarium <ul style="list-style-type: none"> - Investigating what aquariums are and using images to gather ideas - Designing, making and evaluating a model aquarium using a variety of tools, materials and techniques |
| 2 | Designing, making and evaluating a soft 'sea' toy <ul style="list-style-type: none"> - Using images of tropical fish to gather ideas for colours and patterns - Working with fabric to design, make and evaluate a stuffed animal |

Further suggestions:

| RE | |
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| 1 | The story of Jonah and the Whale |

| PE | |
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| 1 | Under the Sea Dances <ul style="list-style-type: none"> Challenge children to move in the manner of a variety of different sea animals (such as crabs, fish, octopuses, etc.) to music |

| ICT | |
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| 1 | Emails <ul style="list-style-type: none"> Write emails to politicians, local councillors, etc., to describe what children think should be done about sea pollution and why. |

Scientific and technological understanding

- Designing, making and evaluating a model aquarium
- Making decisions about appropriate materials and techniques to use
- Working with fabric to design and make a stuffed sea animal
- Evaluating finished products by identifying areas and strength and weakness
- Exploring different habitats and the animals that live in them
- Finding out how sea animals have adapted to their habitat
- Identifying and classifying sea animals using terms such as vertebrate, invertebrate, mollusk, crustacean, mammal, reptile and amphibian
- Identifying the 7 life processes
- Investigating the differences in respiration between land and sea animals
- Identifying movement as a life process and why it is necessary
- Comparing fish and human skeletons
- Identifying different ways in which vertebrates and invertebrates move
- Identifying different ways in which animals reproduce

Mathematical understanding

- Using data, statistics and graphs to answer questions
- Using ICT to create graphs and charts
- Using Carroll diagrams to classify sea animals

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Historical, geographical and social understanding

- Using maps to identify seas, oceans, continents and countries
- Using the position of countries and continents to describe where seas and oceans are
- Investigating the geographical features of oceans (e.g. depth, size and temperature)
- Identifying the uses of seas and oceans and the positive and negative effects

Understanding the arts

- Investigating ways to manipulate paper plates into sea creatures
- Designing, creating and evaluating a paper plate fish
- Using the myth of Atlantis as the basis for artwork
- Using a variety of media, including ICT, to create images
- Finding out what mosaics are and studying examples
- Designing, making and evaluating a mosaic
- Listening and responding to Saint-Saen's 'Aquarium'
- Using music as a starting point for artwork
- Exploring the different sounds a variety of musical instruments create
- Using instruments to create sounds that reflect the sea
- Using art straws to create pictures of human and fish skeletons

Understanding English, communication and language

- Creating posters to warn against sea pollution
- Using mindmaps to show how seas and oceans are used
- Researching a sea creature using books, CD ROMs, the internet, etc.
- Using ICT to create a multimedia presentation about a particular sea creature
- Exploring the features of a story in terms of language, characters, settings, etc.
- Planning and writing a story in an underwater world
- Using ICT to create a digital storybook
- Creating a poster to show the 7 life processes and differences in the processes of land and sea animals
- Using writing and diagrams to describe respiration in land and sea animals
- Creating an information book about how vertebrate and invertebrate sea animals move
- Matching pictures to descriptions
- Creating a table to show the ways in which sea animals reproduce