

Seas and Oceans

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| Seas Around the UK | The North Sea, the English Channel, the Celtic Sea, the Bristol Channel, the Irish Sea. Seas are smaller than oceans, and are usually located where land and ocean meet. |
| Oceans of the World | The Pacific Ocean, the Atlantic Ocean, the Indian Ocean, the Southern Ocean and the Arctic Ocean. The surface of the planet is 71% water. The different oceans are shown by the different shades of blue on the map. All of the oceans are connected together. |
| Sea Creatures (in Science) | Fish, birds, mammals, invertebrates: molluscs, crustaceans |
| Waves (in Science) | Different waves are created mainly by the weather – by wind and by the heat of the sun warming up the oceans. |

Space

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| Our universe | My place in space: zoom in from the universe in stages: galaxy (milky way), spiral (Orion arm), solar system, planet, continent, country, town |
| Our solar system - planets | Name and order – Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune |

Christopher Columbus

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| Boats in the Past | Timeline - Viking long ship, galleon ship, clipper ship, paddle steamer, steam engine liner, cruise ship |
| Life at Sea | Differences between life on board in the past and in the present (cramped conditions, no fresh food, lack of medical attention, missing family and friends, etc.) |
| Ship Communication | Dots and dashes make up letters in Morse Code, used as ship communication. |
| How do boats stay afloat | Spreading weight over a larger area (less dense), and objects that contain air, allow them to float. Salt water is 'denser' so a heavy object is less likely to sink. |
| What do explorers do? | Maps include key landmarks to find places. |
| Ship explorer clothing | Columbus's crew would have worn trousers down to their calves, a shirt and a woollen smock with a hood (<i>to keep salt spray from the sea off</i>), and a red cap called a gorro. They would have been barefoot as the ship's deck was slippy and shoes didn't grip. |
| Mapping and Navigation | Use 4 compass directions – north south east west. |
| Finding new lands | The Santa Maria landed in the Americas in 1492. This was not the discovery of the Americas, the Vikings landed in Greenland in the 11 th century. |

Neil Armstrong

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| Space transport | Sputnik – first satellite in space (Russia), the Apollo 11 mission had three spacecraft: the Command Module Columbia, a Service Module, and the Lunar Module Eagle. |
| Space clothing | Need to not get too hot or cold, be protected from radiation exposure, allow astronauts to breathe and adjust to the changing pressure of gases. |
| The Space Race | Russia became the first country to send a person into space. |
| Take off | Apollo 11 launched on 16 th July 1969. |
| Moon Landing | Neil Armstrong was the first man to step onto the surface of the Moon in 1969. Buzz Aldrin and Michael Collins also part of the crew. |

Vocabulary Introduced

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| continent | The 7 main blocks of land on Earth. |
| invertebrate | An animal without a backbone. |
| communication | A way of sending or receiving information. |
| navigation | Finding the way from place to place. |
| astronaut | A person who is trained to travel in a spacecraft. |
| satellite | Something that orbits the earth or another planet (natural e.g. moons, man-made to collect information). |
| Solar System | Made up of the Sun and everything that orbits it. This includes the eight planets and their moons, dwarf planets, and countless asteroids, comets, and other small, icy objects. |

Teaching Sequence

| | Key learning | Activity |
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| 1 | UK seas | Atlas/Map work – Labelling UK maps |
| 2 | Understanding the 7 continents | Name and recognise the 7 continents, rolling dice/labelling activity. |
| 3 | What is an ocean? | Use definition cards to determine what an ocean is and the names of the 5 oceans. |
| 4 | Underwater Worlds | Recall and name common underwater sea creatures /animals/plants. Create a watercolour scene using colour mixing and create sketches based around JMW Turner's 'Stormy Sea' paintings. |
| 5 | To understand what causes waves in the sea and what effect waves have on beaches and coastlines. | Investigation – blowing different strengths through a straw over the surface of water |
| 6 | Boats in the Past | Timeline - Viking long ship, galleon ship, clipper ship, paddle steamer, steam engine liner, cruise ship |
| 7 | Life at Sea | Write a letter to show differences between life on board in the past and in the present (cramped conditions, no fresh food, lack of medical attention, missing family and friends, etc.) |
| 8 | Ship Communication | Crack the morse code words and sentences, make own. |
| 9 | How do boats stay afloat | Investigation – testing different materials to see whether they float or sink |
| 10 | What do explorers do? | Orienteering around the school grounds to map read. Putting famous explorers on a world map. |
| 11 | Ship and space explorer clothing | Investigation – properties of different materials (flexibility/waterproof) |
| 12 | Mapping and Navigation | Use 4 compass directions – north south east west. |
| 11 | Finding new lands | Make a scrapbook – Caribbean and Moon |
| 12 | The Space Race/Moon landing | Newspaper report/fact page |
| 13 | Our universe | My place in space: zoom in from the universe in stages: galaxy (milky way), spiral (Orion arm), solar system, planet, continent, country, town |
| 14 | Our Solar System | Create a fact page |
| 15 | Our planet | Make Earth biscuits |