# *Geography Curriculum at TEAM Academy Trust*
# *Into the Deep*

# Geography

**Vision**

- Inspire Lifelong Curiosity: Our geography curriculum is designed to spark a deep curiosity about the world, encouraging pupils to explore and question the diverse landscapes, cultures, and phenomena they encounter.
- Foster Global Understanding: By immersing students in the study of different places and peoples, we aim to cultivate a profound understanding and appreciation of the interconnectedness of the world, fostering empathy and global awareness.
- Build Lasting Knowledge and Skills: Through engaging and dynamic lessons, we ensure that students not only acquire essential geographical knowledge but also develop critical thinking and analytical skills that will serve them throughout their lives.

## Intent

Inspire lifelong curiosity → Foster Global Understanding → Building Knowledge → Key Skills for Exploration → Effective Communication → Local and Global Connections

## Implementation

Passion for Exploring the World → Name and Locate Places of the World → Geographical Skills and Fieldwork → Human and Physical Geography → Geographical Vocabulary → Global and Local Connections

## Impact

Assessing vocabulary understanding before and after units → Conducting deeper pupil discussions about their work → Marking and reviewing written work in books → Collecting and analysing images of children's practical learning → Moderation meetings and annual standards reporting → Gathering feedback from pupils and parents.

**Substantive Knowledge and Disciplinary Knowledge**

From the Early Years Foundation Stage up to the end of Key Stage 2, the substantive knowledge progresses through conceptual development. Meanwhile, disciplinary knowledge is developed through historical enquiry and interpretation. To ensure pupils can learn more and know more over time, we believe it is crucial that our Geography curriculum develops both categories of knowledge as well as Geographical skill.

**Reviewing Prior Learning: Speak Like an Expert**

**Purpose:** Sessions that ensure effective retention & recall of information.

**Regular sessions** at the start of every lesson to review prior learning.

**Friday sessions**

Dedicated sessions reviewing the week's learning helping to make connections.

**Format**

Activities include recap quizzes, group discussions, visual aids, role playing, teacher feedback.

**Benefits**

Students develop strong retention skills, articulate historical knowledge & concepts.

# Intent

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| Inspire Curiosity | Spark deep curiosity about the world, encouraging pupils to explore and question diverse landscapes, cultures, and phenomena. |
| Foster Global Understanding | Cultivate empathy and global awareness by helping children understand the interconnectedness of the world and their role as global citizens. |
| Building Knowledge | Enhance learning through educational visits that provide practical experiences and real-world contexts for geographical concepts. |
| Developing Key Skills for Exploration | Develop essential geographical skills such as map reading, data collection, analysis, and fieldwork techniques to enable pupils to explore the world effectively. |
| Effective Communication | Teach various ways to communicate geographical information, including through maps, numerical data, written expression, and presentations |
| Local and Global Connections | Teach various ways to communicate geographical information, including through maps, numerical data, written expression, and presentations |

# Implementation

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| Passion for Exploring the World | Our two-year programme ensures complete coverage of the KS2 National Curriculum, enabling children to name and locate significant places around the globe. |
| Name and Locate Places of the World | We develop pupils' geographical skills through hands-on fieldwork, where they collect, analyse, and communicate data. Leaders and governors rigorously monitor this aspect to maintain high standards. |
| Geographical Skills and Fieldwork | We inspire a passion for exploring the world by incorporating real-life contexts and educational visits, making learning relevant and engaging. External experts, trips, and visitors bring geography to life for our students. |
| Human and Physical Geography | Our curriculum covers both human and physical geography, ensuring that children understand the interaction between people and their environments. We continually enhance resources and integrate technology to support this learning. |
| Geographical Vocabulary | We assess and build upon pupils' understanding of geographical vocabulary before and after each unit, ensuring they can effectively communicate their knowledge. |
| Global and Local Connections | Through partnerships, such as our link with a school in India, and our focus on local geography, we deepen pupils' understanding of their locality and the wider world, fostering a sense of global citizenship. |

# Into The Deep

| Subject: Geography | Year: 3 and 4 | Term: Autumn 2 |
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| **National Curriculum Aims** | **Key Objectives:**<br>• WALT (We Are Learning To) identify and name the world's oceans, using geographical vocabulary to describe Earth's surface features.<br>• WALT understand the different layers of the ocean, recognising how depth impacts the environment and marine life.<br>• WALT learn how ocean exploration has developed over time and how human activity has contributed to our knowledge of the ocean.<br>• WALT explore the contributions of Jacques Cousteau to marine exploration and understand how his work connects to modern geography and ocean studies.<br>• WALT identify types of sea pollution and explore its impact on coastal environments in the UK and India.<br>• WALT understand the impact of David Attenborough's work on raising awareness about ocean conservation and protecting natural environments.<br>• WALT demonstrate our understanding of ocean geography by presenting knowledge about ocean layers, explorers, pollution, and conservation efforts |
| **Key Elements** | **Key Elements:**<br>**Worlds Oceans and Continents/Global Perspective/Comparative Study/ Understanding of Place/Physical Geography/Human Geography/Human Impact on Oceans/Map skills** |
| **Key Questions** | **Five Key Questions:**<br>How much of our planet is covered by oceans and seas? What are Oceanic Layers and the deep sea? How do humans explore the deep oceans? Who was Jacques Cousteau?<br>What is Sea Pollution and what can we do to save our planet? Why should we remember David Attenborough? |
| **Curriculum coherence** | **Building Learning Power - Prior Learning:**<br>The Year 3 and 4 students have a robust foundation in geographical knowledge from their Year 1 and 2 experiences. They explored diverse topics, starting with the "Scented Garden" theme, where they investigated the flora of the Brazilian rainforest. They learned how climate influences plant growth and identified various rainforest plants, from canopy trees to forest floor ferns. They also honed their map skills by locating rainforests on a world map and understanding symbols and keys.<br><br>In their "Coastlines" project, the children expanded their geographical knowledge by studying the world's seas and oceans, using maps, globes, and atlases. They learned about coastal features, erosion, and safety at the coast. The students delved into the history and significance of Whitby, learning about Captain Cook and the tourism industry. Their memorable experience included a coastal visit, and they engaged in practical activities like using compass directions and creating maps with locational language.<br><br>The "Bright Lights, Big City" topic focused on England's capital, London. They explored London's geography, including famous landmarks and routes using maps and compass directions. They learned about the Great Fire of London, enhancing their historical context. The project incorporated digital skills through virtual tours and stop-motion animation. The children also examined the countries and capital cities of the UK, making geographical comparisons and understanding city life dynamics**.** |

**Building Futures - Future Learning through the project:**

In Years 4, 5, and 6, students will deepen their geographical knowledge through a series of diverse and engaging topics. The "Rocks, Relics and Rumbles" project will introduce them to the Earth's layers, plate tectonics, rocks, soil, and fossils, including the work of Mary Anning. They will learn about latitude and longitude, cardinal points, and natural disasters like volcanoes, earthquakes, and tsunamis.

The "Urban Pioneers" project will immerse students in urban life, using Ordnance Survey maps to locate human features and sketch routes. They will explore urban art, conduct surveys, and propose improvements for urban environments, fostering creativity and practical mapping skills.

In "Blue Abyss," students will dive into marine geography, studying ocean life and creating underwater models. They will explore deep-sea environments, bioluminescent creatures, and produce a 3-D art exhibition inspired by the ocean.

The "Sow, Grow and Farm" project will cover agricultural land use, climate zones, and farming practices in the UK and the Americas. Students will investigate food transportation and physical features of these regions.

In "Frozen Kingdoms," they will study polar regions, focusing on polar climates, landscapes, climate change, and indigenous people.

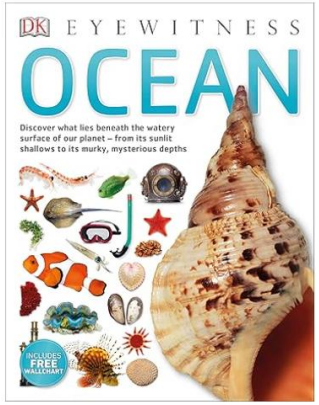
"Hola Mexico" will explore the ancient Mayan civilization, examining Mexico's human and physical geography.

Finally, "Misty Mountain, Winding River" will teach students about rivers and mountain ranges, physical processes like erosion and deposition, and the water cycle. They will use maps, grid references, and contour lines to understand these natural features.

**Vocabulary:**

**Key Text**


Once upon a time in France, a baby was born under the summer sun. His parents named him Jacques. As he grew, Jacques fell in love with the sea. He dreamed of breathing beneath the waves and swimming as gracefully as a fish. In fact, he longed to become a manfish. Jacques Cousteau grew up to become a champion of the seas and one of the best-known oceanographers in the world. In this lovely biography, now in paperback, poetic text and gorgeous paintings come together to create a portrait of Cousteau that is as magical as it is inspiring.




From the craft that investigated the wreck of the Titanic to how octopuses make use of jet propulsion: Eyewitness Ocean lets your child learn all about the secret watery world that covers most of our planet and the incredible creatures that live within it! Eyewitness Ocean also includes a giant fold-out wall chart full of facts, perfect for bedrooms or classrooms.

**Other useful texts:**

| Development of Knowledge | Lesson | Lesson Content | Substantive Knowledge | Disciplinary Knowledge |
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| | Lesson 1 | ***NB: Stick A5 widgit vocabulary sheet in children's books prior to starting the lesson.***<br>**Lesson Objective**: WALT (We Are Learning To) understand the proportion of Earth's surface covered by oceans and seas and identify major oceans and seas on a world map.<br>**SDG 14: Life Below Water**<br>• **Goal Link: This lesson introduces students to the importance of oceans, which aligns directly with SDG 14's aim to conserve and sustainably use marine resources.**<br><br>**Lesson Content:**<br>• **Introduction (5 mins)**: | **Substantive Knowledge**:<br>• Children understand that 71% of Earth's surface is covered by oceans and seas.<br>• Children know the names and locations of major oceans in relation to the | **Disciplinary Knowledge**:<br>• Children can use maps, globes, and digital tools to identify and label oceans and continents.<br>• Children can relate Earth's water |

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| | | ○ Use the "Oceans of the World" PowerPoint to revisit KS1 knowledge and introduce the fact that 71% of the world's surface is covered by oceans and seas.<br>○ Emphasise mathematical understanding of 71% as more than half and close to three-quarters.<br>• **Activity 1: Understanding the Earth's Surface Distribution (10 mins)**:<br>○ Split the class into groups of 4. Each student labels themselves as numbers 1-4.<br>○ Ask number 1 to stand up, representing land, while numbers 2-4 stand up, representing oceans and seas.<br>○ Reinforce that much more of the Earth's surface is ocean than land.<br>• **Activity 2: Exploring Oceans and Continents (15 mins)**:<br>○ Show a world map of oceans and continents (final slide of the PPT).<br>○ Discuss how dividing the world into sections helps us explain locations of places and features.<br>○ Use the "Equator, hemispheres, tropics, and poles" PowerPoint to consolidate knowledge of these terms.<br><br>***Additional Note**: When discussing the world's oceans, highlight the Indian Ocean as the ocean bordering southern India, including Karnataka. Explain how this ocean impacts the region's climate, coastal environment, and marine biodiversity.*<br><br>***Prompt**: Encourage students to think about how oceans connect places across the globe, such as North Devon and Karnataka*.<br>• **Activity 3: Using Globes and Google Earth (15 mins)**:<br>○ Use globes and Google Earth to observe oceans and continents from different perspectives.<br>○ Encourage children to note key features they observe.<br>• **Activity 4: World Map Labelling (15 mins)**:<br>○ Children complete a World Map activity sheet, labelling continents and oceans.<br>○ Option to add a 'Did you know' box that answers the key question of the lesson.<br><br>**Adaptation Note for SEND Pupils**:<br>• Provide pre-labelled maps with simpler terms to support understanding.<br>• Use visual aids, such as large-print maps and diagrams, to reinforce concepts.<br>**Diving Deeper Challenge**:<br>• **Task**: Research additional facts about specific seas or oceans, such as their depth, unique species, and special features (e.g., coral reefs, underwater volcanoes). Children record findings in a digital or paper-based table.<br><br>**Conclusion (10 mins)**:<br>• Review the key question using the labelled maps. | equator, tropics, and poles. | coverage to mathematical concepts (e.g., fractions and percentages). |

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| | | • **Big Question**: Why is it important to understand the proportion of Earth covered by water, and how does this shape life on our planet?<br><br>**Practical Resources**:<br>• PowerPoints: "Oceans of the World" and “Equator, hemispheres, tropics, and poles”<br>• World map activity sheets<br>• Globes and Google Earth<br>• Computers or tablets<br>• Information books on oceans and seas | | |
| | **Lesson 2** | **Exploring Oceanic Layers and the Deep Sea**<br>**Key Question**: *What mysteries lie within the layers of the ocean and the deep sea?*<br><br>**SDG 14: Life Below Water**<br>• **Goal Link: As students learn about the ocean's layers and marine biodiversity, this lesson promotes awareness of ocean health and the importance of preserving marine life.**<br><br>**Lesson Objective**: WALT (We Are Learning To) understand the different layers of the ocean, their characteristics, and the types of life found in each zone.<br><br>**Lesson Content:**<br>• **Revisiting Prior Learning (5 mins)**:<br>○ Quick recap from Lesson 1 on the percentage of Earth’s surface covered by oceans and seas (71%).<br>○ Ask students to recall and name some major oceans and their locations on the world map.<br>○ Use a globe or world map to reinforce the concept of Earth's surface being mostly water.<br>• **Introduction (10 mins)**:<br>○ Begin with a discussion on the vastness and depth of the ocean, highlighting its layers and the mysteries within.<br>○ Show the video *Billy Blue Hair – How Deep is the Ocean?* (YouTube) to introduce children to the concept of ocean layers and different environments.<br>○ https://www.youtube.com/watch?v=5zSdaCUCe_s<br>• **Activity 1: Ocean Layers Overview (20 mins)**:<br>○ Introduce the five main ocean layers: the sunlight zone, twilight zone, midnight zone, abyss, and trenches.<br>https://my.cornerstoneseducation.co.uk/api/school/2210/download/2014-abyss_eng_pres_layers_of_the_ocean?context_project_id=29<br>https://my.cornerstoneseducation.co.uk/api/school/2210/download/2014-abyss_eng_pc_layers_of_the_ocean?context_project_id=29 | **Substantive Knowledge**:<br>• Children understand that the ocean is divided into five main layers, each with unique environmental characteristics.<br><br>• Children know that ocean depth affects temperature, pressure, light, and types of living organisms. | **Disciplinary Knowledge**:<br>• Children can create diagrams to represent scientific concepts visually.<br><br>• Children can use observational skills to identify characteristics of different ocean layers and their ecosystems |

- Discuss each layer's unique characteristics, such as light availability, temperature, and pressure, and highlight the fascinating creatures that inhabit each zone.
- Use BBC videos on the *Deep Seabed* and *Twilight Zone* to illustrate the extreme environments of deeper zones and the adaptations of unique ocean creatures.
  https://www.bbc.co.uk/programmes/p00hn502
  https://www.bbc.co.uk/programmes/p0151hmz
- Engage students in a brief discussion after each video, encouraging them to share observations about the differences between layers.

***Additional Note**: When introducing ocean layers, add examples of marine life unique to the Indian Ocean's deeper layers, particularly near the Arabian Sea. Mention species that live in this region, highlighting their adaptations to the environment.*

***Prompt**: Encourage students to think about the diversity of life found in the Indian Ocean and how it compares to other oceans they are learning about.*

- **Activity 2: Cross-Sectional Diagram (20 mins)**:
  - Provide children with materials to create a cross-sectional diagram of the ocean, labelling each layer.
  - Ask students to add key features of each zone (e.g., depth range, light level) and sketch one or two examples of animals found in each layer.
  - Encourage them to use colour to show light changes from the sunlight zone to the trenches.
  - Wrap up with a quick sharing session where students can explain one feature or creature they drew, reinforcing their understanding of each zone.

***Additional Note**: As students create their cross-sectional diagrams, they could add a "Did you know?" fact about the Indian Ocean, such as a notable deep-sea creature or unique ecosystem specific to this region.*

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**Adaptation Note for SEND Pupils**:

- Provide a pre-labelled diagram with simplified descriptions for each layer.
- Use large-print materials and additional visual aids, such as laminated pictures of creatures from each layer.

**Diving Deeper Challenge**:

- **Task**: Choose one ocean creature and research its specific adaptations to survive in its ocean layer. Students can create a small fact sheet with one or two details to present to the class.

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**Conclusion (5 mins)**:

- Review each ocean layer briefly and discuss the types of life found in different zones.
- **Big Question**: Why do you think some ocean layers are still largely unexplored?

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| | | **Practical Resources**:<br>• Videos: *Billy Blue Hair – How Deep is the Ocean?*, BBC *Deep Seabed*, and *Twilight Zone*<br>• Materials for creating a cross-sectional diagram (paper, coloured pencils, markers) | | |
| | **Lesson 3** | **How Do Humans Explore the Deep Oceans?**<br>**Key Question**: *How do humans explore the deep oceans?*<br>**SDG 14: Life Below Water and SDG 9: Industry, Innovation, and Infrastructure**<br>• **Goal Link: The focus on ocean exploration and the history of scientific advances aligns with SDG 9, which promotes innovation in research and development. Learning about early oceanography encourages appreciation for the infrastructure and technology that helps us understand and protect marine ecosystems (SDG 14).**<br><br>**Lesson Objective**: WALT (We Are Learning To) understand the significance of the HMS Challenger expedition and its role in the development of oceanography.<br><br>**Lesson Content:**<br>• **Revisiting Prior Learning (5 mins)**:<br>○ Quick recap from Lesson 2 on the different layers of the ocean.<br>○ Ask students to name one or two creatures or features unique to the deeper layers.<br>○ Review why the deep ocean remains largely unexplored due to extreme conditions.<br>• **Introduction (10 mins)**:<br>○ Introduce the HMS Challenger and explain its groundbreaking role in exploring the deep sea.<br>○ Briefly explain the importance of the 1872 expedition in discovering that life exists on the deep sea bed and how this led to the science of oceanography.<br><br>***Additional Note**: Introduce the Indian Ocean as an area where similar oceanographic studies and explorations have taken place. Mention any discoveries relevant to this ocean that align with HMS Challenger's work, comparing how ocean depths were explored globally.*<br><br>• **Activity 1: Exploring the HMS Challenger Expedition (20 mins)**:<br>○ Show children an overview of the HMS Challenger expedition, using the *Voyage of HMS Challenger* resource on Interactive Oceans.<br>○ Discuss key aspects, including the ship's mission, methods for collecting specimens, and notable discoveries that transformed our understanding of the ocean.<br>○ Emphasise how the crew collected samples from various ocean depths, contributing to scientific knowledge and museum exhibits we see today.<br>***Additional Note**: Include a mention of oceanographic discoveries in the Indian Ocean as a modern extension of the Challenger's findings. Prompt students to consider how studying oceans like the Indian Ocean can help scientists learn more about global biodiversity.* | **Substantive Knowledge**:<br>• Children understand the significance of the HMS Challenger expedition in the development of oceanography.<br><br>• Children know that early ocean exploration led to discovering life on the ocean floor and inspired future scientific advancements. | **Disciplinary Knowledge**:<br>• Children can creatively present historical information through various formats, including narratives, diaries, and documentaries.<br><br>• Children can engage with primary historical content and present information thoughtfully, using both factual reporting and creative expression. |

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| | | • **Activity 2: Creative Presentation (20 mins)**:<br>  ○ Children choose one of the following creative options to present their understanding:<br>  ▪ **Documentary Film**: Working in pairs, students create a short "documentary" as if they were on the HMS Challenger, using simple narration and illustrations to describe the ship's discoveries.<br>  ▪ **Diary Entry**: Individually, students write a diary entry as a scientist aboard the HMS Challenger, capturing daily experiences and observations, focusing on one specific discovery.<br>  ▪ **Presentation**: Using tablets or paper, students create a short presentation about the HMS Challenger's impact, highlighting its influence on modern oceanography.<br>---<br>**Adaptation Note for SEND Pupils**:<br>• Provide a structured diary template or story map with prompts to support creative writing.<br>• Use visual aids, such as illustrations of the HMS Challenger and artefacts, to assist with comprehension.<br>**Diving Deeper Challenge**:<br>• **Task**: Research an individual who was part of the HMS Challenger expedition, writing a brief biography or sharing facts about their contribution to oceanography.<br>---<br>**Conclusion (5 mins)**:<br>• Review the key achievements of the HMS Challenger and its importance to science.<br>• **Big Question**: How do you think new technologies continue to help scientists explore parts of the ocean that remain unseen?<br>---<br>**Practical Resources**:<br>• Resource link: *Voyage of HMS Challenger* – Interactive Oceans https://interactiveoceans.washington.edu/hms-challenger/<br>• Tablets or computers for digital presentations<br>• Video recording equipment or paper for diary writing<br>• Optional: Video editing or presentation software for students creating documentaries or slides | | |
| | **Lesson 4** | **Who Was Jacques Cousteau?**<br>**Key Question**: *Who was Jacques Cousteau?*<br>**SDG 4: Quality Education and SDG 14: Life Below Water**<br>• **Goal Link: By learning about Jacques Cousteau's contributions, students are exposed to the value of education in understanding and conserving the ocean. Cousteau's legacy supports SDG 4's aim to provide quality education that promotes awareness of global issues, and SDG 14's focus on ocean health** | **Substantive Knowledge**:<br>• Children understand who Jacques Cousteau was and why he is a significant figure in ocean history. | **Disciplinary Knowledge**:<br>• Children can listen actively, demonstrating attentiveness through positive verbal and non-verbal cues. |

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| | | **Lesson Objective**: WALT (We Are Learning To) learn about the life and achievements of Jacques Cousteau and practice active listening and response skills.<br><br>**Lesson Content:**<br>• **Revisiting Prior Learning (5 mins)**:<br>  ○ Quick recap from Lesson 3 on the HMS Challenger and its impact on ocean exploration.<br>  ○ Ask students to share one reason why studying the ocean is important and any similarities they may anticipate with Jacques Cousteau's work.<br>• **Introduction (5 mins)**:<br>  ○ Introduce Jacques Cousteau as an important figure in ocean exploration and explain that the class will learn about his life and achievements.<br>  ○ Show a brief clip or image to spark curiosity about who he was and his work.<br>***Additional Note**: Mention how Cousteau's passion for the ocean led him to explore diverse marine environments worldwide. Explain that while he worked in oceans around the world, his discoveries have inspired scientists everywhere, including those studying the Indian Ocean.*<br><br>• **Activity 1: Video and Story Listening (15 mins)**:<br>  ○ Watch a video or short documentary on Jacques Cousteau's life, or read *Manfish: A Story of Jacques Cousteau* by Jennifer Berne, focusing on how his passion for the ocean began and his contributions to ocean exploration.<br>  ○ Encourage students to listen carefully, noting any clues from tone of voice or body language in the video.<br>• **Activity 2: Class Discussion and Response (15 mins)**:<br>  ○ After watching or reading, hold a guided discussion using questions such as:<br>  ▪ Who was Jacques Cousteau?<br>  ▪ What did he do to help people learn about the ocean?<br>  ▪ Why is he considered an important part of ocean history?<br>  ○ Emphasise active listening skills, including verbal cues (e.g., "I understand") and non-verbal cues (e.g., nodding), and explain how these skills show respect and understanding toward the speaker.<br>• **Activity 3: Question Generation and Research Preparation (15 mins)**:<br>  ○ Ask children to brainstorm additional questions they would like to answer about Jacques Cousteau (e.g., his most famous discoveries, how he explored the ocean).<br>  ○ Write these questions on the board, and let each child choose one or two to use as a starting point for further research in future lessons.<br><br>**Adaptation Note for SEND Pupils**:<br>• Provide a written summary of Jacques Cousteau's main achievements. | • Children know that active listening involves both verbal and non-verbal cues to show understanding and respect. | • Children can formulate questions for further research, showing curiosity and engagement with the topic |

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| | | • Use visual aids, such as images of Cousteau's equipment or underwater scenes, to help illustrate key points.<br>**Diving Deeper Challenge**:<br>• **Task**: Research one of Cousteau's inventions or achievements (e.g., the Aqua-Lung) and prepare a short presentation or written description about how it changed ocean exploration.<br>---<br>**Conclusion (5 mins)**:<br>• Reflect on how Jacques Cousteau's passion helped others understand the ocean.<br>• **Big Question**: How did Cousteau inspire others to care about the ocean and its creatures?<br>***Prompt**: Encourage students to reflect on how Cousteau's legacy might influence ocean research in Karnataka, particularly with current efforts to understand and protect marine life along India's western coast.*<br>---<br>**Practical Resources**:<br>• Video clips or documentaries about Jacques Cousteau<br>• *Manfish: A Story of Jacques Cousteau* by Jennifer Berne<br>• Images and visual aids related to Cousteau's work https://my.cornerstoneseducation.co.uk/api/school/2210/download/2014-abyss_dev_pres_jacques_cousteau?context_project_id=29 | | |
| | **Lesson 5** | **What is Sea Pollution and What Can We Do to Save Our Planet?**<br>**Key Question**: *What is sea pollution, and what can we do to save our planet?*<br>**SDG 6: Clean Water and Sanitation, SDG 12: Responsible Consumption and Production, and SDG 14: Life Below Water**<br>• **Goal Link: This lesson addresses SDG 6 by discussing water pollution, while SDG 12 encourages students to think about responsible consumption to reduce plastic waste. SDG 14 is central here as students explore the impact of pollution on marine ecosystems and how to take action.**<br><br>**Lesson Objective**: WALT (We Are Learning To) understand the causes and impact of sea pollution and explore ways to protect our oceans, connecting challenges faced in both the UK and India.<br>---<br>**Lesson Content:**<br>• **Revisiting Prior Learning (5 mins)**:<br>o Recap key takeaways from previous lessons about the importance of oceans, the different ocean layers, and how people like Jacques Cousteau and the HMS Challenger expedition helped us understand the deep sea.<br>o Briefly revisit the Indian Ocean, reminding students of its significance to Karnataka, where their partner school is located.<br>• **Introduction to Sea Pollution (10 mins)**: | **Substantive Knowledge**:<br>• Children understand what sea pollution is and recognize its harmful effects on marine life and ecosystems in both the UK and India.<br><br>• Children know that pollution affects oceans globally and that protecting them is a shared responsibility. | **Disciplinary Knowledge**:<br>• Children can compare environmental issues in different regions, making connections between local and global challenges.<br><br>• Children can collaboratively generate ideas to combat sea pollution, reflecting on their roles in protecting the planet. |

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| | | ○ Begin with a brief discussion about sea pollution: What is it? Why is it a problem? Use visuals or a short video clip to illustrate types of pollution, such as plastic waste, oil spills, and chemical run-off.<br>○ Show a world map highlighting the UK and the Indian Ocean near Karnataka, explaining that pollution affects oceans everywhere, from the waters around North Devon to those in southern India.<br>• **Activity 1: Understanding Pollution's Impact (15 mins)**:<br>○ Use a few case studies or examples of pollution in both the UK and Indian coastal areas:<br>▪ **UK Example**: Show images of plastic pollution on beaches in North Devon or wildlife affected by marine litter.<br>▪ **India Example**: Discuss pollution in the Indian Ocean, perhaps mentioning plastic waste washing up on Karnataka's beaches or its effects on marine life.<br>○ Facilitate a discussion on how these types of pollution affect marine life, local communities, and the global ecosystem.<br>• **Activity 2: Partner School Perspectives (15 mins)**:<br>○ Share insights or photos from the partner school in Karnataka, if available, showing students how pollution affects their coastal environment.<br>○ Encourage students to think about similarities and differences in the types of sea pollution that affect both regions. Ask: "What do you notice about the challenges our schools face with sea pollution?"<br>• **Activity 3: Brainstorming Solutions and Action Steps (10 mins)**:<br>○ As a class, brainstorm ways to reduce sea pollution locally and globally. Ideas could include:<br>▪ Reducing plastic use and recycling<br>▪ Participating in or organising beach clean-ups<br>▪ Educating others about pollution<br>○ Encourage students to think about actions their school can take, including possible collaborative projects with the partner school, like shared posters or videos to raise awareness.<br>---<br>**Adaptation Note for SEND Pupils**:<br>• Provide simple visuals or diagrams showing the types of sea pollution.<br>• Offer sentence starters or keywords for brainstorming ideas.<br>**Diving Deeper Challenge**:<br>• **Task**: Research one specific type of pollution (e.g., plastic waste) and write a few sentences on how it affects both the UK and Indian coastal areas, suggesting a solution for each region.<br>---<br>**Conclusion (5 mins)**: | | |

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| | | • Reflect on the lesson's key question: Why is it important for us to protect our oceans from pollution?<br>• **Big Question**: How can working together with our partner school in India make a difference in protecting the ocean?<br><br>**Practical Resources**:<br>• World map showing the UK and India's Indian Ocean coastline<br>• Video clips or images illustrating types of sea pollution<br>• Photos or insights from the partner school in Karnataka (if available)<br>• Large paper or whiteboard for brainstorming | | |
| | **Lesson 6** | **Why Should We Remember David Attenborough?**<br>**Key Question**: *Why should we remember David Attenborough?*<br>**SDG 13: Climate Action and SDG 14: Life Below Water**<br>• **Goal Link: David Attenborough's work aligns with SDG 13 as he raises awareness about climate change and conservation, including the importance of taking urgent action. His advocacy for protecting oceans directly supports SDG 14.**<br><br>**Lesson Objective**: WALT (We Are Learning To) explore David Attenborough's contributions to environmental awareness and understand how his work inspires global conservation efforts, including the protection of oceans and marine life.<br><br>**Lesson Content:**<br>• **Revisiting Prior Learning (5 mins)**:<br>  ○ Begin with a recap of key lessons learned so far:<br>  ▪ **Lesson 1**: The vastness of Earth's oceans.<br>  ▪ **Lesson 2**: The mysterious layers of the ocean and its unique creatures.<br>  ▪ **Lesson 3**: Early ocean exploration and the impact of the HMS Challenger.<br>  ▪ **Lesson 4**: Jacques Cousteau's influence on ocean exploration.<br>  ▪ **Lesson 5**: The importance of protecting our oceans from pollution.<br>  ○ Ask students to share one memorable fact from each lesson, setting the stage for understanding why figures like David Attenborough are important.<br>• **Introduction to David Attenborough (10 mins)**:<br>  ○ Show a brief video clip of David Attenborough's work, focusing on his passion for the natural world and marine environments.<br>  ○ Discuss his dedication to exploring and documenting the planet's biodiversity, with an emphasis on his campaigns to protect the oceans and raise awareness about pollution and climate change.<br>• **Activity 1: Exploring Attenborough's Impact (15 mins)**: | **Substantive Knowledge**:<br>• Children understand David Attenborough's contributions to environmental conservation and his focus on protecting oceans and marine life.<br><br>• Children know that figures like Attenborough inspire action toward a sustainable planet. | **Disciplinary Knowledge**:<br>• Children can connect themes from previous lessons to create a tribute that reflects environmental issues.<br><br>• Children can summarise information creatively, using visuals and text to express their understanding of Attenborough's impact. |

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| | | ○ Lead a discussion on some of Attenborough's contributions, connecting back to topics from earlier lessons:<br>▪ **Protecting the Oceans**: Relate his work on ocean conservation to the importance of keeping our oceans clean, as discussed in Lesson 5.<br>▪ **Deep Sea Exploration**: Connect his documentaries on ocean life to the layered ocean zones and marine creatures from Lesson 2.<br>▪ **Historical Legacy**: Compare his impact to that of ocean explorers like Jacques Cousteau and the HMS Challenger, as discussed in Lessons 3 and 4.<br>• **Activity 2: Creating a Tribute to David Attenborough (20 mins)**:<br>○ **Task**: Students create a tribute poster, short video, or written piece about David Attenborough's impact, summarising what they learned about his contributions and why he is important to remember.<br>○ Encourage students to include:<br>▪ Key phrases that reflect his love for the oceans and nature<br>▪ Visuals (e.g., ocean creatures, images of pollution) to represent the environmental challenges he highlighted<br>▪ Facts from previous lessons about the ocean and conservation efforts<br>○ If possible, students can partner with a peer to collaborate, sharing insights from the UK and Karnataka perspectives on ocean conservation.<br>• **Activity 3: Linking to the UK-India Partnership (5 mins)**:<br>○ Prompt students to think about how David Attenborough's message of conservation applies to the UK and India.<br>○ Discuss how working with their partner school in Karnataka could help both communities understand and protect their local environments, just as Attenborough's work has inspired a global conservation effort.<br>---<br>**Adaptation Note for SEND Pupils**:<br>• Provide a simplified tribute template with key phrases and visuals for students to choose from.<br>• Use large images and simple descriptions to explain Attenborough's impact on ocean conservation.<br>**Diving Deeper Challenge**:<br>• **Task**: Research one specific documentary or campaign by David Attenborough focused on oceans or pollution, and write a few sentences about its message and why it's important.<br>---<br>**Conclusion (5 mins)**:<br>• Reflect on the lesson's key question: Why is David Attenborough's work so important for our world?<br>• **Big Question**: How can we, like David Attenborough, inspire others to care about the oceans and our planet?<br>--- | | |

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| | | **Practical Resources**:<br>• Video clip of David Attenborough's work<br>• Tribute poster materials (paper, markers, images)<br>• Tablets or computers for video or written tributes | | |
| | **Lesson 7** | **Speak Like an Expert**<br>**Key Question**: *How can we share our knowledge like experts?*<br>**SDG 4: Quality Education and SDG 17: Partnerships for the Goals**<br>• **Goal Link: This lesson promotes SDG 4 by encouraging students to communicate their knowledge effectively, supporting their growth as informed, globally aware citizens. The partnership with a school in Karnataka aligns with SDG 17, emphasising collaboration and shared learning to reach sustainable development goals together.**<br><br>**Lesson Objective**: WALT (We Are Learning To) confidently present what we have learnt about oceans and conservation, demonstrating expertise on topics from the "Blue Abyss" lessons.<br><br>**Lesson Content:**<br>• **Introduction (5 mins)**:<br>o Explain to the class that they'll be sharing their knowledge about the ocean, pollution, and ocean explorers as if they were experts.<br>o Remind them of key themes from previous lessons and encourage them to speak confidently, using specific vocabulary and facts they've learnt.<br>• **Activity 1: Expert Stations (15 mins)**:<br>o Divide the class into small groups, assigning each group one of the following themes from the lessons:<br>1. **Ocean Layers**: Describe the ocean zones and creatures found in each layer.<br>2. **Famous Explorers**: Share what they learnt about Jacques Cousteau or the HMS Challenger.<br>3. **Ocean Pollution**: Explain the types of pollution affecting oceans and suggest solutions.<br>4. **Conservation Heroes**: Discuss David Attenborough's role in ocean conservation.<br>o Each group prepares a brief, 1-2 minute "expert presentation." Encourage them to use engaging language to sound like experts.<br>• **Rotating Presentations**:<br>o Arrange the classroom into stations, rotating groups to present their knowledge. If time is limited, select one or two groups to present to the whole class.<br><br>**Recording in Books (5 mins)**:<br>• After the presentations, ask each child to complete a short written reflection in their books: | **Substantive Knowledge**:<br>• Children consolidate their understanding of ocean layers, famous explorers, ocean pollution, and conservation efforts. | **Disciplinary Knowledge**:<br>• Children demonstrate public speaking skills and can summarise their learning in written form. |

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| | | ○ **Task**: Write three key points you shared or learnt during the "Speak Like an Expert" activity.<br>○ **Extension**: Add one additional fact you found especially interesting or important, explaining why it matters for ocean conservation.<br><br>**Adaptation Note for SEN Pupils**:<br>• Provide structured support for presentations:<br>○ Use simple prompt cards with visual cues or key vocabulary for each theme.<br>○ Pair SEN pupils with supportive peers or allow them to present one key point rather than multiple facts.<br>• For recording in books:<br>○ Provide a template or sentence starters, such as "One fact I learnt is…," "This is important because…," to help scaffold their writing.<br>○ Offer the option to draw a related image instead of writing additional facts, if needed.<br><br>**Conclusion (5 mins)**:<br>• Gather the class and praise their effort in "speaking like experts."<br>• Ask them to reflect on how sharing their knowledge can help others understand the importance of ocean conservation.<br><br>**Practical Resources**:<br>• Prompt cards with key facts for each station (optional)<br>• Cue cards for talking points<br>• Reflection template in books for recording key points | | |

abyss

J

Jacques Cousteau

Midnight zone

Pacific Ocean

submarine

Arctic Ocean

# Blue Abyss

Sunlight zone

bioluminescence

coral

climate change

Great Barrier Reef

Twilight zone

aqua-lung

David Attenborough