

❖ Bonus Topic

Ocean zones: from sunlight to abyssal zone

Zone	Simple explanation	Useful words	Animal examples
Sunlight zone	The top part of the ocean. There is enough light for many plants and animals.	bright, warm, shallow, colorful	dolphin, turtle, clownfish, crab, coral
Twilight zone	A deeper zone with less sunlight. Some animals swim up and down for food.	darker, cooler, deeper	squid, lanternfish, jellyfish
Midnight zone	A very dark and cold zone. No sunlight reaches here.	dark, cold, deep, strange	anglerfish, giant squid, deep sea jellyfish
Abyssal zone	One of the deepest parts of the ocean. It is very cold and under great pressure.	very deep, very cold, silent	deep sea crab, sea cucumber

Appendix 1 – Ocean World and Marine Life

What is the Ocean World?	Useful speaking frames
- The ocean is a very large body of salt water. - A sea is usually smaller than an ocean and may be partly surrounded by land. - Marine life means plants and animals that live in the sea or ocean. - A habitat is a place where an animal or plant lives. - The coast is the land beside the sea; an island is land with water all around it.	- My favorite sea animal is... because... - It lives in the ocean / sea / coral reef / deep sea. - It has fins / tentacles / a shell / sharp teeth / bright colors. - It eats fish / seaweed / plankton / small animals. - It can swim / hide / glow / hunt / protect itself.
Common sea animals	Quick tasks
- dolphin, whale, shark, turtle, crab - octopus, jellyfish, seahorse, starfish - clownfish, stingray, tuna, seal, penguin - Body words: fin, tail, shell, tentacle, teeth, gills	- Icebreaker: students say their favorite sea animal and one reason. - Create name cards with one sea animal and display them. - Start an ocean word wall: animals, places, plants, movement words. - Classify words: place / animal / plant / movement. - Label ocean zones on a poster and add animals to the correct zones. - Speaking game: Guess the sea animal.

Appendix 2 – Ocean Habitats and Marine Life

What is an ocean habitat?	Useful adjectives for sea animals
• An ocean habitat is a place in the ocean where plants and animals live. • A habitat gives animals food, water, shelter, space, and safety. • Different habitats have different light, temperature, waves, and depth. • Key question: What helps this animal survive in its habitat?	• colorful, bright, dark, striped, spotted, smooth, rough • tiny, small, long, wide, huge, heavy, soft, sharp • fast, slow, gentle, dangerous, poisonous, strange, glowing • Comparisons: bigger than, smaller than, faster than, more colorful than

Ocean Habitats: examples for classroom rules

Habitat	Simple explanation	Animal examples
Coral reefs	Warm, shallow, colorful places. Corals are tiny animals that build reef homes.	clownfish, sea turtle, seahorse, crab, starfish
Open ocean	Deep blue water far from the coast. Animals swim long distances.	whales, dolphins, sharks, tuna, jellyfish
Deep sea	Very dark, cold, and deep. Some animals make light.	anglerfish, giant squid, glowing jellyfish, deep sea crab
Rocky shore	A coast with rocks, waves, pools, and changing tides.	crabs, mussels, sea stars, small fish, seaweed
Polar ocean	Very cold water near ice. Animals have special bodies to stay warm.	penguins, seals, whales, polar fish

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Appendix 3 – Underwater Exploration Tools and Mission Science

Tool	Explanation
Submarine	A strong underwater vehicle. It carries people deep below the sea.
Scuba gear	Equipment that helps a diver breathe and move underwater.
Oxygen tank	A tank with air for divers. It is carried on the diver's back.
Diving mask	A mask that protects the eyes and helps divers see clearly.
Flippers	Special fins for the feet. They help divers swim faster.
Underwater camera	A camera for taking pictures and videos under the sea.
Sonar	A tool that uses sound to find objects and measure distance underwater.
ROV / robot	A remote-controlled underwater robot. It can explore places too deep for people.
Research vessel	A ship where scientists work, collect samples, and study the ocean.

Useful exploration verbs	Safety language and speaking prompt
• dive, swim, explore, observe, record • collect, measure, discover, protect • find, compare, test, design, report • Past tense practice: Scientists found... / Explorers discovered...	• We must check our equipment before diving. • We should stay with our team. • We must not touch dangerous animals. • We can use robots to explore very deep water safely. • What would you take on an underwater mission? • I would take a mask because... / I would take a camera to...

Activity: Design your own submarine	STEM: Sink or float experiment
• Students draw a submarine for young explorers. • They label: window, light, robot arm, camera, oxygen system, safety door. • They present: Our submarine can... It has... It is safe because...	• Test safe classroom objects in water. • Predict: I think it will sink / float because... • Observe and record results in a simple chart. • Connect to submarines: How can a submarine go down and come up?

Appendix 4 – Ocean Protection and Conservation

What is ocean pollution?	Key conservation vocabulary
• Ocean pollution means harmful things enter the sea and damage ocean life. • Plastic waste can look like food to turtles, birds, and fish. • Oil spills can cover animals and stop them from moving or breathing well. • Old fishing nets can trap turtles, dolphins, sharks, and seabirds. • Pollution can travel by rivers, wind, ships, and people.	• plastic waste, oil spill, fishing net, clean-up, recycling • overfishing, endangered animals, conservation, protect • reduce, reuse, recycle, repair, refuse, rescue • coral reef damage, habitat loss, safe beach, ocean pledge

Ocean problems and ways people can help

Problem	What happens?	How can people help?
Plastic pollution	Bags, bottles, straws, and wrappers can hurt animals.	Use a reusable bottle and pick up litter safely.
Oil spills	Oil makes water dirty and covers animals.	Support clean transport and careful rules for ships.
Overfishing	Too many fish are taken from the sea.	Learn about responsible fishing and protect young animals.
Endangered animals	Some turtles, whales, sharks, and corals are in danger.	Protect habitats and do not buy harmful souvenirs.
Coral damage	Warm water, pollution, and careless touching hurt reefs.	Look, do not touch; keep beaches and water clean.