

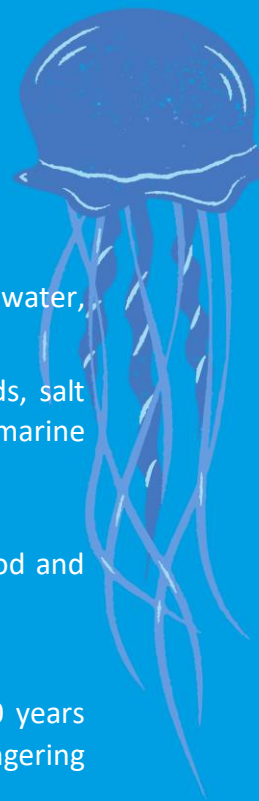
OCEANS AND BLUE ECONOMY

Oceans are important.

- Life arose from the oceans, which cover 71% of the Earth.
- Oceans are an important source of resources including food.
- They play a key role in regulating many of earth's systems, including climate, water, and oxygen.
- They support biodiversity and marine habitats such as seagrasses, sea weeds, salt marshes and mangroves, which absorb carbon and are home to multitude of marine lifeforms.
- Oceans support the blue economy, contributing to 80% of the world trade and commerce¹. Three billion people in the world utilize oceans for their livelihood and 40% of world's population lives along coastal areas².

How oceans are being impacted?

- 90% of fish stocks are fully exploited³, 50% of coral reefs declined in last 30 years jeopardising livelihoods and capacities for disaster risk reduction and endangering marine biodiversity⁴.
- Plastics contribute to 85% of total waste in the oceans, with severe impacts on marine biodiversity⁵.
- The climate crisis caused by increased anthropogenic carbon emissions leads to sea level rise, ocean acidification and loss of biodiversity in the ocean.
- Coastal and marine habitats such as sandy beaches, estuaries, creeks and mangroves are facing destruction due to unchecked development, human activities, pollution and climate change.
- Mangroves are disappearing faster than our forests due to storm surges, tsunamis, rising sea levels and erosion⁶.



THEMES

✓ Fragile Marine Biodiversity¹

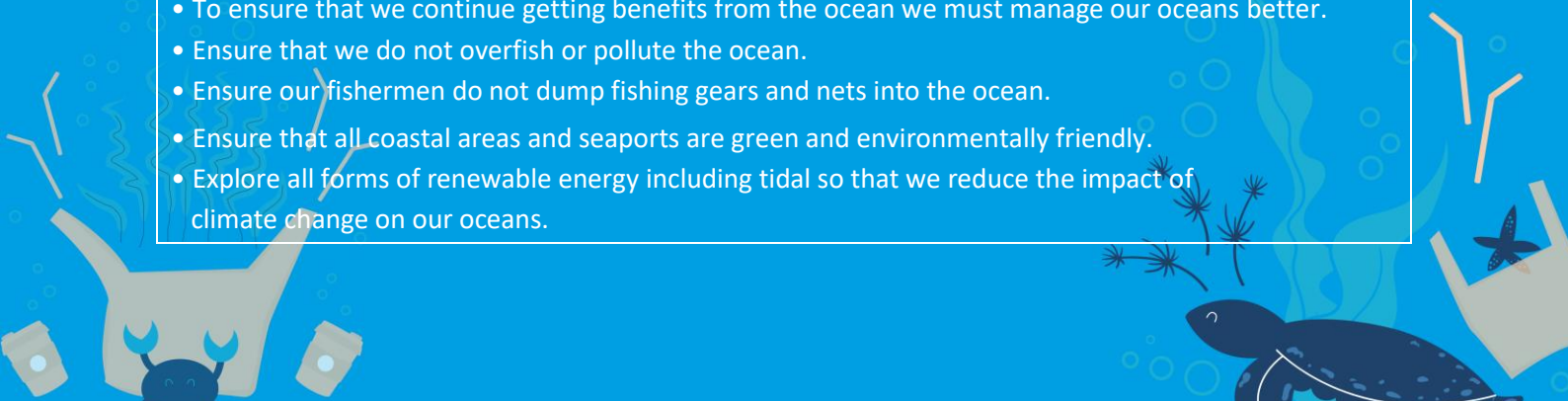
- Coral reefs, sea grass beds, salt marshes and mangroves are very fragile but act as an important habitat for diverse marine organisms such as crustaceans, fishes. They provide a feeding habitat to marine mammals such as dugongs or sea turtles.
- Human activities such as overfishing, pollution, construction activities along the coast are a threat to these fragile habitats.
- Mismanaged plastic waste entering oceans is posing a threat to the habitat with organisms such as fish, seabirds prone to plastic ingestion and entanglement².
- Climate Change and excess carbon dioxide in the atmosphere is making the ocean acidic as the top layers of water absorbs excess carbon dioxide from the air. Did you know since reindustrial times, oceans have become 26% more acidic!³. This results in species like crabs, prawns, shrimps losing their shells and corals becoming weaker.
- Sounds from rumbling big ships, drilling of oil and blasting of the seabed are creating noise pollution in the sea. Marine mammals, reptiles, fishes, and birds use sounds to navigate and move around. Due to noise pollution, they are now confused and disoriented.

✓ Save our oceans from the Plastic Mess!

- Research states that, by 2050, plastic will likely outweigh all fish in the sea.
- In the last ten years, we have produced more plastic products than in the previous century.
- An equivalent of one garbage truck of plastic is dumped into our oceans every minute.
- Plastic waste makes up close to 80% of all marine pollution. It is estimated that around 8 to 10 million metric tons of plastic waste end up in the ocean each year.
- Plastic generally takes between 500-1000 years to break down. Even then, it becomes microplastics, without completely degrading.
- Currently, there are about 50-75 trillion pieces of plastic and microplastics in the ocean.
- This plastic either breaks down into microplastic particles, or floats around and ends up forming garbage patches.

✓ A Healthy Ocean for a Healthy Economy

- Blue Economy contributes about USD 2.3 trillion per year (more than 2 lakh crores rupees) to the global economy¹⁰.
- Blue economy is all about gathering economic benefits from oceans along with ensuring their health.
- To ensure that we continue getting benefits from the ocean we must manage our oceans better.
- Ensure that we do not overfish or pollute the ocean.
- Ensure our fishermen do not dump fishing gears and nets into the ocean.
- Ensure that all coastal areas and seaports are green and environmentally friendly.
- Explore all forms of renewable energy including tidal so that we reduce the impact of climate change on our oceans.



INSTRUCTIONS

Show that you care, share your concern, raise your voice, and express yourself by participating in the interschool painting competition.

Competition is open only for students from Grade 8 to grade 12.

You can choose one of the 3 themes –

- ✓ Fragile Marine Biodiversity
- ✓ Save Our Oceans from the Plastic Mess!
- ✓ A Healthy Ocean for a Healthy Economy

- All artworks must be **Landscape** orientation, prepared on **A3** Size Sheets **ONLY**.
- A **Label** with the Student's name, Class and School name should be pasted **BEHIND** the final artwork submitted.
- Please ensure that the Student Name is **NOT** mentioned on the front side of the Artwork.
- Students are advised to use eco-friendly painting materials like nontoxic crayons, eco-friendly oil paints or simple water colour paints.
- Use of Computer Graphics is not allowed.
- Each participant can submit only one artwork. The final artwork must be sent to:

National Museum of Natural History, Ministry of Environment, Forest, and Climate Change
4th floor, Block 3, CGO Complex, Lodhi Road
New Delhi-110003

Last date for Submission: 4th May 2023

- All participating students will get a digital certificate and **top 20 best paintings will be awarded** and displayed during the G 20 Ocean Dialogue event in Mumbai.

¹ <https://unctad.org/topic/trade-and-environment/oceans-economy>

² <https://unric.org/en/blue-economy-oceans-as-the-next-great-economic-frontier/>

³ <https://unctad.org/news/90-fish-stocks-are-used-fisheries-subsidies-must-stop>

⁴ <https://www.unep.org/explore-topics/oceans-seas/what-we-do/enabling-sustainable-resilient-and-inclusive-blue-economies>

⁵ <https://www.unep.org/news-and-stories/press-release/comprehensive-assessment-marine-litter-and-plastic-pollution#:~:text=The%20report%20highlights%20that%20plastic,per%20meter%20of%20coastline%20worldwide.>

⁶ <https://www.unesco.org/en/days/mangrove-ecosystem-conservation#:~:text=Their%20soils%20are%20highly%20effective,ecological%20and%20socio%2Deconomic%20impacts>

⁷ <https://www.cbd.int/marine/problem.shtml>

⁸ <https://www.iucn.org/story/202207/plastic-pollution-crisis>

⁹ <https://www.un.org/en/conferences/ocean2022/facts-figures>

¹⁰ <https://www.unep.org/news-and-stories/speech/biodiversity-and-oceans-road-sharm-el-sheikh>

