

MINI 30x30

A STUDENTS' WAVE FOR THE OCEAN

Teachers' Guide

COORDINATION



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MINI 30X30 | A STUDENTS' WAVE FOR THE OCEAN

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Contents

Introductory Note	2
Learning About Marine Protected Areas	3
International Cooperation	3
What is the United Nations Ocean Conference (UNOC)?	3
The Mini 30x30 Challenge	4
The Global 30 x 30 target	4
Mini 30x30 – A students' wave for the ocean	4
Marine Protected Areas	5
Does the ocean need protection?	5
What are Marine Protected Areas?	6
What must be considered when creating Marine Protected Areas?	6
Which human activities can be regulated?	7
What are the different levels of protection of Marine Protected Areas?	8
What are the benefits of Marine Protected Areas?	9
How much of the ocean is protected?	10
Diving deeper	10
Discussing the importance of Marine Protected Areas	10
Taking Action: TOP3 Benefits and Open Letter to the UN	11
Appendices	12
Appendix A Activities	12
Activity 1 In my Marine Protected Area	12
Activity 2 Marine Protected Areas from everyone to everyone	20
Appendix B Participation Form	23

Introductory Note

Welcome to the Mini 30x30 Guide,

The contents of this guide were developed to provide a solid basis to learn about Marine Protected Areas in the context of the Mini 30x03 initiative.

The guide is organized in three big sections:

1. **Learning about MPAs**, where you can find all the information necessary to engage your students in the topic.
2. **Discussing the importance of MPAs**, that comprises two activities that were created to help students more fully understand how MPAs work.
3. **Taking action for ocean protection**, the section where students will have the opportunity to contribute to the Mini 30x30 by voting on what they consider are the top 3 benefits of MPAs and deciding if they want to support the delivery of an open letter to the United Nations.

The guide is meant to be used in tandem with the PowerPoint presentation available in the toolkit, however, if this is not a possibility, it is designed to be printed and used on its own, as you will notice that the slides are included in this document as well.

Thank you for your interest in participation in the Mini 30x30. We hope you and your students will find the initiative and the toolkit interesting and informative, and that you will have some fun while contributing to a better future for the ocean.

Learning About Marine Protected Areas

International Cooperation

SLIDES 3 TO 5

What is the United Nations Ocean Conference (UNOC)?

In 2015, countries around the world agreed on a plan to make the planet a better and more sustainable place by 2030. This plan includes **17 large goals**, called the **Sustainable Development Goals (SDGs)**, which help solve problems like poverty, climate change, and pollution.

The United Nations Ocean Conference (UNOC) focuses on **SDG 14, which is all about protecting the seas and the ocean**. And if we don't take care of the ocean, many other goals will also be compromised.

Additional information:

Adopted in 2015 by all 193 UN Member States, the 2030 Agenda for Sustainable Development provides a universal blueprint for achieving a better and more sustainable future for all. At its core are the 17 Sustainable Development Goals (SDGs), which address global challenges such as poverty, inequality, climate change, environmental degradation, peace, and justice.

The UN Ocean Conference is dedicated to SDG 14 – “Life Below Water: *Conserve and sustainably use the oceans, seas and marine resources for sustainable development*” – and plays a key role in achieving the 2030 Agenda, as ocean health is deeply interconnected with global sustainability. Without urgent action to protect marine ecosystems, the achievement of multiple SDGs will be at risk.

A fundamental aspect of the 2030 Agenda is the principle of leaving no one behind, ensuring that all voices – especially those of young people – are included in shaping a sustainable future.

Two UN Ocean Conferences have already taken place:

- **UNOC1 (2017)** | Co-hosted by the Governments of Fiji and Sweden
- **UNOC2 (2022)** | Co-hosted by the Governments of Kenya and Portugal

In June 2025, the **3rd UN Ocean Conference (UNOC3)**, will be co-hosted by Costa Rica and France and will take place in Nice, France. It will serve as a key platform for decision-makers to accelerate efforts to protect the ocean.

UNOC3 is also an **opportunity to amplify students' voices** and ensure that their opinions and concerns are considered in global decision-making processes for ocean conservation.

The Mini 30x30 Challenge

The Global 30 x 30 target

SLIDE 7

Protecting more of the ocean is an urgent global priority. One of the defined targets by the UN Member States is the **protection of 30% of the ocean by 2030**.

This ambitious goal, widely known as the **30x30 Target**, is a crucial step towards protecting marine biodiversity, combating climate change, and securing a sustainable future for the ocean. This target calls for nations to *“Ensure and enable that, by 2030, at least 30% of terrestrial and inland water areas, and of coastal and marine areas [...] are effectively conserved and managed [...] through protected areas and other effective area-based conservation measures”*, while also ensuring the recognition and respect of Indigenous peoples’ and local communities’ rights, cultural heritage, and territories.

Additional information:

In 2016, during the World Conservation Congress in Hawai‘i, the International Union for Conservation of Nature (IUCN) called on its members **to protect 30% of the ocean by 2030**.

This goal was reaffirmed and updated in 2022, during the United Nations Biodiversity Conference (COP15) in Canada, becoming **Target 3 of the 2030 Global Biodiversity Framework**.

Mini 30x30 – A students’ wave for the ocean

SLIDES 8 TO 9

When critical decisions affecting their future are at stake, students’ voices must be considered!

The «Mini 30x30» is a **global movement that empowers students to advocate for ocean protection**, encouraging a stronger commitment of Member States towards a sustainable future.

The final goal is to deliver an **open letter to the United Nations, at UNOC3, enclosing a global and unified message from the young changemakers, urging Member States to commit to the 30 x 30 target**.

To participate, students are encouraged to:

- i. **Engage** with the topic, learn about the importance of MPAs, and discuss it.
- ii. Complete one of the two suggested **activities**.
- iii. **Vote** on whether they **support the submission of the open letter to the UN and select the three benefits of MPAs** they consider most important.

By taking part in «Mini 30x30», students will not only gain valuable knowledge about ocean conservation but will also actively contribute to a real, global movement for change. Their voices will help shape the future of ocean protection, inspiring world leaders to take decisive action at UNOC3.

Marine Protected Areas

Does the ocean need protection?

The health of the ocean is facing rapid decline due to human activities. The ocean is currently facing two major crises: the **climate crisis** and the **biodiversity crisis**, with species extinction at an unprecedented rate. Some of the biggest threats to marine ecosystems are:

- | **Global warming** – marine life and ecosystems are unable to adapt to the planet's rapidly changing climate, increased temperature, decreased oxygen, changes of current patterns, etc.
- | **Ocean acidification** – as ocean stores the atmospheric CO₂, the water is becoming more acidic, directly impacting marine species and ecosystems, and sometimes creating unliveable conditions.
- | **Overfishing** – Overfishing is leading to serious stock depletion, with top predators (such as sharks and tuna) critically affected. Moreover, some unsustainable fisheries are also causing other impacts such as habitat destruction, bycatch of non-commercial species, and leaving ghost nets.
- | **Coastal development** – increased human occupation of coastal areas is very damaging – it causes coastal habitats' destruction, coastal erosion, and pollution.
- | **Pollution** – from the tons of plastic that end up in the ocean every day, to oil spills, urban runoffs with excessive nutrient load leading to oxygen depletion (sometimes creating dead zones), chemical pollution, ocean noise from many sources (sonars, shipping, coastal construction and dredging, oil and gas extraction, etc.) and bright lights, the ocean is suffering from the effects of all kinds of pollution.
- | **Poaching** – some marine organisms are illegally captured.
- | **Invasive species** – non-native species can be intentionally (or not) introduced to new habitats causing impacts by competing with native species.
- | **Seabed mining** – the extraction of metals and minerals from the seabed is a highly destructive and polluting activity, which can have irrevocable effects on the deep-sea fragile ecosystems.

- | **Oil and gas** – large-scale infrastructures are built on the ocean to extract these materials, releasing harmful pollutants, and creating intense noise.

What are Marine Protected Areas?

SLIDE 11

A healthy ocean is essential for the sustainability of the planet, and we urgently need to invest in its protection.

Marine Protected Areas (MPAs) well implemented and managed, are one of the most effective tools for recovering and preserving the ocean's natural values. In simple terms, MPAs are **defined geographical areas, bellow the tideline, with rules that limit human activities.**

By creating MPAs in areas that are endangered and under intense pressure, **species and marine ecosystems can recover and hopefully thrive.** MPAs can also be created in areas less threatened, with the main goal to **preserve their healthy and pristine state, or to promote fisheries, among other reasons.**

Additional information:

According to the International Union for the Conservation of Nature (IUCN), MPAs are:

«A clearly defined geographical space, recognized, dedicated, and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values».

What must be considered when creating Marine Protected Areas?

SLIDE 12

- | MPAs must be based on **bold scientific data** to inform the need and the natural values to protect.
- | **All the users (interested parts) must be engaged** in the discussion – when designing the implementation of MPAs, collaborative processes must involve scientists, politicians, fishers, tourism operators and businesses, NGOs, as well as local communities.
- | The implementation of MPAs must consider the **benefits across multiple dimensions**: the environment, but also people, culture, and businesses/economy.
- | **Rules and laws** must be defined, to limit human activities and ensure vigilance.
- | **Education** is key so that everyone understands the benefits of implementing MPAs.

- | The impact of the implementation of the protective measures needs to be **studied and monitored**.

Which human activities can be regulated?

SLIDE 13

MPAs must have rules to limit several types of human activities. According to the *MPA Guide*, these activities can be:

- | **Mining, mineral oil and/or gas prospecting or exploitation** - any prospecting, exploring, or mining for recovery of sand, gravel or minerals and oil and/or gas prospecting or exploitation (e.g., oil platforms) are **extremely damaging** to marine habitats.
- | **Dredging and dumping** – sediment removal, sea dumping and discharge of harmful substances, including untreated effluent discharges from land, can have a **highly harmful** potential to marine ecosystems. It can cause **habitat destruction, eutrophication, introduction of marine pests and foreign genetical material, among others**.
- | **Anchoring** – anchoring can be very destructive for the sea floor and its ecosystems. Frequent anchoring of large ships, long-term anchoring and anchoring on sensitive habitats, cause **long-term damage**.
- | **Infrastructures** – any human made structure built on coastal areas or on the sea will have an **impact on marine habitats**.
- | **Offshore aquaculture** – some types of offshore aquaculture **destroy habitats, cause hypoxia, use harmful substances or degrade water quality**. Some examples are intensive fish cages, shrimp farms on mangrove habitats, and the introduction of feed supplements with the potential to introduce disease.
- | **Fishing** – fishing impact depends on the **target species, fishing effort (number of individuals that are allowed to be caught), and the fishing gears used**. Industrial fishing with large gears that are dragged across the seafloor or through the water column will have a much larger impact than, for instance, **small-scale fishing** (the most common in small fishing communities).
- | **Non-extractive activities** – these include **snorkelling, swimming, SCUBA diving, tide pooling, cultural or ceremonial gatherings, cultural education, teaching, use of motorized or non-motorized vessels for non-extractive purposes, like whale watching**.

What are the different levels of protection of Marine Protected Areas?

SLIDE 14

Different MPAs can include different levels of protection, with distinct rules applied to human activities. The higher the level of protection, the more restrictions will exist. According to the *MPA Guide*, MPAs can be classified under the following levels of protection:

Minimum Protection – extractive and destructive activities with high total impact can be allowed, except for mining, prospecting, exploitation, and active pipelines with potential to leak. Despite this, the area may still be considered an MPA by IUCN criteria, with some benefits for conservation.

Light Protection – while some protection of biodiversity exists, extractive or destructive activities that have moderate to significant impact may be allowed. These can include infrequent dredging and dumping for selective purposes, moderate and medium scale anchoring, infrastructures and fishing, unfed, small-scale, and low-density aquaculture. Non-extractive activities with moderate impact may be allowed.

High Protection – some light extractive activities with low impact may be allowed. Some examples that may be permitted are small scale and short duration anchoring, small scale and low impact infrastructures, low impact, small scale, low density and unfed aquaculture, infrequent fishing with specific gear types that are highly selective and low impact. Non-extractive activities are regulated and restricted and must be low impact, low density, and small scale.

Full Protection – also known as “no take zones” or “marine reserves,” because no extractive and destructive activities are allowed. Some activities that may be allowed include minimal impact snorkelling, swimming and SCUBA diving, tide pooling, cultural/ceremonial gatherings, education activities, knowledge transmission, and motorized or non-motorized vessels associated with these activities.

Additional information:

To consolidate the knowledge about the levels of protection you can access this *MPA Guide* interactive decision tree: <https://mpa-guide.protectedplanet.net/protection-level-decision-tree>.

You can also further explore the outcomes of each level of protection: <https://mpa-guide.protectedplanet.net/explore/outcomes>.

What are the benefits of Marine Protected Areas?

SLIDES 15 TO 18

MPAs not only play an essential role in protecting marine biodiversity, but they are also extremely important to ensure that people can continue to benefit from everything the ocean has to offer, like food and many other services.

MPAs are also a strong nature-based solution to combat climate change since the ocean works as a carbon sink and is essential in global temperature regulation. Protection of blue carbon ecosystems, especially those with high carbon sequestration such as mangroves, seagrass beds, coastal salt marshes and macro-algae forests, increases the ability to combat climate change.

The ocean also produces over 50% of the Earth's oxygen, and prevents coastal damage caused by extreme natural events, such as storms, erosion, and flooding.

MPAs can thus provide multiple benefits, namely an increase in:

1. **Protection of marine life and biodiversity:** in MPAs marine life can recover, grow, reproduce, and thrive. The number of fish in fully protected MPAs can increase four to five times, with individuals getting older and bigger. Larger organisms produce much more offspring and can disperse to surrounding areas. Over time, the number of species also grows significantly, increasing biodiversity in those areas.
2. **Habitat recovery:** by restricting harmful human activities, MPAs provide marine ecosystems with the necessary time and conditions to regenerate. This leads to the restoration of vital habitats such as mangroves, coral or rocky reefs, seagrass beds, kelp forests which, in turn, allows marine life to recover.
3. **Fight climate change:** the ocean stores heat and atmospheric CO₂, contributing to reduce the excess of this greenhouse gas and thus helping to regulate global temperature and to fight climate change. When protecting marine ecosystems that have high carbon sequestration ability - such as mangroves, seagrass beds, coastal salt marshes and macro-algae forests - the ocean increases this ability to combat climate change. One can say that **the ocean is the «Earth's firefighter»**.
4. **Benefits for fisheries:** when the number of marine animals increases due to protection inside MPAs, some leave the MPA and move to other areas around (in what is called the "spillover effect"). Once outside of the protected area, they can increase stocks that can be captured by fishers, which means that fisheries (and food supply) can benefit from the implementation of MPAs.
5. **Coastal protection:** when habitats like mangroves and reefs are protected, they act more efficiently as barriers to protect coastal areas from storms, flooding, erosion, and currents (which are becoming more frequent due to climate change).

6. **Tourism and local economy:** a healthy ocean attracts visitors who appreciate nature. Sustainable tourism creates new job opportunities and higher income for local businesses and communities.
7. **Preservation of cultural heritage:** many MPAs include areas of cultural and historical significance to local communities, preserving traditional practices and heritage.
8. **Health and wellbeing:** nature in general is key to better human health and wellbeing. The ocean contains important medicinal and aesthetic value, provides spiritual and mental wellbeing, and opportunities for sports and leisure activities.

How much of the ocean is protected?

SLIDE 19

As of 2025, globally only 8% of the ocean is under some sort of protection, but often with no adequate management rules. A much lower percentage of 2.9% is fully or highly protected, and well managed. Therefore, we are still a long way from reaching the 30% target!

Diving deeper

If you are interested in exploring some of the resources mentioned in this guide and deepen your knowledge about MPAs, here we present some websites to visit:

| <https://mpa-guide.protectedplanet.net/>

| <https://mpatlas.org/>

| <https://www.blueazores.org/areasmarinhasprotegidas>

| <https://www.protectedplanet.net/en>

Discussing the importance of Marine Protected Areas

Before the voting process, we suggest two practical activities to help students understand the importance of creating more MPAs and its impacts on both people and the environment. These activities will also allow students to develop skills such as problem-solving and critical thinking, while nurturing their connection to the ocean.

The activities can be found in Appendix A:

[Activity 1 | In my Marine Protected Area](#)

[Activity 2 | MPAs from everyone to everyone](#)

Taking Action: TOP3 Benefits and Open Letter to the UN

SLIDES 24 A 27

Now that your students have learned about MPAs, they are better informed and prepared to vote. For the voting process, the students should:

1. Vote on what they consider the top 3 benefits of MPAs,
2. Decide whether to support the delivery of the open letter to the UN,
3. Claim the certificate of participation (available in the toolkit),
4. Take a group photo with the certificate to be included on the 30x30 mural.

You can do this by filling the participation form [online](#).

In case you can't submit the online form, you can fill [Appendix B](#) and send it to your national coordinator for the initiative or post to the following address:

Oceanário de Lisboa
Esplanada D. Carlos I
1990-005 Lisboa, Portugal

Your input is very important. Together, we are amplifying the voices of students worldwide and contributing to the Mini 30x30 Challenge, urging the UN Member States to protect 30% of the ocean by 2030.

Thank you for your participation!

If you have any questions, please contact us at:

support@students4ocean.com

Appendices

Appendix A | Activities

Concepts and definitions that useful for the activities:

Fishing effort: the total amount of fishing activity on the fishing grounds over a given period of time, often expressed for a specific gear type e.g. number of hours trawled per day, number of hooks set per day or number of hauls of a beach seine per day.

Fish stock: or fish resource means the living resources in the community or population, of one or more species, from which catches are taken in a fishery.

Activity 1 | In my Marine Protected Area

SLIDE 21

This activity promotes a better understanding on the different protection levels in MPAs and the benefits for fisheries of higher protection and good management. Three different levels of difficulty are suggested so that the activity can be adapted to the context of the students.

Easy Level

Materials

- 1 package of pasta or beads (or any other small object) to represent the fish
- 2 A3 paper sheets (one paper sheet per group)
- 4 small containers (two per group) to represent the auction of each year
- Register sheet for each group with the following fields:

Group:	Number of fish			
	Beginning	Caught	Left	After reproduction
Round 1				
Round 2				

Dynamic

1. Create 2 groups of students (A, B) and give one A3 sheet to each group. One will represent an area with no protection and the other an area fully protected.



2. Give 16 fish to each group that they must place on top of their sheets.
3. Play a total of 2 rounds, each representing one year after the implementation of the MPA:

ROUND

Step 1 - Fishing

The groups must fish, taking fish into their auction recipient in the following amounts:

- Group A – capture 75% / $\frac{3}{4}$ of the fish. (4 fish left)
- Group B – no fishing. (16 fish left)

Step 2 - Reproduction

Simulate the natural reproduction rate of fish, in the following amounts:

- Group A – triple the number of fish (result: 12 fish)
- Group B – increase five times the number of fish (result: 80 fish)

ROUND 2

Repeat steps 1 and 2, placing the caught fish on the second auction container, showing the results of the second year, after the establishment of the MPAs.

(Group A finishes the round with 9 fish left; Group B with 400 fish left)

Finally, each group must compare their results in each year.

- | Which group has the most fish left on their sheet?
- | Why does one group have more fish left on their sheet?

- | Why did the fish in the protected area reproduce more?
- | If the group with less fish kept capturing 75% of their fish, could they run out of fish?
- | How could the group with less fish improve their numbers if there was a third round?

Conclusion

Maintaining the fishing effort above the fish population ability to reproduce and replenish leads to decreased populations and overexploitation of fish stocks over time. Within the protected area, fishing activity is more regulated to ensure proper stock management and, when allowed the use of less destructive fishing gears. Good fish stock management is crucial for a healthy ocean, as it allows a sufficient number of individuals to remain in the population, with enough time to reproduce and for the offspring to develop.

Middle Level

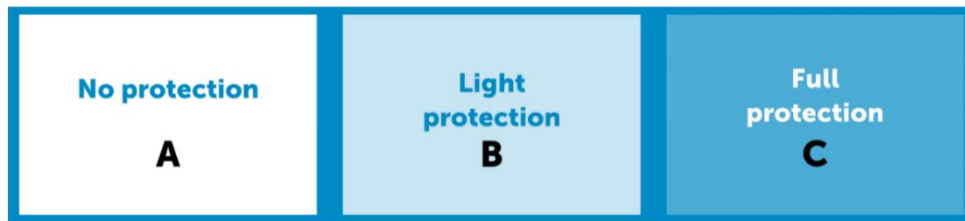
Materials

- 1 package of pasta or beads (or any other small object) to represent the fish
- 3 A3 paper sheets (one paper sheet per group)
- 6 small containers (two per group) to represent the auction of each year
- Register sheet for each group with the following fields:

Group:	Number of fish			
	Beginning	Caught	Left	After reproduction
Round 1				
Round 2				

Dynamic

1. Create 3 groups of students (A, B, C) and give one A3 sheet to each group. These will represent areas with "No protection" (A), "Light protection" (B), "Full protection" (C)



2. Give 16 fish to each group that they must place on top of their sheets.
3. Play a total of 2 rounds, each representing one year after the implementation of the MPA.

ROUND 1

Step 1 – Fishing

The groups must fish, taking fish into their auction recipient in the following amounts:

- Group A – capture 75% / $\frac{3}{4}$ of the fish (4 fish left)
- Group B – capture 50% / $\frac{1}{2}$ of the fish (8 fish left)
- Group C – no fishing (16 fish left)

Step 2 – Reproduction

Simulate the natural reproduction rate of fish, in the following amounts:

- Group A – triple the number of fish (result: 12 fish)
- Group B – increase four times the number of fish in the lightly protected area (result: 32 fish)
- Group C – increase five times the number of fish in the fully protected area (result: 80 fish)

ROUND 2

Repeat steps 1 and 2, placing the caught fish on the second auction container, showing the results of the second year, after the establishment of the MPAs.

(Group A finishes the round with 9 fish left; Group B with 64 fish left and Group C with 400)

Finally, each group must compare their results in each year.

- | Which group has the most fish left on their sheet?
- | Why are the numbers of fish left so different between each group?
- | Why is the reproduction rate different between the different areas?
- | Did the number of captures improve for any of the groups? Why?
- | Could the group with the non-protected area keep capturing 75% of their fish?
- | What could be done to improve the number of fish in following rounds?

Conclusion

Maintaining the fishing effort above the fish population ability to reproduce and replenish leads to decreased populations and overexploitation of fish stocks over time. Within the protected area, fishing activity is more regulated to ensure proper stock management and, when allowed the use of less destructive fishing gears. Good fish stock management is crucial for a healthy ocean, as it allows a sufficient number of individuals to remain in the population, with enough time to reproduce and for the offspring to develop. The higher the level of protection of a MPAs, the more significant its benefits will be, both for the ecosystem and for fishing activities.

Hard Level

Materials

- 1 package of pasta or beads (or any other small object) to represent the fish
- 3 A3 paper sheets (one paper sheet per group)
- 6 small containers (3 per group) to represent the auction of each year
- Register sheet for each group with the following fields, adjusting to each groups' conditions:

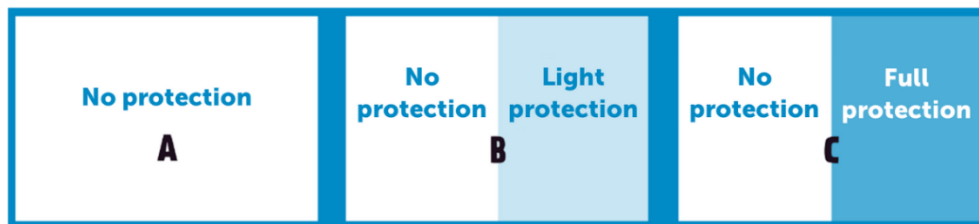
Group:	Number of fish									
	Beginning		Caught		Left		After reproduction		After Migration	
	NP*	LP/FP	NP*	LP/FP	NP*	LP/FP	NP*	LP/FP	NP*	LP/FP
Round 1										

Round 2										
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*NP = No Protection; LP = Light Protection; FP = Full Protection

Dynamic

1. Create 3 groups of students (A, B, C) and give one A3 sheet to each group. These will represent areas with "No protection" (A), "No protection + Light protection" (B), "No protection + Full protection" (C)



2. Give 16 fish to each group that they must place on top of their sheets. In this case, groups B and C place half of the "fish" on the no protection area and half on the protected area.
3. Play a total of 2 rounds, each representing one year after the implementation of the MPA:

ROUND 1

Step 1 – Fishing

The groups must fish, taking fish into their auction recipient in the following amounts:

- Group A – capture 75% / $\frac{3}{4}$ of the fish (4 fish left)
- Group B – capture 50% / $\frac{1}{2}$ of the fish inside the lightly-protected area and 75% / $\frac{3}{4}$ in the non-protected area. (4 fish left inside the protected area; 2 fish left in the non-protected area)
- Group C – no fishing inside the protected area and capture 75% / $\frac{3}{4}$ in the non-protected area. (8 fish left inside the protected area; 2 fish left in the non-protected area)

Step 2 – Reproduction

Simulate the natural reproduction rate of fish, in the following amounts:

- Group A – triple the number of fish. (result: 12 fish)
- Group B – increase four times the number of fish inside the lightly-protected area and triple inside the non-protected area. (result: 16 fish in the protected area and 6 fish in the non-protected area)
- Group C – increase five times the number of fish inside the fully-protected area and triple inside the non-protected area. (result: 40 fish in the protected area and 6 fish in the non-protected area)

Step 3 – Migration

In groups B and C, half of the fish present inside the protected area must move into the non-protected area, representing the spill-over effect. (Group B finishes the round with 14 fish in the non-protected area and 8 fish in the protected area; Group C finishes the round with 26 fish in the non-protected area and 20 fish in the protected area)

ROUND 2

Repeat steps 1, 2 and 3, placing the caught fish on the second auction container, showing the results of the second year, after the establishment of the MPAs. Round up decimal numbers.

(Group A finishes the round with 9 fish left; Group B with 19 fish in the non-protected area and 8 fish in the protected area; Group C with 67 fish in the non-protected area and 48 fish in the protected area)

Finally, each group must compare their results in each year.

- | Which group has the most fish left on their sheet?
- | Why are the numbers of fish left so different between each group?
- | Why is the reproduction rate different between the differently protected areas?
- | Did the number of captures improve for any of the groups? Why?
- | Could the groups with the non-protected areas keep capturing 75% of their fish in there?
- | Under what level of protection did the fish stocks had more time to recover?
- | Why did fish migrate from protected areas to non-protected areas? What effect did that have in the number of fish left on these areas?
- | What could be done to improve the number of fish in following rounds?

Conclusion

Maintaining the fishing effort above the fish population ability to reproduce and replenish leads to decreased populations and overexploitation of fish stocks over time. Within the protected area, fishing activity is more regulated to ensure proper stock management and, when allowed the use of less destructive fishing gears. Good fish stock management is crucial for a healthy ocean, as it allows a sufficient number of individuals to remain in the population, with enough time to reproduce and for the offspring to develop. The higher the level of protection of a MPAs, the more significant its benefits will be, both for the ecosystem and for fishing activities. The benefits of highly protected areas are not

limited to the areas under protection, for as the populations grow and the habitat recover, migration of species outside the boundaries of the MPA occurs, having a positive effect adjacent areas that may not be under protection.

Activity 2 | Marine Protected Areas from everyone to everyone

SLIDE 23

The creation of Marine Protected Areas (MPAs) based on solid scientific knowledge is the most effective tool for reversing the loss of marine biodiversity, increasing ocean's resilience against the impacts of climate change, and contributing to a sustainable blue economy. However, to be effective, it depends on the acceptance of local communities and all stakeholders realizing the importance of the measures to be implemented. As such, the involvement and contribution of everyone in participatory discussion processes is crucial. **Students will take the different stakeholders' role and understand the implementation process of an MPA.**

Materials: character cards and their arguments/evidence (listed below).

For the character cards write on a piece of paper the role on one side and the arguments/evidence on the other, according to the following list:

Scientific researchers - Rising global temperatures are melting ice, destroying coral reefs, and expanding dead zones in the ocean are critical impacts of human action. Additionally, ocean acidification is threatening many marine species. We urgently need to establish protected areas to restore ecosystems and preserve blue-carbon ecosystems that help fight climate change, and recover biodiversity, towards a sustainable planet. Moreover, MPAs increase the movement of fish to adjacent areas, benefiting fisheries.

Fishers – Fish has been decreasing, but we have been fishing these waters for generations, and now we are being told we can't fish in our own territory. How are we supposed to feed our families? Closing off areas for protection means fewer fishing grounds and fewer job opportunities. How can the fisheries benefit from MPA?

Politicians - While environmental protection is important, we cannot ignore the economic realities of our region. How can fisheries, tourism and local businesses benefit and create new jobs?

Dive centre / Whale watching business – Nowadays it's more difficult to find the animals and sometimes when they appear, they are smaller, or they are sick and injured. We have seen dolphins with plastic and nets (which compromises our business) and birds with oil on their feathers. The dives are not as exciting as they used to be as habitats are being destroyed and there is less marine life to see.

Ecotourism resort managers – the coastal area is polluted and disorganized. Local species are disappearing, and others appear to unbalance the ecosystem. The number of clients is decreasing (compromising the business).

NGO – We have been working to raise awareness among fishers and the local communities about sustainable practices, but fish stocks are still decreasing, and the ocean being polluted. Many species are being caught before they can reproduce, and marine animals are being removed for decorative and medicinal purposes. We need to protect areas to secure a viable future for the young generations. People need to understand the value of MPAs and to actively advocate for ocean conservation.

Schools – Environmental education is crucial to creating a new generation of conscious citizens. If we do not teach children about the importance of the ocean and to be active in its protection, the problems will only worsen. Marine protection must be a priority to ensure a better future for all.

Dynamic

1. Divide the students into groups representing the different stakeholders/users that must be involved in the creation of an MPA. Give time for each group to familiarize themselves with their roles, arguments, and evidence.
2. Select a spokesperson in each group.
3. Set up a negotiation process, where stakeholders must discuss and justify their positions regarding the establishment of an MPA in a specific area. Each group should present their perspective, outlining potential benefits, concerns, and possible compromises.
4. The teacher will take on the role of the debate moderator, ensuring that all arguments are heard and guiding the discussion toward a final decision.
5. Encourage the stakeholders to reach a consensus on key aspects of the MPA, such as:
 - a. The size and location of the protected area.
 - b. The level of protection (e.g., no-take zones, regulated fishing, ecotourism guidelines).
 - c. Compensation or alternative solutions for affected sectors.
 - d. The role of enforcement and community involvement in managing the MPA.
6. In turn, each group will have the chance to present their arguments and evidence.

Conclusion

At the end of the discussion, students should have reflected on the challenges of balancing ocean conservation with economic and social interests. Despite its environmental, social, and economic benefits, for a MPA to be successful it depends on the involvement of all potential users of the sea. At the end of the activity, students can propose final recommendations and design the official guidelines

for the newly created MPA, reflecting the perspectives of all stakeholders while prioritizing ocean protection.

To further consolidate learning students can discuss:

- | What compromises were necessary to implement the MPA?
- | What challenges did they face in reaching a decision?
- | How can different sectors work together to ensure the success of an MPA?
- | How do MPAs contribute to broader environmental goals such as biodiversity conservation and climate resilience?

Suggestion:

To decrease the difficulty for younger students you can:

- Set only 2 groups: scientists and fishers.

Schools located in coastal areas, can personalize some aspects of the debate to the local context.

Appendix B | Participation Form

The 3rd United Nations Ocean Conference (UNOC3), which will take place in June 2025 in Nice, will gather world leaders to commit to a more ambitious ocean action.

When critical decisions affecting their future are at stake, students' voices must be considered in such a forum. **The Mini 30x30 – A students' wave for the ocean** is a global collaborative initiative to massively mobilise student voices in advocating for ocean protection.

The final goal is to deliver an open letter **to the United Nations**, enclosing a global and unified message from the young changemakers, urging Member States to commit to **protect 30% of the ocean by 2030** (the 30 x 30 target).

After exploring the toolkit materials and learning about the importance of Marine Protected Areas (MPAs) as effective tools for ocean conservation, students are encouraged to:

- i) Express their agreement on the open letter to the United Nations.
- ii) Vote on the MPAs benefits they value the most.

This form is designed to collect the students' votes. It should be completed by choosing **one** of the following alternatives:

A) **Class submission (ideal)** – a teacher fills out the form to report the class poll.

OR

B) **Individual submission** – each student can vote directly by filling out the form.

NOTE: each student must **vote only once**, to avoid duplicating results (i.e., either individually or in a class poll).

Thank you for participating.

(*Mandatory fields)

Section 1

I declare to be aware that my personal data will be processed exclusively for the purposes of data analysis and result compilation, within the scope of my participation in the Mini30x30 Challenge initiative and assignment by Oceanário de Lisboa and Oceano Azul Foundation with the partner organisations (Directorate-General for Education of the Portuguese Ministry of Education Science and Innovation, Programme "Escola Azul" of the Directorate-General for Maritime Policy of the Portuguese Ministry of Economy, Ciência Viva, Portuguese Committee for Ocean Decade, Zoo Lisbon, Network of European Blue Schools, Blue Schools Global Network (IOC-UNESCO)) in their capacity as data controllers, and that, in accordance with GDPR and other applicable legislation, I may exercise my rights to information, access, rectification, erasure, opposition, limitation and portability, by requesting it, in writing, by e-mail to dataprivacy@oceanario.pt or by post to Esplanada D. Carlos I, 1990-005 Lisboa, in which case I must provide proof of my identity and specify the right or rights I wish to exercise. I am also aware of the right to lodge a complaint with the competent supervisory authority for the protection of personal data, the Portuguese National Data Protection Commission: www.cnpd.pt.

Your personal data will not be transferred to third parties, with the exception of those necessary to comply with legal obligations or if you have given your consent.

The data will be kept for the period necessary to perform this purpose and the respective applicable legal deadlines.

For more information, please refer to the regulation of this initiative.

☐ Yes, I am aware of the conditions detailed above *

1. Country*:
2. City/Location*:
3. Choose the type of submission: *
 - a. Class submission (by teacher) → **section 2**
 - b. Individual submission (by students) → **section 6**

Section 2 - Class submission

This section is intended for submissions made by **teachers reporting the voting results of a class or group of students**.

1. Teacher's full name*:
2. E-mail*:
3. School name*:
4. Age group (please consider the class average age) *:
 - a. 4-5 years old
 - b. 6-7 years old
 - c. 8-9 years old
 - d. 10-11 years old
 - e. 12-13 years old
 - f. 14-15 years old
 - g. 16-17 years old
 - h. 18-19 years old
 - i. Other:
5. Class*:
6. Number of students participating*:

Section 3 – Open letter to the UN on the 30x30 target

After reading and discussing the text of the letter, please indicate the number of students who agree, disagree, or abstain from supporting its content and its delivery to the UN. Ensure the total count aligns with the number of participating students.

1. How many students agree? *
2. How many students disagree? *
3. How many students abstain? *

Section 4 – TOP 3 most important benefits of MPAs

Which benefits of Marine Protected Areas students value the most? *

Students should **vote for the 3 MPAs benefits** they consider the most important. Indicate the number of votes from the class for each benefit. In the case of benefits that have not received any votes, please enter '0'.

NOTE: If the number of votes exceeds 3 x the number of participating students, the response will not be considered valid.

1. Protection of marine life and biodiversity _____ (number of votes) *
2. Habitat recovery _____ (number of votes) *
3. Fight climate change _____ (number of votes) *
4. Benefits for fisheries _____ (number of votes) *
5. Coastal protection _____ (number of votes) *
6. Tourism and local economy _____ (number of votes) *
7. Preservation of cultural heritage _____ (number of votes) *
8. Health and wellbeing _____ (number of votes) *

Section 5 – Group photo for a unified and global message

Your group photo can be part of an amazing and huge graphic piece spelling "30x30", which will be showcased at UNOC3 and publicised on digital media. Each pixel of the picture will be one of the class photos, symbolising the union of students, from across the world, for ocean protection. We suggest you hold up your class participation certificate (see toolkit) for the photo.

NOTE: Please ensure that the students have authorisation for image disclosure.

I authorise the integration of the group photograph submitted in a graphic piece "Mini30x30", as mentioned above, and the dissemination of this piece for the purpose of publicising the initiative through institutional events or news, newsletters, information leaflets, institutional presentations and conferences, through written and electronic publications, websites, corporate social networks, blogs, public multimedia platforms or television channels, by Oceanário de Lisboa and Oceano Azul Foundation and by the Partner organisations (Directorate-General for Education of the Portuguese Ministry of Education Science and Innovation, Programme "Escola Azul" of the Directorate-General for Maritime Policy of the Portuguese Ministry of Economy, Ciência Viva, Portuguese Committee for

Ocean Decade, Zoo Lisbon, Network of European Blue Schools, Blue Schools Global Network (IOC-UNESCO)). *

☐ Yes, I authorise the integration and use of the group photo as detailed above

☐ Yes, I authorise the integration and use of the group photo as detailed above and I also authorise its use by the promoter organisations (Aires Marines Éducatives, the EU4Ocean, the European Association of Zoos and Aquaria, the Irish School Sustainability Network, the Monitoramento Mirim Costeiro, the Ocean Conservation Trust, and the Portuguese Network of UNESCO Associated Schools)

☐ No, I do not authorise the integration and use of the group photo as detailed above

Send a copy via e-mail to support@students4ocean.com * → section 8

Section 6 - Individual submission

This section is intended for **students who opted to directly submit their vote.**

1. Full name*:
2. E-mail*:
3. School *:
4. Age*:
5. Class*:

Section 7 – Open letter to the UN and MPAs benefits

After reading and discussing the text of the letter and learning more about MPAs through the materials available on the website and in the toolkit, you can decide whether you **agree with its content and delivery to the UN and vote on the most important benefits of MPAs.**

1. Do you agree with the delivery of this open letter to the United Nations and with its content?*
- a. Agree
- b. Disagree
- c. Abstain/ I don't know
2. Please select the 3 benefits of effective Marine Protected Areas that you consider to be the most important (Please select only 3, otherwise your answer will not be considered as valid).*
1. Protection of marine life and biodiversity ☐
2. Habitat recovery ☐
3. Fight climate change ☐
4. Benefits for fisheries ☐

- 5. Coastal protection ☐
- 6. Tourism and local economy ☐
- 7. Preservation of cultural heritage ☐
- 8. Health and wellbeing ☐

Section 8 – Communications

☐ I authorise my e-mail address to be used by Oceanário de Lisboa to disseminate information related to the Mini 30x30 Challenge initiative.

☐ I authorise my e-mail address to be used by Oceanário de Lisboa to disseminate information related to its activities in the field of ocean conservation, education, aquarium, and exhibitions.

Thank you for your submission!

Send it to your national coordinator for the initiative or post to the following address:

Oceanário de Lisboa

Esplanada D. Carlos I

1990-005 Lisboa, Portugal

Your input is crucial. The data will soon be analysed, and the results of the initiative will later be communicated to the e-mail address you indicated on this form.

Keep an eye on the website to follow up on the next steps of this initiative: www.students4ocean.com

Together, we are amplifying the voices of students worldwide and contributing to the Mini 30x30 Challenge, urging the UN Member States to protect 30% of the ocean by 2030.

The Mini 30x30 Challenge | A student's wave for the ocean