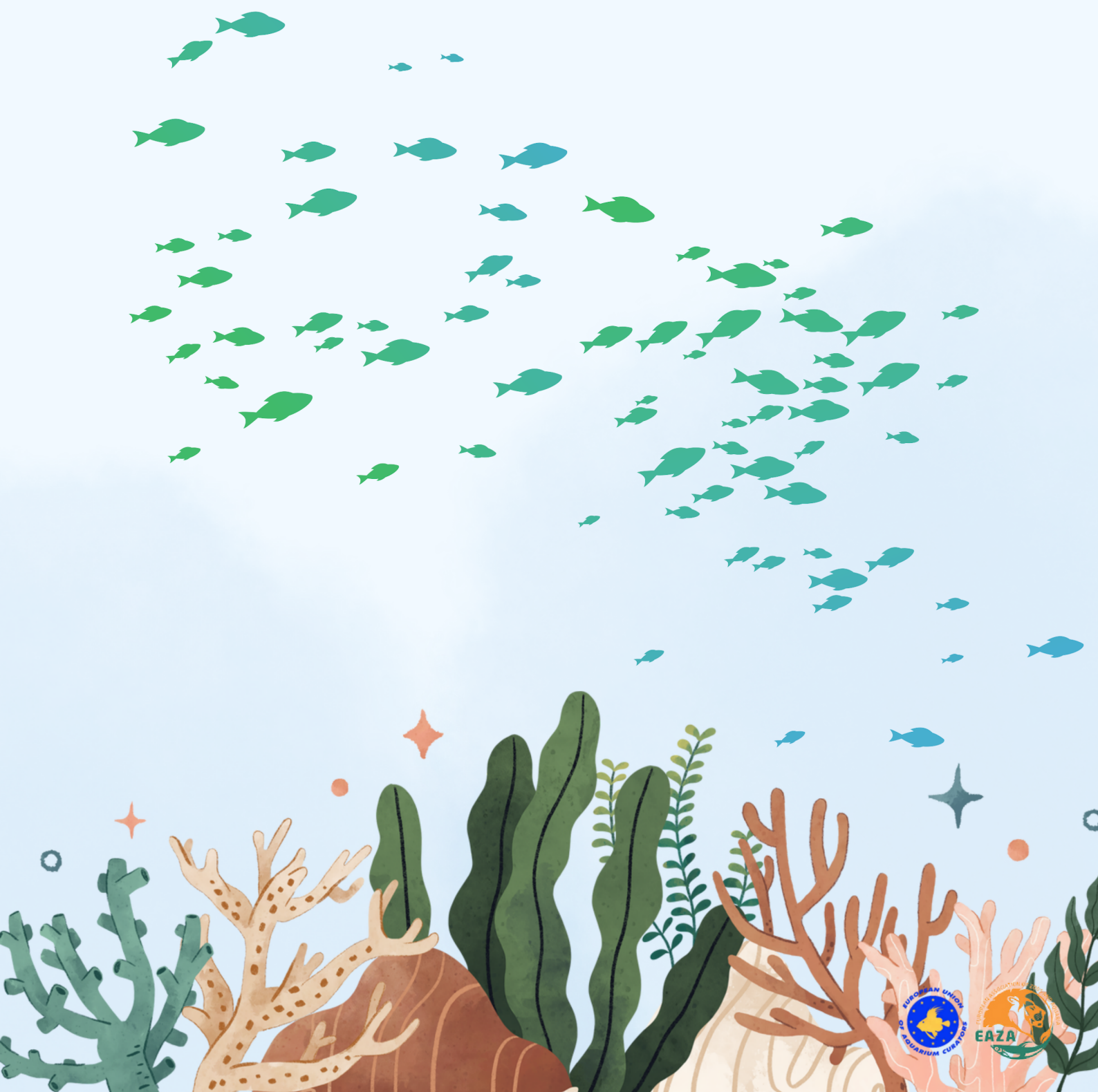


Overfishing

Activity 1 :

Available resources





FÉDÉRATION
WALLONIE-BRUXELLES

This activity was created by the Aquarium-Museum of the University of Liège thanks to the financial support of the Federation Wallonia-Brussels.



The sustainable exploitation of resources represents one of the greatest challenges we will have to face in the upcoming years. The oceans are full of riches, but if we are not careful, they could quickly disappear...

This activity aims to understand how fishing can be managed in a sustainable way over time.



Game rules



Make teams of 5 players.



In each team, each player takes a position around the game board and takes a pot.

- The **game** board corresponds to the different **oceans** of the world with a fixed number (50) of **fish** at the beginning.
- The **pots** represent the **trawlers**, and the players represent the fishermen.



The game is played over 4 rounds of 10 seconds.

- At the start of each round, each trawler can catch as many fish as they wish.
- At the end of the round, each player notes the number of fish taken on the **scoreboard**.
- Between two rounds, the number of fish remaining on the game board doubles: this corresponds to the fish reproduction.



The same process is repeated during the 4 rounds. If there isn't any fish left at the end of one round, the game ends.



The goal for each player is to take as many fish as possible over all 4 rounds, without the stock reaching 0 before the end of the game.



Difficulties

After the first part, several difficulties will need to be faced.

If players are in a hurry and want quickly catch as many fish as possible, they will create the problem of **overfishing**.

Thus, at the beginning, they will rapidly have a large number of fish, but the stocks will quickly decrease and as a result, they will catch less and less fish.

Every single player wanted to catch the most fish, which leads to the collapse of the fish stock.

Another difficulty is to avoid **emptying the stock** by dividing all the fish in the 4th round.

Life doesn't stop after 4 fishing seasons!

It is essential to leave enough fish for future generations!

As well as leaving them enough so that the renewal of the fish stock is guaranteed for many upcoming rounds!



Let's talk about strategies!

Did the players *communicate* constructively with each other during the rounds? The answer will probably be no! However, if they had communicated and compromised among themselves, they could have made the most of the resources. If there is enough fish left at the end of each round, we can start talking about **sustainable fishing**.

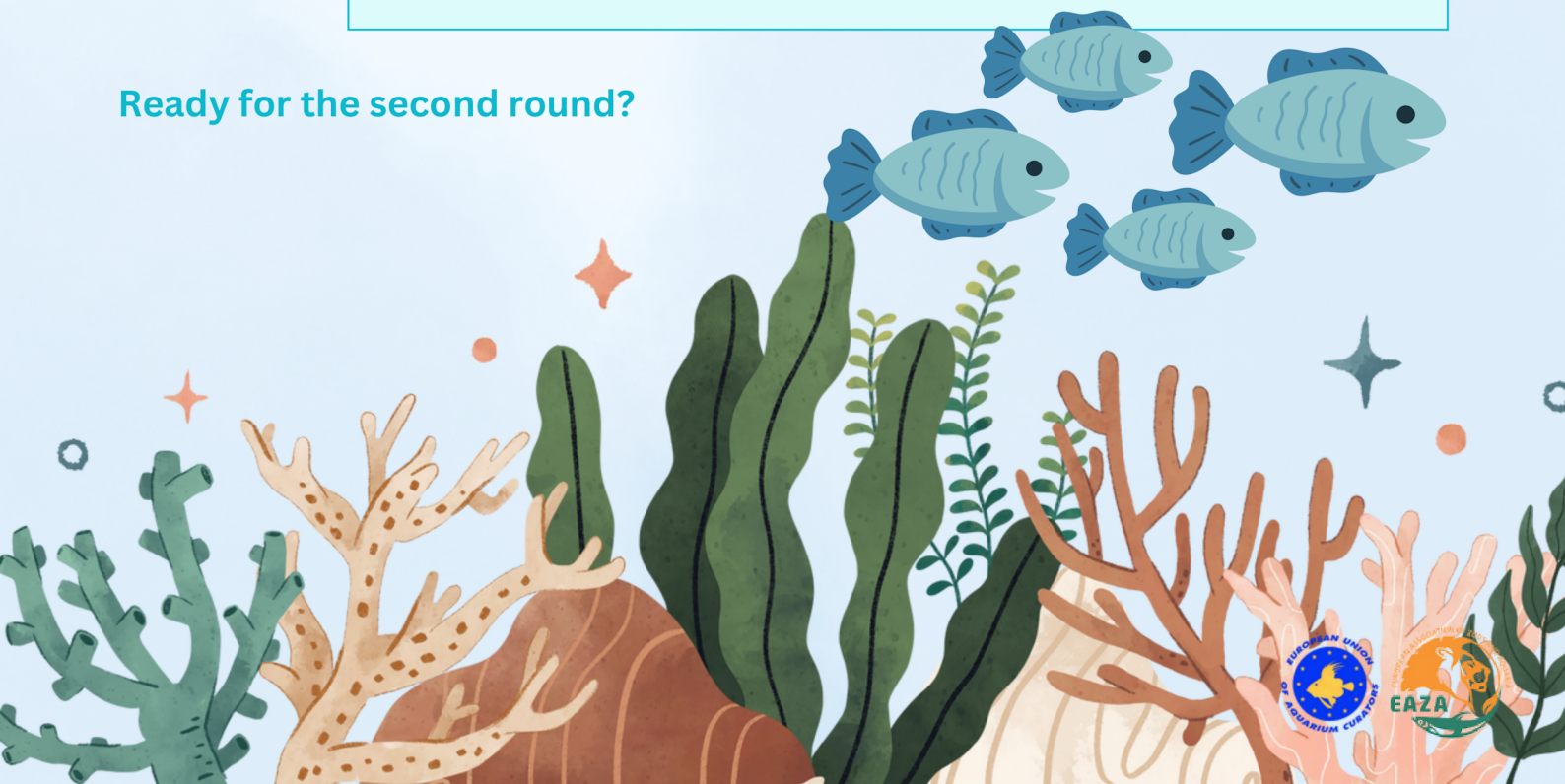
What if we offered each player 10 seconds to *negotiate* before each round?



The secret to develop sustainable fishing is to *distribute half of the available fish stock*. By leaving the other half inside the ocean, the number of fish doubles at the end of each round, and we end up again with the same number of fish at the beginning of each round. And this even after round 4!

With this method, future generations are being left with the same number of fish we have lived with!

Ready for the second round?



Scoreboard

Round :	1	2	3	4	Total
START	50				
Player 1 :					
Player 2 :					
Player 3 :					
Player 4 :					
Player 5 :					
END					



Plateau de jeu



