

The 5th principle**The ocean supports a great diversity of life and ecosystems**

- **Knowledge**

Most of the organisms in the ocean are microbes, the primary producers in the ocean.

Most major groups of organisms on earth are in the ocean.

There are many cycles, adaptations, & relationships among organisms that do not occur on land

Most of the the living space on earth is in the ocean, with diverse and unique ecosystems.

The ocean is defined by its environmental factors in the ecosystems that would affect the organisms living in there.

Majority if the ocean is home to an abundance of the organisms.

The organisms rely on the ocean for existence, for example some don't need the energy from the sunlight.

They rely on chemical energy and chemosynthetic organisms to support life.

Zonation patterns influence organisms' distribution and diversity, but they are affected by density, pressure, and light levels.

Informal video on food webs for kids:

<https://study.com/academy/lesson/ocean-food-web-lesson-for-kids.html>

- **Action**

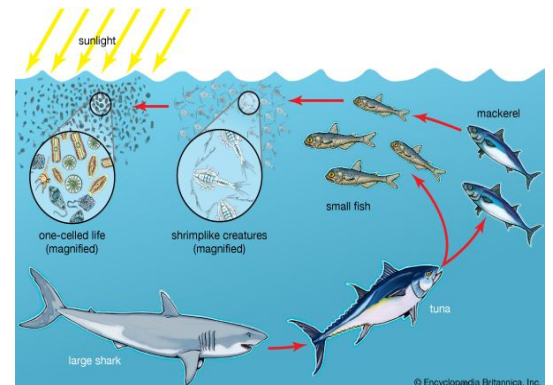
Food web game (similar to the game camouflage)

Materials: coloured pinnies to differentiate the animals

Cones to set up boundaries in the open space

Rules:

- One person is the microbe (primary producer) and they are "it"
 - They cannot move/walk away but they can turn around
- Half of the players are assigned to be small fish (primary consumer)
- A quarter is assigned tuna and the last quarter is assigned shark (apex predator)
- To begin the game, the microbe will stand in the middle of the space and is not allowed to move except to turn around
- The rest of the players will hide in trees or whatever objects are around the open space
- The microbe closes their eyes for 20 seconds and counts while the small fish run up and tag the microbes hand



- The small fish then run back to their hiding spots
- While the small fish are trying to get food from the microbes, the tuna will try to tag the small fish, while the sharks try to tag the tuna
- Tags symbolize the predators eating their prey
- If you are tagged, you are no longer a part of the food chain and you must stand outside the perimeter of the game area
- The microbe then will close their eyes and count to 15 while the small fish, tuna, and sharks repeat what they did in the first round
- The game will continue to become harder to survive as the microbe will count for only 10 seconds in round 3
- The game is over when all of the tuna and small fish are gone and the sharks are left with no food

● Reflection

Our oceans are home to a great diversity of life. From primary producers all the way to the top carnivores. (Plankton-sharks!). This exciting game will give kids a chance to learn about the diversity of organisms that call the ocean home.

Here are some personal answer questions for the kids:

1. What is your favourite sea creature and why.
2. How many different sea creatures can you name?
3. What do you think ocean literacy is?
4. How does the ocean affect your life?

Quiz Questions:

1. Is coral a plant or animal? **Answer -Animal**
2. How many species of sharks do you think there are? **Answer -440**
3. What is the largest type of whale? **Answer -Blue whale**
4. How much of the ocean has been explored? (In percent%) **Answer -5%**