

Food Web Game

Objective: A food web illustrates links among species in an ecosystem according to "who eats what" and shows how species depend on one another for survival.

Resources: Index cards, pencils, coloured pencils and coloured pens, large ball of yarn or string, hole punch, scissors.

Activity: Students are assigned a random animal or plant that is part of the marine food chain with the name of this written on an index card.

Include: Sun, seaweeds, sea snail, Zooplankton, phytoplankton (there can be more than one of each of these), crab, lobster, jelly fish, dolphin, whales, seals, different fish species, prawns, sand eels plus as many others as you need for the whole class.

- Students should **research** their organism and draw an image of it on one side of the card and include **3 important facts** about this in relation to the food chain and the marine ecosystem (on the other side of the card) including: **What do I eat/ do?** e.g. Phytoplankton: 'I make my own food from sunlight energy and water'. e.g., Zooplankton: I eat Phytoplankton '.
- A hole is punched in the top of the card and string put through. The student hangs this card around their neck with the picture facing outwards.
- Students then stand in a circle facing inwards.
- **A ball of yarn** is then thrown to the organism related to the one it is thrown from, in terms of food or energy consumption, **starting from the sun** that fuels other plants and creatures.
- **Each person must say how they are related to that other organism** e.g., Sun- I give light to plants for photosynthesis, plants- I am eaten by sea snails for energy, sea snails- I am eaten by lobsters for food. They may come to the end of a chain and can then start again at another point.
- When all organisms are connected, students can then see the complex "**web**" that has been formed by the yarn. Are there even more connections than were expected?
- Finally, the teacher can take out one of the key species (cut all the stings related to it) such as **zooplankton** and show how the food web might collapse without this.
- **Discuss** how the web collapses when the yarn is cut, and identify which species appear to be most affected.