

Look Who Lives in the Ocean!

Food Chain Pyramid

The ocean is a unique ecosystem. An ecosystem is a biological community of interacting organisms and their environment. Sun, rain and sand help create a habitat but every plant and animal plays a specific and valuable role in keeping the ecosystem working. One of the most important elements of any ecosystem is the food chain.

This project can be done as a class or by smaller groups.

WHAT YOU WILL NEED:

Legal size piece of paper
10 paper cups
Masking tape
Pen

BUILDING A FOOD CHAIN PYRAMID

Across the sheet of paper, write the words: HEALTHY OCEAN WITH UNPOLLUTED WATER.

Turn the cups upside down and using strips of masking tape (so the cups can be re-used), label each of them with one of the following 10 ocean plants or animals: PLANKTON, SEAWEED, ALGAE, SEAGRASS, SEA TURTLE, OCTOPUS, PARROT FISH, SHARK, DOLPHIN and HUMAN.

Lay the paper flat and balance the cups in a pyramid formation on top of it. The bottom row of cups should be the plants and plankton, because they use the space and nutrients the sea provides and are the foundation of any ecosystem.

The second row should be the three small animals who eat, live in or directly depend on plants and plankton.

The third row up should be the two large animals who eat or benefit from the small animals who eat or live in the plants and plankton that live in the ocean. The carnivores need everything below them for survival.

The top cup of the pyramid should be the human. Human life is dependent on stable ecosystems for food, oxygen, drinking water, waste management, a sense of beauty and so much more! We need carnivores, herbivores, plants and oceans for our survival.

The pyramid should look like this:

HUMAN
DOLPHIN SHARK
SEA TURTLE OCTOPUS PARROT FISH
PLANKTON SEAWEED ALGAE SEAGRASS

(HEALTHY OCEAN WITH UNPOLLUTED WATER)

KEEPING THE BALANCE

Like the cups, everything in the natural world is dependent on all the other things. There must be balance. If one animal disappears, others are affected, perhaps even destroyed.

Try to pull a single cup out of the pyramid. Try to slip the paper out from under the stack. Does the pyramid stay standing? Notice what happens to the HUMAN cup when any other creatures, plants or healthy ocean are removed from the stack.

Discuss the results.