

SEA·LIFE AT



Snacks, Shelter & Safety

Science and Citizenship based worksheets for
Key Stages 1 and 2

Support delivery of key topic areas:

Food Chains Habitats Conservation



Welcome to SEA LIFE Snacks, Shelter & Safety

This worksheet based resource has been developed with practising teachers to complement your school visit to the spectacular **SEA LIFE centre** at Chessington World of Adventures & Zoo. It covers three key topic areas:

Snacks

Exploring food chains

Worksheet 1

Science curriculum links:

Sc2 – 5b, 5d, 5e. QCA SoW – Unit 4B Habitats, Unit 6A Interdependence & Adaptation.

Teacher notes on food chains:

All living things depend on each other to survive. In simple terms, a food chain shows how each living thing gets food. At the bottom of the food chain are plants, and phytoplankton or kelp in the sea. Plants get the energy they need from the sun. They are food for other living things. This energy is passed along the food chain.

Worksheet 1 tasks pupils with finding out where sharks sit on the ocean food chain. Clues are provided to help them with this task. The follow-up questions provided can be used as part of the plenary and can be explored together as a class before they are completed individually.

As a result, pupils will learn that green plants can make their own food; some animals eat green plants; some animals eat other animals; and this is what is called a food chain.

Shelter

Understanding habitats

Worksheet 2

Science curriculum links:

Sc1 – 1a, 1b, 2b. Sc2 – 2b, 4c, 5b-5d. QCA SoW – Unit 2C Variation, 4B Habitats, Unit 6A Interdependence & Adaptation.

Teacher notes on habitats:

Allmost all animals in the sea are predators – from mackerel to great white sharks and from starfish to giant squids. Their bodies are designed to capture prey and to avoid becoming prey themselves.

Different fish live in very different places – they almost always have a good reason for choosing where to make their home. Small fish like the goby, anglerfish and plaice need hiding places to escape from bigger predators. Rays come to the surface of the water looking for plankton and small fishes to eat. Flatfish have flat bodies so they can rest on their sides on the sea bed. Benthic sharks live at the bottom of the deepest oceans and usually spend their whole lives without seeing daylight!

Worksheet 2 tasks pupils with researching a sea creature to find out how it has adapted to survive in its environment. This research can be conducted either at the **SEA LIFE centre** at Chessington World of Adventures & Zoo or back in the class via an online treasure hunt activity.

Safety

Importance of conservation

Worksheet 3

Science curriculum links:

Sc2 – 5a. Citizenship curriculum links: 1c, 2a, 2b, 2j. QCA SoW – Unit 3 Animals and Us, Unit 2 Choices.

Teacher notes on conservation:

As well as fostering conservation through enhanced awareness, **SEA LIFE** regularly makes a direct contribution towards conservation and marine animal welfare.

Worksheet 3 gets children thinking about the importance of saving our seas and the potentially catastrophic affects of disrupting ecosystems and food webs. Some of the key threats are overfishing; global warming; pollution; and the slaughter of innocent victims that die annually in fishing nets targeting other species. The death toll of these innocent victims includes sea turtles, sharks, porpoises and even commercial fish like cod and bass. Many of the latter are too small to go to market, but though they are thrown overboard again most are already dead or dying from their ordeal.

There are devices now available like 'pingers' and nets with built-in escape hatches for larger creatures, that can significantly reduce the mortalities, and measures that fishermen can themselves take to help keep other innocent victims alive.

Some fishing practices destroy habitat as well as inhabitants.

Snacks



There's a rumble in the ocean. The sharks are feeling hungry and are searching for a snack.

Part 1: Shark snacks

Do you know where sharks sit on the ocean food chain?

Look at the pictures, read the clues and see if you can find out.

Who eats what?

Clue

Tuna



Large fish, such as the tuna, eat small animals and fish (the ones who feed on plankton).

Who eats what?

Clue

Plankton



Food chains usually start with a plant. In the sea there are tiny floating plants called plankton.

Who eats what?

Clue

Shark



White sharks eat everything from other large fish to sea mammals. They can eat them in one big gulp.

Who eats what?

Clue

Shrimp



Many types of fish and animals such as the snail, shrimp, jellyfish and sea star eat the plankton.

Now write the correct word in each box to complete the food chain below. This arrow ► means **gives food to** and shows how the **energy is transferred** along the chain.







Where are sharks on the ocean food chain? _____

Part 2: Chain reaction

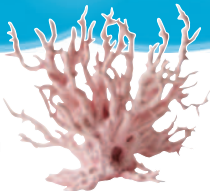
Now it's time to research food chains a little further. Can you complete the following sentences in your workbook?

- Plants are essential to food chains because _____
- Plants are called producers because _____
- Sharks are consumers because _____
- Are shrimps producers or consumers? Shrimps are _____
- Sharks can be eaten by _____



Shelter

Fish can live in almost any place where there is water. Fish live in all the world's seas and oceans. Their habitats (the place where they live) include sandy sea beds, coral reefs and underwater forests. They have to adapt to survive in their habitats. They not only need to find food themselves, they have to try and protect themselves from other predators.



Part 1: Search the sea

A Research one of the sea creatures below to find out how it has adapted to survive in its environment. You'll find them all at the **SEA LIFE centre** at Chessington World of Adventures & Zoo.

Draw the creature you have chosen. Focus on its body shape, tail shape, colour, pattern, mouth and teeth.

Seahorse



Spotted ray



Shark



Clown fish



Plaice



Tompot Blenny



B Answer the following questions in your workbook.

- 1) How does it obtain food to survive?
- 2) How does it protect itself from other predators?
- 3) Is it a prey, predator or both?

C Compare and contrast the creature you have chosen with others in your class.

Part 2: Invent a fish

- It's your turn to invent your own fish!
- Think about where it lives, what it eats and what it hunts.
- Give it at least one adaptation to help it survive in its habitat.
- Write a description of your fish.
- Are you ready to present it to the rest of the class?



Safety

Fish and creatures from one food chain feed off plants and living things from other food chains. In this way the whole system forms one huge web.

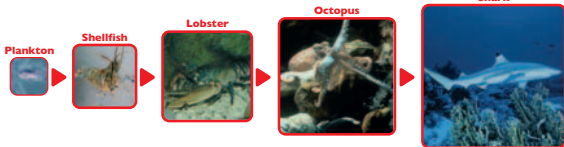
If one animal's source of food disappears, many other animals in the food chain are affected. Humans are usually at the top of the food chain and are often responsible for disrupting food webs.



Birds are another example of animals that affect food chains.

Part 1: Save our sharks

Millions of sea creatures die every year in fishing nets targeting other species. These include sharks. Look at the food chain below.



1 How do you think the food chain might be affected if there were less sharks in the sea?

2 Can you think of other actions that disrupt ecosystems and food webs?

3 What can people do to protect our seas?

Part 2: Spread the word

Design a poster showing the different ways people can protect and preserve our seas.

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Key words

Adaptation

A body part, body covering, or behaviour that helps an animal survive in its environment.

Behaviour

The actions of an animal.

Carnivore

Carnivores eat meat. They have sharp teeth and powerful jaws.

Conservation

Protecting and saving things in nature.

Consumer

A living thing that eats other living things to survive.

Ecosystem

A group of living organisms that interact in an area.

Food chain

The sequence of who eats what to obtain nutrition. Food chains show how energy is transferred. Most food chains start with a green plant.

Food web

A network of many food chains in an ecosystem is called a food web.

Habitat

The place where an animal lives. The physical characteristics of an animal's surroundings.

Herbivore

Herbivores eat plants.

Omnivore

Omnivores eat both animals and plants.

Predator

An animal that hunts and eats other animals for food.

Prey

An animal that is taken and eaten by another animal (predator) for food.

Producer

An organism that makes its own food from light energy or chemical energy. Most green plants are producers. Producers are at the bottom of the food chain.

Top predator

A top predator is at the top of the food chain. It has little or no natural enemies.

