Adaptation Activity Sheet

Animals and plants adapt to the environment that they live in. This means that over time, they change to make themselves best fit the conditions of their habitat.

Those who live in the Arctic, where it is bleak and very cold, and those who live in the desert, where it is very hot and dry, are well adapted to these harsh conditions. If they were not, they would not survive.

Animals that are prey hide from predators as this helps them survive. The fur of some animals is adapted to its habitat. This is called camouflage.

Fill out the table below with plants and animals that live in the five habitats.

Garden	Desert	Urban	Forest / Wood	Sea

	worm	shark	lobster	la	dybird
deer	owl			rat	oak tree
wood	louse				squirrel
snail		camel	flower		
(dandelion		pigeon	se	aweed

Adaptation Activity Sheet

Choose one plant or animal from each habitat and find out how it adapted to its environment.

Garden		
Desert		
Urban		
Forest / Wood		
Sea		

Adaptation Activity Sheet **Answers**

Answers may vary for the garden, urban and forest/wood habitats but accept any reasonable answers, such as:

Garden	Desert	Urban	Forest / Wood	Sea
ladybird	camel	rat	oak tree	lobster
flower		pigeon	squirrel	shark
worm			owl	seaweed
dandelion			woodlouse	
snail			deer	

Example Answers:

Garden

ladybird – Ladybirds have hard outer shells which protect them from other garden predators. Bright colours and being able to secrete a strong smell also warns off predators from attacking them, as they think they are poisonous.

flower – Many flowers have bright coloured petals and sweet smells that attract insects for pollination. They also produce larger grains of pollen that can stick to insects that visit them.

worm – Worms have a streamlined shape which helps them to burrow underground. They also have a segmented body with circular muscles to help them move.

dandelion – Dandelions have seeds shaped like parachutes which disperse on the wind. They also have leaves close to the ground in a rosette shape which prevents other seeds from germinating near to them and helps them survive when they are mown or the flower is eaten by animals.

snail – Snails have a mucus-covered foot muscle that allows them to move in water and on land. The mucus protects them from injury and reduces friction. Different shells may help to camouflage the snail, protect them from predators or help them to burrow. They have eyes that are on stalks that can retract back to protect them.

Desert

camel – Camels have a hump which stores fat to allow them to survive for long periods without food. They also have wide, flat feet to prevent them sinking in the sand. They have long eyelashes and nostrils that can be closed to keep out sand. They have a mixture of thick fur (to keep them warm during cold nights) and thin fur (to help them keep cool in the day).

Urban

rat – Rats have developed larger ears to help them listen for dangers, such as predators. They also have strong paws to help them to scavenge food and strong teeth to help them chew openings into wooden parts of buildings.

pigeon – Pigeons have a streamlined body to help them fly with lower air resistance. They have feathers to keep them warm in cooler weather and to keep them dry. Their eyes also have a membrane to protect them from air and dust.

Forest / Wood

oak tree – Oak trees grow taproots to look for water. They can grow in shallow soil and produce roots that grow just under the soil's surface. They can survive in dry conditions and in poor soil, as its leaves break down and fill the soil with nutrients.

squirrel - Squirrels have thick fur which keeps them warm and helps them to camouflage. Their paws help them to grip food and their tail acts as a balance, as well as being used to wrap around them for extra warmth.

owl – Owls have feathers that are so soft that they make little noise when they fly. This helps them to sneak up on their prey. They also have large eyes that are adapted to help them have excellent vision and sensitive ears to help them hunt.

woodlouse - Woodlice have a hard exoskeleton and are able to roll into a ball to protect themselves from predators. They are also able to absorb water from their surroundings and recycle their own waste to get the copper they need to transport oxygen around their body.

deer – Deer have fur coats to help keep them warm in colder weather. The patterns on their coats helps to camouflage them. They have long, strong legs which help them run quickly and jump high, skills which help them to outrun predators. They also have excellent sight and smell which help them to detect any threats early.

Sea

lobster – Lobsters have a hard exoskeleton which protects them from predators. They are able to shed their exoskeleton and grow a new one when it becomes weakened or injured, which also means they are able to regrow lost limbs. Their antennae are covered in tiny hairs, allowing them to 'smell' their surroundings and detect any prey or predators nearby. Lobsters have also adapted to have two different types of claws – one which has tiny teeth on it, which is used to grab and crush prey, and another covered in a serrated edge which is used to cut.

shark – Sharks have a pointed body shape which makes it easier for them to move through water, without using up much energy. They have excellent senses and are able to smell and hear prey from a great distance. Their jaws are strong and full of teeth and if a tooth is lost, a new one is grown to replace it. Their colour helps them to camouflage in the sea – their underside is paler to match the sky and their top is darker to blend in with the deeper water.

seaweed – Seaweeds have adapted to be tough so that they aren't torn by strong waves. They are also able to store water inside them to prevent them being dried out in the sun. Seaweeds also have gas bladders which help the fronds to float up towards the surface of the water to be closer to the sunlight.