

Pine Class Science Knowledge Organiser - Autumn Term

Seasonal Changes

Key Vocabulary	
seasons	There are four seasons each year, autumn , winter , spring and summer.
autumn	In autumn , the weather begins to get colder. The leaves start to fall from the trees. The amount of daylight becomes less. This means the daytimes are shorter and the night times are longer.
winter	In winter , the weather is much colder. Sometimes it is cold enough to freeze, leaving frost and ice on the ground. It sometimes snows. Many trees have bare branches as all their leaves have fallen off. The daytimes are the shortest in the year and the night times are the longest.
weather	The weather includes the temperature outside, the wind direction and strength, as well as rain, cloud, snow and sun.
daylight	Daylight is when it is light outside. The amount of daylight changes with each season .



The Four **Seasons**

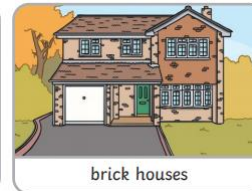
autumn September October November	winter December January February
spring March April May	summer June July August

Everyday Materials

Key Vocabulary	
object	A thing that can be used. For example a door, chair, car, table are all objects .
material	Materials are what an object is made from.
hard	Not easily broken or bent.
soft	If something is soft , it is easy to cut, fold or change the shape of.
stretchy	Can be pulled to make it longer or wider without breaking.
shiny	Reflects light easily.
dull	Doesn't reflect light. Doesn't look bright or shiny .
rough	If something is rough , it feels and looks uneven or bumpy.



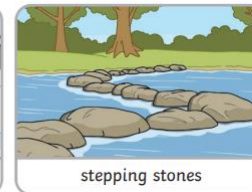
paper books



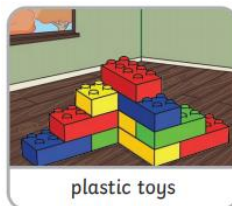
brick houses



fabric clothing



stepping stones



plastic toys



wooden furniture



metal tools



drinking water



glass window

Materials:



plastic



wood



metal



water



glass



stone



paper



brick























fabric

Key Vocabulary	
smooth	Smooth objects have no lumps or bumps.
bendy	Bendy things can be folded easily.
not bendy	If something is not bendy , it can't be folded easily.
waterproof	If something is waterproof , it keeps water out. It keeps things dry.
not waterproof	Not waterproof materials let water in.
absorbent	If something is absorbent , it soaks water up.
not absorbent	If something is not absorbent , it does not soak up water.
transparent	Transparent objects can be seen through.
opaque	Opaque objects can't be seen through.








Animals and their homes

Key Vocabulary	
amphibians	Amphibians live in the water as babies and on land as they grow older. They have smooth, slimy skin.
birds	All birds have a beak, two legs, feathers and wings.
fish	Fish live and breathe under water. They have scaly skin, fins to help them swim and they breathe through gills.
mammals	Mammals are animals that breathe air, grow hair or fur and feed on their mother's milk as a baby.
reptiles	All reptiles breathe air. They have scales on their skin.
carnivore	Animals that mostly eat other animals (meat) are carnivores.
herbivore	Animals that only eat plants are herbivores.
omnivore	Animals that eat both plants and other animals are omnivores.






Mammals			
			
human	mouse	dog	cow
Birds			
			
penguin	chicken	flamingo	robin
Fish			
			
goldfish	tuna	shark	eel
Reptiles			
			
snake	tortoise	lizard	alligator
Amphibians			
			
frog	toad	newt	salamander

Key Vocabulary	
habitat	A habitat is the natural place something lives. A habitat provides living things with everything they need to survive such as food, shelter and water.
microhabitat	A microhabitat is a very small habitat in places like under a rock, under leaves or on a branch. Minibeasts live in microhabitats . The microhabitats have everything they need to survive .
depend	Many living things in a habitat depend on each other. This means they need each other for different things.
survive	This means to stay alive.

Examples of habitats:

		
woodland	urban	coastal
		
rainforest	arctic	desert
		
ocean	river	mountain

Examples of microhabitats:

				
short grass	flowers	inside rotting wood	under leaves	in and on soil

Key discussion points

Which animal group do humans belong to?

What do animals need to survive?

Why is glass a good material for windows?

Can you describe the materials your home is made of?

Why would a tree be a good home for a squirrel?