

## Materials and their uses

Material	Properties	Uses
<b>wood</b> 	opaque hard strong	<b>table</b> 
<b>metal</b> 	shiny smooth reflective	<b>fork</b> 
<b>plastic</b> 	waterproof bendy translucent	<b>water bottle</b> 
<b>glass</b> 	transparent waterproof hard	<b>window</b> 
<b>brick</b> 	hard rough dull	<b>wall</b> 
<b>rock</b> 	strong hard rigid	<b>fireplace</b> 
<b>paper</b> 	tears easily translucent flexible	<b>book</b> 
<b>cardboard</b> 	dull non-reflective opaque	<b>boxes</b> 
<b>fabric</b> 	flexible Soft absorbent	<b>clothes</b> 

## Uses of everyday materials – Year 2

Key vocabulary - properties of materials	
<b>transparent</b>	Completely see-through
<b>translucent</b>	Let some light through but not completely see-through.
<b>opaque</b>	Not able to be seen through.
<b>flexible</b>	Bends easily without breaking.
<b>rigid</b>	Unable to bend or be forced out of shape.
<b>reflective</b>	Reflects light easily.
<b>non-reflective</b>	Does not reflect light.
<b>absorbent</b>	Able to soak up liquid easily.

### Significant scientists

**John Loudon McAdam**  
(1756-1836)



John Loudon McAdam was a Scottish engineer who modernised the way we build roads.

He was the inventor of tarmac road surfacing – commonly called tarmac.

**Julie Brusaw**



Julie is one of the inventors of Solar Roadways. Solar roadways use solar powered road panels to form a smart roadway.

## Changing materials

<b>squashing</b> 	Clay can easily be pushed and pulled.
<b>bending</b> 	Foil is bendy and waterproof.
<b>twisting</b> 	This plastic bottle's shape can be changed.
<b>stretching</b> 	A balloon is very flexible.

It has wooden legs that are rigid and strong.



This chair has a fabric seat because it is soft.

## Examples of habitats

### woodland



Hedgehogs make a nest in leaves in woods.

### pond



Goldfish can breathe in water.

### seashore



Crabs are omnivores and eat seaweed.

### polar



Polar bears are carnivores and eat seals.

### ocean



Stingrays live in saltwater.

### rainforest



Spider monkeys find food high up in the treetops.

# Living things and their habitats – Year 2

## Key vocabulary

<b>living</b>	Living things are plants and animals.  
<b>dead</b>	Dead things include dead animals, plants and parts of plants and animals that are no longer attached.  
<b>never been alive</b>	Objects made of rock, metal and plastic have never been alive.  
<b>habitat</b>	The place where an animal or plant lives and provides their basic needs – <b>shelter, food and water.</b>
<b>micro-habitat</b>	A very small habitat e.g. A log that woodlice live under.
<b>food chain</b>	These show how animals get their food from plants and other animals.

## Examples of micro-habitats

### in leaf litter



Caterpillars need leaves to eat.

### under stones



Woodlice can be found hiding under stones.

### under logs



Worms prefer dark, damp places.

### in shrubs

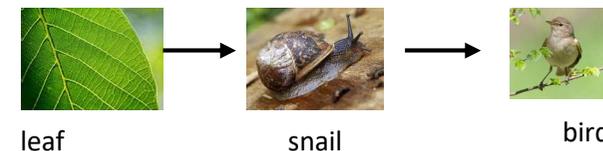


Ladybirds live in shrubs and trees.

## Food chains



The grass **is eaten by** the grasshopper.  
The grasshopper **is eaten by** the spider.



The leaf **is eaten by** the snail.  
The snail **is eaten by** the bird.