

# Knowledge Organiser



## Year 4 - Growing and Changing

### Key questions

#### Body Changes During Puberty

What parts of the body are the same for girls and boys?

What parts of the body are different for girls and boys?

How do some parts of the body change during puberty?

#### Managing Difficult Feelings

What feelings might someone have during puberty?

Why might someone have difficult feelings during puberty?

What are good ways to compromise?

#### Relationships, Including Marriage

Why do some people choose to get married?

Who can get married and how old do they need to be?

Why do some people choose to have a civil ceremony?

Why do some people choose to live together?

### Key vocabulary

breasts testicles womb choice  
civil partnership sperm enjoy  
penis hormones pubic hair  
periods marriage love puberty  
live together civil partnership  
uncomfortable feelings  
menstruation vagina vulva  
compromise share ovaries  
wet dreams

### I can ...


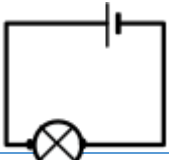

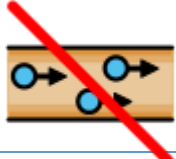

I can label some parts of the body that only boys have and only girls have.

I can list some of the reasons why a teenager might have these difficult feelings (e.g. conflict with parents).

I can tell you why people get married.



**Year 4**  
**Science Knowledge Organiser**  
**Electricity and Circuits**

Electrical circuit		The pathway through which electrical charge flows in an appliance
Circuit diagram		A line drawing that represents how the components in an appliance join together
Electrical conductors		Materials that allow electrical charge to flow through quickly
Electrical insulators		Materials that do not allow electrical charge to flow easily
Power source		Something that transfers electrical energy to make an appliance work.

**Power source:** something that transfers electrical energy to make an appliance work.

**Mains power**



- Provides high power for larger appliances.
- Requires access to an electrical socket.
- Appliances are fixed in place.

**Batteries**



- Allows an appliance to be portable and used anywhere.
- Allows an appliance to be used where no electrical sockets are available.
- Batteries run out and need replacing.
- Batteries are harmful and must not go to landfill.

**Electrical safety**



- Do not use electrical appliances or switches with wet hands.
- Do not put anything other than a plug in an electrical socket.
- Let an adult know if electrical appliances or wires appear damaged.
- Do not leave electrical wires laying across the floor or on hot surfaces.



## Design and Technology Knowledge Organiser

### Year 4 Summer 2 - Mechanical Structures: Slingshot

A prototype is a simple model built to test a design before making the final product.





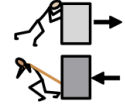
**Prototype one mechanism:** an inclined plane (ramp) is used to make the car roll.






**Prototype two mechanism:** a rubber band is used to slingshot the car forwards.



**Prototype three mechanism:** a rubber band is wound around the back axle and unwinds to make the car move.


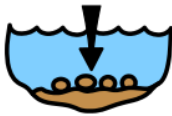


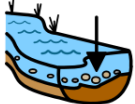

<p>Bearing</p> 	<p><i>A part of a machine that allows one part to rotate.</i></p>
<p>System</p> 	<p><i>A group of related parts that work together as a whole.</i></p>
<p>Force</p> 	<p><i>The use of power, energy or strength.</i></p>

<p>Dowel</p> 	<p><i>A peg or pin that is placed into corresponding holes in two pieces of wood in order to fasten them together.</i></p>
<p>Machine</p> 	<p><i>A device with a system of parts that work together to perform a task.</i></p>
<p>Wheel</p> 	<p><i>A round frame that turns on the axle.</i></p>



# Geography Knowledge Organiser

## Year 4 Summer 2 - Rivers

<p><b>Channel</b></p> 	<p>Where a river flows.</p>
<p><b>Deposition</b></p> 	<p>The process of material being dropped.</p>
<p><b>Erosion</b></p> 	<p>The process of land being worn away.</p>
<p><b>Mouth</b></p> 	<p>Where a river joins the sea or a lake.</p>
<p><b>Sediment</b></p> 	<p>Bits of soil and rock eroded, transported and deposited by a river.</p>
<p><b>Source</b></p> 	<p>Where a river starts.</p>

