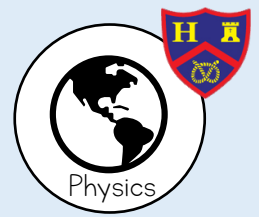


# Electricity

## Year 4



### Review:

*What should I already know?*

- To make something electrical work we need a source of power.

### Essential knowledge

- Identify and name common appliances that run on electricity.
- Construct a simple electrical circuit
- Identify and name the basic parts of an electrical circuit, including, cells, wires, bulbs, switches and buzzers
- Be able to identify whether or not a lamp will light in a simple circuit based upon knowledge of what a simple circuit needs.
- A conductor of electricity is a material that will allow electricity to flow through it.
- An insulator does not allow electricity to flow through it.



### Vocabulary

Physics	Physics is all about the Earth and how it works.
Working Scientifically	Working scientifically is about answering scientific questions.
Appliance	A device or piece of equipment that has been made to perform a specific task.
Battery	A small item used to power small appliances.
Circuit	A pathway that electricity can flow around.
Conductor	A material which energy (in this case, electricity) can flow through.
Insulator	A material which energy (in this case, electricity) cannot flow through easily.

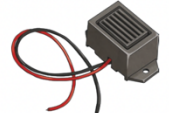
**cell:** Normally, we would call this a **battery** but scientifically, this is a cell. Two or more cells joined together form a **battery**.



**bulb:** Lights up in a complete **circuit**.



**buzzer:** Makes a noise in a complete **circuit**.



**wires:** Used to connect the different components in the **circuit** together.



**motor:** Produces movement in a complete **circuit**.



**switch:** Used to turn other components in the **circuit** on or off.

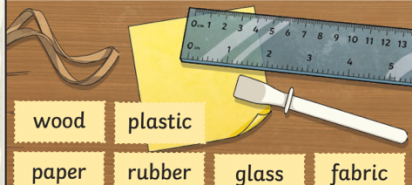


#### Examples of Electrical Conductors



copper steel

#### Examples of Electrical Insulators



wood plastic  
paper rubber glass fabric

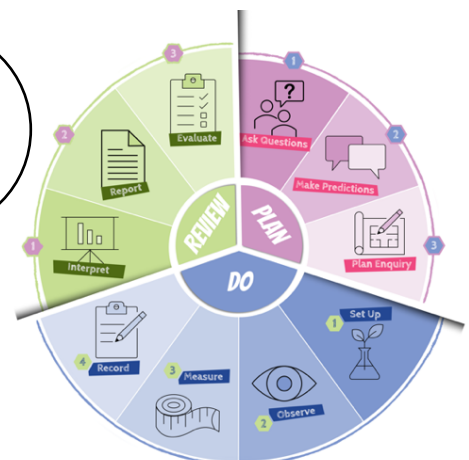
### Working scientifically

#### Our enquiry focus:

Observing Changes Over Time	Pattern Seeking	Identifying, Grouping & Classifying	Fair Testing	Research
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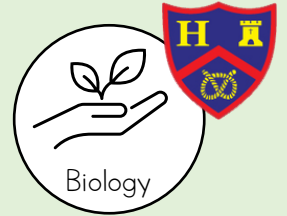
#### Our working scientifically skills:

PLAN	Plan enquiry	DO	Set Up
REVIEW	Interpret	REVIEW	Evaluate



# Living Things and their Habitats

Year 4



## Review:

*What should I already know?*

- Animals can be grouped by what they eat: carnivore, omnivore, herbivores.
- Animals can be grouped into 5 categories: mammals, birds, reptiles, amphibians and fish.
- Living things live in different habitats, including microhabitats.
- Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.

## Essential knowledge.

- Living things can be grouped in different ways (where they live, what type of organism they are, what features they have, invertebrate/vertebrate).
- We can use classification keys to help group, identify and name a variety of living things.

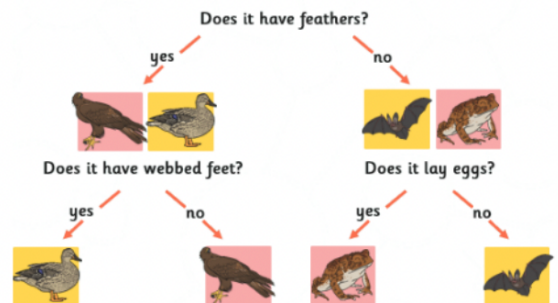
Natural Changes	Human Changes
<ul style="list-style-type: none"> <li>• Earthquake</li> <li>• Storms</li> <li>• Floods</li> <li>• Droughts</li> <li>• Wildfires</li> </ul>	<ul style="list-style-type: none"> <li>• Deforestation</li> <li>• Pollution</li> <li>• Creating a new nature reserve</li> <li>• Introducing a new animal to the habitat.</li> </ul>

- We can recognise that environments can change and that this can sometimes pose dangerous to living things.

## Vocabulary

Biology	Biology is all about living things.
Working Scientifically	Working scientifically is about answering scientific questions.
Classification	Where living things are placed into groups according to their similarities.
Vertebrate/Invertebrate	A creature with/without a spine.
Characteristics	Features or qualities that are specific to something.
Environment	What is around us and contains many different habitats.
Sensitivity	The way living things react to changes to their environment.

## Classification Key:



## Working scientifically

### Our enquiry focus:

Observing Changes Over Time	Pattern Seeking	Identifying, Grouping & Classifying	Fair Testing	Research
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### Our working scientifically skills:

PLAN	Ask questions	DO	Record
DO	Observe	REVIEW	Report

