








# Year 1 Knowledge Organiser - Animals



During this unit, we will be looking at a variety of common animals including fish, amphibians, reptiles, birds and mammals.

Key Vocabulary	
Animal	A living creature
Fur	The fine, soft hair found on different animals
Webbed feet	Fingers and toes that are joined together to help with swimming
Paw	The foot of a mammal
Scales	Small plates that grow from the skin
Feathers	The soft covering on the outside of a bird
Gills	Helps fish to breathe underwater
Carnivores	An animal that eats other animals
Herbivores	An animal that eats plants
Omnivores	An animal that eats other animals and plants

Mammals	Reptiles	Birds	Fish	Amphibians
				
Mammals are warm-blooded.	Reptiles are cold-blooded.	Birds are warm-blooded.	Fish are cold-blooded and live in water.	Amphibians are cold-blooded and live both in water and on land.
Most have hair or fur on their body.	They have dry, scaly skin.	They have feathers, wings and a beak.	They have fins and scales.	They have 3 life stages: egg, larvae and adult.

## A local birdwatch

We will carry out a bird watch within our local area of Horncastle. Working as scientists, we will gather and record data. To be able to compare different seasons, we will repeat a bird watch later in the year for a comparison.

## What scientific skills will I develop from this unit?

- Classifying a variety of animals based on their physical structure, own criteria and what they can eat.
- Observe animals in our local environment over time.
- Generate different questions for investigations
- Using a variety of media to research information about animals including what they eat, their habitats specific characteristics.



## Year 2 Knowledge Organiser - Living Things and Their Habitats

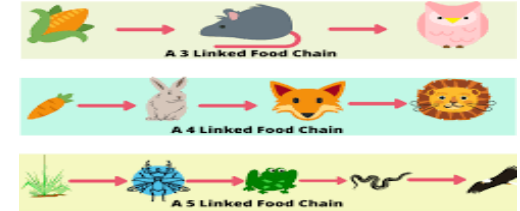


The human body refers to all parts of the body that makes it possible for a human to survive and be healthy. This can be the internal or external parts of our body.

Key Vocabulary	
Habitat	A place where an animal or plant lives.
Desert	An area often covered in sand with very little rainfall.
Ocean	A large area of sea water.
Microhabitat	A very small habitat.
Diet	The food eaten by an animal.
Woodland	A large area with trees, shrubs and ferns.
Living	Something that is alive.
Dead	Something that was living but is now not alive.
Never Alive	Something that has never been alive.
Food Chain	The energy passed from one animal or plant to another when eaten.

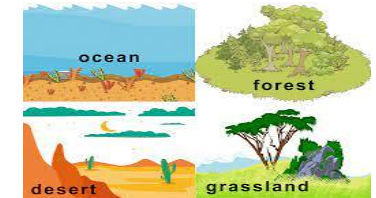
### Food Chains

A food chain is a linear sequence of organisms through which nutrients and energy pass as one organism eats another.



### Habitat

The place where an organism lives is known as a habitat. The word itself comes from a Latin word meaning 'it dwells'. Habitats are made up of physical factors, resources and other organisms a species will need to interact with in order to survive.



### Living, Dead or Never Alive

Living	Dead	Never Alive
Trees	Bones	Metal
Animals	Plants	Stone
Plants	Leaves	Plastic





# Light



Enquiry question: How does the distance between the light source and the object affect the size of a shadow?

## Key Vocabulary

Light source	Objects that give out light
Natural light source	Objects in nature that give out light 
Opaque	A material that light cannot pass through. You cannot see through it.
Artificial light source	Light sources made by humans 
Potential dangers	The possibility that someone or something may be harmed.
Protection	To keep something safe from harm.
Reflect	When light bounces off a surface.
Shadow	These are formed when an object blocks light.
Translucent	A material that lets some light through but not all of it.
Transparent	A material that is completely see through so that all light can pass through.

Why do we need light?

It is completely dark when there is no light.

The more light there is, the easier it is to see objects

We need light to see things.



Sunlight

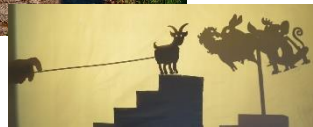
- The light from the sun can be dangerous
- It can damage our eyes
- We must never look directly at the sun
- We can protect our eyes by wearing sunglasses or sunhats in bright sunlight.

## Shadows

Shadows are formed when an opaque object blocks the light.

We can change the size of the shadow by changing the position of the:

- Light source
- Object
- Surface where the shadow is being made



## Reflecting Light

**Shiny** surfaces reflect light very well.



**Matt (dull)** surfaces don't reflect light very well.



## Significant Scientist:

**Thomas Edison (1847 - 1931)**

Thomas Edison was a great inventor and many of his inventions still have a major effect on our lives today. Contrary to popular belief, he did not invent the light bulb, but did invent the first lightbulb that used electricity. He also invented other items that were needed to make the light bulb work in homes including safety fuses and on/off switches for light socket.

