



## Beautiful Bodies: Happy Humans and Amazing Animals!

### BIOLOGY



#### Overview and rationale

Children build on their understanding of their own bodies from the areas of learning of Physical Development and on their knowledge of animals that they encountered in Understanding the World. In this topic, children will learn about the basic needs that all animals have while also learning about the importance of exercise and diet and how we need to respect our own bodies by looking after them. They will learn about babies and gain an understanding of the changes that they have made and about the different stages of human life. They will learn about the young of different animal groups and learn about life cycles of different animals. Children will learn the importance of **respecting** our bodies and the animal kingdom, and how we can look after wildlife and the environment.

#### SCIENCE LEARNING STATEMENTS

Area of Learning	Skills and Knowledge
<b>Scientific Enquiry and applying knowledge in context</b>	I can explore the world around me and raise my own simple questions.
	I can experience different types of science enquiries, including experiments.
	I can begin to recognise ways in which to answer scientific questions.
	I can carry out simple tests.
	I can use simple features to compare objects, minerals, materials and living things. With help, I can decide how to sort and group.
	I can ask people questions and use simple secondary resources.
	I can observe closely using simple equipment to help and, with help, I can observe changes over time.
	With guidance, I can begin to notice patterns and relationships.
	I can use simple measurements and equipment to gather data.
	I can record simple data.
I can use my observations and ideas to suggest answers to questions. I can talk about what I found out and how I found it out.	
With help, I can record and communicate my findings in a range of ways and begin to use scientific language.	

#### NATIONAL CURRICULUM OBJECTIVES

1. identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
2. identify and name a variety of common animals that are carnivores, herbivores and omnivores
3. describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)
4. identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense

#### KEY VOCABULARY

*senses, touch, see, smell, taste, hear, fingers (skin), eyes, nose, ear and tongue, head, neck, arms, elbows, legs, knees, face, ears, eyes, hair, mouth, teeth, penis, testicles, vulva, carnivores, herbivores, omnivores, food chains, vertebrates, invertebrates*

'CORE' KNOWLEDGE	'ADDITIONAL' KNOWLEDGE
1) I can name the 5 types of vertebrate animal groups: fish, amphibians, reptiles, birds and mammals.	a) I can describe the features of each of these groups.
	b) I can identify from pictures what group animals belong to.
	c) I can name some invertebrates such as worms, slugs, and jellyfish.
2) I can name and locate external body parts and what they can do.	a) I can name the five senses – touch, sight, smell, hearing and taste.
	b) I can describe how we can keep our bodies healthy – by exercising and eating a balanced diet.
	c) I know what humans need to survive (water, food, shelter) and what to thrive (sleep, learning new things and connections with others).
3) I know that a carnivore eats the meat of other animals, an omnivore eats meat and plants, and a herbivore eats just plants.	a) I can name some carnivores – such as different types of dogs, cats and bears!
	b) I can name some herbivores – such as zebras, giraffes, elephants, and rabbits.
	c) I can name some omnivores – such as humans!

Possible 'higher order' questioning	
<b>Remember</b>	What are the five different vertebrate groups?
<b>Understand</b>	What types of food do carnivores, omnivores and herbivores eat?
<b>Apply</b>	Can you label the parts of the body?
<b>Analyse</b>	Why should humans eat healthily and exercise?
<b>Evaluate</b>	Why are all creatures important to our world?
<b>Create</b>	Can you create a simple food chain?

School Value	Topic relevance: How/when/where/why is it needed?	Possible Enrichment activities (including trips/visitors, etc)	Bug hunts  Park visits
<b>Resilience</b>	Some animals show real resilience to survive. Can you think of any examples?		
<b>Respect</b>	How do we respect our bodies?		
<b>Responsibility</b>	Who is responsible for keeping you healthy?		
<b>Happiness</b>	Everyone has a right to happy-what things do you do to keep healthy?		
<b>Kindness</b>	How can we show kindness to all living things?		
<b>Pride</b>	What things have you done that you are proud of?		

## DESIGN AND TECHNOLOGY

National Curriculum	Additional Skills	Knowledge	Key Vocabulary
<b>Developing, planning and communicating ideas</b>			
<ul style="list-style-type: none"> <li><i>Design purposeful, functional, appealing products for themselves and other users based on design criteria.</i></li> <li><i>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</i></li> </ul>	<ul style="list-style-type: none"> <li>Draw on their own experience to help generate ideas.</li> <li>Suggest ideas and explain what they are going to do.</li> <li>Model their ideas in card/paper.</li> </ul>	<ul style="list-style-type: none"> <li>Know that before something is made it has to be designed.</li> <li>Know that products are usually made in factories, often by machinery but sometimes by hand (people).</li> </ul>	<p>designed, design, designers, product, audience, factories, machinery, idea</p>
<b>Working with tools, materials and components to make products</b>			
<ul style="list-style-type: none"> <li><i>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</i></li> <li><i>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</i></li> </ul>	<ul style="list-style-type: none"> <li>Begin to make their design using appropriate techniques.</li> <li>With support, measure, mark out, cut and shape a range of materials.</li> <li>Assemble, join and combine materials using a variety of temporary methods (eg glue/tape).</li> <li>Select and use appropriate fruit and vegetables, process and tools.</li> <li>Explore objects and designs to identify likes and dislikes of the designs</li> <li>Begin to use simple finishing techniques to improve the appearance of their product.</li> </ul>	<ul style="list-style-type: none"> <li>Know how to correctly hold a pair of scissors.</li> <li>Know how to cut accurately along different sizes and shapes of lines.</li> <li>Know that tracing (of simple lines using pencil) can be used to develop fine motor skills.</li> <li>Know that there are different ways to join materials (e.g. glue, <u>sellotape</u> and <u>blutack</u>).</li> </ul>	<p>sizes, shapes, lines, tracing, simple lines, fine motor skills, join, materials, glue, <u>sellotape</u>, <u>blu-tack</u>, thread, equipment, hole punched holes</p>
<b>Evaluating processes and products</b>			
<ul style="list-style-type: none"> <li><i>Explore and evaluate a range of existing products</i></li> <li><i>Evaluate their ideas and products against design criteria</i></li> </ul>	<ul style="list-style-type: none"> <li>Begin to verbally evaluate their product, discussing how well it works. Identify strengths and possible changes.</li> <li>Start to evaluate their product by discussing how well it works in relation to the purpose (design criteria).</li> <li>When looking at existing products explain what they like and dislike about products and why.</li> </ul>	<ul style="list-style-type: none"> <li>Know that it is important to evaluate a product to learn and make it better next time.</li> </ul>	<p>make better, what went well</p>
<b>Mechanisms</b>			
<ul style="list-style-type: none"> <li><i>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</i></li> </ul>	<ul style="list-style-type: none"> <li>I can construct a simple slider independently.</li> <li>Explore and use wheels, axles and axle holders.</li> <li>Deconstruct a simple slider and describe how it works.</li> </ul>	<ul style="list-style-type: none"> <li>I know that different mechanisms produce different types of movement.</li> <li>I know and use technical vocabulary relevant to the project.</li> </ul>	<p>slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards vehicle, wheel, axle, axle holder, chassis, body, cab</p>
<b>Project</b>			
<b>Moving animal portraits – pulleys and levers</b>			