



Science Autumn 1 Year 1 Topic: Biology -Animals

Taps Assessment: Animal Classification

Key vocabulary: Head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves
 Names of animals experienced first-hand from each vertebrate group

National Curriculum	Week	NC - Coverage	Disciplinary Knowledge	Substantive Knowledge	Activity Outline
<p>The national curriculum for Science aims to ensure that all pupils:</p> <p align="center"><u>Working Scientifically Key stage 1</u></p> <p>Pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <p>§ asking simple questions and recognising that they can be answered in different ways</p> <p>§ observing closely, using simple equipment</p> <p>§ performing simple tests</p> <p>§ identifying and classifying</p>	1	To name a variety of amphibians, reptiles and birds.	Make close observations of animals from each of the groups	To name a variety of amphibians, reptiles and birds.	Draw/label animals they associate with Autumn as part of their seasonal change.
	2	To identify a variety of amphibians, reptiles and birds.	Compare the structure of two animals from the same or different group e.g. wings, feathers, vertebrates/ invertebrates	To identify a variety of amphibians, reptiles and birds.	Ask the children to name animals and find pictures of these animals for the children to sort. E.g., Legs/no legs Four legs/two legs
	3	To identify and name a variety of common animals including fish, amphibians, reptiles and mammals.	Classify animals using a range of features e.g. lay eggs/give birth to live young. herbivore, omnivore (these terms	To identify and name a variety of common animals including fish, amphibians, reptiles and mammals.	Give images of animals which they grouped together according to similarities in their structures.



<p>§ using their observations and ideas to suggest answers to questions</p> <p>§ gathering and recording data to help in answering questions</p> <p>Subject Content</p> <ul style="list-style-type: none"> identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals identify and name a variety of common animals that are carnivores, herbivores and omnivores describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) <p>School Context</p> <p>Animals around our school grounds.</p>			do not have to be explicitly taught)		TAPAssessment: Animal Classification
	4	To identify and name a variety of common animals that are carnivores, herbivores and omnivores	Group animals using a range of features e.g. lay eggs/give birth to live young. herbivore, omnivore (these terms do not have to be explicitly taught)	To identify and name a variety of common animals that are carnivores, herbivores and omnivores	Give children a sheet with pictures of animals with a speech bubble to show what they eat. Ask children to think which animals they could group together.
	5	Make close observations of animals from each of the groups	Make close observations of animals from each of the groups	To describe the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)	Look at animals that are commonly pets and try and find out what they eat. Ask children if they think whether each animal ate plants, animals or both.
	6	To identify and name a variety of common animals that are carnivores, herbivores and omnivores	Asking simple questions and recognising that they can be answered in different ways.	To identify and name a variety of common animals that are carnivores, herbivores and omnivores	Zoo animals/dinosaurs: can children decide if lions, penguins etc being fed and try to identify what other animals are eating.



Common Misconceptions: Some children may think: • only four-legged mammals, such as pets, are animals • humans are not animals • insects are not animals • all ‘bugs’ or ‘creepy crawlies’, such as spiders, are part of the insect group • amphibians and reptiles are the same

Science Autumn 2 Year 1 Topic: Chemistry - Everyday Materials

Taps Assessment: Ways to test transparency

Key vocabulary: Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through

National Curriculum	Week	NC - Coverage	Disciplinary Knowledge	Substantive Knowledge	Activity Outline
<p>The national curriculum for Science aims to ensure that all pupils:</p> <p style="text-align: center;"><u>Working Scientifically Key stage 1</u></p> <p>Pupils should be taught to use the following practical scientific methods, processes and skills through the</p>	1	<p>Distinguish between an object and the material from which it is made</p> <p>identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p>	<p>Classify one type of object made from a range of materials e.g. a collection of spoons made of different materials.</p>	<p>Distinguish between an object and the material from which it is made</p> <p>identify and name a variety of everyday materials, including wood, plastic, glass,</p>	<p>Give objects that could be made of different materials e.g. cups, spoons and describe them.</p>



<p>teaching of the programme of study content:</p> <p>§ asking simple questions and recognising that they can be answered in different ways</p> <p>§ observing closely, using simple equipment</p> <p>§ performing simple tests</p> <p>§ identifying and classifying</p> <p>§ using their observations and ideas to suggest answers to questions</p> <p>§ gathering and recording data to help in answering questions</p>				<p>metal, water, and rock</p>	
<p>Subject Content</p> <ul style="list-style-type: none"> distinguish between an object and the material from which it is made identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock describe the simple physical properties of a variety of everyday materials 	<p>2</p>	<p>Distinguish between an object and the material from which it is made.</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p>	<p>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p>	<p>Distinguish between an object and the material from which it is made.</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p>	<p>Ask children to choose how to sort objects e.g. twig, water into groups. Encourage children to name the objects and talk about the materials they are made from as they sorted.</p>
	<p>3</p>	<p>Distinguish between an object and the material from which it is made.</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p>	<p>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</p>	<p>Distinguish between an object and the material from which it is made.</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock</p>	<p>Give children the problem of identifying the best material for the bedding in a puppy's basket. Give a range of materials to explore and discuss in their small groups. Discuss which properties would make</p>



<ul style="list-style-type: none"> Compare and group together a variety of everyday materials on the basis of their simple physical properties. 					<p>suitable bedding and introduce the term 'absorbent'. Children to make predictions.</p>
<p>School Context Identify the materials key local buildings are made from and discuss why those materials have been used</p>	<p>4</p>	<p>Describe the simple physical properties of a variety of everyday materials.</p> <ul style="list-style-type: none"> Compare and group together a variety of everyday materials on the basis of their simple physical properties. 	<p>Choose an appropriate method for testing an object for a particular property. Test the materials e.g. absorbency of fabric</p>	<p>Describe the simple physical properties of a variety of everyday materials.</p> <ul style="list-style-type: none"> Compare and group together a variety of everyday materials on the basis of their simple physical properties. 	<p>Give children resources e.g. cotton wool, fabric, newspaper and ask to test the materials to see how absorbent they were.</p>
	<p>5</p>	<p>Describe the simple physical properties of a variety of everyday materials.</p> <ul style="list-style-type: none"> Compare and group together a variety of everyday materials on the basis of their simple physical properties. 	<p>Use their test evidence to answer the questions about properties e.g. Which cloth is the most absorbent?</p>	<p>Describe the simple physical properties of a variety of everyday materials.</p> <ul style="list-style-type: none"> Compare and group together a variety of everyday materials on the basis of their simple physical properties. 	<p>Using their learning from the previous simple test, the children suggested a material that they felt would be suitable for the bedding and explained why</p>
	<p>6</p>	<p>Describe the simple physical properties of a variety of everyday materials.</p> <ul style="list-style-type: none"> Compare and group together a variety of 	<p>Asking simple questions and recognising that they can be answered in different ways.</p>	<p>Describe the simple physical properties of a variety of everyday materials.</p> <ul style="list-style-type: none"> Compare and group together a variety of 	<p>Taps Assessment: Ways to test transparency</p>



		everyday materials on the basis of their simple physical properties.		everyday materials on the basis of their simple physical properties.	
--	--	--	--	--	--

Common Misconceptions: Some children may think: • only fabrics are materials • only building materials are materials • only writing materials are materials • the word 'rock' describes an object rather than a material • 'solid' is another word for hard