







Science Curriculum Overview







Year 1

Term	Science Topic	Knowledge and understanding	Scientific Enquiry Skills	What I will know and remember
1	Animals including humans	<p>To identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p> <p>To identify and name a variety of common animals that are carnivores, herbivores and omnivores.</p> <p>To describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</p> <p>To identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p>	<p>Observe and identify animals in the world around them.</p> <p>Make careful observations of animals in the same group and can use simple features to compare living things (animals).</p> <p>Use simple secondary sources to find answers to help them sort and classify animals according to what they eat.</p> <p>Use their senses to carry out simple practical tests, using simple equipment. Draw simple conclusions and can, with support, record and communicate their findings in a range of ways.</p> <p>Use simple sorting diagrams to sort and classify objects (animals) into simple groups of their choice and are beginning to explain why they have sorted them this way.</p>	<p>I can identify and name some common animals.</p>  <p>I can describe and compare the structure of a variety of common animals.</p>  <p>I can identify, name and sort animals that are herbivores, carnivores and omnivores.</p>  <p>I can identify the parts of the human body.</p>  <p>I can identify the five senses and perform simple tests to observe them.</p>  <p>I can group animals according to a criteria.</p> 

Vocabulary

- Names of animal groups: fish, amphibians, reptiles, birds, mammals.
- Animal diets: carnivore, herbivore, omnivore.

- Human and animal body parts: e.g. body, head, neck, arms, elbows, legs, knees, face, ears, eyes, nose, hair, mouth, teeth, hands, feet, tail, wings, feathers, fur, beak, fins, gills.
- Human senses: sight, hearing, touch, smell, taste.
- Exploring senses: loud, quiet, soft, rough.
- Other: human, animal, pet.




		<u>End of unit assessment</u>		
		<u>Working towards</u>	<u>Working at</u>	<u>Working above</u>
2	Seasonal Changes: Autumn and Winter	To observe changes across the four seasons. To observe and describe weather associated with the seasons and how day length varies.	Observe and record different types of weather over a period of time. Observe seasonal changes in nature. Group things associated with each weather type. Identify and name things in nature associated with autumn. Identify features of autumn and winter and make comparisons. Use an identification key to identify and name signs of autumn. Use the information on the PowerPoint to find out about animals in winter. <i>Ogden Trust Resource : Phizzi Earth and Space : Teaching Point 1</i>	<p>I can observe how the weather changes across the seasons.</p>  <p>I can research day length in autumn.</p>  <p>I can observe and describe the weather in autumn and winter.</p>  <p>I can collect and record data about the weather in autumn and winter.</p>  <p>I can identify signs of autumn and winter.</p>  <p>I can compare how day length varies from autumn to winter.</p> 





				<p>I can observe changes in the trees and in clothes that we wear from autumn to winter.</p>  <p>I can research how some animals adapt in winter.</p> 
--	--	--	--	--

Vocabulary

- Seasons: spring, summer, autumn, winter, seasonal change.
- Weather: e.g. sun, rain, snow, sleet, frost, ice, fog, cloud, hot/warm, cold, storm, wind, thunder, weather forecast.
- Measuring weather: temperature, rainfall, wind direction, thermometer, rain gauge.
- Day length: night, day, daylight.

<u>Working towards</u>	<u>End of unit assessment</u> <u>Working at</u>	<u>Working above</u>
------------------------	--	----------------------



3	<p>Everyday materials</p> <p>To distinguish between an object and the material from which it is made.</p> <p>To identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</p> <p>To describe the simple physical properties of a variety of everyday materials.</p> <p>To compare and group together a variety of everyday materials on the basis of their simple physical properties.</p>	<p>Name different materials.</p> <p>Identify materials that objects are made of.</p> <p>Identify properties of materials.</p> <p>Test materials to identify their properties.</p> <p>Sort materials based on their properties and sort objects based on what material they are made of.</p> <p>Test different materials to see how much water they let through (and therefore identify waterproof and not waterproof materials).</p> <p><i>Ogden Trust Resource : Phizzi Earth and Space : Enquiry A - Astronappy</i></p>	<p>I can identify and name different materials.</p>  <p>I can identify the difference between an object and the materials it is made from.</p>  <p>I can identify the properties of everyday materials.</p>  <p>I can identify which materials have certain</p>
---	---	---	--




			<p><i>Ogden Trust Resource : Phizzi Light and Sound : Investigation A - What is in the bear cave?</i></p> <p><i>Ogden Trust Resource : Phizzi Forces : Enquiry A - Magnetic Materials</i></p> <p><i>Ogden Trust Resource : Phizzi Electricity in KS1: Balloon Beards</i></p> <p><i>Ogden Trust Resource : Phizzi Electricity in KS1: Electricity Around Me</i></p>	<p>properties.</p> <p> I can observe closely.</p> <p> I can test different materials. I can use what I have learnt to make a decision.</p> <p> I can group objects by their properties.</p> <p></p>
--	--	--	--	--

Vocabulary

- Names of materials: wood, plastic, glass, metal, water, rock, paper, cardboard, rubber, fabric.
- Properties of materials: hard, soft, shiny, dull, stretchy, rough, smooth, bendy, not bendy, transparent, opaque, waterproof, not waterproof, absorbent, not absorbent, sharp, stiff.
- Other: object.

<u>Working towards</u>	<u>End of unit assessment</u> <u>Working at</u>	<u>Working above</u>
------------------------	--	----------------------


4	Plants	<p>To identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p> <p>To identify and describe the basic structure of a variety of common flowering plants, including trees.</p>	<p>Make careful observations, sometimes using equipment to help them, of seeds and plants.</p> <p>Explore the world around them, leading them to ask some simple scientific questions about how and why things happen.</p> <p>Make close observations of plants.</p> <p>Observe the natural world around them.</p>	<p>I can describe and compare plants, seeds and bulbs.</p> <p></p> <p>I can name and compare the parts of plants.</p> <p></p>
---	--------	--	--	---

			<p>Observe closely and identify, classify and sort plants from their observations. Begin to explain their choices using simple scientific language. Identify similarities and differences between plants and begin to sort them according to a given criteria.</p>	<p>I can identify and name some common garden and wild plants.</p>  <p>I can identify and name some common plants and trees.</p>  <p>I can identify, group and compare some common fruit and vegetable plants.</p> 
--	--	--	--	---

Vocabulary

- Names of common plants: wild plant, garden plant, evergreen tree, deciduous tree, common flowering plant, weed, grass.
- Name some features of plants: e.g. flower, vegetable, fruit, berry, leaf/leaves, blossom, petal, stem, trunk, branch, root, seed, bulb, soil.
- Name some common types of plant e.g. sunflower, daffodil.

<u>Working towards</u>		<u>End of unit assessment</u>		<u>Working above</u>	
		<u>Working at</u>			

5	Seasonal changes: Spring and Summer	To observe changes across the four seasons. To observe and describe weather associated with the seasons and how day length varies.	Identify and classify things that happen in the different seasons. Make observations to identify features of seasons and compare them, explaining their reasoning. Make observations using simple equipment.	<p>I can observe how things change between seasons.</p>  <p>I can research what happens in summer and how to stay safe in the sun.</p>
---	--	---	--	---

Gather and record data to help in answering questions.
 Use simple equipment to make observations.
 Use a secondary source to gather data and complete a table. They can then use the data to help them match answers to questions.
 Decide how to sort and classify features of seasons into simple groups with some help and record classification tasks using simple tables or sorting diagrams.

Ogden Trust Resource : Phizzi Earth and Space : Teaching Point 1



I can **observe** and describe the weather.



I can **observe** seasonal changes.



I can **use data** to suggest answers about how daylight hours vary.



I can **compare** the four seasons.











Vocabulary

- Seasons: spring, summer, autumn, winter, seasonal change.
- Weather: e.g. sun, rain, snow, sleet, frost, ice, fog, cloud, hot/warm, cold, storm, wind, thunder, weather forecast.
- Measuring weather: temperature, rainfall, wind direction, thermometer, rain gauge.
- Day length: night, day, daylight.

Working towards

End of unit assessment
Working at

Working above

6	Scientists and inventors	<p>To describe the simple physical properties of a variety of everyday materials.</p> <p>To describe and compare the structure of a variety of common animals.</p> <p>To identify and name a variety of common wild and garden plants.</p>	<p>Use observations to suggest answers to questions, by thinking about why Lego is made out of plastic.</p> <p>Ask simple questions and use simple secondary sources to find answers, by role playing an interview with Mae Jemison.</p> <p>To identify and classify animals, by sorting animals according to their features.</p> <p>Gather and record data to help in answering questions, by creating a chart showing the class' most popular sensory plants.</p> <p>To observe and describe weather associated with the seasons, by measuring rainfall with a rain gauge they have made.</p> <p>To gather and record data to help in answering questions, by measuring rainfall with a rain gauge they have made.</p> <p>To identify and classify, by identifying the basic parts of animals' bodies.</p>	<p>I can identify the properties of Lego and think about why Lego is made out of plastic.</p>  <p>I can ask questions about Mae Jemison and research the answers.</p>  <p>I can compare the bodies of different animals.</p>  <p>I can group animals into different groups.</p>  <p>I can identify different plants.</p>  <p>I can make a chart to show our favourite plants.</p>  <p>I can observe and describe the weather.</p>  <p>I can measure and record information about rain.</p>  <p>I can research how vets look after animals.</p>  <p>I can identify parts of animals' bodies.</p> 
---	--------------------------	--	--	--

Vocabulary

Recap of vocabulary taught across the year.

Lego, material, plastic, properties

Astronaut, space, NASA

Zoo, enclosure, sort, group, wings, fur, fins, legs

Senses, sensory, see, hear, feel, smell, texture, plants, leaves, flowers, horticulturist.

Rainfall, rain gauge, meteorologist

Animals, veterinarian, vet, medicine, pet, tail, claws, wing, whiskers, fins.

Winter, ear muffs, warm, material, properties

Biologist, smell, nose, sense, scent.

Working towards

End of unit assessment

Working at

Working above