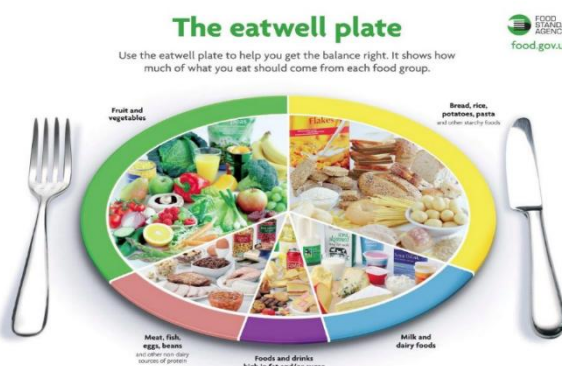




# Autumn 2 and Spring 1 Year 2 Science Knowledge Organiser

## Animals Including Humans

Subject specific Vocabulary		Images/Diagrams/Maps	Important Knowledge	
Carnivore	Eats meat.	 <p style="text-align: center;"><b>The eatwell plate</b> Use the eatwell plate to help you get the balance right. It shows how much of what you eat should come from each food group.</p> <p style="text-align: center;">FOOD STANDARDS AGENCY food.gov.uk</p>	<p>Characteristics of Living Things:</p> <ul style="list-style-type: none"> <li><b>M</b>ovement</li> <li><b>R</b>espire (breathe)</li> <li><b>S</b>ensitive to the environment</li> <li><b>N</b>utrients</li> <li><b>E</b>xcrete (Get rid of waste/pool)</li> <li><b>R</b>eproduce (have babies)</li> <li><b>G</b>row</li> </ul> <p><u>To stay alive, animals need:</u></p> <ul style="list-style-type: none"> <li>Water</li> <li>Food</li> <li>Air</li> </ul> <p><u>Five Food Groups:</u></p> <ul style="list-style-type: none"> <li>Fruit and Veg for our vitamins and minerals.</li> <li>Bread, rice, potatoes, and pasta for our carbohydrates.</li> <li>Milk and dairy food for our calcium.</li> <li>Food and drink high in fats and sugars for energy.</li> <li>Meat, fish, eggs and beans for protein</li> </ul>	
Diet	The food and water living things need.			
Exercise	A physical activity to keep your body fit.			
Germ	Bacteria or virus.			
Herbivore	Eats plants.			
Hygiene	How clean something is.			
Lifecycle	A series of changes that an animal passes through from birth to death.			<p>Writing/Provision/ Enrichment opportunities</p>
Medicine	A drug or other substance used to treat disease or other illnesses and symptoms.			<p>Taste test - Sorting foods into food groups</p>
Offspring	The child of an animal.			<p>Writing - Animal menus</p>
Omnivore	Eats plants and meat.			
Reproduce	When living things make a new living thing of the same kind.			
Scientific Enquiry Skills		Working Scientifically Skills		
				

Presentation	Working Scientifically and Scientific Enquiry Assessment		
	<ul style="list-style-type: none"> <li>With help and prompting, observe changes over time and can describe the changes. They can match some of the animals with their young but may struggle with the animals that do not look like their young.</li> </ul>	<ul style="list-style-type: none"> <li>Observe through video, first-hand observations and measurement how different animals including humans grow and offer explanations. They can match the adult with their offspring using their own subject knowledge.</li> </ul>	<ul style="list-style-type: none"> <li>Make systematic and careful observations.</li> <li>Children can confidently and independently match the animal with its young. They can use scientific language and own scientific knowledge. They can relate to real life.</li> </ul>
	<ul style="list-style-type: none"> <li>With help children can notice patterns to order and sequence the lifecycles of animals. They can make simple comparisons between the pictures and describe how an animal changes in basic terms.</li> </ul>	<ul style="list-style-type: none"> <li>Children can communicate findings using scientific illustrations. Children can identify patterns in the pictures to order. Children can use scientific language when explaining the lifecycles.</li> </ul>	<ul style="list-style-type: none"> <li>Children can sequence the lifecycles of many animals and can use scientific vocabulary when explaining the process. They have good knowledge of the processes and understand how things grow.</li> </ul>
	<ul style="list-style-type: none"> <li>Can answer questions supported by the teacher. They can begin to ask simple questions and with help can find some answers through secondary sources.</li> </ul>	<ul style="list-style-type: none"> <li>Children can ask simple questions relevant to the topic. They know that questions can be answered in different ways. Children can use a search engine to find answers.</li> </ul>	<ul style="list-style-type: none"> <li>Children can write a range of their own questions relevant to the topic and use a search engine confidently to find the answers.</li> </ul>
	<ul style="list-style-type: none"> <li>With support children can notice features on animals and identify some of the things that the animals eat.</li> </ul>	<ul style="list-style-type: none"> <li>Children can draw a basic conclusion using some scientific language, observations and comparisons about what animals eat.</li> </ul>	<ul style="list-style-type: none"> <li>Children can use observations and their own scientific knowledge to present their ideas about how to look after animals. They can include scientific vocabulary relevant to the topic.</li> </ul>
	<ul style="list-style-type: none"> <li>They experience different practical enquiries. They can use resources provided by the teacher and start to suggest own. May need support</li> </ul>	<ul style="list-style-type: none"> <li>Children can carry out simple comparative tests using their own ideas. Can use planning frame with independence.</li> </ul>	<ul style="list-style-type: none"> <li>Can set up practical comparative tests independently. They can organise equipment and think about controlling some elements.</li> </ul>
	<ul style="list-style-type: none"> <li>Children can label the food groups with support or pictorial aids. They are able to identify some food groups and can sort some food cards. Children may need some adult or peer support.</li> </ul>	<ul style="list-style-type: none"> <li>Children can use simple diagrams to represent their learning. They can label the food groups and sort the food independently. Children can add some foods of their own into some groups.</li> </ul>	<ul style="list-style-type: none"> <li>Record findings using scientific language, drawings, and labelled diagrams. Children can confidently sort the foods and can add foods of their own into each group.</li> </ul>
	<ul style="list-style-type: none"> <li>Children can record their learning using art. Children can use a range of foods from different food groups but may not get the proportions correct and may need more support developing their understanding of the different groups.</li> </ul>	<ul style="list-style-type: none"> <li>Children can record their learning in the style of the artist representing a balanced diet. Children use the food wheel as reference to create their art piece and justify why there is lots of some foods and less of others.</li> </ul>	<ul style="list-style-type: none"> <li>Children can use the food wheel confidently to create their art piece. The quantities of food match the proportions in the food wheel. Children can confidently explain why the body needs more of some foods than others.</li> </ul>
	<ul style="list-style-type: none"> <li>Can make basic predictions based on what has happened. They can use basic vocabulary. Their predictions and explanations may lack depth and scientific reasoning.</li> </ul>	<ul style="list-style-type: none"> <li>Children can make simple predictions from observations. They can say their reasons for their prediction. Their predictions improve with more observations.</li> </ul>	<ul style="list-style-type: none"> <li>Children can make further predictions based on what they have observed and give reasons based on their own knowledge and using scientific vocabulary.</li> </ul>
	<ul style="list-style-type: none"> <li>Children can talk about what they have found out about microbes. They can make their own, although they may not be able to relate to the scientific reasoning behind why they have made it. They can use simple vocabulary to describe.</li> </ul>	<ul style="list-style-type: none"> <li>Children can communicate their findings using models. They can use scientific language in their explanations. Can explain why they have designed their bacteria as they have.</li> </ul>	<ul style="list-style-type: none"> <li>Children can use simple language and discuss ideas to communicate findings in ways appropriate for their audience. They show good subject knowledge and can talk about their bacteria in detail.</li> </ul>

- With scaffolding and prompting, children can suggest improvements to their enquiries. They can talk about some simple changes that could be made.

- With support children can suggest improvements to their enquiries. They can suggest some change that could be made. They can state whether the test answered the question.

- Children can make suggestions for improving their enquiry, they can state things that could go wrong. They use evidence when evaluating the effectiveness of the test.