







Grindon Infant Science Medium Term Planning – Year 2 Animals including Humans

<p>End of Unit Goals Pupils will be able to:</p> <ul style="list-style-type: none"> Notice that animals, including humans, have offspring which grow into adults Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene 																													
<p>Prior Knowledge Can classify into vertebrate (groups) & invertebrates. Can classify into carnivores, herbivore & omnivores (Animals Yr1) Can link 5 senses to sense organs (Animals Yr1) Knows 7 processes of life – growth, nutrition (Living things Yr2) Habitat provides basic needs –, water, heat, food (Living Yr2) Plant life cycle (comparative stages) (Plants Yr2) Matter exists as solids, liquids & gases (Materials Yr2)</p>																													
<p>Skill Objectives</p> <table border="1" style="width: 100%;"> <tr> <th colspan="3" style="background-color: yellow;">Explaining Science</th> <th colspan="3" style="background-color: green;">Data, Tables & Graphs</th> </tr> <tr> <td style="background-color: yellow;">I use & remember science words during an activity</td> <td style="background-color: yellow;">I use & remember science words over a short time</td> <td style="background-color: yellow;">I use & remember science words I have used before</td> <td style="background-color: green;">I measure numbers with a number track</td> <td style="background-color: green;">I measure labelled divisions on a number line</td> <td style="background-color: green;">I measure unlabelled divisions on a number line</td> </tr> <tr> <td style="background-color: yellow;">I use science to describe what is happening</td> <td style="background-color: yellow;">I use science to describe & recall what I have seen</td> <td style="background-color: yellow;">I begin to use science models to describe</td> <td style="background-color: green;">I use a simple table recording in words & numbers</td> <td style="background-color: green;">I use a simple table recording in words & numbers (inc. tally)</td> <td style="background-color: green;">I use a frame to construct a simple table of results</td> </tr> <tr> <td style="background-color: yellow;">I add science word labels to diagrams</td> <td style="background-color: yellow;">I add science labels & information (help) to diagrams</td> <td style="background-color: yellow;">I add science labels & information to diagrams</td> <td style="background-color: green;">I use a frame to add to pictograms & block charts</td> <td style="background-color: green;">I construct pictograms & block charts</td> <td style="background-color: green;">I use a frame to construct a bar chart</td> </tr> </table>						Explaining Science			Data, Tables & Graphs			I use & remember science words during an activity	I use & remember science words over a short time	I use & remember science words I have used before	I measure numbers with a number track	I measure labelled divisions on a number line	I measure unlabelled divisions on a number line	I use science to describe what is happening	I use science to describe & recall what I have seen	I begin to use science models to describe	I use a simple table recording in words & numbers	I use a simple table recording in words & numbers (inc. tally)	I use a frame to construct a simple table of results	I add science word labels to diagrams	I add science labels & information (help) to diagrams	I add science labels & information to diagrams	I use a frame to add to pictograms & block charts	I construct pictograms & block charts	I use a frame to construct a bar chart
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<p>Enquiry Types</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  Researching </div> <div style="text-align: center;">  Finding Patterns </div> <div style="text-align: center;">  Observing over time </div> <div style="text-align: center;">  Fair testing </div> </div>				<p>Key Vocabulary Baby, offspring, toddler, child, adolescent, teenager, adult, reproduction, growth, water, hydrated, food, nutrition, diet, balanced, air, oxygen, breathing, respiration, exercise, fitness, heart rate, pulse, hygiene, microbes (bacteria, viruses, fungi), number track, number line, division, table of results, cause, effect, pictogram, block, block chart, bar, bar chart, axes, coordinate.</p>																									
<p>Important Scientists</p> <div style="display: flex;"> <div style="flex: 1;">  Maurice Hilleman (1919-2005) American scientist who developed the MMR vaccine that greatly reduced childhood deaths for measles, mumps and rubella. In 2010 Andrew Wakefield falsely linked MMR with autism. This is still causing significant harm through reduced vaccinations by worried parents. </div> <div style="flex: 1;">  Joseph Lister (1827-1912) British Doctor who revolutionised surgery by using antiseptics (carbolic acid) to prevent infections. He used Louis Pasteur's earlier 'germ theory' in his work. His results though weren't without problems – carbolic acid is toxic. </div> </div>			<p>Common Misconceptions All baby animals are little versions of their parents. Animals only need food & water to live. Some animals, like worms, eat soil. Fats are bad for you. Dieting & fruit drinks are good for you. Running is bad for your knees. Exercise can overcome a bad diet. Exercise takes too much time. Exercise needs to hurt for you to get fit. Everyone knows how to wash their hands.</p>																										
Session	Knowledge Objective	Skill Objective	Enquiry Opportunities	Extension Opportunities	SEN																								
1	<p>WOW- Change for Life Visit (Smoothie Making) Complete KWL Grid Explore and discuss skills and knowledge that will be covered in unit.</p>																												
2	<p>What happens as we grow?</p>	<p>I can recognise different stages of the life cycle.</p>	<p>Recap Link to Y1 coverage Main Provide small groups of children with pictures of humans at different</p>	<p>Construct own table and headings</p>	<p>Pre-teach vocabulary for stages. Provide with labels for different stages</p>																								

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			<p>stages. (baby, toddler, teenager). What order can we put them in? What labels can we use? Allow time for chn to label different stages. Provide with word bank to support. What is different about each stage? Discuss each stage.</p> <p>Plenary</p> <p>Stages game. Give definition of stage and children give the name of the stage to reinforce vocabulary.</p> <p>Key Vocabulary</p> <p>Growth, baby, toddler, child, teenager, adult,</p>		to cut and stick.
2	What happens as we grow?	I can use a simple table to record numbers.	<p>Recap</p> <p>Work in small groups to record as many stages learned from previous session.</p> <p>Main</p> <p>Investigate e.g. handspan, arm length, foot length (Will get longer as we get older?)- Allow opportunity for chn to discuss what we could investigate. Take ideas from chn and set up investigation e.g. When we grow our handspan gets wider. Chn to measure handspan of chn in Reception, Y1 and Y2. How can we record the results? Show chn table. Chn complete a simple table to record measurements.</p> <p>Plenary</p> <p>Discuss what the table shows. Provide with stem sentences to support.</p> <p>Key Vocabulary</p> <p>Growth, baby, toddler, child, teenager, adult, handspan. measure</p>	Describe the variateion.	Support with measuring and reading scale.
3	What do we need to survive?	I can sort foods into different groups. I can make a block graph.	<p>Recap</p> <p>Recap processes of life from previous unit. Can you recall Mrs Gren? What do we need to survive. Discuss. (Food, water, oxygen). What happens if we don't get these?</p>	Describe why it's important to have carbohydrates, protein etc. Use stem sentences and word bank to support.	<p>Pre-teach voabulary using widgets.</p> <p>Provide with only 2 sorting criteria.</p>

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			<p>Main Go through ppt. Introduce a balanced diet. Why do we need it? What foods should we eat a lot of, small amount of etc, use food pyramid to look at this and introduce the children to the vocabulary for different food groups (carbohydrates, fruit and vegetables, proteins, fats and sugars. Chn sort food pictures into three groups, eat lot of, more, least.</p> <p>Key Vocab Water, food (nutrition) air (breathing, respiration, balanced, obesity, starvation</p> <p>Plenary Recap groups. Why do we need _? Discuss Chn to keep food diary for a week for next session of making block graph. Clip to watch https://www.youtube.com/watch?v=sQN8HWI6Svk</p>		
4	What do we need to survive?	I can make a block graph.	<p>Recap Why do we need a balanced diet. What food groups can we name? Why do we need _?</p> <p>Main Model using 2simple graph tool to make bar chart of fruit eaten over a week. Chn make block graph using 2simple graph tool to show the number of fruit eaten each day using the diary.</p> <p>Plenary What does our block graph show us? Discuss</p> <p>Key Vocabulary</p>	Chn to answer questions about block graph. Which day did you eat the most fruit? Which day did you eat the least fruit?	Pre-teach fruits using widgeits. Have real life examples.
5	How can we be more	I can label what	<p>Recap What have we been</p>		Pre-teach vocabulary

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	healthy?	happens to my body before and after exercise.	<p>learning over the past few sessions?</p> <p>Main Focus upon how children are in a rested position. Discuss. Think about heart, face, skin, legs and breathing before exercise. Talk about our pulse and what it is. How does it feel when we are rested? Allow time for chn to feel their pulse. Chn stick picture of themselves into book and label body before exercise. Get chn to carry out different exercises. How do you feel now? Take pulse – what is happening? Why? Chn label themselves about what has happened to their body after exercise. Complete tally chart of Class 1’s favourite exercises.</p> <p>Plenary What new word have you learned from this session? Discuss</p> <p>Key Vocab exercise, fitness (heart rate/pulse), lungs</p>		Provide with before/after exercise table and main areas to look at for the body changing. Provide with a word bank of words to choose from
6	How can we be more healthy?	I can construct and use a tally chart table.	<p>Recap What happens to our body when we exercise?</p> <p>Main What is our favourite type of exercise? Discuss. How can we show this? Model showing our favourite exercise in a tally chart.</p> <p>Plenary Which is the most popular/least popular exercise?</p> <p>Key Vocabulary Tally chart, exercise</p>	Explain in a sentence which is the most popular/least popular exercise	A dult support to read exercises and guidance with marking tallies.
7	Why is it important to be clean?	I can recognise ways to keep clean. I can observe and record	<p>Recap</p> <p>Main Using ppt discuss ways of keeping clean. Make class mind map and add to working wall. Carry out experiment</p>		Pre-teach vocab with widgets. Verball describe to adult . Adult to scribe.

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			<p>using one table for each image to record for.. Put glitter on hand. Record: Hand before cleaning Hand after wiping with a paper towel Hand after washing in cold water Hand after washing in warm water</p> <p>Chn explain what happened using stem sentences:</p> <p>When the hand wasn't clean it was ___fully___ covered with glitter. When the hand was wiped with a paper towel it was ___half___ covered with glitter. When the hand was washed with cold water it was ___partially___ Covered with glitter. When the hand was washed in warm water and soap it had ___no___ glitter on.</p> <p>Plenary Finish lesson with chn in circle. Each child shakes hand with child next to them to demonstrate how bugs are passed around when we touch each other.</p> <p>Key Vocabulary hygiene, microbes (bacteria, fungi, viruses)</p>		
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Useful Texts, Website & Resources

Purple Mash- 2simple graph

Ready Steady Mo!

Oliver's Fruit Salad- Vivian Frensh & Alison Bartlett

Keeping my body healthy- <https://www.youtube.com/watch?v=sQN8HWI6Svk>