



Medium Term Planning for SCIENCE ANIMALS INCLUDING HUMAN GROWTH AND HEALTH

National Curriculum Objectives			Weaving Knowledge and Skills Key Concepts
<p>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>			<p>Observing Closely *Can they use see, touch, smell, hear or taste to help them answer questions? *Can they use some science words to describe what they have seen and measured? *Can they compare several things? Challenging—*Can they suggest ways of finding out through listening, hearing, smelling, touching and tasting? Identifying and Classifying *Can they organize things into groups? *Can they find simple patterns? (or associations)? *Can they identify something by a specific criteria? Challenging—*Can they suggest more than one way of grouping and explain their reasons? Recording Findings *Can they use text, diagrams, pictures, charts, labels to record their observations? Challenging—*Can they use information from books and on-line to find things out? Performing Tests *Can they carry out a simple fair test? *Can they explain why it might not be fair to compare two things? *Can they say whether things happened as they expected? *Can they suggest how to find things out? *Can they use prompts to find things out? Challenging—*Can they say whether things happened as they expected and if not, why not</p>
Key questions	Vocabulary	Resources needed	
<p>What are the basic needs for humans and animals to stay alive? 2. What are the 5 main food groups? 3. What are the stages of growth humans go through? 4. Why is it important to exercise? 5. How can we be hygienic?</p>	<p>Air food water Baby toddler child teenager adult life cycle bar chart centimetres metre stick height balanced diet healthy food groups fruit vegetables vitamins minerals cereals carbohydrates energy meat, fish eggs protein dairy products high energy foods fats sugars food pyramid exercise</p>	<p>1.4 different unusual fruit juices for children to taste & plastic cups. Enlarged block graph and pictogram (session /resources) Children’s food diaries. Long strips of paper, e.g. border rolls, scissors, crayons. Oil, cinnamon (or flour), 2 bowls for washing hands</p>	
Key Concepts			
<ul style="list-style-type: none"> • Life • Matter • Habitation • Being Scientific 			

Session	LO	Teaching input	Independent/Application	SLC opportunities
1	<p>Describe the basic needs of animals, including humans, for survival (which are water, food and air)</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</p> <p>Working scientifically- Identifying and classify Record data</p>	<p>SESSION 1- Recap Basic Needs/Food Groups (Link with DT)</p> <p>QUESTION</p> <p>Discuss: Discuss with children what animals including humans need to grow & survive (refer back to Living things and their habitats strand already taught). List their ideas on</p> <p>Explain that today we are going to look at the foods we humans eat, and start to learn about what makes a <u>balanced diet</u> to help keep us healthy.</p> <p>Introduce food groups.</p> <p>Discuss the fact that we also need water to remain healthy – some is obtained from drinks (including plain water) and some from other foods.</p> <p>Together look at http://www.foodafactoflife.org.uk/Activity.aspx?contentId=55&sectionId=37&siteId=3 and sort foods into the food groups.</p> <p>Plenary</p> <p>Ask – <i>Which fruit juice does our class like best? How can we record our findings?</i></p> <p>Children taste the 4 fruit juices and decide on their favourite. Discuss how there isn't a wrong or right answer and they may prefer a different one to their friends. Collect data on a tally chart and make a pictogram or bar chart using session 1 resources. Discuss findings, ask questions (how many more etc.)</p>	<p>LO I can:</p> <p>Describe the basic needs of animals</p> <p>Describe the importance for humans of eating the right amounts of different types of food</p> <p>Steps to Success:</p> <ul style="list-style-type: none"> ✓ Cut out foods ✓ Put into correct food group and label ✓ Draw own ideas in correct section <p>Activity:</p> <p>Use pictures in session 1 resources to sort food products into groups and label (<i>session resources</i>).</p> <p>Extension: Add in own foods</p> <p>Support: Some children will need help with recording.</p>	<p>listen and respond appropriately to adults and their peers</p> <p>>ask relevant questions to extend their understanding and knowledge</p> <p>>use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas</p>
2	<p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene</p>	<p>SESSION 2- Balanced Diet</p> <p>Remind children that we found out about the different food groups in the last Session. What were they? Write them on f/c: Fruit and vegetables, Cereals, Meat, fish and eggs, Dairy products and High energy foods.</p> <p>What does diet mean? Explain that some people's everyday diet is different in that they might eat or not eat particular foods because of their beliefs – religious or vegetarian, etc. Some people have to be careful about foods they are allergic to. <i>Does anyone in the class have any allergies?</i> Explain that we eat a balanced diet</p>	<p>LO</p> <p>I can:</p> <p>Describe the importance for humans of eating the right amounts of different types of food</p> <p>Steps to Success:</p> <ul style="list-style-type: none"> ✓ Draw healthy food inside the lunchbox, using your list or choosing your own ✓ Label your drawings ✓ Design a lid for your lunch box 	<p>listen and respond appropriately to adults and their peers</p> <p>>ask relevant questions to extend their understanding and knowledge</p> <p>>use spoken language to develop understanding</p>

	<p>Working scientifically- Use their observations and ideas to suggest answers to questions</p>	<p>when we eat the right amounts of food from the different groups. We do need to eat a variety of the right sort of foods too, so that our meals are not boring.</p> <p>Ask different children to select ingredients for a healthy lunchbox. http://www.bbc.co.uk/learningzone/clips/five-types-of-food/2289.html.</p>	<p>Activity : Give children a copy of the blank lunch box and a list of possible foods & ask them to choose which they would put into their healthy lunchbox</p>	<p>through speculating, hypothesising, imagining and</p>
3	<p>Notice that animals, including humans, have offspring which grow into adults</p> <p>Working scientifically- Observe closely, using simple equipment Record data</p>	<p>SESSION 3- Our Bodies</p> <p>Show children pictures of a baby, toddler, child, teenager and adult (<i>session resources</i>) in a random order and ask them to help you put them into the right order. Can anyone explain why this is the correct order? It shows how humans grow from a baby to an adult.</p> <p>Explain that we are going to do an investigation about whether shoe size is related to height. We are going to try and answer the question <u>Do taller children always have bigger shoes?</u> What are their predictions?</p>	<p>LO</p> <p>I can: Talk about how we change as we grow older Observe closely, using simple equipment and record data</p> <p>Steps to Success:</p> <ul style="list-style-type: none"> ✓ Take your shoe off and write down your size ✓ Use a strip of paper to help measure your friend ✓ Use a metre stick to see how tall they are and write it on the post it note <p>Activity (in pairs): Chn take of a shoe and write their shoe size on a post it note, They then measure height (in cm using metre stick) using long strips of paper (e.g. border rolls).</p> <p>Extension: Children work in pairs to complete measuring each other and height independently.</p> <p>Support: Some children will need help with measuring and recording.</p> <p>If chn have time they can complete the chn and babies grid in session 3 resources.</p>	<p>listen and respond appropriately to adults and their peers >ask relevant questions to extend their understanding and knowledge >use spoken language to develop understanding through speculating, hypothesising, imagining and</p>
4	<p>Describe the importance for humans of exercise.</p>	<p>SESSION 4- Keeping Fit</p> <p>Remind children that we need a balanced diet to stay healthy. Now introduce the importance of exercise by talking about/using a suitable book to illustrate some of the different parts and functions of our bodies and why we need to keep fit. Show children the video clips & give them the opportunity to make comments about what they see and hear. Discuss the parts of our body that are involved in exercise:</p>	<p>LO</p> <p>I can: Explain the importance of exercise for staying fit and healthy. Describe what happens to my body when I exercise.</p> <p>Steps to Success:</p> <ul style="list-style-type: none"> ✓ Draw and label ways you keep fit in school 	<p>listen and respond appropriately to adults and their peers >ask relevant questions to extend their</p>

		<p>Tell children that they will have the opportunity to look at all these parts of our bodies in more detail in their science lessons in later years.</p> <p>Ask - <i>What is your favourite form of exercise in school and out of school? What games do you know that are good for making your heart beat more and your lungs work harder?</i> Write some suggestions on f/c that can act as a stimulus for children's drawings.</p>	<ul style="list-style-type: none"> ✓ Draw and label ways you keep fit out of school ✓ Make suggestions for other chn to help them keep fit <p>Activity: Children illustrate their favourite ways of keeping fit in and out of school (<i>session 4 resources</i>)</p>	<p>understanding and knowledge >use spoken language to develop understanding through speculating, hypothesising, imagining and</p>
5	<p>Describe the importance for humans of hygiene.</p> <p>Working scientifically- Perform simple tests Record data</p>	<p>SESSION 5- Looking after ourselves/ Hygiene</p> <p>Remind children that we have not only found out that we need exercise but also a balanced diet to keep healthy. Explain we also need to make sure we get enough rest so our bodies can grow and so that we feel eager and ready to do lots of things during the day.. Discuss bedtimes! Ask children if they don't like going to bed when their parents/carers ask them to. <i>Why? Do children have a regular bedtime? Are they allowed to stay up later sometimes for a special treat?</i> Talk about waking up in the morning and feeling fresh and ready to get up. <i>What happens if you've had a late night? How do you feel in the morning?</i></p> <p>Tell children that we need to keep our bodies clean too if we are to stay healthy. Talk about germs/bacteria and how if we take them into our bodies they can make us unwell. Talk about the role of medicines to help kill bacteria.</p>	<p>LO</p> <p>I am beginning to: Understand that I need to keep clean to stay healthy. Understand that I also need to have plenty of rest to stay healthy. List the things I need to do to grow and stay healthy.</p> <p>Perform simple tests Record data</p> <p>Activity : Question to be investigated - <i>What is the best way to remove bacteria from your hands?</i> Choose 3 children and coat their hands in oil and then coat with one teaspoon of cinnamon or flour (to represent the bacteria which get all over your hands). Wash hands by rubbing them briskly for 10 seconds (opportunity to discuss fair testing). Explain what they will do and predict outcome (<i>session resources</i>). Child 1 - washes hands in cold water. Child 2 - washes hands with warm water and no soap. Child 3 - washes hands with water and soap. Children observe results carefully and record findings. Discuss which the best method was.</p>	<p>listen and respond appropriately to adults and their peers >ask relevant questions to extend their understanding and knowledge >use spoken language to develop understanding through speculating, hypothesising, imagining and</p>
6		<p>SESSION 6- SUMMATIVE ASSESSMENT See separate assessment</p>		