



# Medium Term Unit Planning

**Topic Name: Science Keeping Healthy**

**Learning outcome:**

*By the end of this topic the children will have a really good understanding of how to keep their own bodies healthy, active and safe and also be able to tell others how this can be achieved.*

**Hook: Zeena wants to know how humans and animals on earth stay healthy, she is struggling to on her planet and needs our help.**

**Topic Showcase (e.g. display, museum, performance, presentation) Display their work to the 'aliens' so that they can keep their planet healthy.**

**Oracy: Stand and deliver their ideas of how to keep the aliens healthy.**

**Key Vocabulary: Herbivore, carnivore, omnivore, nutrition, diet, food chain, data, table, bar chart, carbohydrates, proteins, dairy, fats, sugars, vitamins, minerals, fibre, growth, repair, health, energy, muscles, joints, tendons, contract, relax, biceps, triceps, data, scattergram, lungs, diaphragm, lung capacity, investigate, measure, compare,**

**Key Texts (whole class reading/end of the day book/Talk for Writing Texts etc.):**

**WCR – Online non-fiction texts: Broken Bones, Bone Health in Children, Sugar,**

**Citizenship/Community Opportunities:**

**(Focus – change in attitude/increase knowledge and awareness/make a difference)**

**The importance of keeping healthy and change attitudes around certain areas of a healthy life.**



# Medium Term Unit Planning

Experiences/Visits/Visitors

Main Subjects covered: Science (Biology)

## Subject 1 Threshold concepts

- **Work scientifically**  
This concept involves learning the methodologies of the discipline of science.
- **Understand animals and humans**  
This concept involves becoming familiar with different types of animals, humans and the life processes they share.
- **Investigate living things**  
This concept involves becoming familiar with a wider range of living things, including insects and understanding life processes.

Notes:



# Medium Term Unit Planning

Lesson title and learning Intention	Threshold concepts (success criteria)	Milestones (success criteria)	Lesson structure/differentiation
<b>1. Food for Thought</b> <ul style="list-style-type: none"> <li>Revise learning on carnivores, herbivores, omnivores by playing an active game</li> <li>To understand that animals (including humans) can be grouped according to what they eat</li> <li>To answer questions on diet by extracting data from a food survey and displaying it in tables and bar charts</li> <li>To look for patterns and trends in the data and use this to ask further questions</li> </ul>	<ul style="list-style-type: none"> <li><b>Work scientifically</b> This concept involves learning the methodologies of the discipline of science.</li> <li><b>Understand animals and humans</b> This concept involves becoming familiar with different types of animals, humans and the life processes they share.</li> <li><b>Investigate living things</b> This concept involves becoming familiar with a wider range of living things, including insects and understanding life processes.</li> </ul>	<ul style="list-style-type: none"> <li>Identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates.</li> <li>Identify and name a variety of common animals that are carnivores, herbivores and omnivores.</li> <li>Describe and compare the structure of a variety of common animals (birds, fish, amphibians, reptiles, mammals and invertebrates, including pets).</li> <li>Identify that animals, including humans, need the right types and amounts of nutrition, that they cannot make their own food and they get nutrition from what they eat.</li> <li>Construct and interpret a variety of food chains, identifying producers, predators and prey.</li> </ul>	<ul style="list-style-type: none"> <li>Play an active game to reinforce vocabulary, knowledge and understanding of animal feeding categories</li> <li>Review data from a food survey to answer a question on the consumption of either sugar or 5 a day portions</li> <li>Display data in tables and bar charts and use these to look for patterns and trends</li> </ul> <p>Support: Ask children to identify how many portions of fruit and vegetables in their client's diet rather than amount of sugar. Use support resources.</p>



# Medium Term Unit Planning

<p><b>2. A Balanced Diet</b></p> <ul style="list-style-type: none"> <li>•To understand the 5 food groups and the proportions of each needed to create a healthy, balanced diet</li> <li>•Know the nutritional properties of carbohydrates, fruit and vegetables, proteins and dairy foods as well as importance of limiting fat and sugar intake</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Work scientifically</b> <b>This concept involves learning the methodologies of the discipline of science.</b></li> <li>• <b>Understand animals and humans</b> <b>This concept involves becoming familiar with different types of animals, humans and the life processes they share.</b></li> <li>• <b>Investigate living things</b> <b>This concept involves becoming familiar with a wider range of living things, including insects and understanding life processes.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Describe the importance for humans of exercise, eating the right amounts of different types of food and hygiene.</li> <li>• Identify that animals, including humans, need the right types and amounts of nutrition, that they cannot make their own food and they get nutrition from what they eat.</li> </ul>	<ul style="list-style-type: none"> <li>• Create a collage of an Eatwell Plate in groups by sorting foods into categories</li> <li>• Use knowledge of nutrition to answer client's dietary questions and design and model a balanced meal</li> <li>• Create a model of a balanced meal for a paper plate</li> </ul>
<p><b>3. Bones and Skeletons</b></p> <ul style="list-style-type: none"> <li>•Understand that not all animals have an internal skeleton and that the presence of this is an important feature in classifying them</li> <li>•Know that a skeleton is needed for support, protection and movement</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Work scientifically</b> <b>This concept involves learning the methodologies of the discipline of science.</b></li> <li>• <b>Understand animals and humans</b> <b>This concept involves becoming familiar with different types of animals,</b></li> </ul>	<ul style="list-style-type: none"> <li>• Identify that humans and some animals have skeletons and muscles for support, protection and movement.</li> </ul>	<ul style="list-style-type: none"> <li>• Play a game that involves the classification of animals as Vertebrates and Invertebrates</li> <li>• Play another game called 5 Lives that will increase children's knowledge of skeletons and bones whilst having fun</li> <li>• Make a skeleton string puppet that has moving joints</li> <li>• Reinforce knowledge by naming parts and functions on the puppets</li> </ul>



# Medium Term Unit Planning

	<p>humans and the life processes they share.</p> <ul style="list-style-type: none"> <li>Investigate living things This concept involves becoming familiar with a wider range of living things, including insects and understanding life processes.</li> </ul>		<ul style="list-style-type: none"> <li>Puppeteer a skeleton dance</li> </ul>
<p><b>4. Muscles and Movement</b></p> <ul style="list-style-type: none"> <li>To understand how muscles work in pairs to allow movement and maintain posture</li> <li>To investigate whether people who do more sport have stronger muscles</li> </ul>	<ul style="list-style-type: none"> <li><b>Work scientifically</b> This concept involves learning the methodologies of the discipline of science.</li> <li><b>Understand animals and humans</b> This concept involves becoming familiar with different types of animals, humans and the life processes they share.</li> <li><b>Investigate living things</b> This concept involves becoming familiar with a wider range of living things, including insects and understanding life processes.</li> </ul>	<ul style="list-style-type: none"> <li>Identify that humans and some animals have skeletons and muscles for support, protection and movement.</li> </ul>	<ul style="list-style-type: none"> <li>Investigate how muscles work in pairs (biceps and triceps) using a bottle of water as a weight</li> <li>Investigate the question –Do some people have stronger muscles because they use them more?</li> <li>With guidance, decide what data to collect, how to tabulate it and how to share out the work within the group</li> <li>With guidance display data as a scattergram and use it to look for a pattern in the data</li> </ul>



# Medium Term Unit Planning

<p><b>5. Time to Investigate</b></p> <ul style="list-style-type: none"> <li>• Know the diaphragm is used in breathing and the lungs transfer oxygen to the blood</li> <li>• Know that muscles need more oxygen to work hard and this affects breathing rate</li> <li>• To plan and carry out an investigation in groups to answer a specific given question</li> <li>• Review findings and look for patterns in data that may/ may not confirm predictions</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Work scientifically</b> <b>This concept involves learning the methodologies of the discipline of science.</b></li> <li>• <b>Understand animals and humans</b> <b>This concept involves becoming familiar with different types of animals, humans and the life processes they share.</b></li> <li>• <b>Investigate living things</b> <b>This concept involves becoming familiar with a wider range of living things, including insects and understanding life processes.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Identify that humans and some animals have skeletons and muscles for support, protection and movement.</li> <li>• Ask relevant questions.</li> <li>• Set up simple, practical enquiries and comparative and fair tests.</li> <li>• Make accurate measurements using standard units, using a range of equipment, e.g. thermometers and data loggers.</li> <li>• Gather, record, classify and present data in a variety of ways to help in answering questions.</li> <li>• Record findings using simple scientific language, drawings, labelled diagrams, bar charts and tables.</li> <li>• Report on findings from enquiries, including oral and written explanations, displays</li> </ul>	<ul style="list-style-type: none"> <li>• Learn what lung capacity means and how to make an instrument to measure it in litres</li> <li>• Plan and carry out a practical investigation in groups that attempts to answer a scientific question</li> <li>• Display and interpret data collected to either confirm or reject predictions and seek to explain findings</li> </ul>
---	--	--	---



# Medium Term Unit Planning

		<p>or presentations of results and conclusions.</p> <ul style="list-style-type: none"> <li>• Use results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests.</li> <li>• Identify differences, similarities or changes related to simple, scientific ideas and processes.</li> <li>• Use straightforward, scientific evidence to answer questions or to support their findings.</li> </ul>	
<p><b>6. Personal Trainer Presentations for Zane</b></p> <ul style="list-style-type: none"> <li>• To assess knowledge and understanding of the Year 3 Animals Including Humans content taught in this block</li> <li>• To report back to clients on all their health questions using oral explanations backed up by scientific knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Work scientifically</b> This concept involves learning the methodologies of the discipline of science.</li> <li>• <b>Understand animals and humans</b> This concept involves becoming familiar with different types of animals, humans and the life processes they share.</li> <li>• <b>Investigate living things</b></li> </ul>	<ul style="list-style-type: none"> <li>• Ask relevant questions.</li> <li>• Set up simple, practical enquiries and comparative and fair tests.</li> <li>• Make accurate measurements using standard units, using a range of equipment, e.g. thermometers and data loggers.</li> </ul>	<ul style="list-style-type: none"> <li>• Undertake a quiz that assesses all their knowledge and understanding on the block</li> <li>• Give an illustrated presentation to clients on health and fitness, answering all their questions using resources they have made throughout the block and evidence from their own research</li> <li>• Reflect on their own life and consider positive changes they could make to improve their health and fitness</li> </ul>



# Medium Term Unit Planning

and research,  
demonstrations, notes,  
graphs and charts

**This concept involves becoming familiar with a wider range of living things, including insects and understanding life processes.**

- Gather, record, classify and present data in a variety of ways to help in answering questions.
- Record findings using simple scientific language, drawings, labelled diagrams, bar charts and tables.
- Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.
- Use results to draw simple conclusions and suggest improvements, new questions and predictions for setting up further tests.
- Identify differences, similarities or changes related to simple, scientific ideas and processes.
- Use straightforward, scientific evidence to answer questions or to support their findings.





# Medium Term Unit Planning

7.			
----	--	--	--