

**Rowan Science Spring A short term plan**

	Learning Intent	Main Teaching	Activity	Key Vocabulary	Resources
L1	To know the function of the skeleton	Show model of a skeleton and describe the reason we have a skeleton. What would happen if we didn't? Discuss the main parts of our body that are protected by our skeleton.	Children to label parts of a skeleton using the correct vocabulary. Cut out a model of a skeleton and piece together.	Skeleton Function Protection	Presentation Model skeleton Worksheet Split pins.
L2	To know how exercise affects our pulse rate	Children to practice finding their pulse. Count how many beats in one minute. What is our pulse rate measuring?	Practical activity where children will find their pulse rate when sitting down and record. A series of activities will be organised which the children will complete and then take their pulse rate afterwards.	Pulse rate Heart Monitor	Presentation Stop watches Skipping ropes

		How can we alter the pulse rate?			
L3	To know how to present last lesson on pulse rate in the form of a line graph.	Discuss the lesson when they took their pulse rate and how did activities affect the rates. What conclusions can they give with reference to rate and exercise. What factors will they need to consider when drawing their graph. Recap on correct vocabulary to use on x/y axis when labelling and a suitable title.	Children to decide on the scale they will use on their graph paper by looking at the minimum and maximum figures needed to record. Draw a line graph. Answer a series of questions from their findings and what conclusions can they give.	Axis Labelling Line graph	Graph paper Results table

L4	To know the importance and functions of the heart	Discuss the heart and what do we know about it. Discuss the vocabulary e.g aorta, vessels, blood supplies, arteries and veins. How does the heart pump blood around our body?	Children to draw a diagram of the heart and label all the necessary features associated with it. Compile an information sheet on why we have a heart and how it operates.	Valves Veins Arteries Aorta function	Diagram of a heart Model of a heart Power point Reference books
L5	To know how the body functions and importance of each part.	Discuss the main organs of our body e.g liver, kidneys, small and large intestine. Describe how each one is important and where they are situated in our body.	Using an outline of a body, children are to place parts of the body in the correct place. Give a brief description of the importance of each one.	Liver Kidney Intestine Gall bladder bladder	Blank outline and worksheet Model of a body showing the location of these parts.

L6	To know the different life cycles for humans and animals	Discuss the life cycle of a human from babyhood through to old age and the changes that occur. How do animals differ in their life cycles? How does the gestation period of humans and certain animals differ. Which animal lives the longest? Does longevity relate to the size of the animal?	Children to produce a time line for humans in the different stages of life and give key events that happen in these stages. Choose one animal and give similarities/differences of their life cycle and what conclusions can they give.	Gestation adolescence	Presentation Photographs worksheets
L7	To know the seven processes of humans –Mrs Gren	Discuss what processes do all humans and animals experience.	Children to write an account of each of the seven processes in their own words.	Respiration Excretion Nutrition reproduction	Presentation showing processes

		<p>Explain each of these processes and an explanation of each;</p> <p>Movement why do animals need to move?</p> <p>Respiration- release of energy</p> <p>Sensitivity why is it important?</p> <p>Growth – happens to everything</p> <p>Reproduction- making more of ourselves</p> <p>Excretion- getting rid of poisonous waste</p> <p>Nutrition- importance of eating in order to survive</p>			
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L8	To know the importance of having a healthy diet	Discuss the importance of a healthy diet- what is meant by healthy and unhealthy. Which foods would come into each category? What are the effects of an unhealthy diet – how might it affect our heart? What other factors are there for a healthy lifestyle- importance of exercise	Children to design a poster demonstrating the importance of ensuring we eat healthy and maintain a healthy level of exercise.	Healthy/unhealthy lifestyle	Images of a range of different foods
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L9	To know the dangers and effects on our body that cigarettes have	<p>Discuss what is in a cigarette. What is the harmful part of a cigarette and how does it damage our body?</p> <p>What part does it affect the most?</p> <p>Discuss the lungs and teeth.</p> <p>Demonstrate from a distance the effects of smoking using a lemonade bottle (the lungs) and cotton wool in the neck of the bottle which collects the tar.</p> <p>Light a cigarette and push the bottle slowly in</p>	Children to write about the effects of smoking and using diagrams, show how many different parts of the body is affected- lungs, teeth, breath, fingers	Nicotine tar	<p>Presentation showing the effects of smoking.</p> <p>Bottle</p> <p>Cotton wool</p> <p>cigarette</p>
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		and out so that it fills up with smoke and the cotton wool becomes black.			
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