

# Moor House School & College Curriculum Map

SUBJECT: Science			
YEAR GROUP: Year 7			
Autumn 1	Physics - Forces	Physics – Forces	Physics – Forces
Knowledge	Core: Forces in Action	Core: Friction	Core: Investigating Forces
Knowledge & Skills	Core – students to demonstrate understanding of <ul style="list-style-type: none"> <li>- What a force is</li> <li>- The different ways force can change an object</li> <li>- The different ways magnets can interact</li> </ul>	Core – students to demonstrate understanding of <ul style="list-style-type: none"> <li>- How objects are able to slow down</li> <li>- What friction is</li> <li>- What aspects affect friction</li> <li>- How friction affects objects</li> <li>- How friction can be helpful / unhelpful</li> </ul>	Core – students to demonstrate understanding of <ul style="list-style-type: none"> <li>- How forces are measured</li> <li>- Hooke’s Law</li> <li>- Forces involved in floating and sinking</li> <li>- The 3 laws of motion</li> </ul>
Vocabulary	Force Pull Push Twist Direction Speed Shape Object Attract Repel	Friction Surface Opposite	Stretch Motion Relax Hooke’s Law
Autumn 2	Physics – Space	Physics – Space	Physics – Space
Knowledge	Core: Earth & Sun	Core: Moon	Core: Seasons
Knowledge & Skills	Core – students will demonstrate understanding of <ul style="list-style-type: none"> <li>- The shape of the Earth, Sun and Moon</li> <li>- The size of the Earth compared to the Sun and Moon</li> <li>- Shadows change during the day</li> <li>- Why shadows change</li> <li>- Objects make a shadow when there is a light source</li> <li>- The movements of the Earth as it goes around the Sun</li> <li>- The Earth spins and the axis is only imaginary</li> <li>- The Earth spins once every 24 hours</li> </ul>	Core – students will demonstrate understanding of <ul style="list-style-type: none"> <li>- The turning of day to night and vice versa</li> <li>- The 4 phases of the moon</li> <li>- Craters on the moon and how they are formed (investigation)</li> </ul>	Core – students will demonstrate understanding of <ul style="list-style-type: none"> <li>- The different seasons</li> <li>- Why we have seasons</li> <li>- How people in the stone ages measured time</li> </ul>

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Vocabulary	Sphere Orbit	Rotate Tilt Axis	Moon Phases	Crescent Crater	Seasons	Time
<b>Spring 1</b>	<b>Chemistry – Materials and their Properties</b>		<b>Chemistry – Materials and their Properties</b>			
Knowledge	Core: Changing Materials		Core: Water Cycle			
Knowledge & Skills	Core – students to demonstrate understanding of <ul style="list-style-type: none"> <li>- Materials that can bend, squash, stretch and twist</li> <li>- What happens when materials are heated or cooled</li> <li>- How some materials change when mixed</li> <li>- The difference between reversible and permanent changes</li> <li>- Properties of solids, liquids and gases</li> <li>- Changes of state that are reversible and permanent</li> </ul>		Core – students to demonstrate understanding of <ul style="list-style-type: none"> <li>- The different stages of the water cycle</li> <li>- The water cycle and how it is impacted by our changing environment (climate change)</li> </ul>			
Vocabulary	Materials Heat Cool Melt Freeze Particles Mix	Change Reversible Permanent Solid Liquid Gas	Water Cycle Climate Change Evaporation Condensation Precipitation			

<b>Spring 2</b>	<b>Biology – Part of the Body and Senses</b>		<b>Biology – Part of the Body and Senses</b>		<b>Biology – Part of the Body and Senses</b>	
Knowledge	Core: Senses		Core: Parts of the Body		Core: Teeth	
Knowledge & Skills	Core – Students will demonstrate understanding of <ul style="list-style-type: none"> <li>- The different senses</li> <li>- How our senses keep us safe</li> </ul>		Core – Students will demonstrate understanding of <ul style="list-style-type: none"> <li>- The different parts of the human body</li> <li>- What an organ is</li> </ul>		Core – students will demonstrate understanding of <ul style="list-style-type: none"> <li>- The different shapes and sizes of our teeth</li> <li>- Teeth do different functions</li> </ul>	

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		<ul style="list-style-type: none"> <li>- The different organs in the body</li> <li>- The functions of the heart and some organs in the digestive system</li> </ul>	<ul style="list-style-type: none"> <li>- Tooth decay</li> <li>- What causes tooth decay</li> <li>- How to prevent tooth decay</li> </ul>
Vocabulary	Senses                      Survival	Body                              Heart Organ                              Digestion	Teeth Decay
<b>Summer 1</b>	<b>Biology – Life Processes and Living Things</b>	<b>Biology – Life Processes and Living Things</b>	
Knowledge	Core: Food Exercise and Staying Healthy	Core: The Heart and Circulation	
Knowledge & Skills	Core – students will demonstrate understanding of <ul style="list-style-type: none"> <li>- Why water and food are important</li> <li>- How to collect data on how much someone eats or drinks</li> <li>- What a balanced diet is</li> <li>- Why it is important to have a balanced diet</li> <li>- The importance of each of the different food groups</li> <li>- The main parts of the digestive system</li> <li>- The steps in digestion</li> </ul>	Core – students will demonstrate understanding of <ul style="list-style-type: none"> <li>- The importance of the heart and lungs</li> <li>- The functions of the heart and lungs</li> <li>- The function of blood</li> <li>- How blood is carried around the body</li> <li>- Veins carry blood toward the heart and arteries carry blood away from the heart</li> <li>- How to find and count pulse rate</li> <li>- The pulse is caused by a heartbeat</li> <li>- The importance of oxygen and carbon dioxide transfer</li> </ul>	
Vocabulary	Food                              Vitamins Balanced Diet                      Minerals Weight                              Digestion Carbohydrate                      Digestive System Protein Fats	Heart                              Veins Lungs                              Arteries Blood                              Oxygen Blood Vessels                      Carbon Dioxide	
<b>Summer 2</b>	<b>Biology – Life Processes and Living Things</b>	<b>Biology – Life Processes and Living Things</b>	
Knowledge	Core: Variation and Food Chains	Core: Adaptations	Core: Living Things in their Environment
Knowledge & Skills	Core – students demonstrate understanding of <ul style="list-style-type: none"> <li>- What variations means</li> <li>- To learn how to identify living things based on what they look and feel like</li> </ul>	Core – students demonstrate understanding of <ul style="list-style-type: none"> <li>- What an adaptation is</li> <li>- How adaptations help animals and plants survive</li> </ul>	Core – students demonstrate understanding of <ul style="list-style-type: none"> <li>- Different physical features of a habitat</li> <li>- Different living things live in different habitats</li> </ul>

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	<ul style="list-style-type: none"> <li>- What a food chain is</li> <li>- The different parts of a food chain</li> <li>- The difference between a food chain and food web</li> <li>- How to make a food chain</li> </ul>	<ul style="list-style-type: none"> <li>- Identifying certain adaptations in different living things</li> </ul>	<ul style="list-style-type: none"> <li>- How habitats are destroyed</li> <li>- The impact on living things when habitats are destroyed</li> </ul>	
Vocabulary	Variation Food Chain Food Web	Predator Prey	Adaptation Survive	Environment Habitat