

**Year 6 Topic: Production – Feel the Force!****Term: Summer 2****Topic Length: 6 wks**

<b>INTENT</b>	Vision	Together we all discover, learn, grow and succeed									
	Values	<b>W</b>	<b>A</b>	<b>R</b>	<b>M</b>	<b>T</b>	<b>H</b>				
		Well-Being	Aspire	Relationships	Motivation	Trust	Holistic				
	Curriculum Design	<i>The development of subject specific skills and learning behaviours coupled to the acquisition of knowledge</i>									
<b>Learning Behaviours</b>			<b>Disciplinary Knowledge</b>			<b>Substantive Knowledge</b>					
	Attitudes and attributes for learning and life			<b>Know How</b> – Subject specific thinking and problem solving			<b>Know What</b> – Deep learning of the key knowledge				
<b>IMPLEMENTATION</b>	Our 10 Key Principles for Effective T&L	High Aspirations	Inspire and Challenge	Pupil Progress	Positive Habitats	Variation	Developing Learning Behaviours	Relationships	Questioning and Feedback	Assessment for Learning	Subject Knowledge
	Topic Purpose	<i>To investigate and understand the different forces that act on Earth.</i>									
		Hook: Parachute investigation & Matilda production					Celebration – Matilda production				
	Main Subjects	Science					RE				
	Key Performance Indicators	<ul style="list-style-type: none"> <li>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</li> <li>Identify the effects of air resistance, water resistance and friction, that act between moving surfaces</li> <li>Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect</li> <li>Planning a scientific enquiry to answer a question about air resistance.</li> <li>Recognise the need for controlled variables and one changing variable in an investigation.</li> <li>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</li> </ul>					<ul style="list-style-type: none"> <li>Give examples of times my choices have been influenced and may have changed when I considered the consequences that might follow.</li> <li>Explain how believing in Akhirah influences Muslims to do their best to lead good lives.</li> <li>Recognise what motivates or influences me to lead a good life and compare it with what motivates and influences Muslims.</li> <li>Explore and recognise examples of times when I misinterpreted something.</li> <li>Explain two different Muslim interpretations of Jihad.</li> <li>Recognise what motivates me or influences me to lead a good life and compare it with what motivates and influences Muslims.</li> </ul>				
Our Overarching Themes	Relationships	Mastery	Community	Vocabulary / Oracy	Being Healthy / Active	Equity of Education	Developing Learning Behaviours	Fluency			



**Discrete Learning Opportunities**

During the topic, the following subjects will also be taught. Although there will be some connection to our current topic, the learning is more discrete:

(e.g. computing, PE, music, MFL, PSHE, RE, etc...)

Subject	Key Performance Indicators
Computing	SCRATCH. <ul style="list-style-type: none"> <li>• To define and identify variables.</li> <li>• To explain that a variable has a name and a value.</li> <li>• To experiment with altering the value of a variable.</li> </ul>
PE	Play competitive games, modified where appropriate [for example, rounders], and apply basic principles suitable for attacking and defending <ul style="list-style-type: none"> <li>• Principles of a game – rules &amp; strategies for Dartmoor 3 ball and rounders.</li> <li>• Principles of attacking – striking the ball with increasing accuracy and power &amp; tactically when to run between bases,</li> <li>• Principles of defending – stopping the ball effectively in the field, tactically choosing when and where to throw, throwing with increasing accuracy and power and catching a ball at different speeds and heights.</li> </ul>
Music	Matilda Production <ul style="list-style-type: none"> <li>• Learn the lyrics to 4 songs that will be performed in front of an audience.</li> <li>• Understand the variation of rhythm, pitch and tone throughout a song.</li> <li>• To vary the volume according to the nature and part of the song including use of crescendo and diminuendo.</li> </ul>
PSHE	Changing me <ul style="list-style-type: none"> <li>• Understand that everyone is unique and special.</li> <li>• Understand and respect the changes they see in themselves and others</li> <li>• Know who to ask for help if we are worried about changes</li> </ul>
Drama	Matilda production <ul style="list-style-type: none"> <li>• Vary the tone and volume of your voice according to the character role.</li> <li>• Use the stage effectively ensuring the audience are able to follow the narrative</li> <li>• Remember and understand how to move between scenes efficiently and timings for individual roles.</li> <li>• Work effectively as part of team to rehearse scenes.</li> <li>• Be a reliable member of the Year 6 team in order to work together to perform as a group in front of an audience.</li> </ul>



**Key Objective Progression**

Prior Knowledge	Year 6 – Feel the force.	Future Learning
<p><u>Year 3</u></p> <ul style="list-style-type: none"> <li>• Notice that some forces need contact between two objects, but magnetic forces can act at a distance.</li> <li>• Using straightforward scientific evidence to answer questions or to support their findings.</li> </ul>	<p><u>Science-</u></p> <ul style="list-style-type: none"> <li>• Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</li> <li>• Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect</li> </ul>	<p><u>KS3-</u> Forces</p> <ul style="list-style-type: none"> <li>• forces as pushes or pulls, arising from the interaction between two objects</li> <li>• using force arrows in diagrams, adding forces in one dimension, balanced and unbalanced forces moment as the turning effect of a force</li> <li>• forces: associated with deforming objects; stretching and squashing – springs; with rubbing and friction between surfaces, with pushing things out of the way; resistance to motion of air and water</li> <li>• forces measured in newtons, measurements of stretch or compression as force is changed</li> <li>• force-extension linear relation; Hooke’s Law as a special case</li> <li>• work done and energy changes on deformation Science – key stage 3 11</li> <li>• non-contact forces: gravity forces acting at a distance on Earth and in space, forces between magnets and forces due to static electricity. Pressure in fluids</li> <li>• atmospheric pressure, decreases with increase of height as weight of air above decreases with height</li> <li>• pressure in liquids, increasing with depth; upthrust effects, floating and sinking</li> <li>• pressure measured by ratio of force over area – acting normal to any surface.</li> </ul> <p>Balanced forces</p> <ul style="list-style-type: none"> <li>• opposing forces and equilibrium: weight held by stretched spring or supported on a compressed surface.</li> </ul> <p>Forces and motion</p> <ul style="list-style-type: none"> <li>• forces being needed to cause objects to stop or start moving, or to change their speed or direction of motion (qualitative only)</li> <li>• change depending on direction of force and its size</li> </ul>
<p><u>Year 3</u></p> <ul style="list-style-type: none"> <li>• Compare how things move on different surfaces</li> </ul>	<p><u>Science-</u></p> <ul style="list-style-type: none"> <li>• Identify the effects of air resistance, water resistance and friction, that act between moving surfaces.</li> </ul>	
<p><u>Year 5</u></p> <ul style="list-style-type: none"> <li>• Asking relevant questions and using different types of scientific enquiries to answer them.</li> </ul>	<p><u>Science</u></p> <ul style="list-style-type: none"> <li>• Planning a scientific enquiry to answer a question about air resistance.</li> </ul>	



<p><b>Year 5</b></p> <ul style="list-style-type: none"> <li>Setting up simple practical enquiries, comparative and fair tests.</li> </ul>	<p><b>Science</b></p> <ul style="list-style-type: none"> <li>Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> </ul>	
<p><b>Year 5</b> Islam</p> <p>What does it mean to be a Muslim in Britain today?</p> <p>What is the best way for a Muslim to show commitment to God?</p> <ul style="list-style-type: none"> <li>I can show an understanding of why people show commitment in different ways.</li> <li>I can describe how different practices enable Muslims to show their commitment to God and understand that some of these will be more significant to some Muslims than others.</li> <li>I can think of some ways of showing commitment to God that would be better than others for Muslims.</li> </ul>	<p><b>RE</b></p> <ul style="list-style-type: none"> <li>Give examples of times my choices have been influenced and may have changed when I considered the consequences that might follow.</li> </ul> <p><b>RE</b></p> <ul style="list-style-type: none"> <li>Explain how believing in Akhirah influences Muslims to do their best to lead good lives.</li> </ul> <p><b>RE</b></p> <ul style="list-style-type: none"> <li>Explore and recognise examples of times when I misinterpreted something.</li> </ul> <p><b>RE</b></p> <ul style="list-style-type: none"> <li>Explain two different Muslim interpretations of Jihad.</li> </ul>	<p>1.1 Beliefs, teachings and sources Interpreting teachings, sources, authorities and ways of life in order to understand religions and beliefs. Understanding and responding critically to beliefs and attitudes.</p> <p>1.2 Practices and ways of life Exploring the impact of religions and beliefs on how people live their lives. Understanding that religious practices are diverse, change over time and are influenced by cultures.</p> <p>1.3 Expressing meaning Appreciating that individuals and cultures express their beliefs and values through many different forms.</p> <p>1.4 Identity, diversity and belonging Understanding how individuals develop a sense of identity and belonging through faith or belief. Exploring the variety, difference and relationships that exist within and between religions, values and beliefs.</p> <p>1.5 Meaning, purpose and truth Exploring some of the ultimate questions that confront humanity, and responding imaginatively to them.</p> <p>1.6 Values and commitments Understanding how moral values and a sense of obligation can come from beliefs and experience. Evaluating their own and others' values in order to make informed, rational and imaginative choices.</p>