

Year 3 Curriculum Term 2

Topic Title: Feel the force; See the light

English

In Term 2, we will be exploring the book 'The Green Ship', a story full of imagination and adventure. It is written and illustrated by Quentin Blake so our learning will be rich with art opportunities. The illustrations are integral to the narrative and open-up discussions around how text and illustrations can combine to tell a story, whilst also posing alternative viewpoints.

Over the first four weeks we will:

- Build varied and ambitious vocabulary to describe settings
- Orally retell stories and recreate with story maps
- Use adjectives to describe characters
- Write an alternative ending to our book using the third person

Our second book is 'The Princess and the Bear,' a story which draws on three folk tales. We will explore themes of betrayal, compassion and perseverance. Our learning will focus on narratives and will build on the following skills:

- Planning a story with a beginning, middle and end
- Using paragraphs to organise our writing
- Punctuate our writing accurately

In the final week of term, we will be looking at Christmas poetry. We will be looking at rhyme patterns within poems, including applying this to write and perform our own poems.

Maths

Fractions

In our fractions unit, we will be learning to identify unit and non-unit fractions of objects, shapes and length (a unit fraction has 1 as the numerator and a non-unit fraction has >1 as the numerator). We will also be learning how to calculate fractions of a quantity (numbers e.g. $\frac{1}{5}$ of 35).

Geometry- Properties of Shape

This term, we will be learning about the properties of 2-D shapes. The children will learn how to draw and describe 2-D shapes, and how to identify if a 2-D shape is symmetrical, regular or irregular. We will then learn to measure and calculate the perimeter of 2D shapes.

Statistics

In statistics we will be interpreting and presenting data in bar graphs, pictograms and tables.

Measure – volume and capacity, length and mass

Over three weeks, the children will learn how to measure and compare volume in litres and millilitres, about measuring and comparing lengths in m, cm and mm and about measuring and comparing mass in Kg and g. Children will also learn how to add and subtract mass and length.

Geometry- Properties of Shape

To finish off term 2, the children will be returning to shape and learning how to recognise angles as properties of shape, identify angles in their environment, recognise angles as a description of a turn, as well as recognise right angles linking to terms and finally compare right, acute and obtuse angles ($<>=$)

R.E.

What do we know about Jesus?

Within our RE lessons this term, we will be learning:

- The different representations of Jesus, including pictures
- What the Gospels say about Jesus
- To explore other views of Jesus

The language used to describe Jesus in the Bible

PSHE

Kindness and Anti-Bullying

We will be learning:

- How to show kindness to others and regulate our emotions effectively.
- To understand the definition of bullying and what to do if we or someone we know is being bullied

	<ul style="list-style-type: none"> • How to effectively resolve fall outs with our friends. • How to show empathy to ourselves and others when we make mistakes.
Art: Painting This term in Art we will be developing our painting skills. We will explore tertiary colours, build colour pallets and further understand tint, tone and shade, which we will apply to our own artwork. We will use a variety of brushes to create shapes, textures, patterns and lines, which we will apply to a seasonal art piece. As well as this, we will learn how to use watercolours to create a colour wash and explore how we can use this as the background for a more detailed art piece.	Music: This term, we will be learning to play the xylophone. We will be playing tunes containing the notes C, F and G. Initially, we will play these by ear and will then play them by following rhythm notation.
French: We will continue with our French unit 'Où est la France' and will be learning where France is, its capital city and about other French speaking countries. We will continue to learn basic greetings, questions and answers to be able to converse with others. By the end of the term, we aim to be able to ask and answer how we are, numbers to ten and name key places in France.	P.E. Throughout term 2, we will be focusing on outdoor adventure activities and gymnastics. During their OAA lessons, we will be exploring a range of outdoor games and problem-solving tasks. In gymnastics, we will be focusing on skills such as, balancing in different ways, travelling in different ways and finishing with combining the skills.

Thematic Curriculum

Topic Title:	Feel the force; See the light	
Golden Thread:	Being imaginative and exploring	
Big Question:	Do forces make things change?	
Prior knowledge	This term children will be learning about forces and light. Whilst this is the first time the children have covered these topics, they have however, had experience of many of the disciplinary skills they will be covering across the unit, including observation and questioning. They have also had previous experience of comparing materials which will support their learning throughout this unit.	
Blurb overview:	During this unit, the children will gain a deep understanding of both kinetics and optics. They will begin by studying forces by looking at the impact different surfaces have on how things move, before moving on to exploring magnets through a variety of hands-on exploration and investigation. When learning about optics, children will explore light, dark, reflection and shadows. This unit will also provide vast opportunity for children to refine their investigative skills.	
Celebration of Learning	Learning at Royal Harbour with Doctor James Green about forces.	
Text Links	The light thieves by Helena Duggan Flashlight by Lizi Boyd	
Oracy End Point:	Discussion Discussion in small groups over a range of statements regarding Albert Einstein, light and force.	Physical: Consider position and posture when addressing an audience. Linguistic: Be able to use specialist vocabulary Cognitive: Ask questions to find out more about a subject Social and Emotional: Speak with confidence in front of an audience

Science

Substantive Knowledge		Disciplinary Knowledge
<p style="text-align: center;">Kinetics</p> <ul style="list-style-type: none"> • To know how to compare how objects move on different surfaces depending on the properties from which they are made. - To know what forces can do to an object • To know that some forces need contact between two objects, but magnetic forces can act at a distance. • To know how different magnets can have different strengths. • To know how to observe how magnets attract or repel each other and attract some materials and not others. • To know how to compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. • To know magnets as having two poles. • To be able to predict whether two magnets will attract or repel each other, depending on which poles are facing. • To know how magnets can be damaged if they are dropped. <p style="text-align: center;">Optics</p> <ul style="list-style-type: none"> • To know that light is needed in order to see things and that dark is the absence of light. • To know that light is reflected from surfaces. • To know that light from the sun can be dangerous and that there are ways to protect their eyes. • To know that shadows are formed when the light from a light source is blocked by an opaque object. • To be able to find patterns in the way that the size of shadows changes. <p>- to know about the work of past and present scientists: Past - Albert Einstein Present - Masato Sagawa</p>		<ul style="list-style-type: none"> - asking relevant questions and using different types of scientific enquiries to answer them - make simple predictions, of which some will be based on prior knowledge or experiences - setting up simple practical enquiries, comparative and fair tests - know what variables are and begin to suggest ways to control them - recognise when a simple fair test is necessary and help to decide how to set it up - learn how to use new equipment, such as data loggers, appropriately - making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers - gathering and recording data - recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables - help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used - collect data from their own observations and measurements, using notes, simple tables and standard units - help to make decisions about how to record data
Cultural Capital		
<p>Cultural Knowledge: The children will be learning about Albert Einstein, an important person from the past. They will learn about the scientific discoveries Albert Einstein made and the impact that had on future discoveries.</p> <p>Cultural experiences: Visit to local secondary school where the children will meet Dr James Green who will lead a workshop about forces.</p>		
Weekly Overview		
Week 1 w/b 27 th October	Lesson 1- The Big Question: Can you feel the force? Can you see the light? Introduce the idea of the forces push and pull. Remind children in Year 2 they learnt about the applied forces of squashing, bending, twisting, and stretching. Introduce the contact force of push and pull and how this is	

	<p>caused when two objects physically touch. Play a number of games with these aspects Jenga, bowling, tug of war, marble run, kicking a ball, domino trail and children to express if it is a contact force of push and pull.</p> <p>To know how to compare how objects move on different surfaces depending on the properties from which they are made.</p> <p>To know what forces can do to an object</p> <p>Lesson 2: Consider the forces of push and pull (friction). Have ramps of different surfaces. If pushing an object across a surface, how could the material affect the distance the object might travel. The children will plan an investigation to discover if the material of the surface on the ramp effects how far the object travels. We will focus on using scientific vocabulary to make predictions and prepare our investigation.</p> <ul style="list-style-type: none"> • To know how to compare how objects move on different surfaces depending on the properties from which they are made. <p>recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables</p> <p>help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used</p> <p>setting up simple practical enquiries, comparative and fair tests</p> <p>collect data from their own observations and measurements, using notes, simple tables and standard units</p> <p>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>Lesson 3: Children will carry out their investigation and record their results. They will discuss what their results mean and what they can learn from them. We will also discuss any anomalies in our results, including why these may have occurred. Then, we will write conclusions for our investigations applying what we have learnt. We will use our learning to consider what it would be like on an ice rink.</p> <ul style="list-style-type: none"> • To know how to compare how objects move on different surfaces depending on the properties from which they are made. <p>making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>collect data from their own observations and measurements, using notes, simple tables and standard units</p> <p>know what variables are and begin to suggest ways to control them</p> <p>Art Lesson: Children will recap primary and secondary colours. They will then develop their understanding of tertiary colours, creating colour combinations using colour theory. Children will use the media, paint.</p> <ul style="list-style-type: none"> • I am learning to know tertiary colours
<p>Week 2 w/b 3rd November</p>	<p>Lesson 1: Begin by considering what magnets are and what they are used for. Have a variety of magnets and objects in class to explore. Explore how the magnetic force can act a distance as well as exploring the strength of the different magnets. Finally, explore and group which materials are magnetic and which are not. We will teach this by creating rubbish grabbers to see what they could collect with their magnets and recording the results in our books. Introduce Masato Sagawa who invented the worlds strongest magnet.</p> <ul style="list-style-type: none"> • To know that some forces need contact between two objects, but magnetic forces can act at a distance. <p>To know how to observe how magnets attract or repel each other and attract some materials and not others.</p> <p>To know how magnets can be damaged if they are dropped.</p> <ul style="list-style-type: none"> • To know how different magnets can have different strengths. <p>Lesson 2: During this lesson, the children will be introduced to the fact that a magnet has a north and south pole. They will learn which poles attract and which poles repel. They will have the opportunity to explore the poles of the magnets, making predictions on whether the magnets will attract or repel each other. Children will present their scientific findings in a short video with magnets, using scientific vocabulary to support their explanations.</p> <ul style="list-style-type: none"> • To know magnets as having two poles.

	<ul style="list-style-type: none"> • To be able to predict whether two magnets will attract or repel each other, depending on which poles are facing. <p>Lesson 3: The children will be given different sources in order to learn more about the work of Albert Einstein. The children will work in groups to find out key facts about Einstein in the form of a research carousel. They will then create information posters about Albert Einstein and his work.</p> <ul style="list-style-type: none"> • To explore the work of Albert Einstein. <p>Art Lesson: Children will refer to their prior learning on George Seurat and the Art movement Pointillism, to create different textures and effects using dots and dashes. Children will use a variety of brushes and tools to refine their skills in creating a detailed background. Children will use their colour pallet from the previous lesson to focus on their use of tones and shades.</p> <ul style="list-style-type: none"> • I am learning to use a range of brushes to create shapes, textures, patterns and lines <p>I am learning to further explore tint/tone/shade – and apply this in my painting</p>
<p>Week 3 PSHE w/b 10th November</p>	<p>Thursday 13th November – World Kindness Day –</p> <p>Lesson 1: Exploration and explanation of Chilton being a ‘Telling School’ and the meaning of STOP (start telling other people). Children will learn the meaning of a telling school and will put this into practice by looking at statements and discussing whether it is necessary and valuable to pass this information on to an adult. We will use this learning to then discuss what happens if we fall out with friends or if we make mistakes on the playground and how to then make this better.</p> <ul style="list-style-type: none"> • I am learning to know what a telling school is and the meaning of STOP <p>Lesson 2: How does school make sure it is a safe place? Children will explore the different policies we have at Chilton to keep us safe. In groups, the children will make thought showers of all the different safety strategies that we use at Chilton Primary School. We will use this learning to record our knowledge and consider how we can keep ourselves and others safe.</p> <ul style="list-style-type: none"> • I am learning to know what keeps us safe <p>Lesson 3: Unkindness and bullying linked to World Kindness Day. Exploring the similarities and differences between the two. The children will explore the definitions and types of bullying. To celebrate World Kindness Day, the children will complete an array of kindness challenges to spread kindness across the school.</p> <ul style="list-style-type: none"> • I am learning to know the difference between unkindness and bullying.
<p>Week 4 w/b 17th November</p>	<p>Lesson 1: Have shoe boxes with object hidden inside. Have a viewing hole one end of the box. Is it easy to see what is in the box. Add a small hole to the top of the box to let some light in. Slowly add more holes. Children to explore whether it becomes easier to see the object, the more light we allow into the box. Discuss terms transparent, translucent and opaque. Explore materials based on this and sort.</p> <ul style="list-style-type: none"> • To know that light is needed in order to see things and that dark is the absence of light. <p>Lesson 2: Teach the children about how light is reflected from surfaces. Explore reflectors from bikes, reflective jackets and discuss how reflection from these materials help keep us safe. Make links to real life situations and why this is important. Have a variety of materials and torches. Makes predictions for which materials will reflect most light and explore this using torches. We will explore how light reflects back to our eyes and draw and label a diagram to show this.</p> <ul style="list-style-type: none"> • To know that light is reflected from surfaces. <p>Lesson 3: Teach the children about the impact that UV rays can have on the eyes. Explore different ways we can protect our eyes. Are all sunglasses equally as good at keeping our eyes safe? Children will select, design and make their own sunglasses based on the best protections for their eyes.</p> <p>To know that light from the sun can be dangerous and that there are ways to protect their eyes. asking relevant questions and using different types of scientific enquiries to answer them gathering and recording data</p>

	<p>help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used collect data from their own observations and measurements, using notes, simple tables and standard units</p> <p>Art Lesson: Children will add detail to their Pointillism background, to create a seasonal, mixed media art piece. They will link this to their learning in Science, with a focus on darkening silhouettes and shadow and how this can be represented through Art.</p> <ul style="list-style-type: none"> • I am learning to use watercolour to produce washes for backgrounds and add detail • I am learning to further explore tint/tone/shade – and apply this in my painting
<p>Week 5 w/b 24th November</p>	<p>Lesson 1: In this lesson, the children will create their own sunglasses that protect their eyes from UV rays. The children will select their own material of choice and use a range of equipment to create their glasses. In this first lesson, we will be focusing on our prediction skills and begin to ask questions that can be answered by carrying out scientific enquiry.</p> <p>gathering and recording data help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used collect data from their own observations and measurements, using notes, simple tables and standard units</p> <p>Lesson 2: In this second lesson, the children will test their sunglasses and consider their improvements for when they remake them in the next lesson. When testing, the children will be introduced to the term fair testing and identify the conditions that change when carrying out scientific enquiry.</p> <p>gathering and recording data help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used collect data from their own observations and measurements, using notes, simple tables and standard units</p> <p>Lesson 3 : To finish this investigation, the children will make improvements to their sunglasses from their findings and retest, focusing on what further questions they would like to know as a scientist.</p> <ul style="list-style-type: none"> •To know how to measure tests using a range of equipment. •To know how to measure tests using a range of equipment with increasing accuracy (data loggers). •To know how to identify the conditions that change when carrying out scientific enquiry. <p>Art Lesson: Children will refer to their learning on tertiary colours, by re-examining colour theory. They will explore water colours, build a preferable colour pallet of their choice and use this to create a colour wash for the next lesson.</p> <ul style="list-style-type: none"> • I am learning to know tertiary colours • I am learning to further explore tint/tone/shade – and apply this in my painting • I am learning to create a background using a colour wash
<p>Week 6 w/b 1st December</p>	<p>Lesson 1: Discuss with the children how shadows are made. Go on a shadow hunt around the school. When children find a shadow ask them to identify the light source and what object is blocking the light. Children will create diagrams which show the factors that affect the size and shape of shadows.</p> <ul style="list-style-type: none"> •To know that shadows are formed when the light from a light source is blocked by an opaque object. <p>make simple predictions, of which some will be based on prior knowledge or experiences</p>

	<p>Lesson 2: Investigation: Children to create shadow puppets. Children to explore what happens to the shadow when the puppet is moved closer to and further away from the light source. Prepare shadow puppet show, for a younger year group. Children to prepare an explanation on the patterns they have found about shadows.</p> <p>• To be able to find patterns in the way that the size of shadows changes.</p> <p>Lesson 3: Thematic Quiz.</p> <p>Art Lesson: Children will use their water colour, colour wash background from the previous lesson, to add a seasonal, detailed design with mixed media. Children will make educated choices regarding suitable tones for finer details and consider how they can use paint for texture, patterns and lines.</p> <ul style="list-style-type: none"> • I am learning to use a range of brushes to create shapes, textures, patterns and lines • I am learning to use watercolour to produce washes for backgrounds and add details
<p>Week 7 w/b 8th December</p>	<p>Lesson 1 – Shadow puppet show to a lower year group</p> <p>To be able to find patterns in the way that the size of shadows changes.</p> <p>Lesson 2 – Top up teaching lesson.</p> <p>Lesson 3 – RE Lesson 1: We will be learning about the story of Rama and Sita and the reason why Hindus celebrate Diwali. We will also be discussing how Hindus prepare for and celebrate Diwali.</p> <p>I am learning to know about the events and meanings in the story of Rama and Sita</p> <p>Art Lesson: Children will complete a mini knowledge-based assessment, focussed on the learning of the term. Children will use the skills and knowledge gained this term, to create a Christmas card, inspired by the artwork they have completed through the term. Children will make independent decision around their colour choices and design, showing their growth as maturing artists.</p> <p>I am learning to know tertiary colours</p> <p>I am learning to further explore tint/tone/shade – and apply this in my painting</p> <p>I am learning to create a background using a colour wash</p> <p>I am learning to use a range of brushes to create shapes, textures, patterns and lines</p> <p>I am learning to use watercolour to produce washes for backgrounds and add detail</p>
<p>Week 8 R.E Week w/b 15th December</p>	<p>Lesson 2: We will learn about why Diwali lamps are an important part of Diwali, and then make our own Diwali lamps. We will also learn what a Diwali card looks like and make our own.</p> <p>I am learning to learn about the diya and why it is important in the Diwali story.</p> <p>Lesson 3: Today the children will learn the purpose of creating rangoli patterns and about Lakshmi. Rangoli is a Sanskrit word meaning ‘row of colours’. Rangoli has been used as an art form across India for hundreds of years. The children will then create their own rangoli patterns.</p> <p>I am learning to learn about the purpose of creating Rangoli patterns.</p> <p>Top up Teaching Thematic</p>