Year 3 Curriculum Term 2

Topic Title: Feel the force; See the light

English

In Term 2, we will be studying books by the author Anthony Browne. In our Guided Reading sessions, we will spend time looking at the stories as well as looking at how the author uses illustrations to support the story telling process.

Into the Forest by Anthony Browne – 2 weeks

Into the Forest is a narrative that draws upon traditional tales to create suspense and tension. Over the first two weeks, we will:

Use prepositions and noun phrases to describe a setting
Use verbs and adverbs to describe action that takes place within a setting
Use a range of sentence openers to describe a character
Vary our sentence structures using compound sentences

The Tunnel by Anthony Browne – 2 weeks

This story is rich in illustrations and has links to language used in fairy tales. We will study this book across weeks three and four of this term, focusing on writing our own suspense narratives. Within our narratives, we shall:

Use action to infer character
Use dialogue to show character differences
Construct simple, compound and complex sentences
Use a range of verbs and adverbs to describe action
Select vocabulary to entertain the reader

Gorilla by Anthony Browne – 2 weeks

This book is rich in illustrations, which are integral to understanding and retelling the story. We will spend lots of time discussing the themes within the story whilst focusing on writing from viewpoints. Within our writing, we shall:

Use emotive language to infer a character's feelings
Use formal language in a letter
Organise sentences into paragraphs when completing extended writing tasks

Punctuation and Grammar – the children will cover prepositions and using a range of conjunctions accurately to start and join sentences.

Spelling - we will be covering red words, adding -ing, -er, -est, and -y to words and adding suffixes such as -ment, -ness, -ful, -less and -ly.

Reading for Pleasure – weekly sessions. These sessions are designed and planned to promote a positive attitude towards reading, to increase confidence in reading and to support the children with a life-long love of reading.

Maths

Additon and subtraction: Fact families and applying the inverse
Step 1: Commutative or not commutative?
Step 2: Creating fact families
Step 3: Using fact families and the inverse operation to find missing number
Step 4: Solving more complex missing number problems

Additon and subtraction: Written addition
Step 1: Columnar recording related to place value
Step 2: Formal written method with no regrouping (exchange)
Step 3: Formal written method with regrouping of ones
Step 4: Regrouping tens and ones
Step 5: Using measurement units within addition
Step 6: Language of addition

Additon and subtraction: Written subtraction
Step 1: Formal written method with no regrouping (exchange)
Step 2: Subtraction – regrouping (exchange) tens into ones only
Step 3: Subtraction – regrouping hundreds into tens only
Step 4: Subtraction – regrouping hundreds and tens
Step 5: Missing number subtraction problems
Step 6: Mixed and multi-strategy practice

Additon and subtraction: Problem solving: word problems
Step 1: Identifying the part or whole unknown in simple worded problems
Step 2: Understanding start, change and result problems
Step 3: Mixed Practice
Step 4: Understanding multi-step part whole worded problems
Step 5: Understanding simple comparison problems

Geometry and statistics: Statistics – interpreting bar charts and tables
Step 1: Purpose of bar charts
Step 2: Completing bar charts from information provided – identifying intervals of scales
Step 3: Interpreting and inferring information from bar charts (including multi-step questions)
Step 4: More complex bar chart problems

Geometry and statistics: Angles, right angles and estimation
Step 1: Angles are measures of a turn

	Step 2: Comparing and ordering angles (using right angle as a benchmark) Step 3: Identify internal angles in 2-D shapes Step 4: Classifying shapes using internal angles as a property Geometry and statistics: Perpendicular and parallel lines, vertical and horizontal lines Step 1: Perpendicular lines are lines that will meet at a right angle to each other (where lines are vertical and horizontal) Step 2: Perpendicular lines are straight lines that will meet at a right angle to each other (where lines could also be diagonals) Step 3: Parallel lines are straight lines that have a constant distance between them and will never meet at a point Step 4: Parallel sides and sides that are perpendicular to each other in shapes and parallel and perpendicular lines on diagrams Step 5: Vertical lines are perpendicular to the horizon and horizontal lines are parallel to the horizon
R.E. **<u>What do we know about Jesus?</u>** 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 and respect to ourselves How to look after ourselves mentally and physically To understand the definition of bullying and what to do if we or someone we know is being bullied How to effectively resolve fall outs with our friends.
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.** This term, children will develop their passing skills by learning to receive and make quick, short and long passes with increasing accuracy and control. They will practise using a range of passes with their feet, developing the ability to adjust their speed and force. Children will also apply these skills in game situations, making decisions about when and where to use quick or long passes while working effectively with others.

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	
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
Kinetics • 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.	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

Optics • 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. -to know about the work of past and present scientists: Past - Albert Einstein Present - Masato Sagawa	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	
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. Cultural experiences: Visit to local secondary school where the children will meet Dr James Green who will lead a workshop about forces.	
Weekly Overview	
Week 1	Lesson 1 - What is a contact force? - Introduce Big Questions. Using real life scenarios, we will explore how forces affect objects and focus on contact forces. We will play games to retrieve our forces learning of push and pull. Lesson 2 and 3 - How do difference surfaces affect the movement of objects? -We will now deepen our knowledge by investigating the effects of friction as another example of a contact force and explore different amounts of friction depended on the surface.
Week 2 Kindness day 13th November	Lesson 1 and 2 - What is a magnet and how does it work? - Using a variety of magnets, we will explore and observe how magnets work. We will be introduced to the words attract and repel and we will observe those words in action. We will also be introduced to our present scientist: Masato Sagawa. Next, we will explore how magnets have 2 poles. We will predict and then investigate which poles attract and which repel. Lesson 3 –Kindness Day – We will complete a variety of activities that will help us think about respecting and being kind to ourselves. We will also think about different things that we can do to look after ourselves mentally and physically.
Week 3 PSHE	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. Lesson 2 – We will read 'Stop Picking on Me: A First Look at Bullying' and we will discuss the different types of bullying. We will also discussions, interviews and debates on the following questions: How does bullying make people feel — both inside and outside? What could you do as a bystander to make things better? How might a small act of courage stop bullying? How can we build a classroom where everyone feels safe?

	Lesson 3 – Thinking about Chilton being a 'Telling School', and what we know about bullying, how it might feel and what we can do to stop bullying as a class we will create our own class anti-bullying poem. Throughout the week we will complete a variety of kindness challenges.
Week 4	Lesson 1 - Which materials are attracted to magnets? - We will explore which materials are magnetic and which are not. Lesson 2 - Do all magnets have the same strength? - Using a range of magnets, we will investigate if all magnets have the same strength or not. Lesson 3 - Can we see without light? - Using shoe boxes with and without light, the children will explore the question and present what they have found out.
Week 5	Lesson 1 - How does light behave when it is reflected? - We will learn how light travels in straight lines and reflects on surfaces. We will draw this in a scientific diagram. Lesson 2 - How are shadows formed? - Using a light source, we will learn how shadows are formed by an object blocking the travelling light. Lesson 3 - Can we change how shadows are formed? - We will look for and measure, shadows and then investigate what might cause the shadows to change.
Week 6	Lesson 1 - Do shadows stay the same all day? (over 2 lessons) - We will investigate how the movement of the sun changes the shape and size of shadows throughout the day. Lesson 2 - How can we protect our eyes from the sun? - We will first learn the useful properties of the sun and then design some sunglasses to protect our eyes from the harmful UV rays. Lesson 3 - Why is Albert Einstein important? - We will learn about Einstein and what he found out about light.
Week 7 RE	Thematic Top-up Teaching Lesson 1 – We will learn that there are a variety of different representations of Jesus and why they vary. Lesson 2 – We will begin to find out what Jesus was like as a person from how he is portrayed in different Gospels. Lesson 3 – We will explore some of the language used to describe Jesus