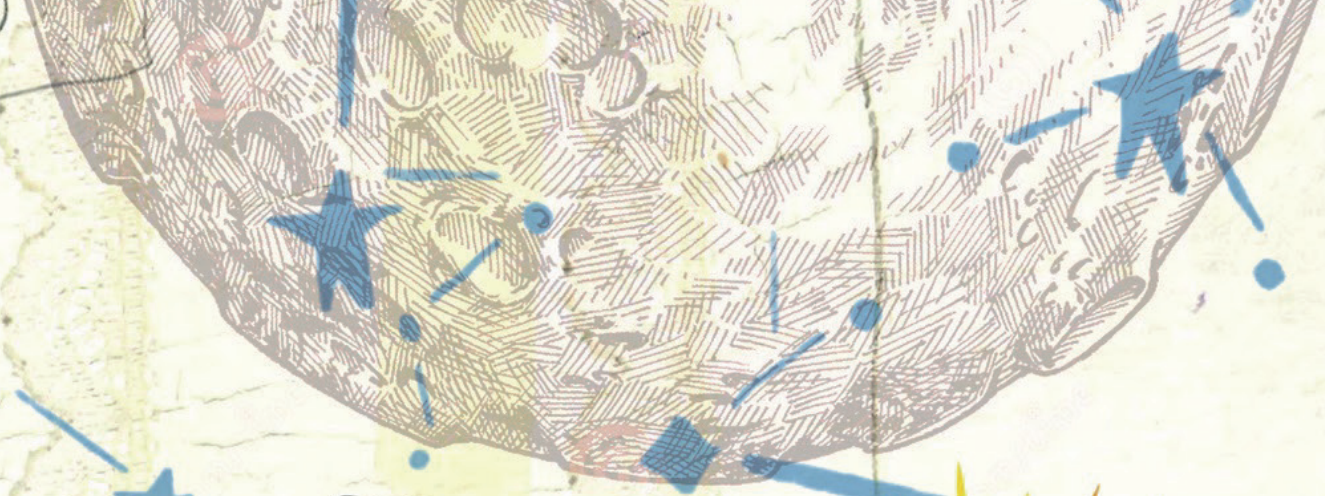
VOYAGERS



YEAR 6

Year 6 Voyagers

Autumn Term: The Windrush

"Life's Uncertain Voyage"

William Shakespeare

Learning in year 6 revolves around the idea of voyages and the qualities required to successfully undertake them. Year 6 begins by going where no one has gone before, beginning with an exploration of the lives of people who have also made voyages into the unknown: Yuri Gagarin, Neil Armstrong Erika S. Bergman, Junko Tabei and Muhammed Ali. Pupils then delve into two contrasting voyages of discovery: The HMT Empire Windrush and The Titanic. What do these journeys tell us about twentieth century attitudes to class, race, equality, fairness? Year 6 pupils investigate the pioneering work of botanist and zoologist, Carolus Linnaeus, 'the greatest man on earth' before comparing the settlements of West Yorkshire with those of the far-distant Himalayas.

Spring Term: Charles Darwin

"Nothing in life is to be fearedd, it is only to be understood. Now is the time to understand more, so that we may fear less."

Marie Curie

Charles Darwin's voyage on HMS Beagle was the inspiration for his pioneering work 'The Origin of Species'. Pupils learn how finches and giraffes can demonstrate the development of people's understanding of evolution & inheritance. They explore the conflict of belief between religion and science, understanding the significance of the discovery of Mary Anning's Ichthyosaur fossil and how this challenged thinking in the 19th century. Pupils prepare for their own voyage to secondary education by equipping themselves with self-organisation strategies in readiness for the challenge of greater independence in later phases of the school.

Summer Term: Space

"We choose to go to the Moon ....., not because they are easy, but because they are hard"

JFK

Supported by our science team from phases 4 & 5 and their expertise in astronomy, this term focuses on the mysteries of life beyond planet Earth. Pupils explore the lives of Nicolaus Copernicus & Galileo Galilei, how their intellect challenged the orthodox way of thinking, their courage overcame the barriers they faced and how their legacy impacts on humans' current understanding of space. Pupils investigate the movement of the Earth, Moon and Sun, experiment with the school telescope, and then once again turn to voyages into the unknown by finding out about the Voyager Mission and the Perseverance Rover on Mars. Towards the end of the term, the pupils study the Science of Well Being before planning and implementing a 'charity challenge', leaving a legacy of kindness as they move to Year 7.

Year 6 Curriculum - phase 3

English

Autumn 1

‘The Magical Mystery tour is coming to take you away’
The Beatles

Voyages into the unknown: The 50s and 60s
n year 6, we’ve got a ticket to ride and pupils explore the lives and achievements of a range of people from the fifties and sixties including Yuri Gagarin, Neil Armstrong, Sir David Attenborough, Junko Tabei & Muhammed Ali. We question the historical significance of the achievements of key figures from this era and how reflect on how their actions still reach us in today’s society.

Read: The Girl of Ink & Stars by Kiran Millwood; Where Once We Stood by Christopher Riley

Learn to write fictional narratives that draw upon ideas from their reading and research. Pupils study different authors to compare, analyse and evaluate how they use vocabulary and cohesive devices to create settings and character descriptions within a story which inspire readers of different audiences.

Autumn 2

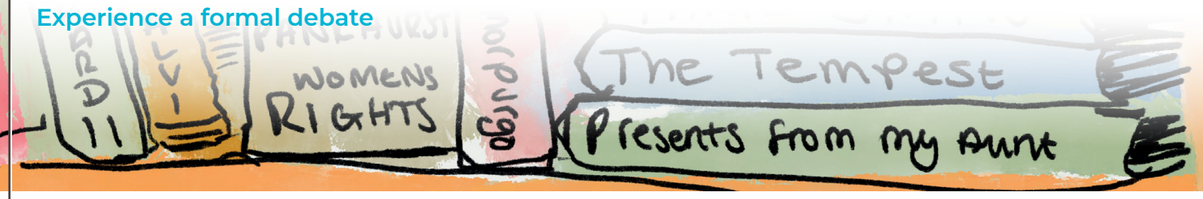
‘Walk on through the wind, walk on through the rain, though your dreams be tossed and blown’
Rodgers & Hammerstein

Voices of The Windrush: The Windrush
As their journey progresses, pupils learn about the voyage of HMT Empire Windrush and hear the stories of the migrants who emigrated to Britain searching for the opportunity to better their lives. The issue of class will be debated, discussed and compared with those aboard the Titanic, provoking important questions about equality, fairness and humility over the past century and now.

Read: Windrush Child by Benjamin Zephaniah; All are Welcome by Alexandra Penfold; The Proudest Blue by Ibtihaj Muhammad & S.K. Ali

Through letters, diary entries and a speech, the pupils capture the stories and talk about a range of first-hand experiences including those of the voyage and subsequent lives in Britain as a migrant in the post-war era. Pupils experience contrasting accounts, understand why this event was significant and identify the impact this generation has had on culture and identity in Britain today.

Experience a formal debate



Maths

“Without mathematics, there’s nothing you can do. Everything around you is mathematics. Everything around you is numbers.”
Shakuntala Devi

The first term of year 6 continues the approach of starting the year with a generous amount of number work. Pupils use this time to consolidate and deepen their understanding, building a real numerical toolkit.

Number: Place Value
- Numbers to ten million
- Compare, order and round any number
- Confidently work with negative numbers

Number: Addition, Subtraction, Multiplication & Division
- Add and subtract integers
- Multiply up to a 4 digits number by a 2-digit number
- Short division, long division & division using factors
- Common factors & multiples
- Primes to 100 & Squares and cubes
- Order of operations
- Mental calculations and estimation
- Reason for known facts

By the end of the first half term, pupils will find that there is nothing they cannot do with integers (whole numbers).

After reviewing and deepening their understanding of integers, pupils then take the same voyage with parts of wholes by doing a significant amount of work on fractions.

Number: Fractions
- Simplify Fractions
- Fractions on a number line
- Compare and order (denominator or numerator)
- Add & Subtract Fractions, including with mixed numbers
- Multiply fractions by integers & by other fractions
- Divide fractions by integers
- Four rules with fractions
- Fractions of an amount, including finding the whole

Geometry: Position & Direction
- The Four Quadrants
- Translations
- Reflections

By the end of the term, pupils have a full understanding of how numbers are formed, relate to each other and how to calculate with them. They have also undertaken the full range of work required with fractions and how these part whole amounts behave when calculating.

Year 6 Curriculum - phase 3

Autumn

Science

‘Till we find our place, in the path unwinding, in the circle, the circle of life’
Tim Rice

Living things in their habitats: Classifying nature
Science in Year 6 begins with the pupils as biologists and ecologists, learning about Carolus Linneaus and his pioneering work grouping organisms. They discover why and how organisms are classified according to common observable characteristics, based on similarities and differences. As our scientific development continues, pupils plan further lines of enquiry, presenting their findings appropriately. Following their visit to Far Bardsey Farm, pupils classify plants, animals & micro-organisms local to West Yorkshire and compare them to those that thrive in the Caribbean.

Read: Darwin’s Tree of Life by Michael Bright and **Animalium (welcome to the museum) by Jenny Broom.**
Create a non-chronological report on unusual animals from the different continents and oceans.
Create their own creature which fits into the classification system.
Experience a visit to a farm.

Humanities

‘God’s Own County’
Yorkshiremen

Following their trip and hike to**, pupils investigate the human geographical features of West Yorkshire such as settlement and land use & changing economic activity (tourism & distribution of food). To deepen their understanding, they visit Far Bardsey Farm Shop, pick pumpkins and make pumpkin soup.

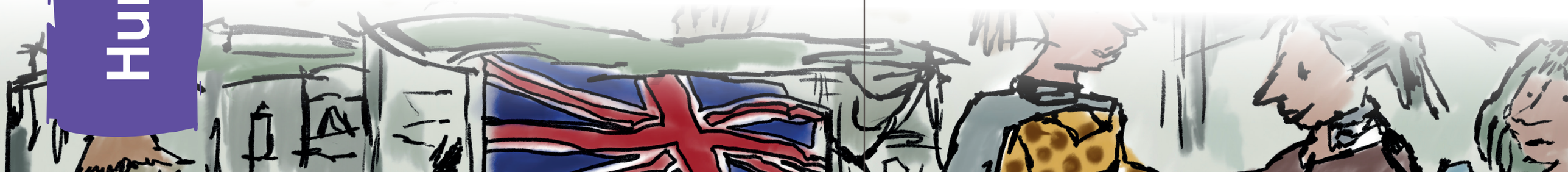
Following this, the pupils compare the human and physical features of West Yorkshire with the Himalayas, learning about Junko Tabei, the economic impact of Everest Tourism and the Himalayan landscape.

Read: Junko Tabei Masters the Mountains by Rebel Girls Series
Create a leaflet to promote The Himalayas as a tourist destination.
Create and label a map of West Yorkshire, listing its key geographical features.
Experience a hike.

‘SOS Titanic calling. We have struck ice and require immediate assistance.’
The Titanic (Telegram)

Pupils begin the half term with a day trip to the Merseyside Maritime Museum in Liverpool where they learn the story of the doomed Titanic and its passengers. During this trip they also visit Albert Dock and the Liver Building, home of the White Star Company. The pupils chronologically place the sinking of 1912 amongst key events in modern society and investigate why it was such a significant turning point in Britain’s history.

Read: Story of The Titanic by DK Eyewitness; Voices of The Titanic: A Titanic Book for Kids (History Speaks!) by Mary Montero.
Write a historical newspaper article describing the sinking of the Titanic and exploring the impact of the passenger class system on the survival rate of passengers.



Year 6 Curriculum - phase 3

Art & Design

Autumn

‘Creativity is mistakes’
Grayson Perry

All voyagers require a chart on their journey, and year 6 art begins with the maps of various artists as they look down from the sky. The term shifts with an exploration of masks from Nicaragua as pupils explore their own personalities, characters and alter egos. What do we choose to conceal and what do we choose to share? From there, the voyage continues with a look at architecture, exploring space and air and even maybe creating a new element as inspired by the work of **Julie Marie Grey.** Pupils are encouraged to make thoughtful choices and decisions which reflect their own increasingly confident artistic voice. Their artistic journey ends with a creative walkabout, as each pupil builds an outsized staff representing themselves as they step into the unknown of secondary education.

MFL

‘If you talk to a man in a language he understands, that goes to his head. If you talk to him in his language, that goes to his heart.’
Nelson Mandela

¡Bienvenidos! Willkommen! In the UK, it is often overlooked that over half of the world’s population is bilingual. We want to challenge this, ensuring that all of our pupils become confident communicators with a love of languages. Pupils study both Spanish and German throughout their time at Primary school, starting with weekly, specialist MFL lessons from Year 3. Our vision is clear - we want our pupils to take delight in being able to communicate in different languages and be knowledgeable about the world, its people and cultures.

So, how do we teach?

Pupils:

- develop excellent phonics knowledge through repetition, rhyme, tongue-twisters and songs
- understand and apply vocabulary from a range of word classes through language games and authentic materials (e.g. songs, stories and media)
- enjoy the culture of Spanish and German speaking countries through food tasting, cooking, festivals, music and sport
- communicate in a variety of ways: poems, songs, puppet shows, role-plays and age-related writing

At Phase 3

- manipulate language, completing tasks of increasing complexity in terms of grammatical structures
- use grammatical terms to talk about their learning so as to support their wider understanding of how languages work, including English

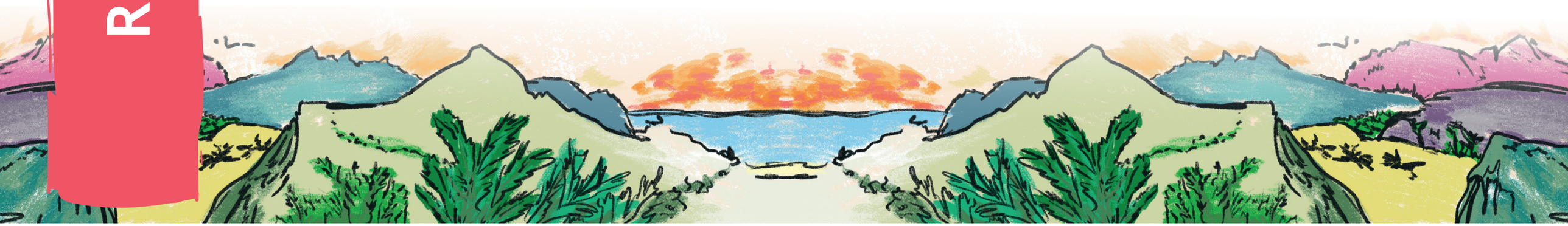
Year 6 Curriculum - phase 3

Autumn

RE

‘Do what you feel in your heart to be right’
Eleanor Roosevelt

Everybody needs a moral map to guide them through the voyage of life – for many that is faith but not for all. In year 6 pupils look carefully at Humanism, exploring the movement and philosophy including thoughts on life an death, how a humanist is guided morally and understands ‘right’ and ‘wrong’. We look again at the importance of celebrating life events and discover great humanists that we can all learn from. Taking into account all our learning and experience, pupils think about other Dharmic and Abrahamic religions they have already studied and make comparisons.



PE

‘I take things one step at a time’
Simone Biles

Year 6 PE takes a voyage through different sports and activities. Starting with gymnastics pupils developing their skills on different apparatus, creating floorwork routines and team sequences, balancing and traveling in pairs before leaping off into a pike, straddle or tuck. IN dance, pupils explore more challenging ways to move their body and tell stories to music, learning how to use props and memorise routines. We venture around the world of sports with Kabaddi, Tri-Golf, Ultimate Frisbee and boxing.

Year 6 Curriculum - phase 3

English

Spring 1

Charles Darwin
Darwin's Finches
Darwin's voyages and work led Victorian society into difficult unnavigated waters. In year 6, pupils learn about Charles Darwin and his pioneering work, 'The Origin of the Species'. They find out about his life and legacy paying particular attention to his voyage on HMS Beagle and his work in the Galapagos Islands. Pupils reflect on the need for courage as they explore the difficult reception to his findings.

Read: **Darwin's Dragons by Lindsay Galvin; On The Origin of Species by Sabina Radeva; What Mr Darwin Saw by Mick Manning**

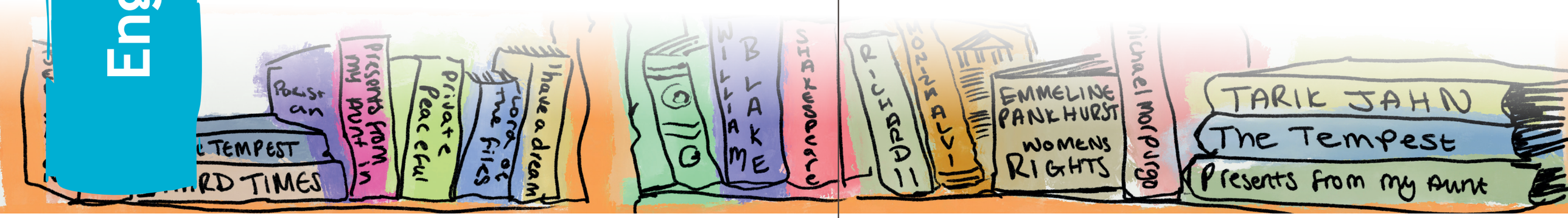
Write an autobiography detailing Charles Darwin's experiences and studies on The Galapagos Islands.

Spring 2

'Tell me and I forget, teach me and I may remember, involve me and I learn' Benjamin Franklin

Learning to Learn
Pupils prepare for external examinations by further developing their skills of self-regulation in a unit devoted to thinking about how we best learn. We enjoy the brave story of Stanley Yelnats and discover how he battled the evil warden, escaped from a pig-stealing- family curse and freed the people of Camp Green Lake. It also provides pupils with further insights into the complexities of narrative structure and how the past can impact on the present and future.

Read: **Holes by Louis Sachar**



Maths

"If there is a 50-50 chance that something can go wrong, then 9 times out of 10 it will." Paul Harvey

The second term finishes off the work on number, continuing the work with parts of whole amounts, by reviewing and deepening understanding of decimals and percentages. This clears the way to do more formal work on algebra.

Number: Decimals
- Three decimal places
- Multiply & divide by 10, 100 and 1000
- Multiply & divide by decimals and integers
- Division to solve problems
- Convert between fractions & decimals

Number: percentages
- Fractions to percentages
- Equivalent fractions
- Equivalent FDP
- Order FDP
- Percentage of an amount – including finding missing values

Number: Algebra
- Find a rule – up to 2 steps
- Form expressions
- Substitution including into formulae
- Form and solve up to two step equations
- Find pairs of values
- Enumerate possibilities

By the end of the half term, pupils will be able to manipulate parts of a whole amount with confidence. They will have also started their journey into algebra and found that letters behave just like numbers, setting them up to transition easily into algebraic work in later phases of their education.

Where last half term formalised algebra, during this one, pupils do a more formal study of the concept of ratio, alongside other work on perimeter area and volume and the units with which these are measured.

Measurement: Converting Units
- Use & convert Metric Measures
- Calculate with metric measures
- Miles and kilometres
- Imperial measures

Measurement: Perimeter, Area and Volume
- Shapes – same area
- Area & Perimeter
- Area of a triangle & parallelogram
- Volume – counting cubes
- Volume of a cuboid

Number: Ratio
- Using ratio language and notation
- Ratio and fractions
- Calculating ratio
- Find, use and calculate with scale factors
- Ratio and proportion problems

By the end of term 2, pupils will have journeyed through nearly all areas of mathematics, namely number, proportion, algebra and shape.

This leaves some handling data work for the beginning of the final term.

Year 6 Curriculum - phase 3

Spring

Science

Evolution & Inheritance: Wind your neck in!

A visit from some amazing birds of prey begins the term. Pupils use this first-hand experience to develop scientific lines of enquiry about the birds' features, following this theme throughout the topic. This leads to pupils studying Darwin's theory of Evolution and how his observation of finches on the Galapagos Islands provided evidence for this theory. Pupils learn how Darwin's theory replaced Lamarchian's theory of evolution and revisit the study of the giraffe's neck which demonstrates the difference between the two theories.

Read: Island by Jason Chin
Write a persuasive blog post set in the 1859 which describes Charles Darwin's theory of evolution in under 500 words.
Report and present findings from their enquiry of the birds via a presentation to an audience explaining why birds of prey have evolved the way they have.
Experience writing for a digit audience.

Humanities

Mary Anning: 'I have always admired most those who lead with their eyes, like Mary Anning, for they seem more aware of the world and its workings.'

World War I
Famous, female and a fossil hunter – Mary Anning was a woman on an untrodden path. In the Spring term, pupils learn about her work as a palaeontologist, place her life within the wider chronology of history and identify geographical regions of the UK with connections to fossils. They recognise that fossils provide fascinating information about living things that inhabited the Earth millions of years ago. Excitingly, pupils get the opportunity to handle, compare and analyse fossils within school.

Read: Mary Anning (History VIP's) by Kay Barnham;
Write an exploding book which reports on the discovery of a fossil at school.
Experience handling real fossils.

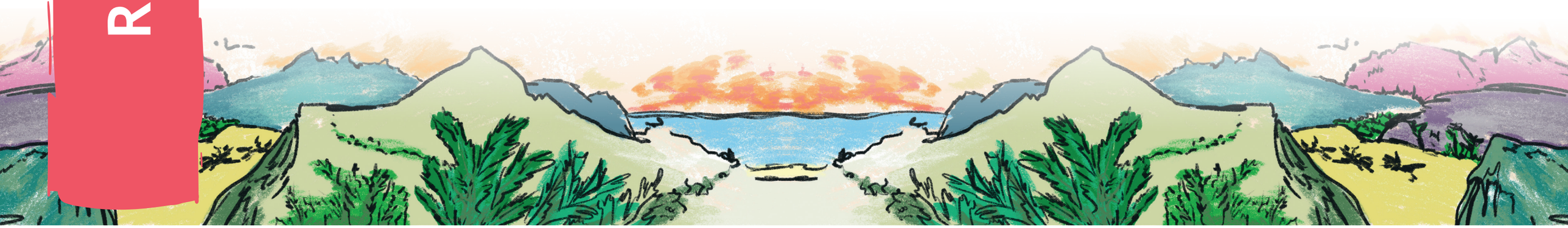
Year 6 Curriculum - phase 3

Spring

RE

‘What’s fair ain’t necessarily right’
Toni Morrison

During this term pupils look at the origins (place, stories, history) of the two major families of religion and in particular their approach to worship and justice. Taking into account all their learning and experience, pupils think about all the Dharmic and Abrahamic religions they have studied and make comparisons.



PE

‘Be proud of every step you take towards achieving your goal’
Simone Biles

Year 6 PE continues their voyage through different sports and activities. Starting with gymnastics pupils developing their skills on different apparatus, creating floorwork routines and team sequences, balancing and traveling in pairs before leaping off into a pike, straddle or tuck. In dance, pupils explore more challenging ways to move their body and tell stories to music, learning how to use props and memorise routines. We venture (again) around the world of sports with Kabaddi, Tri-Golf, Ultimate Frisbee and boxing

Year 6 Curriculum - phase 3

English

Summer 1

‘Like what you do and then you will do your best’
Katherine Johnson

Space: The Final Frontier
The final term begins with pupils experiencing the Alpha Dome Immersive Theatre; they ‘virtually’ orbit the solar system and generate lines of enquiry about stars, planets , black holes. Their journey continues by investigating the lives and work of Nicolaus Copernicus & Galileo Galilei. Where has our knowledge of space come from? Pupils continue to explore the concept of finding your own path, whatever the challenges, by exploring the life of Katherine Johnson – a brilliant mathematician and NASA scientist.

Write non-chronological reports on the ‘Challenging the orthodox in space exploration’.
Read: Wonder by R.J. Palacio; See you in the Cosmos by Jack Cheng.
Experience an immersive theatre dome.

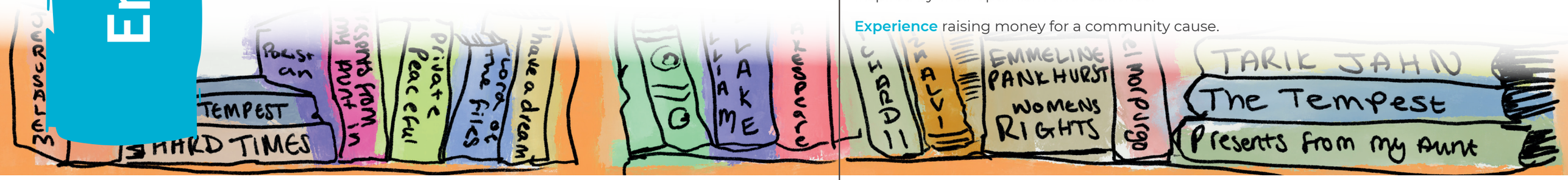
Summer 2

‘We can change the world and make it a better place. It is in our hands to make a difference.’
Nelson Mandela

Charity Challenge
How can we leave a legacy of kindness? At the start of their final term in the primary building, pupils consider the local community and decide upon an area where they feel they can make an impact and help others. Pupils consider their own values and those of the school; they investigate different local charities and causes they could support. Pupils think about different types of support in terms of contributing time, raising awareness, performing a physical challenge or volunteering.

Our reading binds together both elements of our work this term. ‘Wonder’ and ‘See You In the Cosmos’ follow young boys who struggle with the world around them and use their love of space to overcome their difficulties and change the way others perceive them. By sharing their love of space, we are allowed to step into Alex’s and Auggie’s shoes and be inspired by their optimism and resilience.

Experience raising money for a community cause.



Maths

“Even if I were travelling with you, your trip would not be mine.” Paul Theroux

In the last term, pupils spend a significant amount of time learning about how to read and represent data graphically through graphs and charts as well as how to work out averages. Having worked with area and volume last term, they now look at a different section of shapes by exploring angles.

Statistics
- Read, interpret & draw line graphs, using them to solve problems
- Circles
- Read and interpret pie charts
- Pie charts with percentages
- Draw pie charts
- The mean

Geometry: Properties of shape
- Measure with a protractor
- Introduce & calculate angles
- Vertically opposite angles
- Angles in a triangle, missing angles and special cases
- Angles in special quadrilaterals
- Angles in regular polygons
- Draw shapes accurately
- Draw nets of 3D shapes

By the end of this half term pupils have experienced. all areas of mathematics in a great deal of depth.
They will have reached this point through a very personalised voyage that combined exploration and discovery with a formalised “pulling together” of their approaches as external examinations draw nearer.

“I am still waiting for the day I’ll use mathematics integration in real life.”

Consolidation & Investigation
Up to this point, other areas of mathematics have provided pupils with the opportunity to apply their numerical and calculation skills in specific contexts.
In the final half term, pupils are given the opportunity to relate their very pure and deep mathematical understanding to the wider world around them.
They undertake additional investigations into how maths is around us and shapes our experience through the use of money, time, ratio and shapes.

Year 6 Curriculum - phase 3

Summer

Science

The Science of Well Being
Pupils learn about the changes in their own bodies due to the onset of puberty and beginning of adolescence so that they can better understand the changes happening to their bodies.

Building upon their knowledge of how humans have come to know the solar system, pupils begin this unit by observing the moon and night sky over a 28-day cycle. They track the Earth's movement by creating sundials and compare this with the movement of other celestial bodies in the solar system. Pupils explore other voyages into the unknown including: The Voyager mission, ISS and the Perseverance Rover, identifying their significance to future space exploration.

Read: Stargazing Journal for Kids: Night Sky Observation Notebook for Kids to Write in by Merlyna Bear; Voyager Missions! Where are they now and what have they discovered? By Professor Gusto.
Write up a report on the Earth's movement through their sundial experiment.
Experience using a telescope and observing real celestial events.

Humanities

'Standing on the Shoulders of Giants' by Isaac Newton

Pupils learn about the launch of the ISS. They consider the technology and science needed to be able to achieve such a feat, draw on the significance of the achievement for humankind and reflect on its legacy. Pupils track other ventures into space such as: the Voyager mission, the moon landing and Mars exploration. Pupils spiral back on their previous learning and understand that without the work of Nicolaus Copernicus & Galileo Galilei flights into space may not have been possible. Fast forwarding to the near future, pupils look at the very real possibility of space tourism. Is it pioneering science or toys for rich boys?

Read The International Space Station by Clive Gifford; Curiosity: The Story of a Mars Rover by Markus Motam.

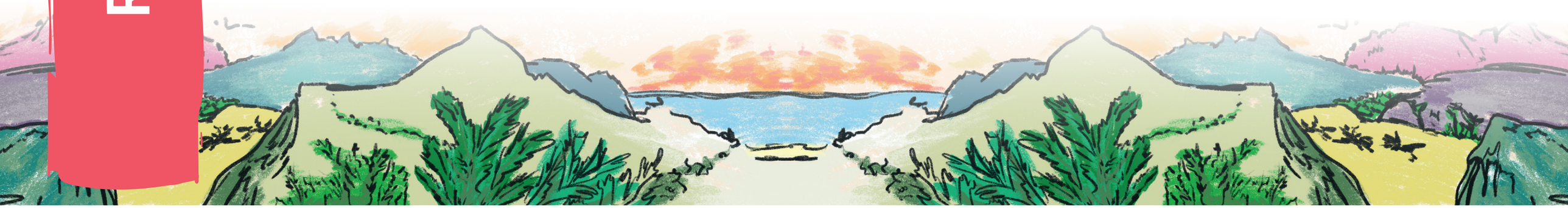
Year 6 Curriculum - phase 3

Summer

RE

‘Paintings have a life of their own, which derives from the painter’s soul’
Vincent Van Gogh

In the summer term, year six take a deeper look at understanding different faiths through their expression in religious art, music and literature. Pupils examine both ancient and modern traditions and think about how the arts relate to worship.



PE

‘I know what I need to do to be a champion, so I am working on it’
Usain Bolt

Striking and fielding sports are the order of the day and pupils develop their skills in fielding, bowling and batting. They refresh their knowledge of game play and scoring systems before playing small, sided games and round robin tournaments. They also journey into the athletics arena enjoying different track and field events leading up to Sports Day. These include: sprint, baton and shuttle relays, long distance, javelin and shot putt. Oh, and we can’t forget the Egg and Spoon race!