|  |
| --- |
| **CYCLE A - Year 5/6 Overview**  |
|  | **Autumn** | **Spring** | **Summer** |
| Enrichment SchoolExperiences | Planetarium – The World Museum, Liverpool - Linked to Science, |  | Jorvic Viking Centre, York – linked to History unit on Vikings. |  |  | Outdoor Experience Trip – TBCResidential trip |
| **English** | **FICTION**The Adventures of Odysseuslinked to History unit – Ancient Greece**GRAMMAR SKILLS**using **expanded noun phrases** to convey complicated information conciselyusing **semicolons, colons or dashes** to mark boundaries between independent clausesuse **synonyms and antonyms**.**NON FICTION**Curiosity: The story of a Mars rover linked to Science Unit - (Space) | **FICTION***Town is by the Sea**(Picture book)* **GRAMMAR SKILLS**recognise and use a variety of **layout devices** to organise contents on the page.develop children’s awareness of the conventions of punctuation when using **bullet points****POETRY** | **FICTION**The Song from Somewhere Else(Illustrated novel)**GRAMMAR SKILLS**recognise the basic features of **formal/impersonal** writing and to see examples of the **subjunctive** in very formal speech and writingdevelop an awareness of the **active and the passive voice** and how it affects presentation of information | **FICTION**Tales from the Carribean*(Traditional Tales)***GRAMMAR SKILLS**to revise and deepen their understanding of the differences between **formal and informal vocabulary** in speech and writing. To increase their awareness of when one might be more appropriate than the other | **NON FICTION**Mama Miti: Wangari Maathai and the Trees of Kenya(Around the world/Black History) **GRAMMAR SKILLS**develop their knowledge of when **hyphens** are used to avoid confusion and ambiguity | **FICTION**Runaway Robot*(Contemporary novel)***GRAMMAR SKILLS**develop their ability to recognise and use a wider range of **cohesive devices** to link ideas across paragraphs**POETRY** |
| **Maths** | **Number: Place Value** * To represent numbers to 10,000 in different ways
* To represent numbers to 100,000 on place value charts and numberlines
* To be able to read, write and represent numbers to 1,000,000
* To be able to read, write and represent numbers to ten million in different ways
* To be able to compare and order whole numbers up to ten million
* To be able to round numbers to the nearest 10, 100 and 1000
* To be able to round numbers within ten million
* To be able to count backwards and forwards through zero

**Number: Addition and Subtraction, Multiplication and Division*** To be able to add whole numbers with more than 4-digits
* To be able to subtract numbers with more than 4-digits
* To use the inverse operation for addition and subtraction
* To solve multi-step addition and subtraction problems
* To be able to add and subtract integers
* To be able to multiply a 4-digit number by a 1-digit number
* To be able to multiply 2-digits using the ‘area model’
* To be able to multiply a 2-digit number by a 2-digit number
* To be able to multiply a 3-digit number by a 2-digit number
* To be able to multiply up to a 4-digit number by a 2-digit number
* To be able to divide a 4-digit number by a 1-digit number
* To be able to divide with remainders
* To be able to use the short division method
* To be able to divide using knowledge of factors
* To divide a 3-digit number by a 2-digit number (without remainders) using long division
* To divide a 4-digit number by a 2-digit number (without remainders) using long division
* To use long division where answers have remainders
* To know that factors of a number multiply together to give that number
* To be able to find common factors of two numbers
* To be able to find common multiples of numbers
* To work out whether or not numbers up to 100 are prime
 | **Number: Addition and Subtraction, Multiplication and Division continued*** To explore the relationship between square and cube numbers
* To understand that the order of operations within a calculation affects the answer
* To be able to use efficient mental calculations and sensible estimations
* To be able to use reasoning and apply understanding of commutativity and inverse operations

**Number: Fractions*** To explore equivalent fractions using models and concrete representations
* To use understanding of the highest common factor to simplify fractions
* To be able to convers improper fractions to mixed numbers
* To be able to convert mixed numbers to improper fractions
* To be able to identify where fractions belong on a numberline
* To be able to compare fractions where denominators are not multiples of the same number
* To be able to compare fractions by finding a common numerator
* To be able to add and subtract fractions where the denominators are multiples of the same number
* To be able to add and subtract fractions where the denominators are not multiples of the same number
* To be able to add two fractions where one or both are mixed numbers or improper fractions
* To be able to add mixed numbers
* To be able to subtract proper fractions from mixed numbers
* To be able to subtract mixed numbers
* To be able to solve problems that involve adding and subtracting fractions and mixed numbers
* To be able to fractions and mixed numbers by integers
* To use concrete and pictorial representations to multiply fractions
* To be able to divide fractions by integers
* To be able to divide fractions where the numerator is not a multiple of the integer
* To be able to use the four operations when calculating with fractions
* To be able to calculate a fraction of an amount
* To be able to find the whole amount from the known value of a fraction

**Geometry: Position and Direction*** To be able to read and plot coordinates in the first quadrant
* To be able to read and plot coordinates in all four quadrants
* To use knowledge of coordinates and positional language to translate shapes in all four quadrants
* To be able to reflect shapes in all four quadrants

**Consolidation** | **Number: Decimals*** To be able to read and write decimal numbers with up to two decimal places and know the value of each digit
* To develop an understanding of thousandths
* To understand numbers with up to three decimal places
* To be able to multiply numbers with up to three decimal places by 10, 100 and 1000
* To be able to divide decimals by 10, 100 and 1000
* To be able to multiply decimals in the context of money and measures
* To be able to divide decimals using knowledge of sharing and grouping
* To solve division problems where the answer has up to 2 decimal places
* To convert decimals into fractions
* To investigate efficient methods to convert fractions to decimals

**Number:** **Percentages*** To know that per cent relates to the number of parts per hundred
* To convert fractions into percentages
* To understand the difference between tenths and hundredths and their equivalent percentages
* To convert between fractions, decimals and percentages to order and compare them
* To be able to find percentages of amounts
* To explore different methods for finding percentages of amounts
* To missing whole or missing percentage when the other values are given

Number: Algebra* To explore simple one-step function machines
* To explore simple two-step function machines
* To be able to form expressions based on function machines
* To be able to substitute into a simple expression to find a particular value
* To be able to substitute into familiar formulae for area and volume
* To use algebraic notation to form one-step equations
* To solve simple one-step equations involving the four operations
* To solve simple two-step equations involving the four operations
* To consider what values a pair of variables can take

To find possible solutions to equations which involve multiples of one or more unknown | **Measurement: Converting Units** * To read, write and recall all metric measurements for length, mass and capacity
* To use skills of multiplying and dividing by 10, 100 and 1000 to convert between units of length, mass and capacity
* To use and apply conversion skills to solve measurement problems in context
* To be able to find approximate conversions from miles to km and from km to miles
* To be able to convert between metric and imperial measurements

Measurement: Perimeter, Area and Volume* To find and draw rectilinear shapes that have the same area
* To calculate the area and perimeter of rectilinear shapes
* To work out the area of triangles by counting
* To calculate the area of right-angled triangles
* To find the area of any triangle using a formula
* To calculate the area of parallelograms
* To know that volume is the amount of solid space something takes up
* To know that volume is the space occupied by a 3-D object
* To use the formula *(l x w x h)* to calculate the volume of cuboids

**Number: Ratio*** To know that ratio shows the relationship between two values
* To use objects and diagrams to compare ratios and fractions
* To use a colon to express ratios
* To be able to calculate ratios
* To be able to draw 2-D shapes to a given scale factor
* To find scale factors when given similar shapes

To solve problems involving ratio and proportion | **Statistics*** To be able to read and interpret
* To be able to draw line graphs
* To be able to read and interpret line graphs to solve problems
* To illustrate and name parts of circles using the words radius, centre and circumference confidently
* To be able to interpret pie charts
* To interpret pie charts with percentages
* To be able to draw a pie chart using a protractor
* To apply addition and division skills to calculate the mean average in a variety of contexts

**Geometry: Properties of Shape*** To be able to measure angles in different orientations
* To draw lines to the nearest millimetre and draw angles of a given size
* To know that there are two right-angles on a straight line and four right angles around a point
* To calculate missing angles on straight lines
* To know that there are 360o in a full turn
* To be able to calculate missing angles
* To recognise that vertically opposite angles share a vertex and that they are equal
* To know that the interior angles of a triangle add up to 180o
* To use knowledge of properties of triangles to reason about angles
* To be able to solve missing angle problems involving triangles
* To know that angles in any quadrilateral add up to 360o
* To explore interior angles in polygons
* To be able to draw shapes accurately on different grids
* To use knowledge of 2-D and 3-D shapes to identify three-dimensional shapes from their nets
 | **Consolidation and themed projects** |
| **Science** | **Earth in Space****The Earth and beyond**Children will develop their knowledge of the Earth’s (and other planets’) place in the solar system, and their relationships with other bodies in space, in particular with the Sun. Children also learn how the Earth’s orbit determines the length of a year and why we have leap years. Children also learn how the Earth’s rotation and tilt affect the direction and length of shadows, and how to use shadows for telling the time.  | **Materials****Get Sorted**Children will identify, compare and classify a variety of materials according to both their properties and their uses. They explore familiar materials in a wide range of contexts and begin to recognise that a single material name, like ‘metal’ or ‘plastic’ can describe a considerable number of different materials that may display very different properties, but which still have features in common. Specific scientific and other vocabulary is used by children as they describe, explain and communicate their understanding of materials, succinctly and in ways appropriate to a science context..  | **Forces****Feel the Force**Children will develop an understanding of how forces including gravitational attraction and drag forces – friction, air resistance, water resistance, and upthrust in water – affect movement. Children learn how mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect, and they use this knowledge in different investigations. When working scientifically, children plan and carry out fair test and pattern-seeking investigations, observe carefully, record accurate measurements, and construct different mechanisms.  | **Living things and their habitats****Cycle of life**Children extend their understanding of what a life cycle is, and learn about the life cycles of some familiar (and some less familiar) mammals, amphibians, insects and birds. They compare and contrast different life cycles, identifying common features as well as explaining key differences. They learn about incredible journeys that some animals undertake to complete their life cycles, and about the different ways in which humans are supporting some endangered animals to increase their population numbers. | **Animals incl Humans****Reproduction in Plants and Animals**Children will learn about reproduction in some types of plants and animals, including humans. This module builds on the learning about different types of animals and their life cycles begun during that unit. They will also learn that plants can reproduce in other ways, through asexual reproduction. As they learn about reproduction in animals, the children will find out more about specific mammals, birds, insects and amphibians and how they reproduce. The children will look at the human life cycle and puberty. | **Materials****Marvellous Mixtures**Children will further develop their conceptual knowledge and understanding of how different mixtures of solids and liquids might be separated. They learn that certain solids dissolve while others do not, and how these dissolved solids might be retrieved from a mixture. They explore how the rate at which solids dissolve can vary, investigating variables that might make a difference. They use their knowledge of separating mixtures in solving a number of real worldbased enquiries, which require them to apply their growing subject knowledge to an unusual context. Children use specific scientific and other vocabulary as they describe, explain and communicate their understanding of materials, succinctly and in ways appropriate to a science context. |
| **Computing** | **Word Processing** | **Data – Databases** | **Game Creator****Online Safety** | **Coding – 2Code A** | **3D Modelling** | **Blogging** |
| **History / Geography** | **HISTORY****Ancient Greece** **– a study of Greek life and achievements** The children explore ancient Greece and its many wonders. They will discover the people, the inventions, the art, the technology and the mythology of the ancient Greeks, all through fully-prepared lessons that are ready to download and teach.They will look at the similarities/differences between Sparta and Athens. | **Mountains**What is a mountain? Where are the ‘Seven Summits’? How are the mountains made? Are all mountains made in the same way? What is it like on a mountain? Why do people choose to live on mountains?What are the UK’s highest mountains like? How are these mountains different from each other?What is it like in the Himalayas? In what ways are they similar to, or different from, the highest mountains in the UK?What can I find out about the world’s highest mountains? What is the land around a mountain like? | **HISTORY** **Vikings**The Children journey back in time as they find out what the Vikings were really like. Were they raiders or settlers? Children will find out the good and the bad things about Vikings and make their own minds up. | **GEOGRAPHY****Volcanoes and Earthquakes part 1** |  | **GEOGRAPHY****Volcanoes and Earthquakes part 2** |
| **Art / DT** | **DT: Food- Bread*** Prepare food products taking into account the properties of ingredients and sensory characteristics.
* Weigh and measure using scales.
* Select and prepare foods for a particular purpose.
* Work safely and hygienically.
* Show awareness of a healthy diet (using the eatwell plate).
* Use a range of cooking techniques.
* Know where and how ingredients are grown and processed.
* Consider influence of chefs e.g. Jamie Oliver and school meals, Hugh Fearnley-Whittingstall and sustainable fishing etc.
 | **ART: Drawing*** To do large charcoal / soft pencil ‘1-minute sketches’ of classmates to capture the line and form speedily. Use newsprint to capture 5 or 6 sketches and choose a favourite.
* To use viewfinders to do quick sketches. Select media to capture what they see
* To look at drawings that use obvious perspective eg train tracks or roads going to the horizon etc and discuss how it is created
* To experiment with drawings using perspective, using line and pattern
* To look at optical art such as the work of Bridget Riley eg ‘Movement in Squares’ 1961and discuss her techniques
* To create their own black and white op art pictures in the style of Bridget Riley
* To evaluate their own work and that of others using the language of art. To be able to express preferences explaining their thinking and suggesting improvements and relating their work to that of other artists
* understand and use mechanical systems in their products [for example, levers and linkages]
 | **ART: Textiles*** To experiment with tie dying fabrics to create patterns and using more than one colour to investigate the effects
* To investigate batik / wax resist to create different colour effects and pattern on fabric
* To develop needle control, using different sizes of needles and different thicknesses of threads appropriate to the task
* To extend the range of stitches used, selecting some for a specific purpose and others for decorative effect
* To use fabric they have dyed, painted or printed to realise a self-generated design items using a variety of stitches, appliques and decorative embellishments
* To evaluate their own work and that of others using the language of art. To be able to express preferences explaining their thinking and suggesting improvements and relating their work to that of other artists
 | * **DT: CAMS- Moving Toys**
* Use mechanical systems such as cams, pulleys and gears.
* Build frameworks to support mechanisms.
* Cut strip wood, dowel, square section wood accurately to 1mm.
* Join materials using appropriate methods.
* Stiffen and reinforce complex structures
 | **DT: Textiles- keyrings*** Use the correct vocabulary appropriate to the project.
* Create 3D products using patterns pieces and seam allowance.
* Understand pattern layout.
* Decorate textiles appropriately (often before joining components).
* Pin and tack fabric pieces together.
* Join fabrics using over sewing, back stitch, blanket stitch or machine stitching (closer supervision).
* Combine fabrics to create more useful properties.
* Make quality products.
 | **ART: Painting*** Experiment with watercolours, blending colours on the paper
* Create a watercolour wash, let it dry, then work over the top of it in watercolour or different media to create mixed media artwork
* Looking at art movements that
* Looking at mood in paintings eg Picasso’s blue period/ Leonardo Da Vinci’s Mona Lisa, then thinking about how the artist created mood and creating their own paintings that reflect a mood
* Looking at different
* To evaluate their own work and that of others using the language of art. To be able to express preferences explaining their thinking and suggesting improvements and relating their work to that of other artists
 |
| **RE** | **Christianity** (Church)Christian rites of passageDenominational differences | **Hindu dharma**ReincarnationKarmaThe 4 ashramas | **Islam**The UmmahHajj | **Christianity** (Jesus)Holy WeekThe EucharistDenominational differences | **Buddhism**The Buddha The Four Noble TruthsThe Eightfold path | **Christianity** (God)SalvationForgiveness |
| **PSHE** | Attraction to others; romantic relationships; civil partnership and marriage.Recognising and managing pressure; consent in different situations.Expressing opinions and respecting other points of view, including discussing topical issues. | Valuing diversity; challenging discrimination and stereotypes.Evaluating media sources; sharing things online.Influences and attitudes to money; money and financial risks. | What affects mental health and ways to take care of it; managing change, loss and bereavement; managing time online.*Human reproduction and birth, increasing independence, managing transition (Y6 content only)* Keeping personal information safe; regulations and choices; drug use and the law; drug use and the media. |
| **PE** | **Dance- Heroes and Villains**To create a group dance using a range of dynamics, accurately timed.To develop awell-rehearsed duet that demonstrates a range of choreographic techniques.To create and perform two different dances from different stimulus (a duet and a group dance). To perform all their creations in a sequence decided by them.To have new performance skills and increased confidence. | **Gymnastics**To demonstrate counter balance and counter tension paired balances using apparatus.To create a gymnastic sequence with counter balances and counter tension in a group.To create a gymnastic sequence with counter balances and counter tension with a partner.To demonstrate paired and group counter balances in unison.To create a sequence of gymnastic actions, paired and group balances | **Dance -Earthlings**To create a solo and demonstrate decision-making skills in the creation of a new dance with a partner.To display increased teamwork skills, spatial awareness and timing. To create dances using different formations and performed in unison.To demonstrate creative skills and decision making in the creation of a new duet.**To** have selected, structured, rehearsed and performed their dances, demonstrating a broad range of skills acquired throughout the scheme | **Gymnastics - 2**To perform partner balances.To create a simple sequence of matched and mirrored partner balances.To know the difference between counter balance and counter tension.To create a gymnastic sequence with counter balances and counter tension with a partner.To create a gymnastic sequence with counter balances and counter tension with a partner.To evaluate and recognise their own success. | **Net and Wall- Tennis**To demonstrate a forehand and backhand shot with some consistency.To direct the ball reasonably well to their partner to continue a rally.To demonstrate a simple tactic in a net type game (i.e. To be able to hit the ball to targets away from their partner.)To play the game for the core task and incorporate tactics to score points. | **Year 5/6 - Orienteering**To demonstrate how to “set or “orientate” a map when moving around a simple course.To demonstrate how to get around a simple course using the 8 points of a compass.To find the correct control marker using a map during a score event.To record answers accurately.To navigate to a control markers during a score event.To make decisions about which control markers to visit in the time allowed. |
| **Invasion Games-Hockey**To show passing a ball to a teammate using a hockey stick.To demonstrate dribbling and shooting a ball using a hockey stick. To apply simple attacking and defending tactics when playing a hockey type game.To play a role in a competitive modified game | **Creative Games**To dribble a ball.To pass and receive a pass using a variety of skills.To select and apply appropriate tactics when playing different invasion games.To create a football type game and select and apply tactics to outwit an opponent.To work as a team to solve a tactical problem through designing a unique invasion game.To adapt an invasion game to include positions and attacking/defending options.  | **Invasion Games- Netball**To demonstrate passing and catching a netball with consistency, accuracy and control.To demonstrate a shoulder pass.To shoot a netball with some accuracy. To make decisions on when to pass the ball in a game situation.To apply simple attacking and defending tactics when playing a netball-type game. | **Striking and Fielding- Cricket**To catch a ball when fielding.To strike a ball with a bat off a tee.To demonstrate an overarm throw when fielding a ball.To explain where to strike a ball in a game. To make a definite choice of where to strike the ball.To demonstrate bowling underarm with accuracy in a game.To strike a ball with a bat.To use tactics in a cricket type game. | **Athletics**To perform running techniques for short and long distances.To perform a pull and push throw. To take off and land one foot to one foot (same and other).To develop running for a distance.To take off and land using a combination of jumps.To perform a sling and heave throw.To develop running techniques at different speeds.To take off and land using a hop, step and jump.To take off part in an athletics event and recording times and distances. | **Striking and Fielding- Rounders**To catch a ball when fielding.To strike a ball with a bat off a tee.To demonstrate an overarm throw when fielding a ball.To explain where to strike a ball in a game. To make a definite choice of where to strike the ball.To demonstrate bowling underarm with accuracy in a game.To strike a ball with a bat.To use tactics in a rounders game. |
| **Music** | **Rock Anthems –** **Livin on a Prayer**Copy back using instruments. Use the notes G and A. Question and Answer using instruments. Use the notes G and A in your answer. Take it in turns to improvise using 2 notes, G and A. | **Performance**A Christmas production will take place and be shared with the parents. | **Pop Ballards****Make you feel my love**Copy back using instruments. Use the notes C and D. Question and Answer using instruments. Use the notes C and C in your answer. Take it in turns to improvise using 2 notes, C and D. | **Old School Hip-Hop –****The Fresh Prince of Bel Air**Copy back using instruments. Use the notes D and E. Question and Answer using instruments. Use the notes D and E in your answer. Take it in turns to improvise using 2 notes, D and E. | **Motown –****Dancing in the Street**Clapping riffs. Learn the rhythm of three riffs. Playing riffs using instruments and/or voices. Play the three riffs using the notes F and G. Question and Answer. As a class or on your own, improvise (make up) your own answer to the musical question you hear played. Use the notes F, or F and G. Improvise! Try on your own. Try to include one or two of the riffs you have learnt. Use the notes F, or F and G. | **Reflect Rewind Replay**This is a consolidation unit of all the skills and knowledge learnt in the previous units during the year. It will be based around classical music and will provide a good end of year summary of all learning that has taken place. |
| **MFL** | **Phonics 3&4****The Date** | **My home** | **Habitats** | **Clothes** | **At School** | **Vikings** |