

#### **English**

#### Reading - Word

Apply their growing knowledge of root words, prefixes and suffixes both to read aloud and to understand the meaning of new words they meet

### Reading – Comprehension

Maintain positive attitudes to reading and understanding of what they read by:

Continuing to read and discuss a wide range of fiction, poetry, plays, non-fiction and reference books or textbooks

Reading books that are structured in different ways and reading for a range of purposes

Increasing their familiarity with a wide range of books, including myths, legend and traditional stories, modern fiction, fiction from our literacy heritage, and books from other cultures and traditions

Recommending books that they have read to their peers, giving reasons for their choices

Identifying and discussing themes and conventions in and across a wide range of writing

Making comparisons within and across books

Learning a wider range of poetry by heart

Preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience

Understand what they read by:

Checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context

Asking questions to improve their understanding

Drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence

Predicting what might happen from details stated and implied

Summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas

Identifying how language, structure and presentation contribute to meaning

Discuss and evaluate how authors use language, including figurative language, considering the impact on the reader

Distinguish between statements of fact and opinion

Retrieve, record and present information from non-fiction

Participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously

Explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary

Provide reasoned justifications for their views

#### Writing

#### Handwriting

Write legibly, fluently and with increasing speed by:

Choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters

Choosing the writing implement that is best suited for a task

#### Composition

### Plan writing by:

Identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own

Noting and developing initial ideas, drawing on reading and research where necessary

In writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed

#### Draft and write by:

selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning

In narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action

Précising longer passages

Using a wide range of devices to build cohesion within and across paragraphs



Using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining]

#### Evaluate and edit by:

Assessing the effectiveness of their own and others' writing

Proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning

Ensuring the consistent and correct use of tense throughout a piece of writing

Ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register

Proof-read for spelling and punctuation errors

Perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear.

### Writing -vocabulary, grammar and punctuation

Develop their understanding of the concepts set out in the National Curriculum <u>English Appendix 2</u> by: Recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms

Using passive verbs to affect the presentation of information in a sentence

Using the perfect form of verbs to mark relationships of time and cause

Using expanded noun phrases to convey complicated information concisely

Using modal verbs or adverbs to indicate degrees of possibility

Using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun

Learning the grammar for years 5 and 6 in the national Curriculum English Appendix 2

Indicate grammatical and other features by: using commas to clarify meaning or avoid ambiguity in writing

Using hyphens to avoid ambiguity

Using brackets, dashes or commas to indicate parenthesis

Using semi-colons, colons or dashes to mark boundaries between independent clauses

Using a colon to introduce a list

Punctuating bullet points consistently

Use and understand the grammatical terminology in English Appendix 2 accurately and appropriately in discussing their writing and reading

### **Spelling, Punctuation and Grammar**

A breakdown of the spelling, punctuation and grammar curriculum can be viewed in the Tatsfield progression booklet and the National Curriculum

#### Range of opportunities

#### **Fiction**

Write stories

Write stories that contain mythical, legendary or historical characters or events

Write stories of adventure

Write stories with imaginary settings

Write letters

Write stories in the style of significant authors

Write stories inspired by reading across the curriculum

Write plays

#### Non-Fiction

Write instructions

Write letters

Write recounts

Write persuasively

Write in a journalistic style

Write formally

#### **Poetry**

Write poems that convey an image



#### Communication – across KS2

Listen and respond appropriately

Ask relevant questions to extend understanding and knowledge

Use relevant strategies to build vocabulary

Articulate and justify answers, arguments and opinions

Give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings

Maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments

Use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas

Speak audibly and fluently with an increasing command of Standard English

Participate in discussions, presentations, performances, role play, improvisations and debates

Gain, maintain and monitor the interest of the listener(s) Consider and evaluate different viewpoints, attending to and building on the contributions of others

Select and use appropriate registers for effective communication

#### **Mathematics**

### Number- number and place value

Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit

Round any whole number to a required degree of accuracy

Use negative numbers in context, and calculate intervals across zero

Solve number and practical problems that involve all of the above

## Number – addition, subtraction, multiplication and division

Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication

Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context

Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context

Perform mental calculations, including with mixed operations and large numbers

Identify common factors, common multiples and prime numbers

Use their knowledge of the order of operations to carry out calculations involving the four operations

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why

Solve problems involving addition, subtraction, multiplication and division

Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

# Number – Fractions (including decimals and percentages)

Use common factors to simplify fractions; use common multiples to express fractions in the same denomination

Compare and order fractions, including fractions > 1

Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example,  $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$ ]

Divide proper fractions by whole numbers [for example,  $\frac{1}{3} \div 2 = \frac{1}{6}$ ]

Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example,  $\frac{3}{8}$ ]

Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places

Multiply one-digit numbers with up to two decimal places by whole numbers

Use written division methods in cases where the answer has up to two decimal places



Solve problems which require answers to be rounded to specified degrees of accuracy

Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts

### **Ratio and Proportion**

Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts

Solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison

Solve problems involving similar shapes where the scale factor is known or can be found

Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples

#### Algebra

Use simple formulae

Generate and describe linear number sequences

Express missing number problems algebraically

Find pairs of numbers that satisfy an equation with two unknowns

Enumerate possibilities of combinations of two variables

#### Measurement

Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate

Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places

Convert between miles and kilometres

Recognise that shapes with the same areas can have different perimeters and vice versa

Recognise when it is possible to use formulae for area and volume of shapes

Calculate the area of parallelograms and triangles

calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm<sup>3</sup>) and cubic metres (m<sup>3</sup>), and extending to other units [for example, mm<sup>3</sup> and km<sup>3</sup>].

## **Geometry – Properties of shape**

draw 2-D shapes using given dimensions and angles

recognise, describe and build simple 3-D shapes, including making nets

compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons

illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius

Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles

#### Geometry – position and direction

Describe positions on the full coordinate grid (all four quadrants)

Draw and translate simple shapes on the coordinate plane, and reflect them in the axes

#### **Statistics**

Interpret and construct pie charts and line graphs and use these to solve problems

Calculate and interpret the mean as an average

#### Science

## Working scientifically

Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate

Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

Using test results to make predictions to set up further comparative and fair tests

Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations



Identifying scientific evidence that has been used to support or refute ideas or arguments

## Living things and their habitats

Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals

Give reasons for classifying plants and animals based on specific characteristics

#### **Animals including humans**

Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood

Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function

Describe the ways in which nutrients and water are transported within animals, including humans

#### **Evolution and inheritance**

Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago

Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents

Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution

Study of Charles Darwin as a local scientist

#### Light

Recognise that light appears to travel in straight lines

Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye

Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes

Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

#### Electricity

Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit

Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches

Use recognised symbols when representing a simple circuit in a diagram

#### Gardening

Maintaining the pond and wildlife area; growing potatoes

#### Computing

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

Work with variables and various forms of input and output

Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

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#### Art

Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.

To create sketch books to record their observations and use them to review and revisit ideas

To improve their mastery of art and design techniques, including drawing, textiles, painting and sculpture with a range of materials. – *Paper and card Sculptures* 

Learn about the great artists, architects and designers in history -, Architect research e.g Inigo Jones and Frank Lloyd Wright.

### **Design Technology**

#### Design:

Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.

Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

#### Make:

Select from and use a wider range of tools and equipment to perform practical tasks, such as cutting, shaping, joining and finishing, accurately.

Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

#### **Evaluate:**

Investigate and analyse a range of existing products.

Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.

Understand how key events and individuals in design and technology have helped shape the world – Architect research e.g Inigo Jones, Robert Adam, Thomas Jefferson, William Wilkins, Sir John Thynne, Sir Robert Smirke, Charles Barry

### **Technical knowledge:**

Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

Understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages

Understand and use electrical systems in products {for example, series circuits, incorporating switches, bulbs, buzzers and motors]

Apply understanding of computing to program, monitor and control their products

## **Cooking and Nutrition**

Understand and apply the principles of a healthy diet

Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques: Bread based meals (scrambled egg, cheese, tuna melt, pizza) Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed

### Geography

## Locational knowledge

Locate the world's countries, using maps to focus on North America, concentrating on their environmental regions, key physical and human characteristics, countries and major cities

Identify the position and significance of latitude, longtitude, Equator, Northern Hemisphere, southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antartic Circle, the Prime/Greenwich Meridian and time zones (including day and night)

#### Place knowledge

Understand geographical similarities and differences through the study of human and physical geography of a region within North America

## **Human and Physical Geography**

Describe and understand key aspects of:

Physical geography, including: climate zones, biomes and vegetation belts and rivers

Human geography, including: types of settlement and land use, economic activity including trade links and the distribution of natural resources including energy, food, minerals and water

#### Geographical skills and fieldwork

Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied



Use the eight points of a compass, four-figure and sixfigure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world

Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies Field study – River study

#### History

Ancient Greece- A study of Greek life and achievements and their influence on the western world

#### Foreign Language- French

Listen attentively to spoken language and show understanding by joining in and responding

Explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words

Engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help\*

Speak in sentences, using familiar vocabulary, phrases and basic language structures

Develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases\*

Present ideas and information orally to a range of audiences\*

Read carefully and show understanding of words, phrases and simple writing

Appreciate stories, songs, poems and rhymes in the language

Broaden their vocabulary and develop their ability to

understand new words that are introduced into familiar written material, including through using a dictionary

Write phrases from memory, and adapt these to create new sentences, to express ideas clearly

Describe people, places, things and actions orally\* and in writing

#### Music

Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression

Improvise and compose music for a range of purposes using the inter-related dimensions of music

Listen with attention to detail and recall sounds with increasing aural memory

Use and understand staff and other musical notations

Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians

Develop an understanding of the history of music

#### **Physical Education**

Use running, jumping, throwing and catching in isolation and in combination

Play competitive games, modified where appropriate [for example, badminton, basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic principles suitable for attacking and defending

Develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]

Perform dances using a range of movement patterns

Take part in outdoor and adventurous activity challenges both individually and within a team

Compare their performances with previous ones and demonstrate improvement to achieve their personal best

#### **PSHE RSE**

#### **Rights and responsibilities**

I can explain why people might do this (why they are showing certain aspects of themselves) and how social media can affect how a person feels about themself. I can explain that what 'environmentally sustainable' living means and give an example of how we can live in a more 'sustainable' way.

I can explain the advantages and disadvantages of different ways of saving money.

#### **Being My Best**

I can tell you how I can overcome problems and challenges on the way to achieving my goals.

I can give examples of an emotional risk and a physical risk.



#### **Growing and Changing**

I can give an example of a secret that should be shared with a trusted adult.

I can tell you some emotional changes associated with 'puberty' and how people may feel when their bodies change.

I can give examples of other ways in which the way a person feels about themself can be affected (e.g. images of celebrities).

#### Me and My Relationships

I can explain bystander behaviour by giving examples of what bystanders do when someone is being bullied.

I can give examples of negotiation and compromise.

I can explain what inappropriate touch is and give example.

## **Valuing Difference**

I can reflect on and give reasons for why some people show prejudiced behaviour and sometimes bully for this reason.

I can explain the difference between a passive bystander and an active bystander and give an example of how active bystanders can help in bullying situations.

## Keeping Myself Safe

I can explain why emotional needs are as important as physical needs and what might happen if a person doesn't get their emotional needs met.

I can explain some ways of making sure that I keep myself safe when using a mobile phone, including safety around sharing personal information or images, and that there are laws relating to this. I can explain why some people believe that more young people drink alcohol than actually do (misperceive the norm).