| Year 6 | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 오 } \\ & \text { 프 } \\ & \mathbb{Z} \\ & \mathbb{X} \end{aligned}$ | Reading Logs, Book Reviews (Sample Texts from a variety of genre) Gothic Horror: Clockwork (Whole book unit) <br> Fiction: Adventure Story - <br> The Firework Makers <br> Daughter - Philip Pullman <br> Discussion/ Balanced <br> Argument comparison of books <br> Science Week: Study of Alessandro Volta and Marie Curie <br> Blog posts online <br> 1a, 1b, 1c, 2a, 2b, 3a, 3b, <br> 5a, 6a, 6b, 6c, 6d, 7a, 7b, 7c | Holes: Louis Sachar <br> Use of VIPERS to answers questions (vocabulary, infer, predict, explain, retrieve, sequence or summarise) <br> Recall and use <br> skimming/scanning skills to retrieve details <br> Retrieval and inference to understand characters and their actions <br> First News newspaper Online biographies of western outlaws <br> Persuasive leaflets Choral Poetry: For the Fallen by Laurance Binyon 1a, 1b, 1c, 2a, 2b, 3a, 3b, 5a, 6a, 6b, 6c, 6d, 7a, 7b, 7c | Novel as a theme: Evacuees. <br> Goodnight Mr Tom by Michelle Magorian (Whole Book Unit) <br> Fiction: Narrative exploring characters / character descriptions <br> Biography /Information text: Famous Mathematicians Texts from internet on the work of Pythagoras and Philippa Fawcett. <br> Non -Fiction texts from the internet. <br> Evacuee Diary extracts Pathe newsreels. <br> 1a, 1b, 1c, 2a, 3a, 3b, 4a, 5a, 6a, 6b, 6c, 6d, 7a, 7b, 7c | Kensuke's Kingdom Michael Morpurgo (Whole book unit) Book Review <br> Book Week text and author visit <br> Use of VIPERS to answers questions (vocabulary, infer, predict, explain, retrieve, sequence or summarise) <br> Recall and use <br> skimming/scanning skills to retrieve details Retrieval and inference to understand characters and their actions <br> Revolting Rhymes -Roald Dahl <br> 1a, 1b, 1c, 2a, 3a, 3b, 4d, $5 \mathrm{a}, 6 \mathrm{a}, 6 \mathrm{~b}, 6 \mathrm{c}, 6 \mathrm{~d}, 7 \mathrm{a}, 7 \mathrm{~b}$, 7c | Greek Myths Story of Perseus <br> Extracts from Who Let the Gods Out? <br> Extracts from Percy Jackson and the Lightning Thief <br> Persephone and DemeterOrchard Book of Greek Myths <br> Poem Stop All the Clocks WH Auden <br> 1a, 1b, 1c, 2a, 3a, 3b, 4d, 5a, 6a, 6b, 6c, 6d, 7a, 7b, 7c | Journey to the River SeaEve Ibbotson (Whole Book Unit) <br> Cross-curricular (Place and Time) /Performance Poetry/ Imagery, Personification Various Rainforest Poems http://fairytalez.com/region/ brazilian/ <br> Use of VIPERS to answers questions (vocabulary, infer, predict, explain, retrieve, sequence or summarise) <br> Recall and use <br> skimming/scanning skills to retrieve details Retrieval and inference to understand characters and their actions <br> 1a, 1b, 1c, 2a, 3a, 3b, 4d, 5a, 6a, 6b, 6c, 6d, 7a, 7b, 7c |

Lowbrook Academy


Identifying different types of noun,
understanding different
types of adjectives,
using direct and reported speech,
apostrophe for contraction and possession,
its and it's,
verbs and adverbs
phrases and clauses, different sentence types, tenses,
conjunctions,
structured paragraphs linking ideas across and paragraphs.
8b, 8d, 9a, 9b, 10a, 10b, 11b, 12b

Year 6 Curriculum Overview
Use the correct form of a $\quad$ Identify the general word 12a, 12b
class of a noun, verb, adjective and adverbs active and passive, synonyms and antonyms, using hyphens to avoid ambiguity,
determiners and article use (a, an, the),
subject and object
use the perfect form of
verbs to mark relationships of time and cause,
coordinating conjunctions $8 \mathrm{a}, 8 \mathrm{~d}, 9 \mathrm{a}, 9 \mathrm{~b}, 10 \mathrm{a}, 10 \mathrm{~b}$, $11 a, 11 b$
paragraphs (Pronouns, Determiners, Subordinating Conjunctions, Adverbs, Paragraphs, Adverbials [including place, number, time], Topic Sentences) 8a, 8b, 8d, 9a, 9b, 10a, 10b, 11a
Fiction: use adverbia phrases and direct speech to enhance characterisation
within a narrative
Non-Fiction: Political addess
Non-Fiction: Alan Turing biography
Non-Fiction: Explanation: Pythagoras including
Pythagorean Spiral
Non-Fiction: Newspaper
report on Evacuees
7c, 7d, 8a, 8b, 8c, 8d, 8e, 9a, 9b, 10a, 10b, 11a, 11b,

Identify adverbials in a passage
Add adverbials to a sentence
Identify nouns in a sentence.
Use a noun phrase to add detail to a noun.
Indicate degrees of possibility using adverbs and modal verbs
Devices to build cohesion

## Poetry: Haiku and Tanka poem <br> Fiction: Retelling of The

 Black HatNon-fiction: Biography on Michael Morpurgo Non-fiction: Set of instructions on how to keep safe on board Peggy-Sue Fiction: Diary entry as Michael adding to his log book
7c, 7d, 8a, 8b, 8c, 8d, 8e,
$9 \mathrm{a}, 9 \mathrm{~b}, 10 \mathrm{a}, 10 \mathrm{~b}, 11 \mathrm{a}, 11 \mathrm{~b}$,
12a, 12.b

Expanded noun phrases, prepositional phrases,
apostrophe for contraction and possession, use of colon to add explanation,
synonyms and antonyms, formal and informal language, use of a thesausrus simple and complex sentences,
passive and active voice, embedded clauses, cohesion between sentences, fronted adverbials and fronted subordinate clauses,
the subjunctive mood
8b, 8d, 9a, 9b, 10a, 10b, 11b, 12b

Fiction: Create a narrative integrating description Non-fiction: Non chronological report on yellow spotted lizard Fiction: informal letter Non-fiction: Persuasive advert about holiday camp Fiction: Newspaper report about Kissin' Kate Barlow Non-fiction: Wild West fact file and bio of notorious outlaws
7c, 7d, 8a, 8b, 8c, 8d, 8e, 9a, 9b, 10a, 10b, 11a, 11b, 12a, 12b

Subject and object of a sentence, using
hyphenated words, direct and reported speech, active and passive voice, semicolons, colons and dashes to mark clauses, formal and informal speech and vocabulary and layout
devices
$8 \mathrm{a}, 8 \mathrm{~b}, 8 \mathrm{~d}, 9 \mathrm{a}, 9 \mathrm{~b}, 10 \mathrm{a}$, $10 b, 11 a, 11 b$

Non-Fiction: Creating FAQs
using research
Non-Fiction: Non-
chronological report on a
mythical creature
Fiction: Narrative of
retelling of Pandora's Box
Non-Fiction: Persuasive
brochure of Greece
Non-Fiction: Persuasive letter to raise funds for RSPCA
7c, 7d, 8a, 8b, 8c, 8d, 8e, $9 a, 9 b, 10 a, 10 b, 11 a, 11 b$, 12a, 12b

Different sentence types, Verb tenses,
linking ideas across and paragraphs,
parenthesis (brackets,
dashes, commas),
modal verbs, editing and evaluating, cohesion across paragraphs,
$8 \mathrm{a}, 8 \mathrm{~b}, 8 \mathrm{~d}, 9 \mathrm{a}, 9 \mathrm{~b}, 10 \mathrm{a}$,
10b, 11a, 11b, 12a

Fiction: Prequel to Miss
Minton's story
Fiction: Playscript of scene from Journey to the River

$$
\begin{gathered}
\text { sea } \\
\text { Fiction: }
\end{gathered}
$$

Non-Fiction: C/C Sports Week -Biography Writing Lance Armstrong
Non-Fiction: Persuasion: Preserve the Rainforest Non-Fiction: Information text leaflet Advice to future Year 6
Information (Relationships) 7c, 7d, 8a, 8b, 8c, 8d, 8e, $9 a, 9 b, 10 a, 10 b, 11 a, 11 b$, $12 a, 12 b$

## Lowbrook Academy



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 microorganisms, plants and animals. Give reasons for classifying plants and
animals based on specific characteristics.
S1.1, S1.2, S1.3, S1.4, S1.5, S1.6, S1.7, S1.8, S1.9, S2.1, S2.2

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 body's function. Describe the ways in which nutrients and water are transported within animals, including humans.
Health and prevention: The importance of sufficient good quality sleep for good health and that a lack of sleep can affect weight, mood and ability to learn
The facts and science
relating, to allergies immunisation and
vaccination.
S1.1, S1.2, S1.3, S1.4 S1.5, S1.6, S1.7, S1.8, S1.9, S3.1, S3.2, S3.3

## Year 6 Curriculum Overview

Lowbrook

## 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
S1.1, S1.2, S1.3, S1.4, S1.5, S1.6, S1.7, S1.8 S1.9, S6.1, S6.2, S6.3

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 S1.1, S1.2, S1.3, S1.4, S1.5, S1.6, S1.7, S1.8, S1.9, S5.1, S5.2, S5.3, S5.4

WeDo Lego:
Pulling
Investigating the effects of balanced and unbalanced forces on the movement of an object. Speed
investigating the factors that make a car go faster and predicting future motion.
Sort to recycle
Design a device that sorts objects using their physical properties, including shape and size.
S1.1, S1.5, S1.6, S1.7, S1.8, S1.9

Animals Including Humans:
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.
Being safe: Appropriate touch
Health \& Prevention: About personal hygiene and germs including bacteria, viruses, how they are
spread and treated, and the importance of handwashing Health and Wellbeing:
Changing adolescent body changes 9-11, menstrual cycle
S1.1, S1.2, S1.3, S1.4,
S1.5, S1.6, S1.7, S1.8,
S1.9, S4.1, S4.2, S4.3

Theme week tech
challenge: boats (floating \& weight)
Technology: Fairground rides
simple electrical circuits, cam belts, pulleys, glue guns, Tenon saw, joining strengthening
Scientist Study of: Marie Curie \& Alessandro Volta
D1.1, D1.2, D2.1, D2.2, D3.1, D3.2, D3.3, D4.1, D4.2, D4.3

Technology: Making own template for biscuits Generate, develop, model, and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes,
pattern pieces and
computer-aided design 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.
Food Tech: Christmas biscuits
Understand and apply the principles of a healthy and varied diet. Prepare and
cook a variety of
predominantly savoury dishes using a range of cooking techniques.
Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.
Physical Health \&
Wellbeing: Healthy Eating healthy diet, principles of planning and preparing a range of healthy meals, characteristics of poor diet
D1.1, D1.2, D2.2, D3.1, D3.2, D4.4, C1, C2, C3

Technology: Making an electric powered car using a Crumble Board and Crumble software to program)
Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups. Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining, and finishing], accurately. Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers, and motors]. Apply their understanding of computing to program, monitor and control their products.
D1.1, D1.2, D2.1, D2.2 D3.1, D3.2, D3.3, D4.1 D4.2, D4.3, D4.4
ch: Making bread
linked to methods used across the world (including yeast)
Understand and apply the principles of a healthy and varied diet. Prepare and
cook a variety of
predominantly savoury dishes using a range of
cooking techniques.
Understand seasonality
and know where and how a variety of ingredients are grown, reared, caught and processed.
Inventor Study of: Bill Gates (Invention of the
computer)

Health and prevention:
about personal hygiene and germs including bacteria, viruses, how they are spread and treated, and the importance of handwashing D2.2, D3.3, C1, C2, C3

Technology: WeDo Lego
(pulleys, levers, cams,
WeDo control to solve real life problems)
Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at individuals or groups.
Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Apply their understanding of computing to program, monitor and control their

## products.

D1.1, D1.2, D3.2, D3.3, D4.4

Food Tech: Making pizza (fresh tomato sauce using home-grown tomatoes and a homemade scone base) Understand and apply the principles of a healthy and varied diet. Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.
Healthy Eating: the principles of planning and preparing a range of
healthy meals
D2.2, D3.2, C1, C2, C3

## Rivers and Canals

Trade and development of British Empire in 19th Century, import/export, Introduction to canals and how they work, Grand
Union canal history and its uses, change of use of canal systems since 1700s Suez Canal history and its uses, Compare Grand Union Canal and Suez Canal.
(Canal River Trust) Human Geography along the River Thames, change in population density, Mountain Ranges around the world and sources of rivers, tectonic plates. 2.5, 2.9, 2.10, 2.11, 2.13
2.14, 2.16

Field Trip - Sky Academy (linked with S\&T and LOL)

## Year 6 Curriculum Overview

Navigation \& Time Zones
Ordnance Survey, Time Zones, GMT, $180^{\circ}$ line (International Date Line), Tropics, latitude and longitude, scale on a map, straight line navigation biomes, bad elf GPS, Following OS map, plotting routes
Remembrance Day assembly
2.10, 2.11, 2.12, 2.13, 2.15
2.16, 2.17, 2.18

## WW2 and Aftermath

The outbreak of war,
evacuation, rationing, the role of women. Study on

Alan Turing
The holocaust, Battle of France, Battle of Britain, The Blitz, Dunkirk, Pearl Harbour, Dambusters Raid Battle of the Bulge, D-Day VE Day, atomic bomb

Timelines 1918 - current day
$2.6,2.10,2.13,2.16,2.17$ Theme Day - Evacuees

Field Trip - Bletchley Park

## Houses of Parliament \&

 Famous Prime Ministerse.g. Winston Churchill
(WW2), Margaret Thatcher
(First woman), Tony Blair (War in Iraq), Theresa May (Brexit), significance of HP as a government building, roles of MPs, planning and delivering debates, the voting system and current issues e.g. Brexit 2.5, 2.11, 2.13, 2.14, 2.16, 2.17

## Ancient Greece

Extent of the Greek Empire created by Alexander the Great. Olympic Games and its origins in Olympia. The importance of deities, especially Zeus and the relevance of Olive Leaf Wreaths. Democracy in Ancient Greece and impact on modern world.
Understand what
curriculum was like in
Ancient Greece. Who was eligible for education? School life for boys and home education for girls. Great Thinkers, their area of influence and knowledge and their contribution to today's world. Religion in

## Greek Culture

2.8, 2.10, 2.11, 2.13, 2.16, 2.17

Field Trip - URE Museum of Greek Archaeology, Reading

Arts and culture: Greece

Medieval Time Period
Timeline- the medieval period, the Feudal system and Magna Carta. Warfare and medieval castles
Knights, Windsor castle,
The War of the Roses, The
Battle of Hasting,
Doomsday book, The invention of the printing press Johannes Gutenberg

Timeline- the medieval period

Sports Week (please teach over this time): History through sport - cricket 2.6, 2.7, 2.10, 2.15, 2.16

## Lowbrook Academy

Theme-Beliefs and Practices
DRE - Key Question-
What is the best way for a
Muslim to show
commitment to God?
PBS - Key Question - To what extent do religious
beliefs influence and
encourage 'good'
behaviour?
How might beliefs and community shape a person's identity?
What difference might it
make to believe in God as Creator?
AF - Believing/Behaving Objectives- Learning to understand some of the ways Muslims show
commitment
to God and to evaluate whether there is a best way. (Spiritual/Cultural)

Religion-Islam
6.1,6.2,6.3,6.4,6.5,6.9, 6.10

## Year 6 Curriculum Overview

Theme- Easter
DRE - Key Question- Is Christianity still a strong religion 2000 years after Jesus was on Earth?
PBS - Key Question - To what extent does participating in worship and/or prayer generate a sense of belonging?
To what extent do religious beliefs influence and encourage 'good' behaviour?
AF - Believing/Belonging/ Behaviour
Objectives- Learning to examine the influences Christianity still has in the world and evaluate whether it is still a strong religion.
(Cultural/Social)
Religion- Christianity
6.32, 6.35, 6.31, 6.40, 6.39

Theme-Beliefs and mora values
DRE - Key QuestionDoes belief of Akhirah (life after death) help Muslims lead good lives?
PBS - Key Question - To what extent do religious beliefs influence and encourage 'good' behaviour?
How well does faith help people cope with matters of life and death?
How might beliefs and
community shape a
person's identity?
AF - Believing/Behaving Objectives- Learning to identify ways in which
Muslims try to lead good lives and how their belief in Akhirah influences this. Learning to challenge stereotyping through understanding different Muslim
Interpretations of Jihad and how this links to getting to Heaven. (Moral/Social)

Religion- Islam
$6.41,6.42,6.43,6.44,6.45$

## Religion- Islam

6.41, 6.42, 6.43, 6.44, 6.45

Music:

## Playing -

Play and perform in solo and ensemble contexts, demonstrating musical quality, e.g. clear starts, ends of pieces/phrases, technical accuracy etc. Use correct \& accurate technique to play. (Recorders \& Glockenspiels) Improvisation Confidently improvise using more complex rhythms and/or melodies.
M2.1, M2.2, M2.3, M2.5 Theme: Happy
Pop music, Pharrell Williams

## Art:

Appraisal \& Appreciation
Describe the work and Describe the work and architect or designer, using appropriate technical vocab, and referring to cultural and historical
contexts. Create own responses to artist's work
A2.1, A2.3

Theme:
Claude Monet,
impressionist landscape paintings, features of impressionism, Waterlilies, oil pastels, paints, drawing

## Music:

Playing -
Play and perform in solo and ensemble contexts, demonstrating musical quality, e.g. clear starts, ends of pieces/phrases, technical accuracy etc.
Use correct \& accurate
technique to play.
(Recorders \&
Glockenspiels)
Improvisation -
Confidently improvise using more complex rhythms and/or melodies. Understanding the difference between improvisation and
composition - e.g. we do not notate improvisation M2.1, M2.2, M2.3, M2.5 Theme:
Classroom Jazz 2
Meet The Blues and
Bacharach Anorak
Musician Study: Ella
Fitzgerald, Jazz / Swing Art:
Skills \& Technique Drawing
Being able to develop an awareness of composition, perspective, scale and proportion within drawings. Use line, tone and shading
in three dimensions
A2.1, A2.2, A2.3
Theme:
Self-portraits, famous artist interpretation of self-portrait

Year 6 Curriculum Overview

## Music:

Improvisation -
Confidently improvise using more complex rhythms and/or melodies.
Composition -
Create simple compositions using knowledge of the dimensions of music (pulse, rhythm, tempo, pitch etc.) and record using formal notation. Deepening
understanding of notation.
Use accurate technique when composing
(Use of Charanga compose software or GarageBand)
M2.1, M2.3, M2.5, M2.6 Theme:

## Music and Me

Contemporary, music and identity

|  |  |
| :---: | :---: |
|  | Art: |
| Exploring Media |  |
| Clay - slabs |  |$\quad$ Ap

Develop skills in using clay including slabs, coils and slips. Plan a sculpture through drawing and other

## preparatory work <br> A2.1, A2.2, A2.3

Theme:
Sculpture based on work Tree of Life by Gustav Klimt

Listening \& Appraising Confidently use musical language to discuss different styles of music and give opinions. Accurately refer to all dimensions of music (pulse rhythm, pitch, dynamics, tempo, timbre, structure,
texture).

Singing -
Understanding how melody and words should be interpreted, starting to think
musically.

M2.1, M2.3, M2.5, M2.6
Theme:
Benjamin Britten Gospel
A Friday Afternoon's song by Benjamin Bitten

## Music:

Listening \& Appraising Confidently use musical language to discuss music, give opinions and feelings.

Accurately refer to all dimensions of music (pulse, rhythm, pitch, dynamics, tempo, timbre, structure, texture).
Singing -
Continue to sing with feeling, good diction projection and posture.
Sing proficiently in an
ensemble, singing songs in different parts.
M2.1, M2.3, M2.5, M2.6
Theme:
You've Got A Friend Music of Carole King

## Music:

Composition \& Playing -
Create simple compositions
using knowledge of the
dimensions of music (pulse rhythm, tempo, pitch etc.), and record using formal
notation. Deepening
understanding of notation
Use accurate technique
when playing.
(Recorders \&
Glockenspiels)
M2.1, M2.2, M2.3, M2.4 M2.5, M2.6
Theme:

## Reflect, Rewind and

Replay
Bringing together musical learning to compose own melodies. Consolidating musical learning

Art:
Exploring Media
Textiles and printing
Print on fabrics using tie-
dyes or batik. Produce
intricate patterns in a malleable media i.e. fabric

## Lowbrook Academy

## Drama

## Drama

Improvise using a range of drama strategies and conventions to explore themes such as hopes,
fears and desires.
D2.4, D2.5, D2.7, D2.8
Theme:

Clockwork retelling of story - creating atmosphere

Linked to Literacy Clockwork

Year 6 Curriculum Overview

## Drama:

## Drama:

Consider the overall impact of a live or recorded performance, identifying dramatic ways of conveying characters' ideas and building tension
D2.1, D2.2, D2.3, D2.4, D2.8
Theme:
Hot-seating, theme evacuees, political address, x-curricular WW2

Linked to P\&T - WW2

Participate in whole-class debate using the conventions and language of debate, including Standard English.
D2.1, D2.6, D2.7, D2.8,

## D2.9, D2.10

Theme:
Balanced arguments, $x$ curricular Literacy

## Linked to P\&T

 Parliament considering how to adapt the performance for a specific audience.D2.1, D2.3, D2.4, D2.7 Theme:
Leavers Assembly, theme memories

I nwhronk $\Delta$ cademy
Consequences of AntiSocial Behaviour
Year 6 to lead the whole school safety assembly, collate classroom H\&S rules, design the schoo charter \& distribute and present to each year group Setting goals (assembly led).

## Growth Mindset

Learning Charter
Being me in my world: A Global Citizen
Safeguarding: Peer on
Peer - respecting other peoples' feelings
Being Safe: Railway safety Caring friendships - judging when a friendship is making
them feel unhappy or
uncomfortable, managing conflict, how to manage these situations Online Relationships:
Cyberbullying. The same principles apply to online relationships as to face-to face relationships, including the importance of respect for others online including when we are anonymous Rule of law
Mutual respect and tolerance
Picture News: Weekly Lesson Starter
Covid-19 Hygiene and safety measures
One Decision: Keeping \& Staying Safe
One Decision: Computer Safety
Five Ways of Wellbeing: Keep Learning -
Introduction to '5 ways' and Setting Goals
2.1, 2.2, 2.3, 2.8, 2.9, 2.11, 2.12, 2.18, 2.22, 2.23, 2.24, 2.25, 2.26, 2.28, 2.29, 2.32 $2.34,2.36,2.38$

Leadership in Year 6
Being a role model.
Rights vs responsibilities, leadership roles in year 6, rights and responsibilities in our community.
COP Lesson: Linked to the annual conference
Physical health and wellbeing: drugs, alcohol and tobacco: the facts about legal and illegal harmful substances and associated risks, including smoking, alcohol use and drug-taking
Safeguarding: Drugs \& Alcohol
Basic First Aid: e.g. dealing with common injuries Online Relationships: Social media protocols How information and data is shared and used online. How to critically consider their online friendships and sources of information including awareness of the risks associated with
people they have never met.
Safeguarding: Grooming \& Sexting
Mutual respect and tolerance.
Democracy (making collective decisions)
Picture News Weekly Lesson Starter
One Decision: Being Responsible
One Decision: Keeping \& Staying Safe
Five Ways of Wellbeing Give - Linked to
Responsibilities to the community
2.1, 2.2, 2.3, 2.8, 2.9. 2.10,
2.11, 2.12, 2.21, 2.22,
2.23,2.25, 2.26, 2.28, 2.31, 2.32, 2.34, 2.36

Vear 6 Curriculum Overview

Gender, Race \&
Lesson linked to Children's Mental Health Week (February)
Respecting Relationships: what a stereotype is, and how stereotypes can be unfair, negative or
destructive. Practical steps they can take in a range of different contexts to
improve or support
respectful relationships Safeguarding Discrimination / Faith Abuse
Diversity and Equality Laws in the UK
Families \& People Who Care for Us: that others families sometimes look different from their family, but that they should respect those differences and know
that other children's
families are also
characterised by love and care. Stable, caring
relationships, which may be of different types, are at the heart of happy families. Definitions of marriage.
Influential person case
study: Emmeline Pankhurst Rule of Law Democracy
Mutual respect and tolerance
Picture News Weekly Lesson Starter
One Decision: Growing \&
Changing (Relationship's tab)
Five Ways of Wellbeing: Connect - Linked to Respecting people who are different and Children's
Mental Health Week.
2.1, 2.2, 2.3, 2.9, 2.11,
2.12, 2.15, 2.18, 2.25, 2.26,

## Democracy \&

Pressure Groups
world
Political manifestos in the UK.
Pressure groups.
Greenpeace and Amnesty International as examples of successful pressure groups.
Tactics that pressure groups can use for their chosen cause - advertising and publicity,
demonstrations and
boycotts.

Should children be allowed the vote?
Respectful relationships: that in school and in wider society they can expect to be treated with respect by others, and that in turn they should show due respect to others, including those in positions of authority

Democracy
Rule of law
Individual Liberty
Picture News Weekly
Lesson Starter

One Decision: A World without Judgment Five Ways of Wellbeing: Give - Linked to charity (the wider world)
2.1, 2.2, 2.3, 2.11, 2.12,
2.13, 2.14, 2.16, 2.25, 2.32, 2.33, 2.34, 2.36 debate topical issue concerning animal cruelty, e.g. Fox hunting Cosmetic Testing

Wearing fur.
Role of the RSPCA.
Health \& Prevention
Human health - bacteria \& viruses
Being safe: how to report concerns or abuse, and the vocabulary and confidence needed to do so. Individual Liberty Democracy
Picture News: Weekly Lesson Starter
One Decision: The Working World - Linked to Political
Systems

Five Ways of Wellbeing: Take Notice - Linked to Health \& Wellbeing (being present) +Overview of the Five Ways to Wellbeing with practical lessons on
safeguarding your
wellbeing (yoga, art,
meditation)
2.1, 2.2, 2.3, 2.11, 2.12, 2.25, 2.32, 2.34, 2.36, 2.37

Lowbrook

Effects of climate change local national and global Exploring satellite images of the ozone layer.
How the media presents information - BREXIT.
Predictions for the future
Preparing for Change
(Wayne Dixon)
Safeguarding: Serious
Violence - Knife crime Safeguarding
Mutual Respect and tolerance (for the environment)
Picture News: Weekly Lesson Starter
One Decision: Feelings \& Emotions (mental health) + Growing \& Changing (physical health)
Five Ways of Wellbeing: Active - Linked to Sports Week
2.1, 2.2, 2.3, 2.11, 2.12,
2.14, 2.16, 2.25, 2.26, 2.31, 2.32, 2.36

## Lowbrook Academy

Invasion Games- Rugby
running, throwing and catching, play competitive games, develop flexibility strength, technique, compare their performances with previous ones
1a, 1b, 1c, 1e
Dance - World War 2 Lindy Hop.
Dance style created by American Gl's.

P - perform traditional duets in the jive/rock $n$ roll genres.
C - choreograph pair phrases in the style being taught.
A - Observe and identify the steps related to dance style using their own and professional dance 1a, 1c, 1d, 1e

Invasion Games- Football running, play competitive games, develop flexibility,
strength, technique,
compare their
performances with previous ones
$1 \mathrm{a}, 1 \mathrm{~b}, 1 \mathrm{c}, 1 \mathrm{e}$

## Orienteering

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 1d, $1 e$

## Invasion Games- Hockey

running, play competitive games, develop flexibility,
strength, technique,
compare their
performances with previous ones
1a, 1b, 1c, 1e

## Gymnastics

Use, jumping in isolation and in combination, develop flexibility, strength, technique, compare their performances with previous
ones
$1 \mathrm{a}, 1 \mathrm{c}, 1 \mathrm{e}$

## nvasion Games- Netba

running, throwing, and catching, play competitive games, develop flexibility strength, technique, compare their
performances with previous ones
$1 \mathrm{a}, 1 \mathrm{~b}, 1 \mathrm{c}, 1 \mathrm{e}$

## Gymnastics

Use, jumping in isolation and in combination, develop flexibility, strength, technique, compare their performances with previous ones
1a, 1c, 1e

Athletics
running, throwing, and catching, play competitive games, develop flexibility
strength, technique,
compare their
performances with previous ones
$1 a, 1 b, 1 c, 1 e$
Dance - Greek Dance
Exploring the style of Greek dancing; straight back and quick moving step work and partner work
$P$ - perform whole class dances to explore a theme in depth. (Cross curricular assembly)
C - compose phrases using motif and gesture, communicating ideas relating to the theme.
A - Identify and analyse in depth how the theme has inspired the dance movement.
1a, 1c, 1d, 1e

## Cricke

running, throwing, and catching, play competitive games, develop flexibility, strength, technique, compare their performances with previous ones
1a, 1b, 1c, 1e

## Orienteering

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
1d, 1 e

## Tennis

running, throwing, and catching, play competitive games, develop flexibility, strength, technique,
compare their
performances with previous
ones
1a, 1b, 1c, 1e
Education outside the classroom: Mobile Caving and climbing

## C\&E)

Safeguarding: Peer on Peer - respecting other peoples' feelings
Being Safe: Railway safety Where to get advice e.g. family, school and/or other
sources

Caring friendships - judging when a friendship is making them feel unhappy or uncomfortable, managing conflict, how to manage these situations (linked to

## C\&E)

Physical Health and Wellbeing: physical health and fitness
Online Relationships: cyberbullying. The same principles apply to online relationships as to face-to face relationships, including the importance of respect for others online including when we are anonymous. Physical health and Wellbeing: Internet safety and harms. On-line abuse and mental health.
Reporting concerns

Physical health and wellbeing: drugs, alcoho and tobacco: the facts about legal and illegal harmful substances and associated risks, including smoking, alcohol use and drug-taking
Being Safe: The effects of legal and illegal drugs smoking alcohol (linked to C\&E)
Safeguarding: Drugs \& Alcohol
Basic First Aid: e.g. dealing with common injuries
Online Relationships:
Social media protocols
How information and data is shared and used online. How to critically consider their online friendships and sources of information
including awareness of the risks associated with
people they have never met.
Health and prevention: The importance of sufficient good quality sleep for gooo health and that a lack of sleep can affect weight, mood and ability to learn.
The facts and science
relating to allergies
immunisation and
vaccination.

Respecting Relationships:
what a stereotype is, and how stereotypes can be unfair, negative or destructive. Practical steps they can take in a range of different contexts to improve or support respectful relationships Safeguarding: Discrimination / Faith Abuse
Families \& People Who Care for Us: that others' families sometimes look different from their family, but that they should respect those differences and know
that other children's
families are also
characterised by love and care. Stable, caring relationships, which may be of different types, are at the heart of happy families. Definitions of marriage. Mental wellbeing: How to recognise and talk about their emotions, including having a varied vocabulary of words to use when talking about their own and others' feelings. Where and how to seek support

Pressure groups (linked to C\&E)
Respectful relationships: that in school and in wider society they can expect to be treated with respect by others, and that in turn they should show due respect to others, including those in positions of authority. Health and prevention: about personal hygiene and germs including bacteria,
viruses, how they are
spread and treated, and the importance of handwashing

Mental wellbeing: That mental wellbeing is a normal part of daily life, in the same way as physical health. Isolation and
loneliness can affect children and that it is very important for children to discuss their feelings with an adult and seek support.

Mental wellbeing
hat mental wellbeing is normal part of daily life, in the same way as physical health. There is a normal range of emotions (e.g. happiness, sadness, anger fear, surprise, nervousness) and scale of emotions that all humans experience in relation to different experiences and

Health \& Prevention: Human health - bacteria \& viruses
Being safe: how to report concerns or abuse, and the vocabulary and confidence needed to do so. Mental Wellbeing: self-care techniques in preparation for exams.
Where and how to seek support (including recognising the triggers for seeking support), including whom in school they should speak to if they are worried about their own or
someone else's mental wellbeing or ability to control their emotions (including issues arising online). It is common for people to experience mental ill health. For many people who do, the oroblems can be resolved if the right support is made available, especially if accessed early enough

Safeguarding: Serious Violence - Knife crime (linked to C\&E)
www.noknivesbetterlives.co m/parents/having-theconversation
https://www.knifefree.co.uk worried-young-person/ Being safe: Appropriate touch
Health and Wellbeing:
Changing adolescent body - changes 9-11, menstrual cycle (linked to S\&T)
Health \& Prevention:
Human health - bacteria \& viruses
The facts and science relating to allergies immunisation and vaccination
Physical Health \&
Wellbeing: Internet safety \& harms - being a discerning consumer of information Physical Health \& Wellbeing: Internet safety \& harms - being a discerning consumer of information

Residential Outdoor Activities Trip - Building confidence, independence

## Lowbrook Academy

Online Safety How to use mobile phone and online platforms safety (Online Safety)
Identify benefits and risks of mobile devices
broadcasting the location of the user/device, e.g. apps accessing location
To have a clear idea of appropriate online behaviour and how this can protect themselves and others from possible online dangers, bullying and inappropriate behaviour Online Relationships cyberbullying. The same principles apply to online relationships as to face-to face relationships, including the importance of respect for others online including when we are anonymous.

Physical health and
Wellbeing: Internet safety and harms. On-line abuse and mental health. Reporting concerns Cyberbullying (link to C\&E) Making a poster in citizenship and ethics on online safety 2.4, 2.5

## Year 6 Curriculum Overview

Use Purple Mash to Blog (Blogging)
Identify the purpose of writing a blog. Identify the features of successful blog writing. Understand how to write a blog. Consider the effect upon the audience of changing the visual
Online Relationships
Social media protocols
How information and data is shared and used online. How to critically consider their online friendships and sources of information
including awareness of the risks associated with
people they have never met.
Social media Protocols (link to C\&E)
Write a blog in literacy on Stanley Yelnats' experience in 'Holes' 2.4, 2.6, 2.7

Code a Crumble Board to
move a car
(Coding)
design, write and debug programs that accomplish specific goals, including controlling or simulating
physical systems
Crumble software to
program
2.1,2.2,2.3,

Linked to S\&T-Circuits, making an electric powered car

Using Excel to Produce a cost of bread-Creating

Formula
(Spreadsheet)
Create formulae, plan pocket money spending Plan a school event 2.6,

Linked to S\&T- making bread

Lowbrook
Programming We do Lego and using iPad App (Programming)
Model reality, conduct investigations, and use design skills
2.1, 2.2, 2.3 Linked to S\&T

Design a Web page (Networking)
Find out what a LAN and a WAN are. Find out how we access the internet in school. Think about what the future might hold
Physical Health \&
Wellbeing: Internet safety \& harms - being a discerning consumer of information
Create a webpage in
literacy about the
expectations of year 6 in
Lowbrook aimed at year 5

1. When do you stop being a child? (emotional health)
2. Placing school rules in importance (C\&E)
3. If you could choose to be any other living thing, what would it be? (S\&T)
4. Is it ever ok to lie? (C\&E) 5. What makes a painting valuable? (Art)
5. How important is it to have privacy? (Online Safety)
6. Would you rather live during the Industrial revolution or now? (P\&T)
7. Should you be paid to go to school?
8. What's braver, being scared of something in the first place but doing it anyway or not being scared in the first place? (Emotional Health)
9. Was maths invented or discovered? (Maths)
10. Why is heart the symbol of love? (S\&T)
11. Which is more important, a doctor or a teacher?
12. Is it better to be chosen for a responsibility or to volunteer? (C\&E)
13. Why do you cover things in paper and then rip the paper off again? = Would Christmas be Christmas without surprises? (Eco Schools, Christmas)
14. Is it ok to hunt if you eat what you have caught? (C\&E)
talented with no resilience or resilient and less
talented? (Growth Mindset)
15. What is the most important electrical item/appliance? (S\&T)
3.Should a couple share
the same surname after
marriage? (C\&E)
4.Should animals and
humans be treated equally? (C\&E)
16. Is there more future or more past? (P\&T)
17. Would you rather be a soldier or an evacuee during WWII? (P\&T)
18. Is new technology
always a good thing? (ICT)
19. Should we be allowed to eat as much meat as we like? (C\&E)
20. Is Brexit a good thing for the UK? (C\&E)
21. What's the most important subject in school?
22. If you could ask any member of the last supper a question what would it be? (F\&B)
1.Why do we keep inventing cars that go faster if there is a speed limit? (S\&T)
23. Would you rather live during Ancient Greek or now? ( $P \& T$ )
3.Does a belief in life after death help us to live good lives? (F\&B)
24. Should children be allowed to vote? (C\&E) 5.What makes a good song? (A\&C)
25. Rank the qualities of a good sportsman (PE)
26. Does a feudal system still exist? (P\&T)
27. What is true happiness? 4. How does change help us grow? (Emotional health)
28. What will the next adaptation of the human race be? (S\&T) Mandarin?
Can I review numbers and recognise characters without Pinyin? Can I review age and recognise characters without Pinyin?
Can I review age and recognise characters without Pinyin?
Can I review and learn new ways of greeting including talking about the weather?
29. Can I review and learn new ways of greeting including talking about the weather?

Can I review 'my name is' and be able to recognise characters without pinyin?
Can I review family and be able to recognise characters without pinyin?
Can I review pets and be able to recognise characters without pinyin?
Can I review pets and be able to recognise characters without pinyin?
Can I review how to say my birthday and be able to recognise characters without pinyin?
8. Can I review how to say my birthday and be able to recognise characters without pinyin?

Can I review words for school subjects and recognise characters without pinyin? Can I learn to say what subjects I like and dislike
Can I describe my school timetable in Chinese?
Can I say what is in one's schoolbag and other classroom objects?
Can I describe my classroom and classmates?
Can I describe my classroom and classmates?

Can I review all conten covered so far? Can I revise my Mandarin knowledge for a YCT 2 assessment? Can I review all content covered so far? Can I revise my
Mandarin knowledge for a YCT 2 assessment? Can I review all content covered so far? Can I revise my Mandarin knowledge for a YCT 2 assessment?
6.

Can I create a KS2 Mandarin portfolio? Can I complete a YCT 2 Assessment? Can I create a KS2 Mandarin portfolio? Can I complete a YCT 2 Assessment?
Can I create a KS2 Mandarin portfolio?
6. Can I play Mandarin games?

Number and Place Value
Read, write, order and compare numbers up to 10 000000 and determine the value of each digit e.g. What must be added to 26 523 to change it to 54525 ?

Round any whole number to a required degree of accuracy e.g. round 265 496 to the nearest 10000 (270 000)

Solve number and practical problems that involve number, place value and rounding e.g. What is the largest 5-digit number whose digits sum to 20? (99200).

Addition, subtraction, multiplication and

## division

Continue to use all the multiplication tables to $12 \times$ 12 in order to maintain their fluency e.g. $84 \div 12$

Continue to practise the four operations for larger numbers using the formal written methods of columnar addition and subtraction, short and long multiplication, and short and long division

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

Perform mental calculations, including with mixed operations and large

## FRACTIONS

Fractions (including decimals and percentages)
Use common factors to simplify fractions e.g. as the numerator and denominator have a common factor of $4,12 / 16$ can be simplified to $3 / 4$; use common multiples to express fractions in the same denomination e.g. as the denominators have a common multiple of $12,3 / 4$ and $5 / 6$ can both be expressed in twelfths i.e. 9/12 and 10/12 respectively

List equivalent fractions to identify fractions with common denominators

Compare and order fractions, including fractions $>1$ e.g. put these fractions in order from the smallest: $5 / 4,5 / 8,3 / 2,14 / 8$

Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts e.g. order $4 / 5,75 \%, 0.9,19 / 20$

## ALGEBRA

Use symbols and letters to represent variables and unknowns in mathematical situations...

- missing numbers, lengths, coordinates and angles e.g. $3 x=24$ or the angles in a triangle are $35^{\circ}$, $120^{\circ}$ and $\mathrm{y}^{\circ}$;

Number and Place Value
Read, write, order and compare numbers up to 10 000000 and determine the value of each digit

Round any whole number to a required degree of accuracy e.g. Give an example of a number which you might round to the nearest 10 ? Nearest 10 000 ?

Use negative numbers in context, and calculate intervals across zero e.g. how much warmer is $5^{\circ} \mathrm{C}$ than $-4^{\circ} \mathrm{C}$ ? $\left(9^{\circ} \mathrm{C}\right)$

Solve number and practical problems that involve number, place value and rounding e.g. What is the smallest number which rounds to 35000 , to the nearest 1000? (34500).

## Addition, subtraction, multiplication and division

Continue to use all the multiplication tables to $12 \times$ 12 in order to maintain their fluency

Continue to practise the four operations for larger numbers using the formal written methods of columnar addition and subtraction, short and long multiplication, and short and long division

Mutliply multi-digit numbers up to 4 digits by a two-digit whole number using the

## FRACTIONS

Ration and Proportion
Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts e.g. adjust a recipe for 4 people, to serve 6 people

Solve problems involving similar shapes where the scale factor is known or can be found e.g. two rectangular picture frames are the same shape, but one is bigger than the other; the smaller one measures 10 cm by 15 cm ; the larger frame has a width of 30 cm , what is its length?

Begin to use the notation a : b to record ratio

Solve problems involving the calculation of percentages (e.g. measures) such as $15 \%$ of 360 and the use of percentages for comparison

Link percentages of $360^{\circ}$ to calculating angles of pie charts

Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples e.g. for every egg you need three spoons of flour; how many eggs are needed for 12 spoons of flour?

## NUMBER

Number and Place Value
Read, write, order and compare numbers up to 10 000000 and determine the value of each digit

Round any whole number to a required degree of accuracy e.g. What is the smallest number which rounds to 500000 , to the nearest 1000? (499 500).

Use negative numbers in context, and calculate intervals across zero

Solve number and practical problems that involve number, place value and rounding e.g. What is the smallest 4-digit integer whose digits sum to 20 ? (10199).

Addition, subtraction, multiplication and division
Continue to use all the
multiplication tables to $12 \times$ 12 in order to maintain their fluency

Continue to practise the four operations for larger numbers using the formal written methods of columnar addition and subtraction, short and long multiplication, and short and long division

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

Use symbols and letters to represent variables and unknowns in mathematical situations..

- missing numbers, lengths, coordinates and angles e.g. 68=6t-4 or the angles in a kite are $\mathrm{x}^{\circ}, \mathrm{x}^{\circ}, 15^{\circ}$ and $53^{\circ}$; find $x$, or plot points ( $x$,
y) where $x+y=1$
- mathematics and
science formulae e.g.
$A=1 / 2(1 \times h)$
- arithmetic rules
- generalising number patterns e.g. 6, 11, 16, $21, \ldots 5 n+1$
- number puzzles e.g. $x+y=10$ and $2 x+y=13$; find $x$ and $y$
Express missing number problems algebraically e.g. I'm thinking of a number; l double it and subtract 12 from the result; the answer
is 60 ; what was my number? $(2 x-12=60$, so $2 x=72$, so $x=36$ )

Use simple formulae expressed in words e.g. write a formula for the cost of a taxi journey, C, which is $£ 2.10$ plus $£ 1.60$ per kilometre, $k$.
( $\mathrm{C}=2.10+1.60 \mathrm{k}$ )
Enumerate all possibilities of combinations of two variables e.g. list all the combinations of boys and girls in a class where there are twice as many boys as girls and between 25 and 35 children in the class altogether.
numbers e.g. (13 $500 \times 2)$ $\div 9=3000$

Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why e.g. There are 6534 cars parked in a 3 -storey car park; 1398 are on the first floor and 3765 are on the second floor; how many cars are parked on the third floor?

Solve problems involving addition, subtraction, multiplication and division e.g. 396 children and 37 adults went on a school trip; buses seat 57 people; how many buses were needed?

Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy. e.g. find the perimeter of a football pitch with side
lengths 105.3 m and 46.8 m (estimate:
(105+45) $\times 2=300 \mathrm{~m}$; actual: $(105.3+46.8) \times 2=304.2 \mathrm{~m}$ (same number of decimal places as numbers in the question)

Identify common factors, common multiples and prime numbers e.g. common factors of 12 and 15 are 1 and 3; common multiples of 4 and 6 are 12, 24, 36...; prime

- mathematics and formal written method of science formulae e.g. long multiplication $A=1 \times w$
- arithmetic rules e.g. $a+b=b+a$

Express missing number problems algebraically e.g. $17=x+4.5$

Use simple formulae expressed in words e.g. write a formula for the number of months, $m$, in $y$ years. ( $y=12 m$ )

Enumerate all possibilities of combinations of two variables e.g. investigate how many different ways 2 red eggs can be placed in a 6 -space egg carton, by starting with a 3 -space carton, 4-space carton etc?

## MEAUREMENT

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 three decimal places e.g. 4.52 kg $=4520 \mathrm{~g} ; 1.005 \mathrm{~km}=$ 1005m

Recognise that shapes with the same areas can have different perimeters and vice versa e.g. investigate rectangles with areas of 24 cm 2 to find

## ALGEBRA

Perform mental calculations, including with mixed operations and large numbers

Solve addition and subtraction multi-step problems in contexts deciding which operations and methods to use and why e.g. Three people won £365 496 on the lottery; one received £197540, another received £40 010; how much did the third person receive?

Solve problems involving addition, subtraction, multiplication and division e.g. I think of a number and subtract 5.6 from it then multiply the result by 6 ; the answer is 7.2 ; what was my number?

Use estimation to check answers to calculations and determine, in the context of a problem,
levels of accuracy e.g. A box contains
approximately 52 matches; how many boxes can be filled with 10000 matches?

Identify common factors common multiples and prime numbers e.g. Find
the smallest common multiple of 5, 6 and 8 (120)

Use symbols and letters to represent variables and unknowns in mathematical situations...

- missing numbers, lengths, coordinates and angles e.g. $5 y+1=16$ or the angles in an isosceles triangle are $50^{\circ}, y^{\circ}$ and $y^{\circ}$; find $y$
- mathematics and science formulae e.g. $\mathrm{P}=2(\mathrm{l}+\mathrm{w})$ - arithmetic rules e.g. $a \times b=b \times a$
- generalising number patterns e.g. 3, 6, 9, 12, ... $3 n$
- number puzzles e.g $a+b=8.5$ and $a \times 6=15$; find $a$ and $b$

Express missing number problems algebraically e.g the perimeter of a triangle is 20 cm ; it has two sides of length 8 cm ; what is the length of the other side? ( $20=2 \times 8+x$ so $x=4 \mathrm{~cm}$ )

Use simple formulae expressed in words e.g. write a formula for the cost of a party, C, which costs £100 plus $£ 2$ per person,
n. $(C=100+2 n)$

Enumerate all possibilities of combinations of two variables e.g. investigate all possible half-time scores when the full time score of a football match is 4:2

Generate and describe

Perform mental calculations, including with mixed operations and
large numbers e.g. (13 400
$+10600) \times 4 \div 12=8000$

## Solve addition and

 subtraction multi-step problems in contexts, deciding which operations and methods to use and why e.g. Write a number story for this number sentence: $23.5=20.4+$4.9-1.8

Solve problems involving addition, subtraction, multiplication and division e.g. Club A sold 3500 tickets for $£ 9.50$ each and Club B sold 8150 tickets for £3.50; how much more money did Club A make than Club B?

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

Identify common factors, common multiples and prime numbers e.g. Find the highest common factor of 120,90 and 75 (15) or Find all the prime numbers between 80 and 100 .

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

Generate and describe linear number sequences e.g. $6,13,20,27, \ldots 7 n-1$

Find pairs of numbers that satisfy number sentences involving two unknowns.
e.g. $a-b=5$, give pairs of values that $a$ and $b$ could have (e.g. 8, 3 or 6.5, 1.5
or ...)
MEASUREMENT
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 three decimal places

Recognise that shapes with the same areas can have different perimeters and vice versa e.g. investigate parallelograms with areas of 24 cm 2 to find which has the smallest perimeter

Recognise when it is possible to use formulae for area and volume of shapes e.g. find the height of cuboid which is 12 cm long, 2 cm high and has the same volume as a cube with sides of 6 cm

Calculate the area of parallelograms and triangles, relating it to the area of rectangles
numbers are numbers with exactly 2 factors e.g. 2, 3,
$5,7,11,13, \ldots$

## FRACTIONS

Fractions (including decimals and percentages)
Identify the value of each digit to three decimal
places and multiply and divide numbers by 10,100 and 1000 where the answers are up to three decimal places e.g. 205.6

$$
\div 100=2.056
$$

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

$$
\text { e.g. } 0.6 \times 7
$$

## 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 e.g. adjust a recipe for 4 people, to serve 20 people

## GEOMETRY

Properties of Shape
Recognise, describe and build simple 3-D shapes, including making nets e.g. investigate different nets for a cube, recognising when 'nets' will fold to make a cube and when
they will not.

## Position and Direction

 Describe positions on the full coordinate grid (all four quadrants) e.g. ( $-3,7$ )which has the smallest perimeter

Recognise when it is possible to use formulae for area of shapes e.g. find the length of rectangle which is 4 m wide and has the same area as a square with a side length of 8 cm .

Calculate the area of triangles, relating it to the area of rectangles, e.g. compare the 'counting squares' method to using the formula for the area of a triangle

## GEOMETRY

Properties of shapes Draw 2-D shapes using given dimensions and angles using measuring tools and conventional markings and labels for lines and angles e.g. same length lines, parallel lines and same size angles:

## STATISTICS

Use and interpret data Interpret and construct pie charts and line graphs and
use these to solve
problems e.g. draw a pie chart to show how Jack spends his $£ 36$ birthday money:

- £9 snacks
- £15 toys
- £12 books

Encounter and draw graphs relating two variables, arising from their own enquiry and in other

Divide numbers up to 4 linear number sequences 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

Use their knowledge of the order of operations to carry out calculations involving the four operations and using brackets; e.g. $2+1 \mathrm{x}$ $3=5$ and $(2+1) \times 3=9$.

## FRACTIONS

Fractions (including decimals and percentages) Use common factors to simplify fractions; use common multiples to express fractions in the same denomination

List equivalent fractions to identify fractions with common denominators

Compare and order fractions, including fractions $>1$ e.g. put these fractions in order from the smallest: 5/4, 5/6, 3/2, 4/3

Associate a fraction with division and calculate decimal fraction equivalents e.g. 0.375 for a simple fraction e.g. 5/8

Use understanding of relationship between unit fractions and division to
e.g. write the first 5 terms in a 'decrease by 9 ' sequence starting from 20 , or find the nth term of a simple sequence e.g. 4, 8 , $12,16, \ldots$
Find pairs of numbers that satisfy number sentences involving two unknowns. e.g. $a-b=5$, give pairs of values that $a$ and $b$ could have (e.g. 8, 3 or 6.5, 1.5 or ...) or. $p \times q=24$; if $p$ and $q$ are both positive, even numbers, list all the possible combinations (e.g. $2 \times 12,4 \times 6, \ldots$ )

## MEASUREMENT

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 three
decimal places
Recognise that shapes with the same areas can have different perimeters and vice versa e.g. investigate triangles with areas of 12 cm 2 to find which has the smallest perimeter

Recognise when it is possible to use formulae for area and volume of shapes e.g. find the length of the side of a cube with a volume of 27 cm 3
fractions, or by rounding as appropriate for the context

Use their knowledge of the order of operations to carry out calculations involving the four operations and using brackets e.g. 14 x
$(29-12)+7=245$
FRACTIONS
Fractions (including decimals and percentages)

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

List equivalent fractions to identify fractions with common denominators

Compare and order fractions, including fractions $>1$ e.g. put these fractions in order from the smallest: $5 / 4,5 / 6,3 / 5,4 / 3$

Associate a fraction with division and calculate decimal fraction
equivalents e.g. 0.375 for a simple fraction e.g. 5/8

Use understanding of relationship between unit fractions and division to work backwards by multiplying a quantity that represents a unit fraction to find the whole quantity e.g. if $1 / 5$ of a mass is 150 g , then the whole mass

Solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate e.g. A jug holds 550 ml ; how may jugs of water are needed to fill a 4.8 litre bucket?
convert between miles and kilometres and other units commonly used e.g. use a conversion line graph or be able to work out that 6 pints of milk is a bit more
than 3 litres
calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm3) and cubic metres (m3) and extending to other units, such as mm3 and km3.

Begin to use compound units for speed e.g. miles per hour

## GEOMETRY

Properties of shapes Draw 2-D shapes using given dimensions and angles using measuring tools and conventional markings and labels for lines and angles e.g. construct a triangle or complete a parallelogram with given lengths and angles

Recognise, describe and build simple 3-D shapes,

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

Predict missing coordinates of quadrilaterals by using the properties of shapes, which may be expressed
algebraically e.g. translating vertex $(a, b)$ to $(a-2, b+3)$, or find the other vertices of a square, given two of them are $(a, b)$ and ( $a+d, b+d)$

## Competencies:

-Fractions, Decimals and Percentages
-Equivalent Fractions

- Conversions (F).
subjects e.g. a scatter graph connecting heights of children and their longjump distance

Competencies: -Angles -Properties of 2D Shape -Properties of 3D Shape -Roman Numerals (F)

Year 6 Curriculum Overview
Lowbrook
work backwards by
multiplying a quantity tha represents a unit fraction to find the whole quantity e.g. if $1 / 4$ of a length is

36 cm , then the whole
length is $36 \times 4=144 \mathrm{~cm}$
Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions e.g. $1 / 2+1 / 8=$ 5/8

Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the
answers are up to three decimal places e.g. $\times$ $100=140.8$

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

$$
\text { e.g. } 0.06 \times 8
$$

Use written division methods in cases where the answer has up to two decimal places e.g. $458 \div$

$$
8=57.25
$$

Multiply and divide numbers with up to two decimal places by onedigit and two-digit whole numbers e.g. $3.15 \times 62$

Solve problems which require answers to be rounded to specified degrees of accuracy and check the reasonableness of answers.

Calculate the area o
parallelograms and triangles, relating it to the area of rectangles, e.g. compare the 'counting squares' method to using the formula for the area o a parallelogram

Solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate e.g. Ben walked 850 m to the bus stop, travelled on a bus for 8.67 km and then a train for 120.9 km ; how far did he travel altogether?

Convert between miles and kilometres and other units commonly used e.g. know that a mile is approximately 1.6 km (and 1 km is approximately 0.6 miles) and use this to make rough calculations

Calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm3) and cubic metres (m3) and extending to other units, such as mm3 and km3.

## GEOMETRY

## Properties of shapes

 Draw 2-D shapes using given dimensions and angles using measuring tools and conventional markings and labels foris $150 \times 5=750 \mathrm{~g}$
Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions e.g. 13/4-5/6= 11/12

Use a variety of images to support understanding of multiplication with fractions

Multiply simple pairs of proper fractions, writing the answer in its simplest form e.g. $1 / 4 \times 1 / 2=1 / 8$

Divide proper fractions by whole numbers e.g. $1 / 3 \div$

$$
2=1 / 6
$$

Identify the value of each digit to three decima places and multiply and divide numbers by 10,100 and 1000 where the answers are up to three decimal places e.g.
$\div 1000=0.45$
Multiply one-digit numbers with up to two decimal places by whole numbers

$$
\text { e.g. } 0.04 \times 12
$$

Use written division methods in cases where the answer has up to two decimal places e.g. $693 \div$

$$
15=14.2
$$

Multiply and divide numbers with up to two decimal places by onedigit and two-digit whole numbers e.g. $93.15 \div 5$
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

Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and
find missing angles
describing them
algebraically e.g. $a=180-$ (b+c)

Illustrate and name parts of circles, including radius diameter and circumference and know that the diameter is twice the radius describing it algebraically as $d=2 \times r$

## 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.

## Predict missing

 coordinates of quadrilaterals by using the properties of shapes, which may be expressed algebraically e.g translating vertex (a, b) to ( $a-2, b+3$ ), or find the other vertices of a square, given two of them are $(a, b)$ and$\left.\begin{array}{|l|l|l|l|}\hline & & \begin{array}{c}\text { Recall and use } \\ \text { equivalences between } \\ \text { simple fractions, decimals } \\ \text { and percentages. including } \\ \text { in differnt contexts. e.g. } \\ \text { find a fraction which lies } \\ \text { between } 0.4 \text { and } 0.5 \\ \text { STATISTICs. }\end{array} \\ \text { Use and interpret data } \\ \text { Calculate and interpret the } \\ \text { mean as an average. e.g. } \\ \text { find the mean height of } \\ \text { these children: } 1.2 \mathrm{~m}, \\ \text { 1.07m and } 1.12 \mathrm{~m}\end{array}\right\}$
lines and angles e.g. complete a triangle with given lengths and angles

Recognise, describe and build simple 3-D shapes, including making nets e.g visualise 3-D shapes
drawn on isometric paper and begin to draw 2-D representations of 3-D shapes

Compare and classify geometric shapes based on their properties and sizes (e.g. parallel sides, line symmetry, types of angles etc) and find unknown angles in any triangles, quadrilaterals, and regular polygons

Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles describing them
algebraically e.g. $a=180$

$$
(b+c)
$$

## 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.

## Predict missing

 coordinates of quadrilaterals by using the properties of shapes which may be expressedSolve problems which require answers to be rounded to specified degrees of accuracy and check the reasonableness of answers.

Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts e.g. find a decimal which lies between $3 / 8$ and $1 ⁄ 2$

## 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 e.g.adjust a recipe for 6
people, to serve 15 people
Solve problems involving similar shapes where the scale factor is known or can be found e.g. On a map 2 cm represents 1 km ; a road measures 7 cm on the map, how long is it in real life?

Use the notation $a: b$ to record ratio

Solve problems involving the calculation of percentages (e.g
measures) such as $15 \%$ of 360 and the use of percentages for comparison

Link percentages of $360^{\circ}$ to calculating angles of pie

Draw and label a pair of axes in all four quadrants with equal scaling

## STATISTICS

Use and interpret data Calculate and interpret the mean as an average.

Interpret and construct pie charts and line graphs and use these to solve problems e.g. connect conversion from kilometres to miles in measure to its graphical representation.

Encounter and draw graphs relating two variables, arising from their own enquiry and in other subjects.

Sports Week: Creating scatter diagrams and interpreting data from athletic performances.


