



Year 5 Curriculum Map

SUGGESTED PROJECTS

HOLA MEXICO
MYSTERIOUS MAYANS
OUT OF THIS WORLD

TOP SECRET
BATTLE FROM THE AIR
CIRCLE OF LIFE

<p><u>Science</u> Forces Living Things & Their Habitats Animals & Humans Properties & Changes of Materials Earth & Space</p> <p><u>Significant Scientists</u> David Attenborough (Living things) Jane Goodall (Living things) Mae Jemison (Earth and Space) Zhang Heng (Earth and Space)</p>	<p><u>RSE</u> Families Friendships Respectful Relationships Staying Safe Mental Wellbeing Drugs, Alcohol, Tobacco Health and Prevention Basic First Aid Online Safety Physical Fitness Healthy Eating Online Relationships</p>	<p><u>Geography</u> <u>Locational Knowledge</u> World Countries (North America) <u>Place Knowledge</u> North America (Mexico) <u>Human & Physical Geography</u> Distribution of natural resources (energy, food, minerals and water) biomes, climate and trade <u>Geographical Skills & Fieldwork</u> Maps, atlases and globes, four and six figure grid references (Ordnance Survey maps)</p>
<p><u>PE</u> Invasion Games Net and Wall Games Striking and Fielding Swimming Dance Gymnastics Athletics Outdoor and Adventurous Challenges</p>	<p><u>History</u> WW2: A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066 - significant turning points in British history A non-European society that provides contrast with British history – Mayans A local history study – how WW2 affected Horncastle</p>	<p><u>Computing</u> E-Safety Shaping the Digital World Communicating in the Digital World Exploring the Digital World</p>
<p><u>Art</u> Drawing Painting Collage Textiles Artist focus</p>	<p><u>Languages</u> T1: On Holiday T2: Eating Out T3: Hobbies T4: A school Trip T5: Seasons T6: The Environment</p>	<p><u>Music</u> Planets (Music express. Focus= listening. Links to Romantic composers e.g. Holst) Life cycles (Music express. Focus = structure. Brahms, Berio, Liszt and Monteverdi. Keeping healthy (Music Express. Focus = beat) Diversty At the Movies (Music Express. Focus= composing Joe Hisaishi)</p>
<p><u>Design & Technology</u> Textiles Construction Materials Food & Nutrition</p>	<p><u>RE</u> Being Human – Hinduism believing Being Human – Islam believing Being Human – Christianity believing In depth study of Sikhism.</p>	<p><u>PSHE</u> Being Me in My World Celebrating Difference Dreams and Goals Relationships Healthy Me Changing Me</p>

The focus areas for each subject are recorded on this page so coverage is clear and these should be linked to projects. Maths and English focus areas are recorded in the map; however every objective is not recorded in this overview since they are too numerous and are therefore detailed in medium and short term planning for these subjects.

YEAR 5 CURRICULUM SUBJECT SKILLS MAP

Our curriculum responds to the needs and experiences of our children through challenging, inspiring and engaging them with what matters, and most importantly, it prepares children for the future.

COMMUNITY
(our school, local and wider global communities and global dimensions)

CREATIVE THINKING
(encouraging inquisitiveness, problem solving, reasoning and enquiry based learning)

CONFIDENT & RESILIENT LEARNERS
(a focus on children's self-esteem, well-being and developing a growth mind-set)

English

See English Subject Progression for more details

Maths

Number

Counting
Place Value
Addition and Subtraction (mental methods)
Addition and Subtraction (formal written methods)
Use the inverse to check addition and subtraction calculations.
Multiplication and Division (tables)
Multiplication and Division (mental methods)
Multiplication and Division (formal written methods)
Fractions
Roman Numerals
Use and apply measures to increasingly complex contexts – positive and negative integers
Fractions, Decimals and Percentages

Measurement

Use and Apply measures to increasingly complex contexts
Problem solving in all four operations involving money and time
Perimeter and Area
Recognise and estimate volume and capacity.

Geometry

Describe position, direction and movement in increasingly precise ways – reflection and translation
Use the properties of shapes and angles in increasingly complex and practical contexts

Statistics

Gather, Organise and Interrogate data
Solve comparison, sum and difference problems using information presented in a line graph.
Complete, read and interpret information in tables, including timetables.

Science

Working Scientifically

to consider how scientists have combined evidence from observation and measurement with creative thinking to suggest new ideas and explanations for phenomena
to make predictions of what will happen based on scientific knowledge and understanding, and suggest how to test these
to plan comparative and fair tests
to make relevant observations and measurements with increasing accuracy
to record data and results using diagrams, classification keys, tables and bar and line graphs
to recognise and make predictions from patterns in data and suggest explanations for these using scientific knowledge and understanding
to identify patterns in results and results that do not appear to fit the pattern
to interpret data and decide whether it is sufficient to draw conclusions
to draw conclusions indicating whether these match any prediction made

Biology

to describe the life cycles common to a variety of animals, including humans (birth, growth, development, reproduction, death), and to a variety of plants (growth, reproduction and death)
to describe the life process of reproduction in some plants and animals
to describe the changes as humans develop from birth to old age
Taken from RSE
Describe the different roles food can play in people's lives and can explain how people can develop eating problems (disorders) relating to body image pressures.
Explain how they expect and value their body To identify the elements of a poor diet.
To know the risks associated with unhealthy eating habits, including the importance of calories

Physics

to explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
to identify the effect of drag forces, such as air resistance, water resistance and friction that act between moving surfaces
to describe, in terms of drag forces, why moving objects that are not driven tend to slow down
to understand that force and motion can be transferred through mechanical devices such as gears, pulleys, levers and springs
to observe the apparent movement of the Sun during the day and observe changes across the four seasons, how day length varies
to describe the movement of the Earth relative to the Sun in the solar system
to describe the movement of the Moon relative
to describe the Sun, Earth and Moon as approximately spherical bodies
to use the idea of the Earth's rotation to explain day and night
to investigate the way that ideas of the solar system have developed, understanding how the geocentric model of the solar system gave way to the heliocentric model by considering the work of scientists such as Ptolemy, Alhazen and Copernicus

Chemistry

to compare and group together everyday materials based on evidence from comparative and fair tests, including their hardness, solubility, conductivity (electrical and thermal), and response to magnets
to understand how some materials will dissolve in liquid to form a solution
to use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
to give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials
to demonstrate that dissolving, mixing and changes of state are reversible changes
to explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning, oxidation and the action of acid on bicarbonate of soda

The skills and knowledge for each subject for the whole year are listed on this year group curriculum map. The objectives chosen for each term, most of which will be taught through projects in a cross-curricular theme, are highlighted when they are covered. The subject progressions provide details of where support and extension can be provided for children where needed. Some skills will be an ongoing focus throughout the year.

Autumn: Blue Spring: Pink Summer: Green Ongoing: Yellow

Computing

Identify trusted adult

Demonstrate safe practice when selecting images or content for uploading to an online space.

Create class rules

Understand the need for privacy settings on any social networking sites (and that those privacy settings may not be observed by online 'friends' who can use/ share/download your images /content). C/C RSE

Enter labels and numbers into a spreadsheet. Enter formulae into a spreadsheet and modify the data, (simple calculations + - x ÷). C/C Maths

Identify and enter the correct formulae into cells, modify the data, make predictions of changes and test them. C/C Maths

Write control sequences which use outputs and inputs (using if... then... type commands) to control events in response to conditions. Use sub routines to decompose the problem into smaller parts (e.g. Use Flowol, CoCo 2, Junior Control Insight or Go software).

Explain the logical steps of the flow diagram in the design process.

Develop and use criteria to evaluate the design and layout when evaluating a range of web sites, pages on VLE, online resources and presentations.

Make effective use of transitions and animations in presentations. Consider the effect on the audience and the appropriateness of such devices.

Through peer and self-evaluation children evaluate their design and make improvements.

Use and refine their skills while independently creating, sending and responding to emails, blogs and forums in VLE/social media.

As a class or group make use of video technology to exchange ideas and collaborate on projects (e.g. Skype with webcams or Face Time with iPads).

Enhance a presentation by acquiring, storing, and combining images from different sources.

Make use of transitions and special effects in video editing software and understand the effect they have on the audience.

Independently select and use a variety of appropriate devices to record sounds. Upload and download projects (e.g. Learning Platform).

Create the Use the pre-programming features of data logging software and devices to set up a specific data capture, perhaps overnight. C/C Science

Use graphical information to answer questions and solve simple problems. C/C Maths

Check for accuracy by checking data, using different views, search tools, and graphing. Identify and correct inaccuracies. C/C Maths

Select an appropriate search engine to find information related to their topic.

Develop skills to question where web content might originate and understand that this gives clues to its authenticity/reliability (by looking at web address, author, linked pages etc.).r own sounds and compositions to add to their presentations/films/images/ photos.

Use ICT to produce music for a specific purpose, considering the impact on the audience (e.g. length, style, genre etc.).

Geography

Use different types of fieldwork sampling (random and systematic) to observe, measure and record the human and physical features in the local area. Record the results in a range of ways.

Collect and analyse statistics and other information in order to draw clear conclusions about locations.

Analyse and give views on the effectiveness of different geographical representations of a location (such as aerial images compared with maps and topological maps - as in London's Tube map).

Describe geographical diversity across the world.

Understand some of the reasons for geographical similarities and differences between countries.

Describe and understand key aspects of:

- human geography, including: economic activity including trade links, and the distribution of natural resources including energy, food, minerals, and water supplies.

Create maps of locations identifying patterns (such as: land use, climate zones, population densities, height of land).

Use the eight points of a compass, six-figure grid references, symbols and a key (that uses standard Ordnance Survey symbols) to communicate knowledge of the United Kingdom and the world.

Design & Technology

Create objects (such as a cushion) that employ a seam allowance.

Join textiles with a combination of stitching techniques (such as back stitch for seams and running stitch to attach decoration).

Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles (such as a soft decoration for comfort on a cushion).

Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filling and sanding).

Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).

Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).

Choose from a wider range of materials and tools.against their own design criteria and consider the views of others to improve their work

Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).

Measure accurately and calculate ratios of ingredients to scale up or down from a recipe.

Demonstrate a range of baking and cooking techniques.

Create and refine recipes, including ingredients, methods, cooking times and temperatures.

Understand seasonality

Combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.

Create innovative designs that improve upon existing products.

Evaluate the design of products so as to suggest improvements to the user experience.

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

Design with the user in mind, motivated by the service a product will offer (rather than simply for profit).

Make products through stages of prototypes, making continual refinements.

Ensure products have a high quality finish, using art skills where appropriate.

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

Languages

Learn and perform rhymes, poems and texts.

Listen with care and show understanding by joining in and responding

Prepare and practise a simple conversation, expressing opinions

Focus on correct pronunciation

Speak in simple language and be understood

Ask and answer questions

Use tone of voice and gesture to help convey meaning

Listen attentively and understand more complex phrases and sentences

Prepare a short presentation on a topic through retaining and recalling phrases and sentences

Demonstrate a growing vocabulary

Express personal responses and opinions e.g. using a variety of verbs such as 'Je préfère, J'aime/ Je n'aime pas

Read a range of fiction and non-fiction texts

Show understanding in simple reading

Understand basic grammar appropriate to the language being studied including feminine, masculine, high frequency verbs, key features and patterns of the language

Choose words, phrases and sentences and write them into a gapped text or as picture captions

Use grammatical knowledge to create sentences

Use a bilingual dictionary (hard copy or online) to check spelling of familiar words

Write sentences about a topic to send to a contact in a partner school

Engage in a French day (week) to explore cultural differences:

Consider aspects of daily life of children in own and in country/countries where language is spoken

- Reflect on cultural issues using empathy and imagination to understand other people's experiences
- Learn about symbols and objects from own and from country/countries where language is spoken – exchange information with contact at partner school
- Write labels and signs for objects around school

Music

Hold a part within a round. Sing a harmony part.

Sustain a drone or a melodic ostinato to accompany singing.

Improvise within a group performance.

Take turns to lead a group.

Sings songs/play from memory or notation with confidence:

- within a small group
- alone

Perform with an awareness of lyrical content (know what the words mean) and occasion.

Play a more complex accompaniment on an instrument

Create songs with verses and a chorus.

Use a number of structures to develop my ideas (e.g. ABACA, a a1 a2)

Use drones and melodic ostinati (based on the pentatonic scale).

Demonstrate imagination and confidence in the use of sound.

Show thoughtfulness in collecting sounds and structures to convey an idea.

Create own musical patterns with an awareness of timbre and duration.

Use a variety of musical devices:

- melody
- rhythms

Create music which uses notations as a support for performance.

Read the treble clef musical stave and work out the notes (EGBDF/FACE).

Draw the treble clef at the correct position on the stave. Recognise the use of # (sharp) and ♭ (flat) symbols.

Know and use standard musical notation.

Read notes and know how many beats they represent. Begin to use and understand simple time signatures.

Extend notation to semi-quaver.

Choose a wider range of musical vocabulary to accurately describe and appraise music.

Begin to recognise music from different eras of music.

Describe own music, identifying strengths and weaknesses.

Understand how lyrics reflect cultural context and have social meaning.

Refine and improve work.

Learn about the components and design of key musical instruments and how they evolved.

Art & Design

Develop techniques, including control and use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.

Improve mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]

Take account of the purpose of the activity.

Use research to inspire drawings from memory or imagination.

Develop ideas using different or mixed media using a sketchbook.

Alter and refine drawings and describe changes using art vocabulary.

Begin to use a variety of techniques to add interesting effects (e.g. reflections, shadows, direction of sunlight).

Use lines to represent movement.

Build up in stages – foreground and background. Stronger colours at front.

Begin to combine colours, tones and tints to enhance the mood of a piece.

Sketch (lightly) before painting to combine line and colour.

Begin to use qualities of watercolour and acrylic paints to create interesting pieces.

Begin to develop a personal style of painting, drawing upon ideas from other artists.

Begin to use brush techniques and the qualities of paint to create texture.

To use contrasting textures, colours or patterns.

To incorporate frottage (rubbing) into collage work.

To use tessellation.

To use montage.

To develop dyeing by investigating natural dyes.

To practise basic stitches by incorporating into other work.

To use Batik techniques.

Explore a range of great artists, architects and designers in history.

Discuss and review own and others work, expressing thoughts and feelings, identify modifications and see how they can be developed further.

Identify artists who have worked in a similar way to their own work.

PE

Demonstrate a range of skills, for passing and receiving, in a controlled manner whilst moving

Understand and show how a team can retain possession and find ways of progressing towards an opponent's goal

Find and use space to help my team

Choose and use skills which meet the specific needs of the invasion game

Play shots on both sides of the body (forehand and backhand) and from above the head with reasonable control

Understand how to position/move my body to receive a ball coming from different heights and angles

Understand and play a game over a net by hitting into spaces to score

Recognise which things I need to practice more

Use a rounders/ cricket bat with confidence

Strike and throw the ball with reasonable accuracy and consistency

Bowl underarm so the ball arrives appropriately for the batter to hit

Field the ball and return it with an overarm throw

Play in a range of small sided striking and fielding games and experience all roles.

Confidently swim 25 metres unaided in a choice of stroke

Competently swim 10 metres front crawl, back crawl and breaststroke with a controlled stroke

Perform basic self-rescue skills such as calling and waving for help, holding the HELP (Heat Escape Lessening Posture) position, and huddling in groups to remain afloat

Tread water, with head above water, for 20 seconds

Perform and create ideas in a variety of dance styles with accuracy and consistency

Select and use a wide range of dynamics to compose a sequence of 5 or more steps

Refine movements

Identify and show a range of bridge shapes with back, front or side towards the floor or apparatus

Identify and show the five basic jumps and demonstrate clear body shapes in the air

Know and show a range of travelling and jumping activities initiated by pushing/pulling on the floor/apparatus.

Demonstrate a variety of shapes and speeds when spinning on different body parts.

Lead own warm up and demonstrates all round safe practice

Show understanding of composition by performing increasingly complex sequences

Analyse the skills of others and suggest ways to improve quality of performance demonstrating knowledge and understanding

Demonstrate increasingly good strength, speed and stamina over a variety of distances

Demonstrate accuracy and technique in a standing jump and make attempts at the triple jump

Demonstrate an increasing understanding of body shape when developing the accuracy and technique of my throws

Explain how to improve technique in a variety of events

Understand and explain the short and long term effects of exercise, and understand the need for specific warm up and cool down

Choose and perform skills and strategies effectively and find solutions to problems and challenges

Plan, implement and refine strategies; adapt them where necessary

Work increasingly well in a group or in a team where roles and responsibilities are understood

Identify what I do well, as individuals and as a group; suggest ways to improve.

Taken from RSE

To know the risks associated with obesity

To know how to seek support if they are worried about their health

PSHE Education

Make choices about their own behaviour because they understand how rewards and consequences feel

Understand that actions affect themselves and others

Explain the differences between direct and indirect types of bullying

Know some ways to encourage children who use bullying behaviours to make other choices and know how to support children who are being bullied

Describe the dreams and goals of a young person in a culture different from theirs

Reflect on how these relate to their own dreams

Explain how to stay safe when using technology to communicate with friends

Recognise and resist pressures to use technology in ways that may be risky or cause harm to themselves or others

Describe the different roles food can play in people's lives and can explain how people can develop eating problems (disorders) relating to body image pressures

Explain how they expect and value their body

Describe how boys' and girls' bodies change during puberty

Express how they feel about the changes that will happen during puberty

History

Use sources of evidence to deduce information about the past.

Understand that no single source of evidence gives the full answer to questions about the past.

Use sources of information to form testable hypotheses about the past.

Give a broad overview of life in Britain from medieval until the Tudor and Stuarts times

Compare some of the times studied with those of the other areas of interest around the world

Identify periods of rapid change in history and contrast them with times of relatively little change

Use dates and terms accurately in describing events

Use appropriate historical vocabulary to communicate including dates, time period, era, chronology, continuity, change, century, decade, legacy etc

RE

In what ways does the Bible teach Christians to treat others?

10 commandments

How is this expressed in practice?

The ways in which beliefs impact on action: expectations of behaviour, ways in which people act, examples of contemporary individuals.

Look at Christian Aid, street pastors Archbishop of Canterbury etc.

How do Hindus reflect their faith in the way they live?

Satsang(togetherness)- the importance of family, community and society in thinking of one's dharma (duty).

What is karma and how does it drive the cycle of samsara?

How might a Hindu seek moksha?

What does the Qur'an teach Muslims about how they should treat others?

How do Muslim teachings guide the way Muslims act in the world?

Hadith- the collections of teachings to provide guidance on how to follow the straight path (shariah)

In depth study of Sikhism:

Look at the key beliefs, practices, festival and symbolism. (see long term plan for more detail)

RSE

To understand what is meant by marriage and civil partnership.

(demonstration of commitment made by two people who love and care for each other and who want to spend their life together and who are of legal age to make that commitment)

To recognise types of teasing and bullying and understand these are wrong and unacceptable.

To know how to report bullying and help someone who has been bullied.

To develop strategies to resolve disputes and conflict through negotiation.

To know to protect their bodies from unwanted and inappropriate contact.

To learn to manage requests for images of themselves and or others/ seek support if worried.

To understand when it is right to break a confidence or share a secret

To understand what stereotype means. (unfair, destructive and negative)

To recognise and challenge stereotypes

To recognise that they many experience conflicting emotions, how to overcome these.

To understand the importance of community participation and its benefits on mental wellbeing.

To develop simple self-care techniques.

To know when to seek support for their mental health.

To realise the consequences of anti-social behaviour.

To know that energy drinks, alcohol and tobacco can damage immediate and future health

To understand the facts and science relating to immunisation and vaccination.

To be aware of school rules that help keep them safe.

To know where and how to get help.

To know basic concepts of first aid for common injuries (head, body, cuts and bruises).

To understand the key facts about puberty.

To understand how their body will, and emotions may change as they move through puberty.

To understand the key facts about menstrual cycle and wellbeing