



# Year 6 Curriculum Map

SUGGESTED PROJECTS  
 GREEKS  
 THE LAND BEFORE TIME  
 JOURNEY TO THE AMAZON  
 EAT. SLEEP. BREATHE. REPEAT  
 HEALTHY CAFE

|  |   |   |
|--|---|---|
| <p><b><u>Science</u></b><br/>           Light<br/>           Living Things &amp; Their Habitats<br/>           Animals &amp; Humans<br/>           Evolution &amp; Inheritance<br/>           Electricity</p> <p><b>Significant Scientists</b><br/>           Charles Darwin (Evolution)<br/>           Mary Anning (Evolution)<br/>           Linnaeus (Classification)<br/>           Aristotle (Classification)</p> | <p><b><u>RSE</u></b><br/>           Families<br/>           Friendships<br/>           Respectful Relationships<br/>           Staying Safe<br/>           Mental Wellbeing<br/>           Drugs, Alcohol, Tobacco<br/>           Health and Prevention<br/>           Basic First Aid<br/>           Online Safety<br/>           Physical Fitness<br/>           Healthy Eating<br/>           Online Relationships</p> | <p><b><u>Geography</u></b><br/> <b>Locational Knowledge</b><br/>           Countries in Europe (Greece)<br/>           World countries (South America)<br/>           Longitude/Latitude and Equator<br/> <b>Place Knowledge</b><br/>           Greece and Amazon Rainforest<br/> <b>Human &amp; Physical Geography</b><br/>           River Amazon<br/> <b>Geographical Skills &amp; Fieldwork</b><br/>           Fieldwork linked to rivers<br/>           Map work</p> |
| <p><b><u>PE</u></b><br/>           Invasion Games<br/>           Net and Wall Games<br/>           Striking and Fielding<br/>           Swimming<br/>           Dance<br/>           Gymnastics<br/>           Athletics<br/>           Outdoor and Adventurous Challenges</p>   | <p><b><u>History</u></b><br/>           Ancient Greece – a study of Greek life and achievements and their influence on the western world</p>  | <p><b><u>PSHE</u></b><br/>           Being Me in My World<br/>           Celebrating Difference<br/>           Dreams and Goals<br/>           Relationships<br/>           Healthy Me<br/>           Changing Me</p>   |
| <p><b><u>Art</u></b><br/>           Drawing<br/>           Painting<br/>           Printing<br/>           Sculpture<br/>           Artist focus</p>   | <p><b><u>Languages</u></b><br/>           T1: Actions<br/>           T2: In France<br/>           T3: Family<br/>           T4: A Weekend with Friends<br/>           T5: The Future<br/>           T6: Jobs</p>  | <p><b><u>Music</u></b><br/>           Diversity – Performer: Nina Simone<br/>           Feelin' Good (Classroom Jazz 2)<br/>           Carole King – Singer/songwriter (You've Got a Friend)<br/>           Shiva Feshareki: A turntablist and composer of Iranian descent who works with orchestras. (Music and Me)</p>  |
| <p><b><u>Design &amp; Technology</u></b><br/>           Electricals &amp; Electronics<br/>           Mechanics<br/>           Computing<br/>           Construction<br/>           Food &amp; Nutrition</p>  | <p><b><u>RE</u></b><br/>           Do you have to believe in God to be good?<br/>           Life Journey – Hinduism/Islam Living<br/>           Life Journey – Christianity Living</p>  | <p><b><u>Computing</u></b><br/>           E-Safety<br/>           Shaping the Digital World<br/>           Communicating in the Digital World<br/>           Exploring the Digital World</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 6 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

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

Fractions, Decimals and Percentages

### Measurement

Area

Use formulae to find the area of shape

Calculate the area of parallelograms and triangles

Calculate volume of cubes and cuboids

### Geometry

Describe position, direction and movement in increasingly precise ways – use all four quadrants

Use the properties of shapes and angles in increasingly complex and practical contexts

Illustrate and name parts of circles, including radius, diameter and circumference.

### Statistics

Gather, Organise and Interrogate data

### Ratio and Proportion

Recognise Proportionality

Consolidate understanding of ratio

Link percentages when calculating angles of pie chart.

### Algebra

Understand the practical value of algebra

## 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 plan enquiries, including recognising and controlling variables where necessary

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

to choose what evidence to collect to investigate a question, ensuring the evidence is sufficient

to make a variety of relevant observations and measurements using scientific equipment with increasing accuracy and precision

to decide when observations and measurements need to be checked, by repeating to give more reliable data

to record data and results using all previous methods and, in addition, models

to report findings and draw conclusions, including explanations involving causal relationships

to use simple models to describe scientific ideas, identifying scientific evidence that has been used to support or refute ideas or arguments

to use results to draw conclusions and make further predictions

### **Biology**

to describe how adaptation leads to evolution

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

identify how animals and plants are suited to and adapt to their environment in different ways

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

to recognise how and why the human skeleton has changed over time, since we separated from other primates

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

to explain the classification of living things into broad groups according to common, observable characteristics and based on similarities and differences, including plants, animals and micro-organisms

to identify and name the main parts of the human circulatory system, and explain the functions of the heart, blood vessels and blood (including the pulse and clotting)

to recognise the impact of diet, exercise, drugs and lifestyle on the way human bodies function

### **Taken from RSE**

evaluate when alcohol is being used responsibly, anti-socially or being misused

explain how they feel about using alcohol when they are older and their reasons for this.

### **Physics**

to understand that light appears to travel in straight lines

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

to use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them, and to predict the size of shadows when the position of the light source changes.

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

to 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

to use recognised symbols when representing a simple circuit in a diagram

## 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.

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

Use a choice of techniques to represent movement, perspective, shadows and reflections.

Choose a style of drawing suitable for the work (e.g. realistic or impressionist).

Create a colour palette based upon colours observed in the natural or built world

Use qualities of watercolour and acrylic paints to create visually interesting pieces.

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

Use brush techniques and the qualities of paint to create texture.

Develop a personal style of painting drawing upon ideas from other artists.

To use printing as a technique to enrich paintings.

To use mono printing including blocking out techniques (war printing, face masks).

To make precise repeating patterns by creating accurate printing blocks.

To use papier mache.

To use moulds.

To use chicken wire as a former.

To use decorating techniques to create surface textures.

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

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

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

Annotate work in sketchbook.

## Languages

Listen attentively, retell and discuss the main ideas of a spoken story, song, poem or text

Use spoken language confidently to initiate and sustain conversations on a familiar topic

Be understood with little or no difficulty

Tell stories from their own experience

Perform a short piece of narrative to an audience

Develop a sketch or role play to perform to a range of audiences (the class or in assembly)

Retell a sequence of events

Understand and express reasons

Understand the gist of spoken passages

Express personal responses and opinions e.g. using verbs and conjunctions such as 'Je préfère...parceque..'

Read and understand the main points from a short-written passage

Give true or false responses to statements about a written passage

Read descriptions of others to identify who they are

Read for enjoyment

Read and understand the gist of a simple news story or magazine article

Use punctuation to make a sentence make sense

Apply grammatical knowledge to sentence writing

Write several sentences from memory

Construct a short text/PowerPoint to tell a story or give a description – send to contact in a partner school

Use imaginative or adventurous word choices

Use a dictionary

Evaluate work

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

- Recognise similarities and differences between the cultures they have learned about
- Recognise and challenge stereotypes
- Present information about different aspects of another culture – write questions to seek information from contact in partner school

## History

Select suitable sources of evidence, giving reasons for choices.

Show an awareness of the concept of propaganda and how historians must understand the social context of evidence studied.

Seek out and analyse a wide range of evidence in order to justify claims about the past.

Refine lines of enquiry as appropriate.

Describe the social, ethnic, cultural or religious diversity of past society

Describe the characteristic features of the past, including ideas, beliefs, attitudes and experiences of men, women and children

Describe the main changes in a period of history (using terms such as: social, religious, political, technological and cultural)

Understand the concept of continuity and change over time, representing them, along with evidence on a time line

Use literacy, numeracy and computing skills to an exceptional standard in order to communicate information about the past

Use original ways to present information and ideas.

Use appropriate historical vocabulary to communicate effectively.

## Geography

Name and locate some of the countries and cities of the world and their identifying human and physical characteristics, including hills, mountains, rivers, key topographical features and land-use patterns; and understand how some of these aspects have changed over time.

Identify and describe how the physical features affect the human activity within a location.

Use a range of geographical resources to give detailed descriptions and opinions of the characteristic features of a location.

Name and locate the countries of North and South America and identify their main physical and human characteristics.

Describe how locations around the world are changing and explain some of the reasons for change.

Identify and describe the geographical significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, and time zones (including day and night).

Describe how countries and geographical regions are interconnected and interdependent.

Describe and understand key aspects of:

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

## RE

How do Christians show they belong?

Rites of passage: birth, initiation, marriage and death.

How do Hindus show they belong?

Samskaras: rites of passage: birth, initiation, marriage and death.

How do Muslims show they belong?

Rites of passage: birth, marriage and death.

Do you have to believe in God to be good?

Look at religions/beliefs where there is no good such as Buddhism and Humanism.

**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

Understand some malicious adults use the internet to make contact and "groom" young children. C/C RSE

Create class rules

Know how to report any suspicions (Think You Know REPORT ABUSE page).

Discuss scenarios involving online risk

Change data and formulae in a spreadsheet to answer 'what if..?' questions and check predictions. C/C Maths

Use a spreadsheet to draw a graph to help answer specific questions. C/C Maths

Use more advanced formulae (SUM, average, mode etc.) C/C Maths

Explore a range of ICT games (including multi-player) in a safe environment (e.g. Pora Ora).

Evaluate different ICT games and design their own, writing rules and objectives.

Analyse the impact of games in our society.

Design own game, simulation or app and use a programming tool to create it for use by others (e.g. Scratch, Kodu and Appshed - apps don't have to be published).

Independently select and import text, images, video and sounds (including their own) using a range of digital devices and prepare them for presentation using ICT to create their own effects.

Develop the use of hyperlinks to produce interactive presentations or websites. Understand how pages link together and recognise the need for clarity. Produce a diagram to show the links between pages.

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

Produce formal or informal messages appropriate to the task or to solve problems (requesting information, sharing data etc.).

Combine stills, video and sound using a video editing package. Export movies in a variety of formats and use them in multimedia presentations.

Plan and create a short animated sequence to communicate an idea, using a storyboard and timeline. C/C English

Independently select, edit and combine sound files. Manipulate the sounds (such as reversing sounds, adding echo, altering speed etc. and using them appropriately considering audience and purpose.

Use a range of sensors (temperature, light, sound, heart rate monitors, light gates) to support scientific investigations. C/C Science

Construct, refine and interpret frequency tables, bar charts with grouped discrete data and line graphs; interpret pie charts. C/C Maths

Design questions using key words, to search a large pre-prepared database. Use complex searches (and/or, is greater/less than) to search data when looking for relationships and patterns in data.

Develop strategies for finding information checking for bias and different viewpoints (using different keywords, cross checking with other sources etc.).

Discuss how internet search engines find, store and rank data.

Discuss issues of copyright and downloading material Game cheats, music, images. Reference sources used in their work.

## Music

Sing or play from memory with confidence (alone).

Perform solos or as part of an ensemble, displaying variety of techniques.

Sing or play expressively and in tune.

Hold a part in a round on my own.

Sing a harmony part confidently and accurately.

Perform with controlled breathing (voice) and skilful playing (instrument).

Improvise a melody and rhythm within a given structure.

Combine a variety of musical devices, including melody, rhythm and chords.

Thoughtfully select elements for a piece in order to gain a defined effect.

Convey the relationship between the lyrics and the melody.

Use digital technologies to compose, edit and refine pieces of music.

Create musical patterns for different occasions using different musical devices.

Use the standard musical notation of crotchet, minim and semibreve to indicate how many beats to play.

Read and create notes on the musical stave.

Understand the purpose of the treble clef and begin to understand the purpose of bass clef and begin using them in transcribing compositions.

Understand and use the # (sharp) and b (flat) symbols.

Use and understand simple time signatures.

Understand dotted notes, triplets and basic cross rhythms using syncopation.

## PSHE Education

Make choices about own behaviour because they understand how rewards and consequences feel, and understand how these relate to rights and responsibilities

Understand that actions affect themselves and others; explain how they care about other people's feelings and try to empathise with them

Explain ways in which difference can be a source of conflict or a cause for celebration

Show empathy with people in either situation

Describe some ways in which I can work with other people to help make the world a better place

Identify why they are motivated to do this

Recognise when people are trying to gain power or control

Demonstrate ways they could stand up for myself and their friends in situations where others are trying to gain power or control

Evaluate when alcohol is being used responsibly, anti-socially or being misused

Explain how they feel about using alcohol when they are older and their reasons for this

Describe how a baby develops from conception through the nine months of pregnancy, and how it is born

Recognise how they feel when they reflect on the development and birth of a baby

## Design & Technology

Use electrical and mechanical systems in their products.

Convert rotary motion to linear using cams.

Use innovative combinations of electronics (or computing) and mechanics in product designs.

Write code to control and monitor models or products.

Choose from a wider range of materials and tools.

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).

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).

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).

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.

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.

Investigate and analyse a range of products.

## PE

Understand and demonstrate a range of controlled passing, receiving, dribbling and shooting skills

Understand the positions I play and identify specific attacking and defending skills

Play in a range of small sided games and can make effective choices about when, how and where to pass

Describe the best parts in an individual or team performance

Play a variety of shots with intent when striking the ball after one bounce or on the volley

Direct a ball into an opponent's court at different heights, speeds and angles

Evaluate the effectiveness of a shot and suggest ways of improving it

Play a range of small sided net wall games and apply common principles for attack and defence

Understand and show the correct striking stance and direct the ball away from fielders

Bowl accurately in competitive situations

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

Recognise and identify what needs to be improved, in mine and other's performances, and make suggestions.

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, confidently for 30 seconds

Lead a warm up and demonstrates all round safe practice

Perform and create complex sequences with high energy, slow grace or other themes and maintain this throughout a piece.

Perform expressively and hold a precise and strong body posture.

Modify a performance, and that of others, as a result of observation

Travelling and balancing:

Understand and use a variety of spatial relationships when working with a partner

Understand, identify and use the terms synchronisation and cannon.

Make clear balance shapes for a partner to travel over or under.

Understand and use the terms; counter-balance and counter-attention.

Lead own warm up and demonstrates all round safe practice

Show understanding of composition by performing more complex sequences with a partner

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

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

Demonstrate accuracy and technique in the standing and triple jump

Demonstrate accuracy and technique in developing the distance of my throws

Improve my technique in a variety of events

Compete with others and keep track of personal best performances, setting targets for improvement.

Work confidently in familiar and changing environments; adapt quickly to new situations

Devise and put into practice a range of solutions to problems and challenges

Take a leading role when working with others

Identify and respond to events as they happen and identify effective performances and solutions

### Taken from RSE

To know the risks associated with obesity

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