

Scholes (Elmet) Primary
St James' CE Primary
Moortown Primary

### Our curriculum:

### Intent, implementation and impact

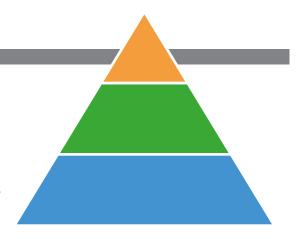
Date: Summer 2020 and reviewed on an on-going basis



Our curriculum intent has three layers:



We are required to cover The National Curriculum (Department for Education, 2014). The aims set out in The National Curriculum (especially sections 3-6) direct the core aims for the curriculum; our curriculum intent complements this.



### Layer 2: Our schools' core aim

We want Sphere Federation schools to be happy and healthy places to learn. This core aim permeates our schools and their ethos, whether in the classroom or around and about school. (At St James' CE Primary, this is expressed with one additional element: 'happy and healthy place to achieve and believe'.)

#### Layer 3: Our curriculum aims

We deliver the content in ways which achieve five intentions (many of which feature in the National Curriculum Purpose of Study for each subject):

#### challenging

Our curriculum is implemented in a way that covers statutory requirements of the National Curriculum and our own curriculum age-related expectations; throughout, teachers will search for purposeful, meaningful opportunities to extend and deepen pupils' learning at the appropriate level for individual children's needs.

#### enjoyable

We want Sphere Federation schools to be happy and healthy places to learn. The more enjoyable a topic is, the more engaged our pupils will be, and the more we will be able to meet the needs of all children in our school community. Visits, visitors, themed weeks and other enriching activities help to make the curriculum enjoyable.

#### relevant

Ofsted sets out a criterion to judge the quality of education: 'the extent to which schools are equipping pupils with the knowledge and cultural capital they need to succeed in life.' (School inspection handbook: Handbook for inspecting schools in England under section 5 of the Education Act 2005, November 2019, point 178, p43). The skills and knowledge set out in our age-related expectations for each subject mean our curriculum content is very relevant for our pupils' present and future lives.

#### inspiring

The National Curriculum sets out 'to engender an appreciation of human creativity and achievement' (section 3.1, p6). Teachers introduce pupils to British and world-wide achievements, past and present. Further, we want to promote an appreciation and sense of awe and wonder when learning about the natural world.

#### creative

A characteristic of effective learning is creative thinking – we want our children to develop this from the outset of their learning journey: our children will be creative in their ideas, in their questions, in their solutions. For our teachers, our curriculum has some flexibility built into it so that they can be creative, linking learning with books that inspire, for example.

### Our curriculum implementation Overview (core and foundation subjects)

The following two pages present an overview of how we implement our curriculum.

To meet our curriculum aims, teachers will deliver lessons which are:

- coherently planned, and
- sequenced to ensure cumulatively sufficient knowledge and skills for future learning

specific knowledge and skills	core knowledge and skills	supporting skills
These derive from each individual National Curriculum subject; we set them out in our age-related expectations (the second part of this Curriculum Statement).	<ul> <li>oral and written communication: speaking, listening, reading, writing</li> <li>application of maths</li> </ul>	<ul> <li>digital literacy</li> <li>working with others</li> <li>improving own learning and performance (linked to metacognition)</li> <li>thinking skills (eg critical thinking, reasoning, problem-solving)</li> </ul>

The core subjects of English, Maths and Science are taught as discrete subjects.

Half-termly topics are driven by a **foundation subject** (History, Geography, Computing, Art, Design Technology etc) and enriched by other subjects.

English	The subject matter of a Science unit or a curriculum topic is often developed or referred to in English or Maths lessons.  For example, during a History-driven topic, children might: read some linked poetry, fiction or non-fiction texts (in a Reading lesson); write a recount based around an event from the past (using and applying skills in a Writing lesson); perform calculations based around historical dates (using and applying Maths skills).	Science unit or
Maths	The skills children learn in English and Maths lessons are practised and applied in topic lessons which give them a sense of purpose and relevance.  For example, in a Geography lesson, children might: locate information using the contents and index pages of an atlas (Reading); use capital letters for place names (Writing); apply their knowledge of place value when looking at larger numbers such as population (Maths).	curriculum topic

# Our curriculum implementation Overview (topics)

To meet our curriculum intent, we deliver much of the curriculum through topics which have four elements:

### drivers

Each topic has a driving subject – the main focus for teaching pupils the knowledge and skills they need to succeed in life. The driver changes with each topic to ensure a broad and balanced curriculum across our two-year planning cycle.

### skills

Stemming from
English and Maths
knowledge,
the skills of oral and
written
communication
and the
application of maths
are central to life
and central to
learning.
Also important are
supporting skills
such as working
with others.







# living and learning

We want to promote children's life skills (eg knowledge of other cultures and their understanding of health and wellbeing) and their learning skills (eg working well as a team).

This includes social, moral, spiritual and cultural development, and staying safe.

### enrichers

An enricher is another subject that may enhance and broaden the learning experiences for our children. Enrichers provide natural links to the topic that may go beyond the statutory elements of the National Curriculum.

### Our curriculum implementation Overview (key points)

#### Rationale

Our curriculum has been designed following extensive consultation with teachers and children. Various models of curriculum were critiqued before settling on the following plans for curriculum implementation. The consultation was comprehensive:

- leaders were thorough in preparation of different models, with pros and cons for each
- there was thoughtful discussion about where and when subjects and units of learning would be mapped out
- views were collected and shared across Sphere Federation
- leaders took on board views, but also were very mindful of ensuring a broad and balanced learning experience eg in History, a balance of British and world history units across each phase which promote a greater depth of understanding of events in Britain and globally

#### A two-year cycle

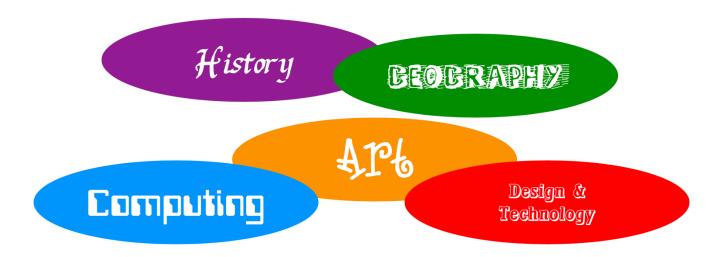
In Sphere Federation schools, teachers work in three different phases to plan and deliver the curriculum: Years 1 and 2, Years 3 and 4 and Years 5 and 6. There are various benefits of this, which include:

- teachers can share ideas and skills when planning and delivering topics
- teachers can provide different areas of subject expertise
- a common topic creates a talking point or 'buzz' for conversations in school
- classes might swap teachers or combine to work with other children
- there are economies of scale when organising visits out or visitors into school
- to help reduce teachers' workload, a problem increasingly recognised by the Department for Education and Ofsted (eg School inspection handbook: Handbook for inspecting schools in England under section 5 of the Education Act 2005, November 2019)

As a result, we operate a two-year rolling programme of topics, with some topics in 'Year A', some in 'Year B'. This means that some children will encounter a topic when in Year 3, for example, and other children when in Year 4. The age-related expectations are the same for both year groups in the phase (see appendix). Teachers will differentiate to meet the needs of all pupils so that by the time they leave a phase, they will have met the expectations. This means that the learning in a Year 3 child's book might look similar to that of a Year 4 child's book, but it may have been delivered and supported in a different way.

An advantage of a two year cycle is that children learn some age-related expectations in one year and then secure their learning in the following year – an opportunity to reinforce, to provide for even greater 'mastery' of the learning; and an opportunity to go deeper with the learning, to use and apply their learning in more situations.

(Incidentally, the National Curriculum doesn't specify year groups for foundation subjects such as history and geography.)



The drivers for the topics are one of the following:

- History (one half-term as a driver in Year A; two half-terms in Year B)
- Geography (two half-terms as a driver in Year A; one half-term in Year B)
- Computing (one half-term as a driver each year)
- Art (one half-term as a driver each year)
- Design Technology (one half-term as a driver each year)



Reading and Writing (part of the English curriculum) and Maths are core subjects with a great deal of content. We've a short document for each which, like this Curriculum Statement, sets out our intent, implementation and impact, and lists our age-related expectations for each year group, too. We've set out more about how reading in particular is an integral part of our topics later in this Curriculum Statement.

#### Foreign Language, Music, PSHE, PE, RE



These subjects are all additional foundation subjects. They can help to enrich any of the topics we implement, but they are also taught in a discrete way.

For example, PSHE (Personal, Social, Health and Economic Education, and referred to in our schools as 'Living and Learning') will enrich the learning experiences of children during a Computing topic in that they will develop respectful relationships and learn more about careful online relationships and internet safety and harms. However, most aspects of the PSHE curriculum will be taught in a dedicated weekly Living and Learning session.

Similarly, RE (Religious Education) is taught in a dedicated session. We use the agreed syllabus for RE in Calderdale, Kirklees and Leeds, 'Believing and Belonging in West Yorkshire' (2019-2024).

(At St James' CE Primary, there is a denominational requirement to provide a certain proportion of teaching from the religious designation because the school is a voluntary controlled Church of England school.)

#### Spiritual, moral, social and cultural development (SMSC)

The National Curriculum states: 'Every state-funded school must offer a curriculum which is balanced and broadly based and which: promotes the spiritual, moral, cultural, mental and physical development of pupils at the school and of society' (2.1, p5).

We promote SMSC through our whole-school ethos, effective relationships throughout the school, assemblies (*St James' CE Primary: collective worship*), and other curriculum activities. National Curriculum subjects provide opportunities to promote SMSC, too. Explicit opportunities are provided in Religious Education and in Living and Learning (nationally referred to as Personal, Social and Health Education or PSHE and citizenship).

An example of how one subject – Science - can promote SMSC:

- spiritual: developing a sense of awe and wonder at the complexity and pattern in natural phenomena
- moral: looking at good and bad uses of drugs; moral issues in the human food chain
- social: looking at ways in which the environment needs protection
- cultural: scientific development in relation to others water supplies, new varieties of flowers and food crops

#### Special educational needs and/or disabilities (SEND)

All three schools in Sphere Federation are inclusive and are committed to meeting the needs of children with SEND in **the most effective way** so that they achieve **the best possible outcomes**:

- we want pupils with SEND to acquire the knowledge and skills they need to reach their full potential,
- to be ready for the next stage in their education and,
- a ultimately, to succeed in life.

To do this, we adapt how we implement the curriculum to meet the needs of pupils with SEND so that we can develop their knowledge, skills and abilities to apply what they know and can do with increasing fluency and independence. The adaptations we make are appropriate and reasonable, and are made in accordance with the Equality Act 2010 and the SEND code of practice.

#### Flexibility and freedom

In specific circumstances (such as where there is a significant event nationally/globally that merits consideration eg a natural disaster in the news), teachers may choose to deviate a little from the topic. This is important as it provides opportunities for teachers to explore other aspects of learning within or beyond the curriculum – learning which is more spontaneous in that it meets children's questions, needs and interests in a responsive, more 'organic' way.

This corresponds to two of our Curriculum Aims (layer 3 of the pyramid shown on page 1):

- being relevant, so that we can respond to local, national and world events which help to build up 'the knowledge and cultural capital they need to succeed in life.' (School inspection handbook: Handbook for inspecting schools in England under section 5 of the Education Act 2005, November 2019, point 178, p43)
- being **creative**, so that we can respond to children's interests and questions in a way which provides an even richer source of knowledge and skills.

#### Class novels

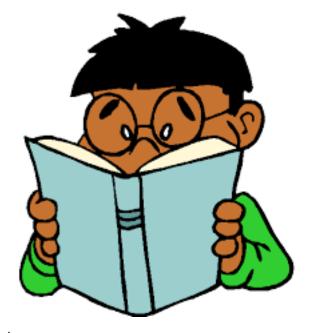
In every class, reading has a high profile. This includes a class novel (or other shared text).

Our topics will always be supported and enriched by quality texts. These might be class novels, extracts from quality texts, shorter picture books (a wide variety of 'mature picture books' are available), poetry and non-fiction texts. These texts will complement/contextualise the learning of the topic's driving subject. The topics aim to show children the links between a text and the wider world, and – importantly - promote a love of reading.

#### **Topics: vocabulary**

Within each topic (and in Science), there are key subject-specific words/phrases that we want our children to know.

- At the start of the topic, there is a 'class assessment' where teachers introduce the key vocabulary and gauges the knowledge and understanding of the words for the class as a whole.
- Throughout the topic, these words are taught and used often. There is at least one 'standalone' session where the vocabulary is taught/practised in some way, and plenty of ongoing learning where the vocabulary is used.
- ◆ At the end of the topic, children demonstrate their knowledge and understanding of the vocabulary. They may also use and apply the words in sentences or in a topic review of some sort (eg some writing, a video presentation).



#### Challenge and deeper learning

Across all subjects, teachers provide opportunities for challenge and deeper learning. Pupils benefit from this: whoever needs it, in whatever lesson. Sometimes, the challenge may not be evident in books; for example, challenge might be provided by less support during the teacher input; an additional, practical task that isn't recorded; and teacher questioning which is targeted to meet the needs of different pupils. Often, there is evidence in books of challenge for pupils: for example, teacher feedback which provides an additional task or thought-provoking question; an open-ended activity that promotes reasoning; and 'flipping over' the learning or activity by considering the opposite or reverse (eg by coming up with their own questions or criteria).

Our curriculum implementation: Long-term plans continues below, after content on curriculum impact.

### **Curriculum impact**

We evaluate the impact of our curriculum in the following ways:

#### Pupil achievement and progress

We measure pupil achievement – the acquisition of knowledge and skills – and progress using a number of strategies, including:

- in-year and end of year tests (this includes the statutory end of key stage assessments – the 'SATs' – see the Results page in the Find Out section on our website)
- teacher assessments (supported by moderation in school, across Sphere Federation and externally with other schools and with the local authority)
- on-going teacher assessment based on questioning in class, observations and pupil outcomes (which includes their work in books)
- additional assessments that support teacher assessment, such as checks on times tables and reading fluency, and curriculum 'quizzes'
- pupils' acquisition of vocabulary and knowledge through book scrutinies, learning conversations and learning walks

In **core subjects**, teachers continually assess children's learning and this helps to shape their subsequent teaching. At the end of each term (in Science, at the end of the year), there is a more formal assessment and data is submitted to senior leaders who track attainment and progress to measure impact.

In **foundation subjects**, teachers do similar: they continually assess children's learning which informs their subsequent teaching. At the end of the year, they make summative assessments, indicating if children are 'currently working below', 'working towards', at 'expected' or at 'greater depth' in each subject.

Monitoring of planning and lesson observations, alongside scrutiny of progress in books and learning conversations with children, ensure that all children are provided with opportunities to achieve and that they are successful in achieving what is expected at their stage of learning.

Whole school areas for development are identified as a result of data analysis. The data analysis enables professional development to be implemented to 'close the gap' in these curriculum areas for all children in all year groups.

#### **Pupil attitudes**

We measure pupil attitudes using a number of strategies, including:

- feedback during learning conversations and in pupil and parent/carer surveys
- attitudes and behaviour in lessons across the curriculum
- the quality of the work they produce, including taking pride in presentation
- attendance and punctuality



# Our curriculum implementation Long-term plans for topic

The topic plan for each phase is set out below. 'Year A' are 'odd years': 2019-20, 2021-22, 2023-24... and 'Year B' are 'even': 2020-21, 2022-23, 2024-25...

	Year 1 a	nd Year 2 Year B	Year 3 aı Year A	nd Year 4 Year B	Year 5 ai Year A	nd Year 6 Year B
Autumn 1	Geography: Where in the world am !? (British geography and fieldwork)	History: Great Fire of London (Events beyond living memory; with reference to local history)	Geography: Where in the world am I? (British geography and fieldwork)	History: Ancient Greece	Geography: Where in the world am I? (British geography and fieldwork)	History: Stone Age to Iron Age Ancient Egypt
Autumn 2	Art drawing painting printing	Art drawing painting sculpture	Art painting collage	Art drawing digital art	Art painting sculpture	Art drawing printing
	featured art/design: abstract featured artist: Paul Klee	featured art/design: Renaissance featured artist: Leonardo da Vinci	featured art/design: native Australian featured artist: Martha McDonald	featured art/design: architecture featured artist: Sir Christopher Wren	featured art/design: sculpture featured artist: Barbara Hepworth	featured art/design: design featured artist: William Morris
Spring 1	History: Toys (Changes within living memory; with reference to local history)	Geography: Environment / Natural disasters  'The streets around our school' primary focus: environmental issues	<b>History</b> : Romans Anglo-Saxons	Geography: Environment / Natural disasters primary focus: volcanoes and/or earthquakes	History: Vikings  The Islamic Golden Age (Early non-European civilisation)	Geography: Environment / Natural disasters primary focus: seas and oceans
Spring 2	Computing  primary focus: programming	Computing  primary focus: programming	Computing  primary focus: programming	Computing  primary focus: programming	Computing  primary focus: programming	Computing primary focus: programming
Summer 1	Geography: Explorers (Contrasting locations: UK and non-Europe)	History: 'Heroes' (Lives of significant individuals – civil rights; including Leonora Cohen, local suffragette)	Geography: Explorers (Contrasting locations: UK and Europe)	History: Leeds over time (Local history)	Geography: Explorers (Contrasting locations: UK and the Americas)	History: World War II inc evacuees and refugees, and Leeds at war (Study of an aspect or theme)
Summer 2	Design & Technology primary focus: textiles	Design & Technology primary focus: construction	Design & Technology primary focus: textiles	Design & Technology primary focus: construction	Design & Technology primary focus: textiles	Design & Technology primary focus: construction



# Our curriculum implementation Reading to complement our topics

Our Reading Curriculum Statement includes a list of texts for each term (including extracts from classic fiction, poetry and picture books). Below is an extract from this plan – our **flexible** plan for **suggested** class novels chosen to compliment some of the topics we've set out in our long-term plan for topics.

Autumn	Year 1 ar	nd Year 2	Year 3 ar	nd Year 4	Year 5 ar	nd Year 6
	Year A	Year B	Year A	Year B	Year A	Year B
Topics	Geography: Where in the world am I? (British geography and fieldwork)	History: Great Fire of London (Events beyond living memory; with reference to local history)	Geography: Where in the world am I? (British geography and fieldwork)	History: Ancient Greece	Geography: Where in the world am I? (British geography and fieldwork)	History: Stone Age to Iron Age and Ancient Egypt
Class novel read one	Yours Sincerely, Giraffe by Megumi Iwasa Flat Stanley by Jeff Brown Lost and Found by Oliver Jeffers	Toby and The Great Fire of London by Margaret Nash The Great Fire of London by Liz Gogerly  Vlad and the Great Fire of London by Kate Cunningham	Wild Robot by Peter Brown  Podkin One Ear by Kieran Larwood	Greek Myths by Marcia Williams  Who Let the Gods Out? by Maz Evans	Survivors by David Long  Journey to Jo'burg by Beverley Naidoo	The Boy with the Bronze Axe by Kathleen Fidler Wolf Brother by Michelle Paver

Spring	Year 1 a	nd Year 2	Year 3 ar	nd Year 4	Year 5 ar	nd Year 6
Opinig	Year A	Year B	Year A	Year A	Year B	Year A
Topics	History: Toys (Changes within living memory; with reference to local history)	Geography: Environment / Natural disasters  'The streets around our school' primary focus: environmental issues	History: Romans Anglo-Saxons	Geography: Environment / Natural disasters primary focus: volcanoes and/or earthquakes	History: Vikings  The Islamic Golden Age (Early non-European civilisation)	Geography: Environment / Natural disasters primary focus: seas and oceans
Class novel use one	Naughty Bus by Jan Oke  The Teddy Robinson Storybook by Joan G Robinson  The Teddy Bear by David McPhail	The Lorax by Dr Seuss  The Last Wolf by Mini Grey  The Weed by Quentin Blake	How to be an Anglo-Saxon in 13 Easy Stages by Scoular Anderson Illustrated Tales of King Arthur by Sarah Courtauld Anglo-Saxon Boy by Tony Bradman	Firework Maker's Daughter by Philip Pullman  When the Mountains Roared by Jess Butterworth  Escape from Pompeii by Christina Balit	Odd and the Frost Giants by Neil Gaiman Viking Boy by Tony Bradman Beowolf by Michael Morpugo	Song of the Dolphin by Elizabeth Laird  Sky Song by Abi Elphinstone  Nowhere Emporium by Ross Mackenzie

Summer	Year 1 aı	nd Year 2	Year 3 ar	nd Year 4	Year 5 ar	nd Year 6
	Year A	Year B	Year A	Year A	Year B	Year A
Topics	Geography: Explorers (Contrasting locations: UK and non-Europe)	History: Heroes (Lives of significant individuals – civil rights; including Leonora Cohen, local suffragette)	Geography: Explorers (Contrasting locations: UK and Europe)	History: Local history	Geography: Explorers (Contrasting locations: UK and the Americas)	History: World War II inc evacuees and refugees (Study of an aspect or theme)
Class novel use one	Man on the Moon: a day in the life of Bob by Simon Bartram Where The Wild Things Are by Maurice Sendak	Fantastically Great Women who Changed the World by Kate Pankhurst  Rise Up: Ordinary Kids with Extraordinary Stories by Amanda Li	The Miraculous Journey of Edward Tulane by Kate DiCamillo  Pirates Handbook by Sam Taplin  A Bear called Paddington by Michael Bond	The Lottie Project by Jaqueline Wilson  Loidis Ledes Leeds by Tom Palmer	The Explorer by Katherine Rundell  Journey to the River Sea by Eva Ibbotson  Forest of Doom by Ian Livingston (or another Fighting Fantasy book)	When Hitler Stole Pink Rabbit by Judith Kerr  Letters From The Lighthouse by Emma Carroll

# Our curriculum implementation Reading as an integral part of our topics

When reading cross-curricular texts, teachers support children to read as a 'subject expert' (reading, for example, as a...scientist / historian etc). This role will help them to focus on foundation subject knowledge and skills. (For the biggest impact, teachers focus on one or two of the points, rather than all at once.)

Reading as a				
scientist (closely matching our working scientifically skills)	historian	geographer		
<ul> <li>What scientific questions can you ask about this text?</li> <li>What scientific questions does this text answer?</li> <li>Can you visualise what this text is describing?</li> <li>Can you draw diagrams based on the text?</li> <li>Can you find and evaluate information in the text?</li> <li>What are the similarities, differences or changes explained in the text?</li> <li>What does the data show us?</li> <li>Can you explain this science?</li> <li>What conclusions can we draw from the text?</li> <li>Why has the author chosen to present this information in this way? (ie diagram, bold, text)</li> </ul>	<ul> <li>What's the source of this text? When was it written? By whom? Why? What is their likely intent or viewpoint? How much should we trust it? Is it primary or secondary?</li> <li>What's the context of the text? What time period was it written in? What was happening at the time that might impact on this evidence?</li> <li>Can anything corroborate this evidence? Is there a different source that can back it up or that has an opposing view?</li> <li>Why has the author chosen to present this information in this way? (ie diagram, bold, text)</li> </ul>	<ul> <li>What geographical vocabulary is being used?</li> <li>Can I find this location on a map? If so, where?</li> <li>What do I know already about the locations mentioned?</li> <li>What geographical features are mentioned/shown?</li> <li>How is this place similar or different to others that I know?</li> <li>What human influences are mentioned in the text?</li> <li>How have these places been influenced by humans? How can you tell?</li> <li>Why has the author chosen to present this information in this way? (ie diagram, bold, text)</li> </ul>		
artist	designer or technician (the process of designing and making)	programmer		
<ul> <li>What art vocabulary is being used?</li> <li>What do I already know about the technique being described?</li> <li>Can I visualise the process being described?</li> <li>What sounds like the most difficult part? Why? Is it realistic to do?</li> <li>Is there a better guide elsewhere?</li> <li>What could I do differently? Why?</li> </ul>	<ul> <li>What technology vocabulary is being used?</li> <li>What do I already know about the techniques being described?</li> <li>What techniques, materials, equipment and tools have been described in the text? Why?</li> <li>Can I visualise the process being described?</li> <li>What sounds like the most difficult part? Why? Is it realistic to do?</li> <li>Why has the author chosen to present this information in this way? (ie diagram, bold, text)</li> <li>Is there a better guide elsewhere?</li> <li>What could I do differently? Why?</li> </ul>	<ul> <li>What technical vocabulary is being used?</li> <li>What do I already know about the programming being described?</li> <li>Will it work? Why/why not?</li> <li>What sounds like the most difficult part? Why? Is it realistic to do?</li> <li>How has the author broken the task down into smaller steps?</li> <li>What could I do differently? Why?</li> </ul>		
art 'audience'	design 'appreciator'	(safe) internet user		
<ul> <li>Before I read this text, what are my views or thoughts about the piece of art or artist?</li> <li>What is purpose of the text? To give me background information? To help me understand the art? To persuade me to like it?</li> <li>Does the text help me to appreciate the art or artist? How?</li> <li>Now that I've read the text, have my views or thoughts changed? How? Why?</li> <li>Does it inspire my creativity?</li> </ul>	<ul> <li>Before I read this text, what are my views or thoughts about the piece of design, designer or product?</li> <li>What is purpose of the text? To give background information? To help me understand the design or designer? To persuade me? Does the text help me to appreciate the design or product? How?</li> <li>Now that I've read the text, have my views or thoughts changed? How? Why?</li> <li>Does it inspire my creativity?</li> </ul>	<ul> <li>Is this content safe? How do you know? Is it something I've used before? Do I know the author or trust the website?</li> <li>What is the purpose of the text? Is it trying to persuade me to do something or change my mind? If so, I need to be careful.</li> <li>Is this content positive, negative or neutral?</li> <li>Is the content and/or author trustworthy and reliable? How do I know? How can I check this? What else could I read to check it?</li> <li>See age-related expectations for Staying safe online for more.</li> </ul>		

# Our curriculum implementation Long-term plans for Science

Our long-term plan for Science is shown below. Like the 'topic driver subjects' (History, Geography, Computing, Art and Design Technology), the science curriculum is delivered across a two-year cycle. However, Science is a core subject of the National Curriculum and is therefore taught in at least one dedicated lesson each week. There is scope, however, for the same links to and from English and Maths (see p2), and for Science to be included within a topic lesson as an enricher (see p3).

# SCIENCE

#### Key:

- · each row represents a half-term
- orange = chemistry unit
- green = biology unit
- blue = physics unit
- white box = 'free' unit
- text = National Curriculum unit and associated year group
- italic text = corresponding Rising Stars: Switched on Science resource title

Each phase teaches the same science unit at the same time; allowing collaborative planning and sharing of resources and enrichment opportunities. Each cycle typically includes biology, chemistry and physics appropriate to the age of the children.

	Year 1 ar Year A	nd Year 2 Year B	Year 3 ai Year A	nd Year 4 Year B	Year 5 ar Year A	nd Year 6 Year B
Autumn 1	Chemistry Everyday Materials (Y2) Materials Monster Squash, Bend, Twist and Stretch	<b>Biology</b> Living Things and Their Habitats (Y1)	Chemistry States of Matter (Y4) Looking at States	Biology Living Things and Their Habitats (Y4) Living Things	Chemistry Properties and Changes of Materials (Y5) Material World	Biology Living Things and Their Habitats (Y6) Classifying Living Things
Autumn 2	Working scientifically	Working scientifically	Physics Light (Y3) Light and Shadows	Physics Sound (Y4) What's That Sound?	Physics Light (Y6) Light	Physics Forces (Y5) Let's Get Moving
Spring 1	Biology Seasonal Changes (Y2)	Chemistry Everyday Materials (Y1) Celebrations	Physics Electricity (Y4) Power It Up!	Chemistry Rocks (Y3) Rocks, soils and fossils!	Biology Evolution and Inheritance (Y6) Evolution and Inheritance	Physics Earth and Space (Y5) Out of this World
Spring 2	Working scientifically (Holiday)	Working scientifically (Little Masterchefs)	Working scientifically (The Nappy Challenge)	Working scientifically (The Big Build)	Working scientifically (Amazing Changes)	Working scientifically (The Titanics)
Summer 1	Biology Plants (Y1)	Biology Plants (Y2) Young Gardeners	Biology Plants (Y3) How Does Your Garden Grow?	Physics Forces and Magnets (Y3) Forces and Magnets	Physics Electricity (Y6) Electricity!	Biology Living Things and Their Habitats (Y5) Circle of Life
Summer 2	Biology Animals including Humans (Y1) Who Am 1?	Biology Animals including Humans (Y2) Healthy me	Biology Animals including Humans (Y3) Food and our Bodies	Biology Animals including Humans (Y4) Teeth and Eating	Biology (RSE) Animals including Humans (Y5) Growing up and growing old	Biology (RSE) Animals including Humans (Y5) Growing up and growing old
					Biology Animals including Humans (Y6) Healthy Bodies	Biology Animals including Humans (Y6) Healthy Bodies

Working scientifically skills are embedded within lessons. This allows children to revisit and secure these skills across a unit, year and phase. Typically, there is sufficient time within the science curriculum for children to plan and develop their own investigations. For example, an enquiry in Y3/4 about the freezing points of different liquids may be developed by children into a subsequent activity which investigates if the freezing points change when the liquids are mixed together. There is also a 'free' science unit in each cycle for teachers to plan science which is not driven by the National Curriculum; instead, the unit is derived from some other prompt:

- the children's/teacher's interests
- reaction to a current scientific event eg Tim Peake's trip to the International Space Station
- a STEM ambassador project eg Polar Explorers

Teachers have access to Rising Stars Switched on Science to aid their planning. (This is also a recognition of the workload and well-being of staff.).

## **Age-related expectations: Art**

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Knowledge and other learning	Knowledge and other learning	Knowledge and other learning
<ul> <li>I know the difference between drawing pencils (eg 2H, HB, 2B).</li> <li>I know the primary and secondary colours.</li> <li>I know some (at least two) famous artists and can comment on their work (eg Paul Klee, Leonardo da Vinci).</li> </ul>	<ul> <li>I know the difference between drawing pencils (eg 2H, HB, 2B), paints (eg poster and watercolour) and pastels (eg chalk and oil).</li> <li>I know and understand the colour wheel (specifically, primary/secondary colours, complementary colours and hot/cold colours).</li> <li>I know some famous artists (at least four, including at least one designer / architect) and can comment on their work, including similarities and differences (eg as previous, plus Martha McDonald, Sir Christopher Wren).</li> </ul>	<ul> <li>I know the difference between drawing pencils (eg 2H, HB, 2B), paints (eg poster and watercolour) and pastels (chalk and oil); and know their effect including when talking about famous art.</li> <li>I know some famous artists (at least six, including at least one designer and at least one architect) and can comment on their work, including similarities and differences and making reference to visual and tactile elements (eg as previous, plus Barbara Hepworth, William Morris).</li> <li>I have an understanding of how art has changed over time (making reference to historical skills and concepts such as chronology, change and continuity, and cause and effect to help with this understanding).</li> </ul>
Skills	Skills	Skills
<ul> <li>I can use some processes to create drawings, paintings and other art.</li> <li>I can draw an object from direct observation with some accuracy.</li> <li>I can use different media (eg pencil, paint).</li> <li>I can use some visual and tactile elements: colour, pattern, texture.</li> </ul>	<ul> <li>I can use a range of processes to create art (eg drawings, paintings, sculpture, collage, printing, e-art and textiles).</li> <li>I can draw an object from direct observation with growing accuracy.</li> <li>I can use a range of media with some control (eg pencil, paint, pastel, charcoal).</li> <li>I can use visual and tactile elements (eg colour, pattern, texture, line, shape, form and space).</li> </ul>	<ul> <li>I can use a range of processes with success to create art (eg drawings, paintings, sculpture, collage, printing, e-art and textiles).</li> <li>I can draw an object accurately from direct observation.</li> <li>I can select and use a range of media with control (eg pencil, watercolours, poster paint, chalk pastel, oil pastel).</li> <li>I can use visual and tactile elements to achieve my intentions (eg colour, pattern, texture, line, shape, form and space).</li> <li>I can mix paint effectively to achieve a desired colour.</li> </ul>

# **Age-related expectations: Computing**

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Knowledge and other learning	Knowledge and other learning	Knowledge and other learning
Programming  I know what an algorithm is and that digital devices use them.  I know that algorithms need clear, precise instructions to work effectively.  Digital literacy  I know that there are search engines to help find information.  I know that technology is used beyond school and I can give some examples.	Programming  I know what an algorithm is and that computer programmers strive to make them as simple as possible, using concepts like repetition to do this.  Digital literacy  I know what a computer network (eg the school network) is and some of the devices that are connected to a network (eg talk about the school network).  I know there are different search engines and can compare how results are selected and ranked.  I know and understand how at least one key individual (eg Lovelace, Turing, Berners-Lee) has helped shape the world of computing.	Programming I know that computer simulations are used to model a real-world or imaginary situation (eg NASA simulating take-offs and landings; responses to natural disasters).  Digital literacy I know that computer networks, like the internet, provide lots of services and offer opportunities for communication and collaboration.  I know there are different search engines and can evaluate them, showing an awareness of how results are selected and ranked.  I know the difference between the Internet and the World Wide Web.  I know and understand how some key individuals (eg Lovelace, Turing, Berners-Lee) have helped shape the world of computing.

### Skills

#### **Programming**

- I can create and debug simple programs.
- I can look at an algorithm and use logical reasoning to predict what will happen when it is executed.

#### Digital literacy

- I can create digital content (eg take photographs for a specific purpose; use software to create artwork; use a child-friendly word processor).
- I can store and retrieve digital content (eg locate a photo just taken on an iPad; open a file saved on the school network; give created content a suitable name; save a document correctly).
- I can manipulate digital content (eg when taking photographs, select the most appropriate and delete others; edit photographs within the app or using a second app; when using art software, delete or change aspects).



### Skills

**Programming** 

- I can design, write and debug programs that accomplish specific goals.
- I can use repetition in programs.
- I can use sequence and selection in programs (eg if..., then...).
- I can work with a range of inputs and outputs (eg visual photos or videos; audio sounds or sound effects).
- I can use logical reasoning to explain how algorithms work and to debug (ie detect and correct errors).
- I can solve problems by decomposing them into smaller parts (eg if creating a maze game, break the task up into a number of steps: design and create the maze, design and then program the main sprite or character, program other characters or features of the game).

#### **Digital literacy**

- I can use search technologies effectively and can evaluate results.
- I can create digital content and programs by using different software and different digital devices.

#### **Skills**

#### **Programming**

- I can design, write and debug programs that accomplish specific goals, including controlling physical systems or simulating physical systems (eg robots, motors, sensors or animation of the water cycle or a simulation of how the moon orbits the Earth).
- I can more efficiently write programs that include repetition, sequence and selection.
- I can use variables in programs (eg timer, score, health bar).
- I can work with a wider range of inputs and outputs (eg motors, motion sensors, noise sensors).
- I can use logical reasoning to enhance algorithms in some way (eg to make a game more or less challenging).
- I can solve increasingly complex problems by decomposing them into smaller parts (eg if creating a maze game, break the task up into a number of steps: design and create the maze, design and then program the main sprite or character, program other characters or features of the game).

#### Digital literacy

- I can be discerning in evaluating digital content with an understanding of how search engines select and rank results.
- I can create digital content and programs by combining different software and different digital devices (eg combining images and text on a word processing document, combining video, audio and images in a movie or presentation, creating an animation on Scratch with music, sound effects, text).
- I can use digital devices to collect data and then use it to answer questions or solve problems (eg using data loggers or sensors).

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Staying safe online	Staying safe online	Staying safe online
Age Restrictions     I know that some online activities have age restrictions because they have content which is not appropriate.	<ul> <li>s of what is set out here.</li> <li>hild at home to stay safe online. We include the content he</li> <li>Age Restrictions</li> <li>I know that some online activities have age restrictions because they have content which is not appropriate.</li> </ul>	Age Restrictions     I know why age restrictions exist and how the content may be damaging to under-age consumers.
Digital Content I am beginning to understand what a digital footprint is.  Misinformation, disinformation and hoaxes I know that I shouldn't believe everything I see or read online.  Fake websites and scam emails I know that some websites have secure markings (eg padlock symbol next to URL) that makes them more trustworthy.  Password safety I know that passwords are important and that we should keep them to ourselves.  continued	<ul> <li>I know why age restrictions exist and how the content may be damaging to under-age consumers.</li> <li>Digital Content</li> <li>I understand what a digital footprint is.</li> <li>I understand the significance of my digital footprint and I think carefully about what I post online as it is difficult to remove.</li> <li>Misinformation, disinformation and hoaxes</li> <li>I know that I shouldn't believe everything I see or read online.</li> <li>I know that some people or groups may mistakenly share false information (ie misinformation) or deliberately deceive (ie disinformation).</li> <li>Fake websites and scam emails</li> <li>I know that some websites have secure markings (eg padlock symbol next to URL) that makes them more trustworthy.</li> <li>I know that fake websites and emails are sometimes used to get personal information, photos, money and other data.</li> <li>Password safety</li> <li>I know that passwords are important and that we should keep them to ourselves.</li> <li>I can explain what is and isn't a secure password.</li> <li>continued</li> </ul>	<ul> <li>I know that the minimum age at which children can agree to share information and use social media is 13.</li> <li>Digital Content</li> <li>I know that we need to be aware of our digital footprint and think carefully about what we post online as it is difficult to remove, and that his could have a detrimental impact in the future (eg career).</li> <li>I know that online content is shared quickly online and that this can be both positive and negative.</li> <li>Misinformation, disinformation and hoaxes</li> <li>I know that some people (or fake profiles and 'bots') or groups may share false information to deliberately deceive or may mistakenly share false information (misinformation).</li> <li>I know the potential consequences of sharing information that may not be true.</li> <li>Fake websites and scam emails</li> <li>I know that fake profiles, websites and emails are sometimes used to persuade eg to get personal information, images, money and other data.</li> <li>I can describe ways to risk assess online (eg does the URL show a padlock next to it, is the website one I've used before, is the email unsolicited, do I know the sender, is the email too good to be true, does the email or website not look quite right).</li> <li>Password safety</li> <li>I can explain what is and isn't a secure password.</li> <li>I know that password phishing is the process by which people try to find out passwords so they can access protected content.</li> <li>I know that a 'good company' would never ask you to share your full password.</li> </ul>

#### Personal data

 I know that I'm too young to share personal information (eg full name, address, school, age) online.

#### Persuasion

 I know that there are adverts online which, if clicked on, may take me away from the page I'm looking at.

#### Online vs. offline behaviours

- I know that people should treat others respectfully when they are online.
- I know what to do if someone is mean to me or someone else online.

#### Impact on quality of life

 I know that being online offers lots of positives but that there needs to be a balance between time being spent on and offline.



#### Personal data

 I know that some online activities require some of my personal information before I can access them but I should check with a trusted adult before I give this information.

#### Persuasion

- I know that an online search may show a paid for result and/or adverts.
- I know that there are adverts online which, if clicked on, may take me away from the page I'm looking at.
- I know that pop-up adverts may persuade me to buy something or download something and I know how to get rid of them.

#### Online vs. offline behaviours

- I know that people should treat others respectfully when they are online.
- I know what good online behaviours do and don't look like and know what to do if I see bad online behaviour.

#### Impact on quality of life

- I know that being online offers lots of positives but that there needs to be a balance between time being spent on and offline.
- I know that time spent online means less time to do other activities and that this can lead to being physically inactive.

#### Personal data

- I know that some online activities require some of my personal information before I can access them but I should check with a trusted adult before I give this information.
- I know that personal data is highly sought by companies and can be 'farmed' in ways that look harmless (eg websites that look like games, online surveys and questionnaires).

#### Persuasion

- I know that an online search may show a paid for result and/or adverts.
- I know that I may see adverts based on what I've been looking at online and that cookies help companies do this.
- I know that pop-up adverts may persuade me to buy something or download something and I know how to get rid of them.
- I know that the majority of games and platforms are businesses designed to make money and that their aim is to encourage users to be online for as long as possible to encourage them to spend money or for them to make money through advertising.

#### Online vs. offline behaviours

- I know that online behaviours should mirror offline behaviours eg people should treat others respectfully.
- I know what good online behaviours do and don't look like and know what to do if I see bad online behaviour.
- I know how and why people are unkind or hurtful online, when they would not necessarily be unkind to someone face to face.
- I know the potential consequences of bad online behaviour (eg hate crime).
- I am aware that some people feel pressured online to act in a harmful way.
- I know that it's ok to step away or say no to bad online behaviour.

#### Impact on quality of life

- I know that being online offers lots of positives but that there needs to be a balance between time being spent on and offline.
- I understand some of the consequences of spending too much time online (eg physical inactivity, mental health).
- I am aware that content online is often unrealistic (eg manipulated images, idealised lifestyles) and that this could have a detrimental impact on confidence.

### Age-related expectations: Design and Technology

#### Years 5 and 6 (expectations for the end of Year 6) Years 1 and 2 (expectations for the end of Year 2) Years 3 and 4 (expectations for the end of Year 4) Knowledge and other learning Knowledge and other learning Knowledge and other learning I know that products are designed. I know that products go through a design process before • I know and understand how to strengthen, stiffen and reinforce more complex structures. • Through exploration, I know how products can be made they are made. stronger, stiffer or more stable. I know and understand how to strengthen or stiffen • I know how electrical circuits / computing principles are structures. integrated into a product. I know how electrical circuits are integrated into a I know and understand how key events (eg the invention product. of the steam engine, electricity, plastic) and key individuals (eg Isambard Kingdom Brunel, George I know at least one key event (eg the invention of the Stephenson, Lewis Latimer) in design and technology steam engine, electricity, plastic) in design and have helped shape the world. technology. I understand how historical restrictions have previously I know at least one famous designer (eg Jonathan Ive, limited the opportunities for some groups (eg women) to Vivienne Westwood, Charles Eames). be successful designers. **Skills Skills** Skills Design Design Design • I can generate, develop and communicate my ideas in • I can generate, develop and communicate my ideas in • I can generate, develop and communicate my ideas in different ways (eg by talking, drawing, mock-ups and, different ways (eg through discussion, annotated different ways (eg through discussion; annotated where appropriate, information and communication sketches, prototypes and, where appropriate, information sketches; cross-sectional and exploded diagrams; and communication technology). prototypes: and information and communication technology). • I can design purposeful, functional, appealing products • I can design purposeful, functional, appealing products technology). for myself and other users based on given design criteria. for myself and others based on my own design criteria. I can use research to develop my own design criteria to Make inform the design of innovative, functional, appealing products that are aimed at particular individuals or I can select from and use a range of tools and equipment • I can select from and use a wider range of tools and to perform practical tasks (eq cutting, shaping, joining equipment to perform practical tasks (eg cutting, shaping, groups. joining and finishing). and finishing). Make • I can select from and use a wider range of tools and • I can select from and use a wide range of materials and • I can select from and use a wider range of materials and components, including construction materials, textiles components (including construction materials, textiles equipment to accurately perform practical tasks (eg cutting, shaping, joining and finishing). and ingredients. and ingredients) according to their function. • I can select from and use a wider range of materials and **Evaluate** • I can use electrical systems in my products (eg circuits, • I can explore and evaluate a range of existing products. switches, bulbs, buzzers and motors). components (including construction materials, textiles and ingredients) according to their function and looks. • I can evaluate my ideas and products against given • I can evaluate my ideas and products against my own • I can use mechanical systems in my products (eg gears, design criteria. design criteria. pulleys, cams, levers and linkages). Evaluate I can investigate and analyse a range of existing I can evaluate my ideas and products against my own products. design criteria and consider the views of others. • I can investigate and analyse a range of existing products with a greater level of scrutiny and critical thought.

# Age-related expectations: Foreign language - Spanish

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Knowledge and other learning	Knowledge and other learning	Knowledge and other learning
<ul> <li>I know where some foreign languages are spoken.</li> <li>I know some facts about Spain.</li> </ul>	<ul> <li>I know at least three reasons why it's good to learn a language in addition to English.</li> <li>I know where some foreign languages are spoken.</li> <li>I know some facts about the culture, people, and places of Spain.</li> <li>I know some strategies that help me to remember key words and phrases.</li> </ul>	<ul> <li>I know some facts about the culture, people, and places of Spain and at least one other country where Spanish is spoken.</li> <li>I know some strategies that help me to remember key words and phrases.</li> <li>I understand that online dictionaries, translator websites and apps can't be relied on to translate accurately, and know some of the language problems that can be caused by them.</li> </ul>
Skills	Skills	Skills
<ul> <li>I can listen to simple spoken Spanish and show understanding by joining in and responding.</li> <li>I can explore the patterns and sounds of Spanish through songs and rhymes.</li> <li>I can ask and answer simple questions.</li> <li>I can speak in simple sentences, using some basic vocabulary, phrases and basic language structures.</li> <li>I can use accurate pronunciation so that others understand when I use familiar words and phrases.</li> <li>I can read simple words and phrases with some understanding.</li> <li>I can appreciate songs and rhymes in Spanish.</li> <li>I can begin to describe things orally.</li> <li>I can link basic grammar in Spanish to English grammar (eg nouns, verbs, adjectives).</li> </ul>	<ul> <li>I can listen to spoken Spanish and show understanding by joining in and responding.</li> <li>I can explore the patterns and sounds of Spanish through songs and rhymes and begin to link the spelling, sound and meaning of words.</li> <li>I can engage in simple conversations; ask and answer questions; express opinions and respond to those of others.</li> <li>I can speak in sentences, using increasingly familiar vocabulary, phrases and basic language structures.</li> <li>I can develop accurate pronunciation so that others understand when I read aloud or use familiar words and phrases.</li> <li>I can present ideas and information orally.</li> <li>I can read and show understanding of words, phrases and simple writing.</li> <li>I can appreciate stories, songs, poems and rhymes in Spanish.</li> <li>I can broaden my vocabulary and develop my ability to understand new words, including through using a dictionary.</li> <li>I can write phrases from memory.</li> <li>I can describe people, places, things and actions orally.</li> <li>I can understand basic Spanish grammar (including feminine and masculine; the conjugation of high-frequency verbs; key features and patterns of the language; and how these differ from or are similar to English).</li> </ul>	<ul> <li>I can listen attentively to spoken Spanish and show understanding by joining in and responding.</li> <li>I can explore the patterns and sounds of Spanish through songs and rhymes and link the spelling, sound and meaning of words.</li> <li>I can engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help.</li> <li>I can speak in sentences, using familiar vocabulary, phrases and basic language structures.</li> <li>I can develop accurate pronunciation and intonation so that others understand when I read aloud or use familiar words and phrases.</li> <li>I can present ideas and information orally to a range of audiences.</li> <li>I can read carefully and show understanding of words, phrases and simple writing.</li> <li>I can appreciate stories, songs, poems and rhymes in Spanish.</li> <li>I can broaden my vocabulary and develop my ability to understand new words that are introduced into familiar written material, including through using a dictionary.</li> <li>I can write phrases from memory, and adapt these to create new sentences, to express ideas clearly.</li> <li>I can describe people, places, things and actions orally and in writing.</li> <li>I can understand basic Spanish grammar (including feminine and masculine; the conjugation of highfrequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English).</li> </ul>

## Age-related expectations: Geography Where in the world am I? topic

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
(British geography and fieldwork)	(British geography and fieldwork)	(British geography and fieldwork)
Knowledge and other learning	Knowledge and other learning	Knowledge and other learning
<ul> <li>I know the four countries and capital cities of the UK.</li> <li>I know the seas which surround the UK.</li> <li>I know some key geographical vocabulary relating to physical features (beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season, weather).</li> <li>I know some key geographical vocabulary relating to human features (city, town, village, factory, farm, house, office, port, harbour, shops).</li> </ul>	<ul> <li>I know the main cities of the UK (the four capitals and at least four more).</li> <li>I know some of the counties in the UK.</li> <li>I know some of the main rivers and mountains in the UK (at least three of each).</li> <li>I know some key vocabulary relating to physical geography (all of the Year 1/2 vocabulary plus volcanoes and earthquakes).</li> <li>I know some key vocabulary relating to human geography (all of the Year 1/2 plus types of settlement and land use).</li> </ul>	<ul> <li>I know some key vocabulary relating to physical geography (all of the Year 1/2 and Year 3/4 vocabulary plus climate zones, biomes and vegetation belts).</li> <li>I know some key vocabulary relating to human geography (all of the Year 1/2 and Year 3/4 vocabulary plus economic activity, trade links and the distribution of natural resources such as energy, food, minerals and water).</li> <li>I know some of the main rivers, mountains and regions (eg the Yorkshire Dales, the Lake District, the Highlands of Scotland) in the UK (at least three of each).</li> <li>I know how some physical and human features of the UK have changed over time (eg expansion of cities, travel networks, coastal erosion).</li> </ul>
Skills	Skills	Skills
<ul> <li>I can use maps, atlases and globes to identify places (must include places in the Knowledge section).</li> <li>I can use simple compass directions (North, South, East, West) and locational / directional language (eg near and far, left and right) to describe the location of features and routes on a map.</li> <li>I can use simple fieldwork and observational skills to study the geography of my school and its surrounding environment (including physical and human features).</li> <li>I can use aerial photographs and plan perspectives to recognise landmarks and basic physical and human features.</li> <li>I can devise a simple map, using and constructing basic symbols in a key.</li> </ul>	<ul> <li>I can use maps, atlases, globes and digital / computer mapping to locate places (must include places detailed in the Knowledge section).</li> <li>I can describe features of the UK (referring to physical and human geography in the Knowledge section).</li> <li>I can use the eight points of a compass, four figure grid references and can identify some map symbols (including through the use of Ordnance Survey maps).</li> <li>I can use fieldwork to observe, measure, record and present the human and physical features in the local area (eg collect data, take photographs, use and annotate maps).</li> </ul>	<ul> <li>I can use maps, atlases, globes and digital / computer mapping to locate places efficiently (must include places detailed in the Knowledge section).</li> <li>I can describe features of the UK (referring to physical and human geography in the Knowledge section).</li> <li>I can describe counties in the UK (referring to physical and human geography in the Knowledge section).</li> <li>I can use the eight points of a compass, six figure grid references and can identify a wider range of map symbols (including through the use of Ordnance Survey maps).</li> <li>I can use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods (including sketching maps, creating plans and graphs and using digital technologies).</li> </ul>

## Age-related expectations: Geography Explorers topic

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
(Contrasting locations: UK and non-Europe)	(Contrasting locations: UK and Europe)	(Contrasting locations: UK and the Americas)
Knowledge and other learning	Knowledge and other learning	Knowledge and other learning
<ul> <li>I know the world's seven continents.</li> <li>I know the world's five oceans.</li> <li>I know some key geographical vocabulary relating to physical features (beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season, weather).</li> <li>I know some key geographical vocabulary relating to human features (city, town, village, factory, farm, house, office, port, harbour, shops).</li> </ul>	<ul> <li>I know some European countries and their capital cities (at least four, not including those in the UK).</li> <li>I know some of the main rivers and mountains in Europe.</li> <li>I know the position of the Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle.</li> <li>I know some key vocabulary relating to physical geography (all of the Year 1/2 vocabulary plus volcanoes and earthquakes).</li> <li>I know some key vocabulary relating to human geography (all of the Year 1/2 plus types of settlement and land use).</li> </ul>	<ul> <li>I know some European countries and their capital cities (at least six, not including those in the UK).</li> <li>I know some world-wide countries and some of their major cities.</li> <li>I know some key vocabulary relating to physical geography (all of the Year 1/2 and Year 3/4 vocabulary plus climate zones, biomes and vegetation belts).</li> <li>I know some key vocabulary relating to human geography (all of the Year 1/2 and Year 3/4 vocabulary plus economic activity, trade links and the distribution of natural resources such as energy, food, minerals and water).</li> </ul>
Skills	Skills	Skills
<ul> <li>I can use maps, atlases and globes to identify places (must include places in the Knowledge section).</li> <li>I can compare and contrast a small area of the United Kingdom and a small area of a contrasting non-European country (referring to physical and human geography in the Knowledge section).</li> <li>I can use aerial photographs and plan perspectives to recognise landmarks and basic physical and human features.</li> <li>I can identify features of countries and cities in the UK and its surrounding seas (referring to physical and human geography in the Knowledge section).</li> </ul>	I can use maps, atlases, globes and digital / computer mapping to locate places (must include places detailed in the Knowledge section).  I can compare and contrast a region of the UK and a region within Europe, showing some understanding of the similarities and differences (referring to physical and human geography in the Knowledge section).	I can use maps, atlases, globes and digital / computer mapping to locate places efficiently (must include places detailed in the Knowledge section).  I can compare and contrast a region of the UK and a region within North or South America, showing understanding of the similarities and differences (and referring to physical and human geography in the Knowledge section).  I can identify the position and significance of latitude, longitude, the Prime / Greenwich Meridian and time zones (including day and night).

## Age-related expectations: Geography Environment / Natural disasters topic

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
'The streets around our school' (primary focus: environmental issues)	(primary focus: volcanoes and/or earthquakes)	(primary focus: seas and oceans)
Knowledge and other learning	Knowledge and other learning	Knowledge and other learning
<ul> <li>I know the world's seven continents.</li> <li>I know the world's five oceans.</li> <li>I know weather patterns in the UK (seasonal and daily).</li> <li>I know some key geographical vocabulary relating to physical features (beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season, weather).</li> <li>I know some key geographical vocabulary relating to human features (city, town, village, factory, farm, house, office, port, harbour, shops).</li> </ul>	<ul> <li>I know some key vocabulary relating to physical geography (all of the Year 1/2 vocabulary plus volcanoes and earthquakes).</li> <li>I know some key vocabulary relating to human geography (all of the Year 1/2 plus types of settlement and land use).</li> <li>I know the position of the Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle.</li> <li>I know that latitude tells us how north or south a place is (the Equator is 0° latitude) and the causal link to world climates.</li> <li>I know that longitude tells us how east or west a place is (the Prime Meridian or Greenwich Meridian is 0°) and the link to time zones.</li> </ul>	<ul> <li>I know some key vocabulary relating to physical geography (all of the Year 1/2 and Year 3/4 vocabulary plus climate zones, biomes and vegetation belts).</li> <li>I know some key vocabulary relating to human geography (all of the Year 1/2 and Year 3/4 vocabulary plus economic activity, trade links and the distribution of natural resources such as energy, food, minerals and water).</li> <li>I know how some physical and human features of the UK have changed over time (eg expansion of cities, travel networks, coastal erosion).</li> </ul>
Skills	Skills	Skills
<ul> <li>I can use maps, atlases and globes to identify places (must include places in the Knowledge section).</li> <li>I can compare and contrast a small area of the United Kingdom and a small area of a contrasting non-European country (referring to physical and human geography in the Knowledge section).</li> </ul>	<ul> <li>I can use maps, atlases, globes and digital / computer mapping to locate places (must include places detailed in the Knowledge section).</li> <li>I can compare and contrast a region of the UK and a region within Europe, showing some understanding of the similarities and differences (referring to physical and human geography in the Knowledge section).</li> </ul>	<ul> <li>I can use maps, atlases, globes and digital / computer mapping to locate places efficiently (must include places detailed in the Knowledge section).</li> <li>I can compare and contrast a region of the UK and a region within North or South America, showing understanding of the similarities and differences (and referring to physical and human geography in the Knowledge section).</li> <li>I can identify the position and significance of latitude, longitude, the Prime / Greenwich Meridian and time zones (including day and night).</li> </ul>

# Age-related expectations: History Cycle A, Spring 1

Years 1 and 2 (expectations for the end of Year 2)  Toys (Changes within living memory, inc local history)  Knowledge and other learning  I know and can use words and phrases relating to time and chronology (eg old, new, past, a very long time ago, present, ancient, modern).  I know that the toys their grandparents played with were different to their own.	Years 3 and 4 (expectations for the end of Year 4)  Romans Anglo-Saxons  Knowledge and other learning  I know how Britain changed from the Iron Age to the end of the Roman occupation.  I know how the Roman occupation of Britain helped to advance British society.  I know there was resistance to the Roman occupation and know	Years 5 and 6 (expectations for the end of Year 6)  Vikings The Islamic Golden Age  Knowledge and other learning  I know where the Vikings originated from and can show this on a map.  I know that the Vikings and Anglo-Saxons were often in conflict.  I know why the Vikings frequently won battles against the Anglo-Saxons.
I know what some older objects were used for.     I know the main differences between their school days and that of their parents or grandparents.  Claims	<ul> <li>about Boudicca.</li> <li>I know about at least one famous Roman emperor.</li> <li>I know how Britain changed between the end of the Roman occupation and the Anglo-Saxon invasion and settlement.</li> <li>I know about how the Anglo-Saxons attempted to bring law and order into the country.</li> <li>I know that during the Anglo-Saxon period Britain was divided into many kingdoms and that some of these boundaries still exist today.</li> </ul>	I know about the impact that the ancient Islamic civilisation in Baghdad had on the world.     I know why this Islamic civilisation was considered an advanced society, especially in relation to that period of time in Britain.
Skills	Skills	Skills
<ul> <li>Time and chronology</li> <li>I can sequence events (eg within my own life time) and objects (eg Victorian, 1970s and modern toys) in chronological order and give plausible reasons for this order.</li> <li>Change and continuity</li> <li>I can recognise similarities and differences between my life and the life of an older person (eg holidays, toys, transport).</li> <li>Cause and effect</li> <li>I can explain how significant people and events have changed our way of life (eg why the Great Fire of London happened).</li> <li>Historical sources</li> <li>I can ask and answer questions about the past using different historical sources (eg photographs, written records, people).</li> <li>Historical interpretation</li> <li>I can use my historical imagination to make inferences about people's lives and their feelings (eg how Mary Seacole felt when tending injured soldiers).</li> </ul>	<ul> <li>Time and chronology</li> <li>I can sequence key periods and events in chronological order using historical knowledge and / or enquiry skills and a growing awareness of dates.</li> <li>Change and continuity</li> <li>I can recognise similarities and differences between the lives of people living in different periods of time.</li> <li>Cause and effect</li> <li>I can explain why significant events happened, why people behaved as they did, and begin to think about the consequences this may have had (eg why the Romans invaded Britain and what this meant for British people).</li> <li>Historical sources</li> <li>I can ask and answer questions about the past using primary and secondary sources to gain a clearer understanding.</li> <li>I can begin to evaluate historical sources with an awareness that recent history has a greater number of sources.</li> <li>Historical interpretation</li> <li>I understand that people may have different interpretations of the past (eg Howard Carter: tomb raider or celebrated archaeologist?) and that there may be different points of view in primary and secondary sources.</li> </ul>	Time and chronology  I can sequence key periods of British and world history in chronological order using dates.  I can use a timeline to give information about a period of history (eg plot key developments across a period of local history) or a theme (eg plot key developments of a theme, like transport, across periods of history).  Change and continuity  I can recognise and offer plausible explanations for similarities and differences between the lives of people living in different periods of time and also between people living during the same period of time but in different places (eg comparing Viking Britain to the Early Islamic Civilisation).  Cause and effect  I can explain why significant events happened and why people behaved as they did, and can understand the consequences, including those for the present day (eg conflicts, inventions and other advances).  Historical sources  I can evaluate historical sources based on reliability and bias.  I can ask and answer questions by selecting from a range of sources (both primary and secondary) to gain a clearer understanding.  Historical interpretation  I can debate different interpretations of people and events and demonstrate an appropriate understanding of different points of view.

# Age-related expectations: History Cycle B, Autumn 1

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
The Great Fire of London (Events beyond living memory, inc local history)	Ancient Greece	Stone Age to Iron Age Ancient Egypt
Knowledge and other learning	Knowledge and other learning	Knowledge and other learning
<ul> <li>I know and can use words and phrases relating to time and chronology (eg old, new, past, a very long time ago, present, ancient, modern).</li> <li>I know what houses were like before the Great Fire of London and that fires were quite common.</li> <li>I know that Samuel Pepys' diary helps us to know what the Great Fire of London was like.</li> <li>I know why the fire spread quickly and how it was eventually put out.</li> <li>I know what changed as a consequence of the Great Fire of London.</li> </ul>	<ul> <li>I know that ancient Greece was divided into many city states and I know that Athens and Sparta were the most powerful. I know some of the main characteristics of the Athenians and the Spartans.</li> <li>I know about the influence the gods had on Ancient Greece.</li> <li>I know about the influence Ancient Greece has had on the Western world, eg philosophy, arts, science, maths, literature and politics.</li> <li>I know that democracy is a Greek word meaning 'government by the people' and that our government today is a legacy of the Athenian assembly and council.</li> </ul>	<ul> <li>I know how Britain changed between the beginning of the stone age and the iron age.</li> <li>I know the main differences between the Stone, Bronze and Iron ages.</li> <li>I know what is meant by 'hunter-gatherer'.</li> <li>I know about and can name some of the advanced societies that were in the world around 3000 years ago.</li> <li>I can compare life in Britain 3000 years ago to life in Ancient Egypt.</li> <li>I know that the ancient Egyptians had a writing system called hieroglyphics.</li> <li>I know that the ancient Egyptians built pyramids as tombs for pharaohs and that the biggest was built around 2500BC.</li> </ul>
Skills	Skills	Skills
<ul> <li>Time and chronology</li> <li>I can sequence events (eg within my own life time) and objects (eg Victorian, 1970s and modern toys) in chronological order and give plausible reasons for this order.</li> <li>Change and continuity</li> <li>I can recognise similarities and differences between my life and the life of an older person (eg holidays, toys, transport).</li> <li>Cause and effect</li> <li>I can explain how significant people and events have changed our way of life (eg why the Great Fire of London happened).</li> <li>Historical sources</li> <li>I can ask and answer questions about the past using different historical sources (eg photographs, written records, people).</li> <li>Historical interpretation</li> <li>I can use my historical imagination to make inferences about people's lives and their feelings (eg how Mary Seacole felt when tending injured soldiers).</li> </ul>	Time and chronology  I can sequence key periods and events in chronological order using historical knowledge and / or enquiry skills and a growing awareness of dates.  Change and continuity  I can recognise similarities and differences between the lives of people living in different periods of time.  Cause and effect  I can explain why significant events happened, why people behaved as they did, and begin to think about the consequences this may have had (eg why the Romans invaded Britain and what this meant for British people).  Historical sources  I can ask and answer questions about the past using primary and secondary sources to gain a clearer understanding.  I can begin to evaluate historical sources with an awareness that recent history has a greater number of sources.  Historical interpretation  I understand that people may have different interpretations of the past (eg Howard Carter: tomb raider or celebrated archaeologist?) and that there may be different points of view in primary and secondary sources.	<ul> <li>Time and chronology</li> <li>I can sequence key periods of British and world history in chronological order using dates.</li> <li>I can use a timeline to give information about a period of history (eg plot key developments across a period of local history) or a theme (eg plot key developments of a theme, like transport, across periods of history).</li> <li>Change and continuity</li> <li>I can recognise and offer plausible explanations for similarities and differences between the lives of people living in different periods of time and also between people living during the same period of time but in different places (eg comparing Viking Britain to the Early Islamic Civilisation).</li> <li>Cause and effect</li> <li>I can explain why significant events happened and why people behaved as they did, and can understand the consequences, including those for the present day (eg conflicts, inventions and other advances).</li> <li>Historical sources</li> <li>I can evaluate historical sources based on reliability and bias.</li> <li>I can ask and answer questions by selecting from a range of sources (both primary and secondary) to gain a clearer understanding.</li> <li>Historical interpretation</li> <li>I can debate different interpretations of people and events and demonstrate an appropriate understanding of different points of view.</li> </ul>

# Age-related expectations: History Cycle B, Summer 1

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Heroes (Lives of significant individuals, inc local history)	Leeds over time (Local history)	World War II (evacuees, refugees and Leeds at war) (Study of an aspect or theme in British history)
Knowledge and other learning	Knowledge and other learning	Knowledge and other learning
<ul> <li>I know and can use words and phrases relating to time and chronology (eg old, new, past, a very long time ago, present, ancient, modern).</li> <li>I know why Leonora Cohen (must be studied), Nelson Mandela, Rosa Parks, Martin Luther King (at least one other must be studied) were significant individuals.</li> <li>I know what impact Leonora Cohen (must be studied), Nelson Mandela, Rosa Parks, Martin Luther King (at least one other must be studied) had or what changed because of them.</li> </ul>	See the link below for planning support: https://www.mylearning.org/collections/leeds-curriculum  I know some ways that Leeds has changed over time and the reasons for these changes. I know some significant local buildings, individuals or events.	<ul> <li>I know that there were Axis Powers and Allied Powers during WWII and some of the countries that belonged in each.</li> <li>I know some individuals who were influential in WWII.</li> <li>I know when and why WWII began.</li> <li>I know that the bombing of London was called the Blitz and lasted for 57 nights and that its purpose was to weaken British spirits and morale.</li> <li>I know a consequence of WWII was that some people were evacuated from cities.</li> <li>I know how and when WWII ended.</li> <li>I know many people became refugees as a consequence of WWII.</li> </ul>
Skills	Skills	Skills
<ul> <li>Time and chronology</li> <li>I can sequence events (eg within my own life time) and objects (eg Victorian, 1970s and modern toys) in chronological order and give plausible reasons for this order.</li> <li>Change and continuity</li> <li>I can recognise similarities and differences between my life and the life of an older person (eg holidays, toys, transport).</li> <li>Cause and effect</li> <li>I can explain how significant people and events have changed our way of life (eg why the Great Fire of London happened).</li> <li>Historical sources</li> <li>I can ask and answer questions about the past using different historical sources (eg photographs, written records, people).</li> <li>Historical interpretation</li> <li>I can use my historical imagination to make inferences about people's lives and their feelings (eg how Mary Seacole felt when tending injured soldiers).</li> </ul>	Time and chronology I can sequence key periods and events in chronological order using historical knowledge and / or enquiry skills and a growing awareness of dates.  Change and continuity I can recognise similarities and differences between the lives of people living in different periods of time.  Cause and effect I can explain why significant events happened, why people behaved as they did, and begin to think about the consequences this may have had (eg why the Romans invaded Britain and what this meant for British people).  Historical sources I can ask and answer questions about the past using primary and secondary sources to gain a clearer understanding. I can begin to evaluate historical sources with an awareness that recent history has a greater number of sources.  Historical interpretation I understand that people may have different interpretations of the past (eg Howard Carter: tomb raider or celebrated archaeologist?) and that there may be different points of view in primary and secondary sources.	Time and chronology  I can sequence key periods of British and world history in chronological order using dates.  I can use a timeline to give information about a period of history (eg plot key developments across a period of local history) or a theme (eg plot key developments of a theme, like transport, across periods of history).  Change and continuity  I can recognise and offer plausible explanations for similarities and differences between the lives of people living in different periods of time and also between people living during the same period of time but in different places (eg comparing Viking Britain to the Early Islamic Civilisation).  Cause and effect  I can explain why significant events happened and why people behaved as they did, and can understand the consequences, including those for the present day (eg conflicts, inventions and other advances).  Historical sources  I can evaluate historical sources based on reliability and bias.  I can ask and answer questions by selecting from a range of sources (both primary and secondary) to gain a clearer understanding.  Historical interpretation  I can debate different interpretations of people and events and demonstrate an appropriate understanding of different points of view.

# Age-related expectations: Living and learning

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Families and people who care for me	Families and people who care for me	Families and people who care for me
<ul> <li>I know that families are important because they can give love, security.</li> <li>I can appreciate the importance of spending time together and sharing each other's lives.</li> <li>I know that other people's families, either in school or in the wider world, sometimes look different from my own family, but I respect those differences.</li> <li>I know that stable, caring relationships, which may be of different types, are at the heart of happy families.</li> <li>I know that marriage is intended to be lifelong.</li> <li>I can recognise if family relationships are making me feel unhappy or unsafe, and I can seek help or advice from others if needed.</li> </ul>	<ul> <li>I know that families are important because they can give love, security and stability.</li> <li>I know characteristics of healthy family life.</li> <li>I can appreciate the importance of spending time together and sharing each other's lives.</li> <li>I know that other people's families, either in school or in the wider world, sometimes look different from my own family, but I respect those differences and I know that other children's families are also characterised by love and care.</li> <li>I know that stable, caring relationships, which may be of different types, are at the heart of happy families.</li> <li>I know that marriage represents a formal and legally recognised commitment of two people to each other which is intended to be lifelong.</li> <li>I can recognise if family relationships are making me feel unhappy or unsafe, and I can seek help or advice from others if needed.</li> </ul>	<ul> <li>I know that families are important because they can give love, security and stability.</li> <li>I know characteristics of healthy family life.</li> <li>I can appreciate the importance of spending time together and sharing each other's lives.</li> <li>I know that other people's families, either in school or in the wider world, sometimes look different from my own family, but I respect those differences and I know that other children's families are also characterised by love and care.</li> <li>I know that stable, caring relationships, which may be of different types, are at the heart of happy families.</li> <li>I know that marriage represents a formal and legally recognised commitment of two people to each other which is intended to be lifelong.</li> <li>I can recognise if family relationships are making me feel unhappy or unsafe, and I can seek help or advice from others if needed.</li> </ul>
Caring friendships	Caring friendships	Caring friendships
<ul> <li>I know that friendships can make me feel happy and secure, and how people choose and make friends.</li> <li>I know some characteristics of friendships, such as mutual respect, truthfulness, trustworthiness, loyalty, kindness, generosity, trust, sharing interests and experiences and support with problems and difficulties.</li> <li>I know that healthy friendships are positive and welcoming towards others, and do not make others feel lonely or excluded.</li> <li>I know that most friendships have ups and downs.</li> <li>I know that resorting to violence is never right.</li> <li>I can use simple ways to recognise who to trust and who not to trust.</li> <li>I can judge when a friendship is making me feel unhappy or uncomfortable.</li> <li>I can manage conflict, including knowing when and how to seek help or advice from others, if needed.</li> </ul>	<ul> <li>I know how important friendships are in making me feel happy and secure, and how people choose and make friends.</li> <li>I know an increasing range of characteristics of friendships, including mutual respect, truthfulness, trustworthiness, loyalty, kindness, generosity, trust, sharing interests and experiences and support with problems and difficulties.</li> <li>I know that healthy friendships are positive and welcoming towards others, and do not make others feel lonely or excluded.</li> <li>I know that most friendships have ups and downs, and that these can often be worked through so that the friendship is repaired or even strengthened.</li> <li>I know that resorting to violence is never right.</li> <li>I can recognise who to trust and who not to trust.</li> <li>I can judge when a friendship is making me feel unhappy or uncomfortable.</li> <li>I can manage conflict, including knowing when and how to seek help or advice from others, if needed.</li> </ul>	<ul> <li>I know how important friendships are in making me feel happy and secure, and how people choose and make friends.</li> <li>I know characteristics of friendships, including mutual respect, truthfulness, trustworthiness, loyalty, kindness, generosity, trust, sharing interests and experiences and support with problems and difficulties.</li> <li>I know that healthy friendships are positive and welcoming towards others, and do not make others feel lonely or excluded.</li> <li>I know that most friendships have ups and downs, and that these can often be worked through so that the friendship is repaired or even strengthened.</li> <li>I know that resorting to violence is never right.</li> <li>I can recognise who to trust and who not to trust.</li> <li>I can judge when a friendship is making me feel unhappy or uncomfortable.</li> <li>I can manage conflict, including knowing when and how to seek help or advice from others, if needed.</li> </ul>
Respectful relationships	Respectful relationships	Respectful relationships
<ul> <li>I know it's important to respect others, even when they are very different from me (eg physically, in character, personality or backgrounds), or when they make different choices or have different preferences or beliefs.</li> <li>I can take steps in different contexts to improve or support respectful relationships.</li> <li>I know the conventions of courtesy and manners.</li> <li>I know the importance of self-respect and how this links to my own happiness.</li> </ul>	<ul> <li>I know it's important to respect others, even when they are very different from me (eg physically, in character, personality or backgrounds), or when they make different choices or have different preferences or beliefs.</li> <li>I can take practical steps in a range of different contexts to improve or support respectful relationships.</li> <li>I know the conventions of courtesy and manners.</li> <li>I know the importance of self-respect and how this links to my own happiness.</li> </ul>	<ul> <li>I know it's important to respect others, even when they are very different from me (eg physically, in character, personality or backgrounds), or when they make different choices or have different preferences or beliefs.</li> <li>I can take practical steps in a range of different contexts to improve or support respectful relationships.</li> <li>I know the conventions of courtesy and manners.</li> <li>I know the importance of self-respect and how this links to my own happiness.</li> </ul>

<ul> <li>I know that in school and in wider society I should be treated with respect by others, and in turn I should show respect to others, including those in positions of authority.</li> <li>I know about different types of bullying and the responsibilities of bystanders (especially to report bullying to an adult: STOP = Start Telling Other People) and how to get help.</li> <li>I know the importance of permission-seeking and permission giving (consent) in relationships with friends, peers and adults.</li> </ul>	<ul> <li>I know that in school and in wider society I should be treated with respect by others, and in turn I should show respect to others, including those in positions of authority.</li> <li>I know about different types of bullying (including cyberbullying), the impact of bullying, responsibilities of bystanders (especially to report bullying to an adult: STOP = Start Telling Other People) and how to get help.</li> <li>I know what a stereotype is, and how stereotypes can be unfair, negative or destructive.</li> <li>I know the importance of permission-seeking and permission giving (consent) in relationships with friends, peers and adults.</li> </ul>	<ul> <li>I know that in school and in wider society I should be treated with respect by others, and in turn I should show respect to others, including those in positions of authority.</li> <li>I know about different types of bullying (including cyberbullying), the impact of bullying, responsibilities of bystanders (especially to report bullying to an adult: STOP = Start Telling Other People) and how to get help.</li> <li>I know what a stereotype is, and how stereotypes can be unfair, negative or destructive.</li> <li>I know the importance of permission-seeking and permission giving (consent) in relationships with friends, peers and adults.</li> </ul>
Online relationships (see Computing expectations)	Online relationships (see Computing expectations)	Online relationships (see Computing expectations)
<ul> <li>I know that people sometimes behave differently online, including by pretending to be someone they are not.</li> <li>I know that the same principles apply to online relationships as to face-to-face relationships, including the importance of respect for others online (even when we are anonymous).</li> <li>I know rules and principles for keeping safe online.</li> <li>I know when and how to alert someone if I'm feeling uncomfortable.</li> <li>I know risks associated with people I have never met.</li> </ul>	<ul> <li>I know that people sometimes behave differently online, including by pretending to be someone they are not.</li> <li>I know that the same principles apply to online relationships as to face-to-face relationships, including the importance of respect for others online (even when we are anonymous).</li> <li>I know rules and principles for keeping safe online.</li> <li>I am aware of risks, harmful content and harmful contact, and I know how to report them.</li> <li>I know that online friendships and sources of information are often not as they seem.</li> <li>I know risks associated with people I have never met.</li> <li>I know that information and data is shared and used online.</li> </ul>	I know that people sometimes behave differently online, including by pretending to be someone they are not.  I know that the same principles apply to online relationships as to face-to-face relationships, including the importance of respect for others online (even when we are anonymous).  I know rules and principles for keeping safe online.  I can recognise risks, harmful content and harmful contact, and I know how to report them.  I can critically think about online friendships and sources of information.  I know risks associated with people I have never met.  I know how information and data is shared and used online.
Being safe	Being safe	Being safe
<ul> <li>I know some boundaries are appropriate in friendships with peers and others (including in a digital context).</li> <li>I know about the concept of privacy.</li> <li>I know that it is not always right to keep secrets if they relate to being safe.</li> <li>I know that each person's body belongs to them.</li> <li>I know the differences between appropriate and inappropriate/unsafe physical contact.</li> <li>I know how to respond safely and appropriately to adults who I don't know.</li> <li>I know how to recognise and report feelings of being unsafe or feeling bad about any adult.</li> <li>I know how to ask for advice or help for myself or others, and to keep trying until I am heard.</li> <li>I know how to report concerns or abuse.</li> <li>I know I can get help or advice from school.</li> </ul>	<ul> <li>I know what sorts of boundaries are appropriate in friendships with peers and others (including in a digital context).</li> <li>I know about the concept of privacy and the implications of it for both children.</li> <li>I know that it is not always right to keep secrets if they relate to being safe.</li> <li>I know that each person's body belongs to them.</li> <li>I know the differences between appropriate and inappropriate/unsafe physical, and other, contact.</li> <li>I know how to respond safely and appropriately to adults who I don't know (in all contexts, including online).</li> <li>I know how to recognise and report feelings of being unsafe or feeling bad about any adult.</li> <li>I know how to ask for advice or help for myself or others, and to keep trying until I am heard.</li> <li>I know how to report concerns or abuse, and the vocabulary and confidence needed to do so.</li> <li>I know where to get advice eg family, school and/or other sources.</li> </ul>	<ul> <li>I know what sorts of boundaries are appropriate in friendships with peers and others (including in a digital context).</li> <li>I know about the concept of privacy and the implications of it for both children and adults.</li> <li>I know that it is not always right to keep secrets if they relate to being safe.</li> <li>I know that each person's body belongs to them.</li> <li>I know the differences between appropriate and inappropriate/unsafe physical, and other, contact.</li> <li>I know how to respond safely and appropriately to adults who I don't know (in all contexts, including online).</li> <li>I know how to recognise and report feelings of being unsafe or feeling bad about any adult.</li> <li>I know how to ask for advice or help for myself or others, and to keep trying until I am heard.</li> <li>I know how to report concerns or abuse, and the vocabulary and confidence needed to do so.</li> <li>I know where to get advice eg family, school and/or other sources.</li> </ul>
Mental wellbeing	Mental wellbeing	Mental wellbeing
<ul> <li>I know that mental wellbeing is a normal part of daily life, in the same way as physical health.</li> <li>I know that there is a normal range of emotions (eg happiness, sadness, anger, fear, surprise, nervousness) and scale of emotions that all humans experience in relation to different experiences and situations.</li> </ul>	<ul> <li>I know that mental wellbeing is a normal part of daily life, in the same way as physical health.</li> <li>I know that there is a normal range of emotions (eg happiness, sadness, anger, fear, surprise, nervousness) and scale of emotions that all humans experience in relation to different experiences and situations.</li> </ul>	<ul> <li>I know that mental wellbeing is a normal part of daily life, in the same way as physical health.</li> <li>I know that there is a normal range of emotions (eg happiness, sadness, anger, fear, surprise, nervousness) and scale of emotions that all humans experience in relation to different experiences and situations.</li> </ul>

- I know it's important to recognise and talk about my emotions.
   I know the benefits of physical exercise, time outdoors and
- I know the benefits of physical exercise, time outdoors an voluntary activity on mental wellbeing and happiness.
- I know some simple self-care techniques, including the importance of rest, time spent with friends and family, and the benefits of hobbies and interests.
- I know that it's very important for children to discuss their feelings with an adult and seek support.
- I know that bullying (including cyberbullying) has a negative and impact on mental wellbeing.
- I know where and how to seek support, including who in school I should speak to if I'm worried about my own or someone else's mental wellbeing (including issues arising online).

- I know how to recognise and talk about my emotions, and I'm starting to have a varied vocabulary of words to use when talking about my own and others' feelings.
- I can judge whether what I'm feeling and how I'm behaving is appropriate and proportionate.
- I know the benefits of physical exercise, time outdoors, community participation, voluntary and service-based activity on mental wellbeing and happiness.
- I know some simple self-care techniques, including the importance of rest, time spent with friends and family, and the benefits of hobbies and interests.
- I know that isolation and loneliness can affect children and that it is very important for children to discuss their feelings with an adult and seek support.
- I know that bullying (including cyberbullying) has a negative and often lasting impact on mental wellbeing.
- I know where and how to seek support (including recognising the
  triggers for seeking support), including who in school I should
  speak to if I'm worried about my own or someone else's mental
  wellbeing or ability to control their emotions (including issues
  arising online).
- I know it is common for people to experience mental ill health.
- I know that mental ill health problems can be resolved.

- I know how to recognise and talk about my emotions, including having a varied vocabulary of words to use when talking about my own and others' feelings.
- I can judge whether what I'm feeling and how I'm behaving is appropriate and proportionate.
- I know the benefits of physical exercise, time outdoors, community participation, voluntary and service-based activity on mental wellbeing and happiness.
- I know some simple self-care techniques, including the importance of rest, time spent with friends and family, and the benefits of hobbies and interests.
- I know that isolation and loneliness can affect children and that it is very important for children to discuss their feelings with an adult and seek support.
- I know that bullying (including cyberbullying) has a negative and often lasting impact on mental wellbeing.
- I know where and how to seek support (including recognising the triggers for seeking support), including who in school I should speak to if I'm worried about my own or someone else's mental wellbeing or ability to control their emotions (including issues arising online).
- I know it is common for people to experience mental ill health.
- I know that mental ill health problems can be resolved if the right support is made available, especially if accessed early enough.

#### **Internet safety** (see Computing expectations)

- I know that the internet has benefits.
- I know it's important to not spend too much time online.
- I know it's important to keep personal information private.
- I know why social media (eg some computer games and online gaming) are age restricted.
- I know that the internet can also be a negative place where online abuse, bullying and harassment can take place, which can have a negative impact on mental health.
- I know it's important to be a discerning consumer of information online.
- I know how and when to seek support including which adults to speak to in school if I'm worried about something online.

#### **Internet safety** (see Computing expectations)

- I know that for most people the internet is an integral part of life and has many benefits.
- I know about the benefits of rationing time spent online, the risks
  of excessive time spent on electronic devices and the impact of
  positive and negative content online on my own and others'
  mental and physical wellbeing.
- I am aware of the effect of my online actions on others.
- I can recognise and display respectful behaviour online and the importance of keeping personal information private.
- I know why social media (eg some computer games and online gaming) are age restricted.
- I know that the internet can also be a negative place where online abuse, trolling, bullying and harassment can take place, which can have a negative impact on mental health.
- I am increasingly able to be a discerning consumer of information online including understanding that information, including that from search engines, is ranked, selected and targeted.
- I know where and how to report concerns and get support with issues online.

#### Internet safety (see Computing expectations)

- I know that for most people the internet is an integral part of life and has many benefits.
- I know about the benefits of rationing time spent online, the risks
  of excessive time spent on electronic devices and the impact of
  positive and negative content online on my own and others'
  mental and physical wellbeing.
- I can consider the effect of my online actions on others.
- I can recognise and display respectful behaviour online and the importance of keeping personal information private.
- I know why social media (eg some computer games and online gaming) are age restricted.
- I know that the internet can also be a negative place where online abuse, trolling, bullying and harassment can take place, which can have a negative impact on mental health.
- I know how to be a discerning consumer of information online including understanding that information, including that from search engines, is ranked, selected and targeted.
- I know where and how to report concerns and get support with issues online.

#### Physical health and fitness

- I know that an active lifestyle is a healthy lifestyle.
- I know the importance of building regular exercise into daily and weekly routines and how to achieve this eg walking or cycling to school, a daily active mile, or other forms of regular, vigorous exercise.

#### Physical health and fitness

- I know that an active lifestyle is a healthy lifestyle, both mentally and physically.
- I know the importance of building regular exercise into daily and weekly routines and how to achieve this eg walking or cycling to school, a daily active mile, or other forms of regular, vigorous exercise.

#### Physical health and fitness

- I know characteristics and mental and physical benefits of an active lifestyle.
- I know the importance of building regular exercise into daily and weekly routines and how to achieve this eg walking or cycling to school, a daily active mile, or other forms of regular, vigorous exercise.

<ul> <li>I know that an inactive lifestyle is unhealthy and have an awareness of some consequences.</li> <li>I know how and when to seek support including which adults to speak to in school if I'm worried about my health.</li> </ul>	I know that an inactive lifestyle is unhealthy and have an understanding of some consequences (including obesity). I know how and when to seek support including which adults to speak to in school if I'm worried about my health.	I know risks associated with an inactive lifestyle (including obesity).  I know how and when to seek support including which adults to speak to in school if I'm worried about my health.
Healthy eating	Healthy eating	Healthy eating
<ul> <li>I know what constitutes a healthy diet.</li> <li>I know that the '5-a-day' message is a good way to plan for a healthy diet.</li> <li>I know what a poor diet looks like and some risks associated with unhealthy eating (eg obesity and tooth decay).</li> </ul>	<ul> <li>I know what constitutes a healthy diet (including an awareness of calories and other nutritional content).</li> <li>I know simple principles of planning and preparing a range of healthy meals.</li> <li>I know what a poor diet looks like and some risks associated with unhealthy eating (eg obesity and tooth decay).</li> </ul>	<ul> <li>I know what constitutes a healthy diet (including understanding calories and other nutritional content).</li> <li>I know principles of planning and preparing a range of healthy meals.</li> <li>I know what a poor diet looks like and some risks associated with unhealthy eating (eg obesity and tooth decay) and other behaviours (eg the impact of alcohol on diet or health).</li> </ul>
Drugs, alcohol and tobacco	Drugs, alcohol and tobacco	Drugs, alcohol and tobacco
<ul> <li>I know medicines can be harmful if not taken in the right way.</li> <li>I know that smoking is harmful.</li> </ul>	I know simple facts about legal and illegal harmful substances, including smoking, alcohol use and drug-taking.	I know facts about legal and illegal harmful substances and associated risks, including smoking, alcohol use and drugtaking.
Health and prevention	Health and prevention	Health and prevention
<ul> <li>I know how to reduce the risk of sun damage.</li> <li>I know the importance of sufficient good quality sleep for good health and that a lack of sleep can affect mood and ability to learn.</li> <li>I know about dental health and the benefits of good oral hygiene and dental flossing, including regular check-ups at the dentist.</li> <li>I know about personal hygiene and germs, and the importance of handwashing.</li> <li>I know some simple facts relating to allergies, immunisation and vaccination.</li> </ul>	<ul> <li>I know about safe and unsafe exposure to the sun, and how to reduce the risk of sun damage.</li> <li>I know the importance of sufficient good quality sleep for good health and that a lack of sleep can affect weight, mood and ability to learn.</li> <li>I know about dental health and the benefits of good oral hygiene and dental flossing, including regular check-ups at the dentist.</li> <li>I know about personal hygiene and germs including bacteria, viruses, how they are spread and treated, and the importance of handwashing.</li> <li>I know simple facts and science relating to allergies, immunisation and vaccination.</li> </ul>	<ul> <li>I can recognise early signs of physical illness, such as weight loss, or unexplained changes to the body.</li> <li>I know about safe and unsafe exposure to the sun, and how to reduce the risk of sun damage, including skin cancer.</li> <li>I know the importance of sufficient good quality sleep for good health and that a lack of sleep can affect weight, mood and ability to learn.</li> <li>I know about dental health and the benefits of good oral hygiene and dental flossing, including regular check-ups at the dentist.</li> <li>I know about personal hygiene and germs including bacteria, viruses, how they are spread and treated, and the importance of handwashing.</li> <li>I know facts and science relating to allergies, immunisation and vaccination.</li> </ul>
Basic first aid	Basic first aid	Basic first aid
I am aware of the emergency services and how they can help.	I can make a call to emergency services if necessary.	I can make a clear and efficient call to emergency services if necessary.      I know concepts of basic first-aid eg dealing with common injuries, including head injuries.
Changing adolescent body	Changing adolescent body	Changing adolescent body
		I know about puberty and the changing adolescent body, including physical and emotional changes.     I know about menstruation and menstrual wellbeing.

## **Age-related expectations: Music**

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Knowledge and other learning	Knowledge and other learning	Knowledge and other learning
<ul> <li>I know at least two different musical elements (eg pitch, tempo), and can comment on their effect.</li> <li>I know at least four musical instruments, and can comment on their sound.</li> <li>I listen to music with concentration and comment on it.</li> </ul>	<ul> <li>I know at least four different musical elements (eg pitch, tempo, duration, dynamics), and can comment on their effect.</li> <li>I can comment on music from different cultures.</li> <li>I know and can comment on the work of at least two great composers and musicians.</li> <li>I understand stave and other musical notations.</li> </ul>	<ul> <li>I know different musical elements (eg pitch, tempo, duration, dynamics, timbre, texture, structure), identifying them and commenting on their effect.</li> <li>I have an awareness of the history of music and music from different cultures and traditions.</li> <li>I know and can comment on the work of at least three great composers and musicians.</li> </ul>
Skills	Skills	Skills
<ul> <li>I can follow the pulse of a piece of music by clapping or tapping along with it.</li> <li>I can use my voice expressively and creatively by singing songs and speaking chants and rhymes.</li> <li>I can play tuned and untuned instruments musically.</li> <li>I can experiment with, create, select and combine sounds with some awareness of musical elements.</li> </ul>	I can listen to and repeat (by singing and playing an instrument) a sound with some accuracy. I can play and perform using my voice and musical instruments with increasing accuracy and control. I can improvise and compose music using some different musical elements (eg pitch, rhythm, dynamics).	<ul> <li>I can listen to and repeat (by singing and playing an instrument) a sound with increasing accuracy, demonstrating aural memory.</li> <li>I can play and perform in solo and ensemble contexts, using my voice and musical instruments with increasing accuracy, fluency, control and expression.</li> <li>I can improvise and compose music using a wider range of different musical elements (eg pitch, rhythm, dynamics, timbre, texture, form).</li> <li>I can use and understand stave and other musical notations.</li> </ul>

## Age-related expectations: PE

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Knowledge and other learning	Knowledge and other learning	Knowledge and other learning
<ul> <li>I know at least one good reason why exercise is important.</li> <li>I know how my body feels during exercise.</li> </ul> Skills	<ul> <li>I know at least two good reasons why exercise is important.</li> <li>I know the effects of exercise on the body.</li> </ul>	I know at least three good reasons why exercise is important.  I know the effects of exercise on the body and the reasons for this.  I know that activities / practices can be used to improve a skill / performance.  Skills
<ul> <li>I can use simple skills (eg throwing, catching, passing, dribbling, hitting).</li> <li>I can use some simple tactics for attacking and defending (eg moving into space, using others).</li> <li>I can participate in some simple, competitive team games.</li> <li>I can change speed and direction when moving.</li> <li>I can complete a short sequence with some control in dance and gym, including using balance.</li> <li>I can comment on my own, and others', performances.</li> </ul>	<ul> <li>I can use appropriate technique to complete skills (eg throwing, catching, passing, dribbling, hitting) under pressure.</li> <li>I can use simple tactics with some success for attacking and defending (eg moving into space, using others, marking).</li> <li>I can participate in some competitive team games.</li> <li>I can move appropriately to complete a given task (eg moving rapidly into space when playing a game or moving gracefully when completing a gymnastics routine).</li> <li>I can create and complete a short sequence with some control in dance and gym, including using balance and flexibility.</li> <li>I can identify strengths and weaknesses in my own, and others', performances.</li> </ul>	<ul> <li>I can consistently use appropriate technique to complete skills (eg throwing, catching, passing, dribbling, hitting) under pressure and in competitive situations.</li> <li>I can select and use tactics for attacking and defending (eg moving into space, using others, marking) to be successful in a game.</li> <li>I can participate effectively in some competitive team games.</li> <li>I can move appropriately and effectively to complete a given task (eg moving rapidly into space when playing a game or moving gracefully when completing a gymnastics routine).</li> <li>I can create and complete a longer sequence with control in dance and gym, including using balance, flexibility, strength.</li> <li>I can identify strengths and weaknesses in my own, and others', performances comparing past and present performances.</li> <li>I can take part in outdoor and adventurous activity challenges both individually and within a team.</li> <li>I can swim competently, confidently and proficiently over a distance of at least 25 metres, using a range of strokes effectively (eg front crawl, backstroke, breaststroke) and I can perform safe self-rescue in different water-based situations.</li> </ul>

### Age-related expectations: RE

# Years 1 and 2 (expectations for the end of Year 2) Knowledge of the beliefs and practices of religions and other world views

- I know that some people choose to have a religion and some people don't.
- I know there are lots of different religions and that this is not the same as nationality.
- I know at least four key facts about Christianity and Islam (eg sacred texts, significant figures, festivals, symbols, places of worship).



# Years 3 and 4 (expectations for the end of Year 4) Knowledge of the beliefs and practices of religions and other world views

#### I know that some people choose to have a religion, some people don't, and some people are unsure, and can suggest possible reasons for a particular choice.

- I know there are lots of different religions and can name at least four
- I know at least three religious symbols and can match them to the correct religion.
- I know at least four key facts about Christianity, Islam and Sikhism (eg sacred texts, significant figures, festivals, symbols, places of worship, dietary requirements).

# Years 5 and 6 (expectations for the end of Year 6) Knowledge of the beliefs and practices of religions and other world views

- I know that some people choose to have a religion, some people don't, and some people are unsure, and can talk about reasons for both points of view.
- I know there are lots of different religions (and possibly some non-religious systems of belief such as Humanism) and can name at least six.
- I can roughly locate on a map where some key world religions are most popular.
- I know at least four religious symbols and can match them to the correct religion.
- I know at least four key facts about Christianity, Islam, Sikhism and Judaism (eg sacred texts, significant figures, festivals, symbols, places of worship, dietary requirements, rules and moral codes).

## Skills Beliefs and practices of religions and other world views

- I can recall and name different beliefs and practices, including prayer, worship, festivals, rituals and ways of life, in order to find out about the meanings behind them.
- I can retell and suggest meanings for some religious and moral stories, exploring and discussing sacred writings and sources of wisdom and recognising the traditions from which they come.
- I can recognise some ways that people express beliefs and belonging through prayer, worship, symbols and actions, appreciating some similarities between communities.

#### Questions of meaning, purpose and value

- I can explore questions about beliefs, expressing my own ideas and opinions in response, using words, music, drama, art or poetry.
- I can observe and recount different ways of expressing belief, responding sensitively.

#### Morality, identity and diversity

- I can find out about questions of right and wrong and begin to express my ideas and opinions in response.
- I can notice and respond sensitively to some similarities between different religions and other world views in my approach to questions of beliefs and meaning.

#### Beliefs and practices of religions and other world views

- I can describe and understand some simple links between stories and other aspects of the communities I am investigating, responding to beliefs and teachings that arise from them.
- I can describe and make some simple connections between different features of religions and other world views, discovering more about prayer, celebrations, worship, pilgrimages and the rituals which mark important points in life.

#### Questions of meaning, purpose and value

- I can observe and understand examples of religions and other world views so that I can begin to explain, with reasons, their meanings and significance for the choices made by individuals and communities.
- I can discuss and present my own and others' views on questions about belonging, meaning, purpose and truth, applying ideas of my own in different forms (eg through reasoning, music, art. poetry).

#### Morality, identity and diversity

**Skills** 

- I can begin to discuss and respond in a simple way to ethical questions, including what is right, wrong, just and fair, and the complexity of these questions.
- I can begin to consider and apply ideas about ways in which diverse communities can live together, responding to ideas about community, values and respect.

#### Skills

#### Beliefs and practices of religions and other world views

- I can describe and understand links between stories and other aspects of the communities I am investigating, responding thoughtfully to beliefs and teachings that arise from them.
- I can describe and make connections between different features
  of religions and other world views, discovering more about
  prayer, celebrations, worship, pilgrimages and the rituals which
  mark important points in life.

#### Questions of meaning, purpose and value

- I can observe and understand varied examples of religions and other world views so that I can explain, with reasons, their meanings and significance for the choices made by individuals and communities.
- I can discuss and present thoughtfully my own and others' views on challenging questions about belonging, meaning, purpose and truth, applying ideas of my own in different forms (eg through reasoning, music, art, poetry).

#### Morality, identity and diversity

- I can discuss and respond to ethical questions, including what is right, wrong, just and fair, and the complexity of these questions.
- I can consider and apply ideas about ways in which diverse communities can live together for the well-being of all, responding thoughtfully to ideas about community, values and respect.

## **Age-related expectations: Science Working scientifically**

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Skills	Skills	Skills
<ul> <li>I can ask simple questions and recognise that they can be answered in different ways.</li> <li>I can observe carefully, using simple equipment.</li> <li>I can perform simple tests.</li> <li>I can identify and classify.</li> <li>I can use my observations and ideas to suggest answers to questions.</li> <li>I can gather and record data to help in answering questions.</li> </ul>	<ul> <li>I can ask relevant questions and use different types of scientific enquiries to answer them.</li> <li>I can set up simple practical enquiries, comparative and fair tests.</li> <li>I can make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</li> <li>I can gather, record, classify and present data in a variety of ways to help answer questions.</li> <li>I can record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</li> <li>I can report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</li> <li>I can use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</li> <li>I can identify differences, similarities or changes related to simple scientific ideas and processes.</li> <li>I can use straightforward scientific evidence to answer questions or to support their findings.</li> </ul>	<ul> <li>I can plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.</li> <li>I can take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</li> <li>I can record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</li> <li>I can use test results to make predictions to set up further comparative and fair tests.</li> <li>I can report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written form such as displays and other presentations.</li> <li>I can identify scientific evidence that has been used to support or refute ideas or arguments.</li> </ul>

## Age-related expectations: Science vocabulary Working scientifically

Years 1 and 2 (ex	xpectations for the	end of Year 2)	Years 3 and 4 (ex	pectations for the	end of Year 4)	Years 5 a	nd 6 (e	xpectations for the	end of Year 6)
Skills			Skills			Skills			
ask questions	observe carefully	identify	comparative test	take measurements	set up practical enquiries	relev		scientific evidence	systematic, observations
classify	perform simple test	answer questions	fair test	conclusion	prediction	accu	rate	comparative test	considered prediction
gather data	record data	simple equipment	present data	report findings	precise observations	report f	indings	fair test	logical conclusion

### Age-related expectations: Science Biology

### Years 1 and 2 (expectations for the end of Year 2) Years 3 an

#### Knowledge and skills

#### Animals including humans cycle B T3.2 (Y1)

- I can identify and name a variety of common animals, including fish, amphibians, reptiles, birds and mammals.
- I can identify and name a variety of common animals that are carnivores, herbivores and omnivores.
- I can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).
- I can identify, name, draw and label the basic parts of the human body and say which part of the human body is associated with each sense.

#### Animals including humans cycle A T3.2 (Y2)

- I know that animals, including humans, have offspring, which grow into adults.
- I can find out about and describe the basic needs of animals, including humans, for survival (water, food and air).
- I can describe the importance for humans of exercise, eating the right amount of different types of food, and hygiene.

#### Plants cycle A T3.1 (Y1)

- I can identify and name a variety of common, wild and garden plants.
- I can identify and name various deciduous and evergreen trees.
- I can identify and describe the basic structure of a variety of common flowering plants, including trees.

#### Plants cycle B T3.1 (Y2)

- I can observe and describe how seeds and bulbs grow into mature plants.
- I can find out and describe how plants need water, light and suitable temperature to grow and be healthy.

#### Living things and their habitats cycle B T1.1 (Y1)

- I can explore and compare differences between things that are living, dead and things that have never been alive.
- I know that most living things live in habitats to which they are suited; I can describe how different habitats provide for the basic needs of different kinds of animals and plants; and how they depend on each other.
- I can identify and name a variety of plants and animals in their habitats, including micro-habitats.
- I can describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

#### Seasonal Changes cycle A T2.1 (Y2)

- I can observe changes across the four seasons.
- I can observe and describe weather associated with the seasons and how day length varies.

### Years 3 and 4 (expectations for the end of Year 4)

## Knowledge and skills Animals including humans cycle A T3.2 (Y3)

they get nutrition from what they eat.

#### I can identify animals, including humans, need the right types and amount of nutrition, and they cannot make their own food:

 I can identify that humans and some other animals have skeletons and muscles for support, protection and movement.

#### Animals including humans cycle B T3.2 (Y4)

- I can describe the simple functions of the basic parts of the digestive system in humans.
- I can identify the different types of teeth in humans and their simple functions.
- I can construct and interpret a variety of food chains, identifying producers, predators and prey.

#### Plants cycle A T3.1 (Y3)

- I can identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.
- I can explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.
- I can investigate the way in which water is transported within plants.
- I can explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal

#### Living things and their habitats cycle B T1.1 (Y4)

- I know that living things can be grouped in a variety of ways.
- I can explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.
- I know that environments can change and that this can sometimes pose dangers to living things.



### Years 5 and 6 (expectations for the end of Year 6)

### Knowledge and skills

#### Animals including humans cycle A and B T3.2 (Y5)

• I can describe the changes as humans develop to old age.

#### Animals including humans cycle A and B T3.2 (Y6)

- I can identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.
- I am aware of the impact of diet, exercise, drugs and lifestyle on the way my body functions.
- I can describe the ways in which nutrients and water are transported within animals, including humans.

#### Living things and their habitats cycle B T3.1 (Y5)

- I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- I can describe the life processes of reproduction in some plants and animals

#### Living things and their habitats cycle B T1.1 (Y6)

- I can describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals.
- I can give reasons for classifying plants and animals based on specific characteristics.

#### Evolution and inheritance cycle A T2.1 (Y6)

- I know that living things have changed over time and that fossils
  provide information about living things that inhabited the Earth
  millions of years ago.
- I know that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
- I can identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

# Age-related expectations: Science vocabulary Biology

Years 1 and 2 (expectations for the end of Year 2)		Years 3 and 4 (expectations for the end of Year 4)			Years 5 and 6 (expectations for the end of Year 6)				
Knowledge and skills			Knowledge and skills			Knowledge and skills			
Animals including humans cycle B T3.2 (Y1)			Animals including humans cycle A T3.2 (Y3)			Animals including humans cycle A and B T3.2 (Y5)			
fish (x3 examples)	amphibians (x3 examples)	reptiles (x3 examples)	food groups	balanced di	et	skeleton	adolescence	adolescent	arthritis
birds (x3 examples)	mammals (x3 examples)	carnivore	muscles	joints		support	gestation period	life expectancy	puberty
herbivore	omnivore	body parts	protection	contract		relax	teenager		
Animals including humans cycle A T3.2 (Y2)			Animals including	humans cycle	B T3.2	2 (Y4)	Animals including	humans cycle A an	d B T3.2 (Y6)
basic needs	survival	exercise	canine	incisor		molar	blood	heart	blood vessels
nutrition	hygiene	growth	enamel	digestion		energy	oxygen	carbon dioxide	deoxygenated
life cycle	,9	greatur	intestine	stomach		oesophagus	pulse	drugs	addiction
			Plants cycle A T3.	.1 (Y3)			Living things and t	heir habitats cycle	B T3.1 (Y5)
Plants cycle A T3.1	coniferous	flower	function	structure		seed formation	reproduction	life cycle	gestation
plant	tree	leaf	seed dispersal	pollination	١	support	fertilisation	metamorphosis	pollination
petal	root	stem	reproduction	nutrients		transported	germination	larva	pupa
<u> </u>		Living things and	their habitats cv	vcle B	3 T1.1 (Y4)	Living things and t	heir habitats cycle	B T1.1 (Y6)	
Plants cycle B T3.1 seeds	(Y2) bulbs	temperature	mammal	bird		fish	species	classification system	observable characteristic
growth	survival	healthy	amphibian	reptile	verte	ebrate/invertebrate	specific characteristic	sub-divide	microorganism
mature plants		-	flowering/non- flowering plant	classification key	env	ironmental danger	bacteria	funghi	microbe
Living things and th	neir habitats cycle F	3 T1 1 (Y1)		<u> </u>			Evolution and inhe	ritance cycle A T2.1	(Y6)
living	dead	alive		'Yes	)		evolution	inheritance	adaptation
habitat	micro-habitat	environment	5	V W	<b>A</b>	•	natural selection	trait	variation
food chain	predator	prey		7 8	-7	ہے گ	prehistoric	inhabited	characteristics
Seasonal changes	cycle A T2.1 (Y2)		1/2	5 1 0	र्य				
spring	summer	autumn	W. Carlotte	9 (3)	, 7	7			
winter	seasons	weather	~	ME	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<b>(1)</b>			
day	night	length		TO M	P				
				<del>Q</del>	<b>₹</b> )				

## Age-related expectations: Science prior knowledge Biology

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Knowledge and skills	Knowledge and skills	Knowledge and skills
From their experiences in Early Years Foundation Stage, children will know words such as:  Plant, soil, vegetables, tree, food.	Animals including humans cycle A T3.2 (Y3)     The basic parts of the human body (Year 1).     That animals and humans need food to survive (Year 2).     That it is important to eat the right types of food (Year 2).	Animals including humans cycle A and B T3.2 (Y5)     That animals have offspring which grow into adults (Year 2).     That we grow and get bigger as we get older (Year 2).     About our skeletons and joints (from Year 3).     The life cycles of different animals, including mammals (Year
Animal, bird, fish and the names of a variety of animals.	Animals including humans cycle B T3.2 (Y4)  The names of external parts of the body.	<ul><li>5).</li><li>That our bodies change as we get older.</li></ul>
Basic parts of the body such as eyes, ears, mouth and nose, arm, leg, head, etc.	<ul> <li>About the importance of food for human survival.</li> <li>That children grow into adults and the changes that happen as a result.</li> <li>How important it is to eat the right amounts of different foods.</li> <li>That animals, including humans, need the right types and amount of nutrition.</li> <li>We cannot make our own food: we get nutrition from what we eat.</li> <li>How nutrients and food are transported within animals and humans.</li> <li>How to identify and name a variety of common animals that are carnivores, herbivores and omnivores.</li> <li>How to explore and compare the difference between things that are living, are dead and have never been alive.</li> <li>How to find out and describe the basic needs of animals and humans for survival.</li> </ul>	<ul> <li>Animals including humans cycle A and B T3.2 (Y6)</li> <li>That exercise is good for you from general learning and everyday life.</li> <li>That the heart pumps blood around the body.</li> <li>That smoking is bad for you.</li> <li>Living things and their habitats cycle B T3.1 (Y5)</li> <li>The structure of flowers and how they relate to reproduction (Year 3).</li> <li>The process of pollination (Year 3).</li> <li>That animals have offspring that grow into adults (Year 2).</li> <li>The process of fertilisation in plants (Year 3).</li> <li>Depending on when the 'Growing Up and Growing Old' unit is taught relative to this unit, they may already know about the life cycle of a human (Year 5).</li> </ul>
	<ul> <li>Plants cycle A T3.1 (Y3)</li> <li>The basic structure of a plant (Year 1).</li> <li>That plants need water, light and a suitable temperature to grow and stay healthy (Year 2).</li> <li>How seeds and bulbs can grow into mature plants (Year 2).</li> <li>Living things and their habitats cycle B T1.1 (Y4)</li> <li>That living things can be animals or plants.</li> <li>That a natural environment or the home of a variety of plants and animals is called a habitat.</li> <li>That living things can be divided into groups.</li> <li>The basic features of common animals and plants.</li> <li>That living things can be grouped based on their external features.</li> </ul>	Living things and their habitats cycle B T1.1 (Y6)  That there are ways to classify living things. That there are invertebrates and vertebrates. That two of the main groups of living things are animals and plants. Some of the features of animals and plants. That fungi and microbes exist. That 'germs' cause diseases.  Evolution and inheritance cycle A T2.1 (Y6) That we all have different characteristics like eye colour, nose shape and hair colour. That offspring look similar to their parents.

## **Age-related expectations: Science Chemistry**

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Knowledge and skills	Knowledge and skills	Knowledge and skills
Everyday Materials cycle B T2.1 (Y1)  I can distinguish between an object and the materials from which it is made.  I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock.  I can describe the simple physical properties of a variety of everyday materials.  I can compare and group together a variety of everyday materials on the basis of their simple physical properties.  Everyday Materials cycle A T1.1 (Y2)  I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, rock, brick, paper and cardboard for particular uses.  I can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	<ul> <li>States of matter cycle A T1.1 (Y4)</li> <li>I can compare and group materials together, according to whether they are solids, liquids or gases.</li> <li>I can observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C).</li> <li>I can identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</li> <li>Rocks cycle B T2.1 (Y3)</li> <li>I can compare and group different rocks on the basis of their appearance and simple physical properties.</li> <li>I can describe in simple terms how fossils are formed when things that have lived are trapped within rock.</li> <li>I can recognise that soils are made from rocks and organic matter.</li> </ul>	<ul> <li>Properties and changes of materials cycle A T1.1 (Y5)</li> <li>I can compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.</li> <li>I know that some materials will dissolve in liquid to form a solution.</li> <li>I can describe how to recover a substance from a solution.</li> <li>I can use their knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</li> <li>I can give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</li> <li>I can demonstrate that dissolving, mixing and changes of state are reversible changes.</li> <li>I can 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 and the action of acid on bicarbonate of soda.</li> </ul>

## **Age-related expectations: Science vocabulary Chemistry**

Years 1 and 2 (expectations for the end of Year 2)			Years 3 and 4 (ex		end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)			
Knowledge and skills Everyday materials cycle B T2.1 (Y1)			Knowledge and skills			Knowledge and skills			
			States of matter cy	cle A T1.1 (Y4)	1	Properties and changes of materials cycle A T1.1 (Y5)			
materials	hard / soft	stretchy / stiff	matter	solid	liquid	dissolve	soluble	insoluble	
shiny / dull	rough / smooth	bendy / not bendy	gas	boiling point	freezing point	mixture	solvent	solution	
waterproof / not waterproof	absorbent / not absorbent	opaque / transparent	melting point	condensation	evaporation	chemical reaction	reversible	irreversible	
veryday materials	cycle A T1.1 (Y2)		Rocks cycle B T2.1	(Y3)					
physical properties	suitable	particular purpose	rock	soil	fossil				
solid objects	comparing	flexible	grains	crystals	permeable				
			impermeable	extinct	palaeontologist				

## Age-related expectations: Science prior knowledge Chemistry

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Knowledge and skills	Knowledge and skills	Knowledge and skills
From their experiences in Early Years Foundation Stage, children will know words such as:	States of matter cycle A T1.1 (Y4)  How to describe simple physical properties of everyday materials.	<ul> <li>Properties and changes of materials cycle A T1.1 (Y5)</li> <li>About everyday materials and their properties and uses (Years 1 and 2).</li> </ul>
Squash, squeeze, twist, stretch, direction.	How to compare and group together a variety of everyday materials.	<ul><li>About magnetic materials (Year 3).</li><li>About rocks (Year 3).</li></ul>
Wood, metal, plastic, fabric.	<ul> <li>How to compare using observations.</li> <li>That materials are either solid, liquid or gas.</li> <li>That ice melts at 0°C.</li> <li>That ice and water can be present at the same time.</li> </ul>	<ul> <li>About temperature and heating and cooling (Year 4).</li> <li>The states of matter and change of state (Year 4).</li> <li>About evaporation and condensation in the water cycle and the factors that affect evaporation (Year 4).</li> </ul>
	Rocks cycle B T2.1 (Y3)	
	<ul> <li>How to identify everyday materials including rock (Year 1).</li> <li>How to identify and compare everyday materials including rock (Year 2)</li> </ul>	
	Fossils are not met in Key Stage 1 at all: however, a lot of children will already have an interest in, and may know quite a lot about fossils.	
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# **Age-related expectations: Science Physics**

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Knowledge and skills	Knowledge and skills	Knowledge and skills
	<ul> <li>Knowledge and skills</li> <li>Light cycle A T1.2 (Y3)</li> <li>I know that I need light in order to see things and that dark is the absence of light. I know that light is reflected from surfaces.</li> <li>I know that light from the sun can be dangerous and that there are ways to protect my eyes.</li> <li>I know that shadows are formed when the light from a light source is blocked by an opaque object.</li> <li>I can find patterns in the way that the size of shadows change.</li> <li>Electricity cycle A T2.1 (Y4)</li> <li>I can compare and group different rocks on the basis of their appearance and simple physical properties.</li> <li>I can describe in simple terms how fossils are formed when things that have lived are trapped within rock.</li> <li>I can recognise that soils are made from rocks and organic matter.</li> <li>Sound cycle B T1.2 (Y4)</li> <li>I can identify how sounds are made, associating some of them with something vibrating.</li> <li>I know that vibrations from sounds travel through a medium to the ear.</li> <li>I can find patterns between the pitch of a sound and features of the object that produced it.</li> <li>I can find patterns between the volume of a sound and the strength of the vibrations that produced it.</li> <li>I know that sounds get fainter as the distance from the sound source increases.</li> <li>Forces and magnets cycle B T3.1 (Y3)</li> </ul>	<ul> <li>Light cycle A T1.2 (Y6)</li> <li>I am aware that light appears to travel in straight lines.</li> <li>I can 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.</li> <li>I can 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.</li> <li>I can use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</li> <li>Electricity cycle A T3.1 (Y6)</li> <li>I can associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</li> <li>I can 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.</li> <li>I can use recognised symbols when representing a simple circuit in a diagram.</li> <li>Forces cycle B T1.2 (Y5)</li> <li>I can explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.</li> <li>I can identify the effects of air resistance, water resistance and friction that act between moving surfaces.</li> <li>I know that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</li> </ul>
	<ul> <li>Forces and magnets cycle B T3.1 (Y3)</li> <li>I can compare how things move on different surfaces.</li> <li>I can notice that some forces need contact between two objects, but magnetic forces can act at a distance.</li> <li>I can observe how magnets attract or repel each other and attract some materials and not others.</li> <li>I can compare and group together a variety of everyday</li> </ul>	<ul> <li>Earth and space cycle B T2.1 (Y5)</li> <li>I can describe the movement of the Earth, and other planets, relative to the Sun in the solar system.</li> <li>I can describe the movement of the Moon relative to the Earth.</li> <li>I can describe the Sun, Earth and Moon as approximately</li> </ul>
	<ul> <li>T can compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.</li> <li>I can describe magnets as having two poles.</li> <li>I can predict whether two magnets will attract or repel each other, depending on which poles are facing.</li> </ul>	<ul> <li>I can describe the Sun, Earth and Moon as approximately spherical bodies.</li> <li>I can use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</li> </ul>

# Age-related expectations: Science vocabulary Physics

Years 1 and 2 (expectations for the end of Year 2)	Years 3 and 4 (ex	pectations for the e	nd of Year 4)	Years 5 and 6 (expectations for the end of Year 6)			
Knowledge and skills	Knowledge and s	kills		Knowledge and s	kills		
(No specific requirement to teach aspects of Physics in Key	Light cycle A T1.2 (Y3)			Light cycle A T1.2 (Y6)			
Stage 1)	light source	transparent	translucent	pupil	image	travel	
	opaque	shadow	reflective	cast	spectrum	reflection	
	surface	darkness (absence of light)	mirror	refraction	light rays	periscope	
	Electricity cycle A	T2.1 (Y4)		Electricity cycle A T3.1 (Y6)			
	appliance	electricity	battery	voltage	component	cell	
	series circuit	bulb	buzzer	variable	current	symbol	
	wire	switch	insulator / conductor	fuse			
	Sound cycle B T1.2 (Y4)			Forces cycle B T1.2 (Y5)			
	sound source	vibrate	volume	gravity	friction	air resistance	
	pitch	louder / fainter	medium	water resistance	lever	pulley	
	decibels	insulate		gear	mechanism	theory of gravity	
	Forces and magnets cycle B T3.1 (Y3)			Earth and space cycle B T2.1 (Y5)			
	magnet	magnetic	attract	solar system	planet	star	
	repel	pole	compass	sun	moon	orbit	
	magnetic north	contact		geocentric	heliocentric	model	

## Age-related expectations: Science prior knowledge Physics

Years 1 and 2 (expectations for the end of Year 2) Years 3	and 4 (expectations for the end of Year 4)	Years 5 and 6 (expectations for the end of Year 6)
Knowledge and skills Knowle	dge and skills	Knowledge and skills
From their experiences in Early Years Foundation Stage, children will know words such as:  Sound, light, eyes, ears.  Light cyc.  Their cyc.  That form  Electricit  That  That  That  That  That  That  Their cyc.  Their cyc.  That  Tha	dge and skills  the A T1.2 (Y3)  If have some personal experience and ideas to draw upon. It shadows are dark and are similar in shape to the object ing them.  If y cycle A T2.1 (Y4)  If electricity makes things work.  If you need wires for electricity to work.  If batteries produce electricity.  If electricity can be dangerous.  If batteries are safe to use in the classroom.  If you hear with our ears.  If to make loud noises.  Ind magnets cycle B T3.1 (Y3)  If the same not met in Key Stage 1 at all. However, children well have come across them at school or home and seen they can attract some other materials.	Light cycle A T1.2 (Y6)  That they see with their eyes. That light can be reflected from some surfaces. How to make a shadow. About transparent, opaque and translucent objects.  Electricity cycle A T3.1 (Y6) That a complete circuit is required for a bulb to light. That batteries produce electricity. That an electric current passes through a circuit. That metals are good conductors. That some devices run off mains and some off batteries. That batteries have two ends.  Forces cycle B T1.2 (Y5) A little about forces covered in the magnets topic in Year 3, so they should know what a force is and that some forces do not have to be in contact to act.  Earth and space cycle B T2.1 (Y5) Earth and space are not covered in Key Stage 1 or lower Key Stage 2 at all. However, the children will be aware of our Sun and be familiar with the names of some of the planets. The study of light and shadows in Year 3 introduces children to the Sun's apparent movement across the sky.