

Weaving Scientific Knowledge, Skills and Understanding into the new National Curriculum

**Key Stage 1:
Science**



Knowledge, Skills and Understanding breakdown for Working Scientifically

Year 2

Observing closely	Performing Tests	Identifying and Classifying	Recording findings
<ul style="list-style-type: none"> • Can they use <see, touch, smell, hear or taste> to help them answer questions? • Can they use some scientific words to describe what they have seen and measured? • Can they compare several things? 	<ul style="list-style-type: none"> • Can they carry out a simple fair test? • Can they explain why it might not be fair to compare two things? • Can they say whether things happened as they expected? • Can they suggest how to find things out? • Can they use prompts to find things out? 	<ul style="list-style-type: none"> • Can they organise things into groups? • Can they find simple patterns (or associations)? • Can they identify animals and plants by a specific criteria, eg, lay eggs or not; have feathers or not? 	<ul style="list-style-type: none"> • Can they use <text, diagrams, pictures, charts, tables> to record their observations? • Can they measure using <simple equipment>?

Year 2 (Challenging)

<ul style="list-style-type: none"> • Can they suggest ways of finding out through listening, hearing, smelling, touching and tasting? 	<ul style="list-style-type: none"> • Can they say whether things happened as they expected and if not why not? 	<ul style="list-style-type: none"> • Can they suggest more than one way of grouping animals and plants and explain their reasons? 	<ul style="list-style-type: none"> • Can they use information from books and online information to find things out?
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Knowledge, Skills and Understanding breakdown for Living Things and their Habitats

Year 2

Living Things & their Habitats	Animals, including humans	Plants
<ul style="list-style-type: none"> • Can they match certain living things to the habitats they are found in? • Can they explain the differences between living and non-living things? • Can they describe some of the life processes common to plants and animals, including humans? • Can they decide whether something is living, dead or non-living? • Can they describe how a habitat provides for the basic needs of things living there? • Can they describe a range of different habitats? • Can they describe how plants and animals are suited to their habitat? 	<ul style="list-style-type: none"> • Can they describe what animals need to survive? • Can they explain that animals grow and reproduce? • Can they explain why animals have offspring which grow into adults? • Can they describe the life cycle of some living things? (e.g. egg, chick, chicken) • Can they explain the basic needs of animals, including humans for survival? (water, food, air) • Can they describe why exercise, balanced diet and hygiene are important for humans? 	<ul style="list-style-type: none"> • Can they describe what plants need to survive? • Can they observe and describe how seeds and bulbs grow into mature plants? • Can they find out & describe how plants need water, light and a suitable temperature to grow and stay healthy?

Year 2 (Challenging)

<ul style="list-style-type: none"> • Can they name some characteristics of an animal that help it to live in a particular habitat? • Can they describe what animals need to survive and link this to their habitats? 	<ul style="list-style-type: none"> • Can they explain that animals reproduce in different ways? 	<ul style="list-style-type: none"> • Can they describe what plants need to survive and link it to where they are found? • Can they explain that plants grow and reproduce in different ways?
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Knowledge, Skills and Understanding breakdown for Uses of Everyday Materials

Year 2

Classifying and grouping materials

- Can they describe the simple physical properties of a variety of everyday materials?
- Can they compare and group together a variety of materials based on their simple physical properties?

Changing materials

- Can they explore how the shapes of solid objects can be changed? (squashing, bending, twisting, stretching)
- Can they find out about people who developed useful new materials? (John Dunlop, Charles Macintosh, John McAdam)
- Can they identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper, cardboard for particular uses?
- Can they explain how things move on different surfaces?

Year 2 (Challenging)

- Can they describe the properties of different materials using words like, transparent or opaque, flexible, etc.?
- Can they sort materials into groups and say why they have sorted them in that way?
- Can they say which materials are natural and which are man made?

- Can they explain how materials are changed by heating and cooling?
- Can they explain how materials are changed by bending, twisting and stretching?
- Can they tell which materials cannot be changed back after being heated, cooled, bent, stretched or twisted?

Weaving Historical Knowledge, Skills and Understanding into the new National Curriculum

**Key Stage 1:
History**



National Curriculum Requirements of History at Key Stage 1

Pupils should develop an awareness of the past, using common words and phrases relating to the passing of time. They should know where the people and events they study fit within a chronological framework and identify similarities and differences between ways of life in different periods. They should use a wide vocabulary of everyday historical terms. They should ask and answer questions, choosing and using parts of stories and other sources to show that they know and understand key features of events. They should understand some of the ways in which we find out about the past and identify different ways in which it is represented.

Pupils should be taught about:

- **changes within living memory. Where appropriate, these should be used to reveal aspects of change in national life**
- **events beyond living memory that are significant nationally or globally** (e.g. the Great Fire of London, the first aeroplane flight or events commemorated through festivals or anniversaries)
- **the lives of significant individuals in the past who have contributed to national and international achievements. Some should be used to compare aspects of life in different periods** (e.g. Elizabeth I and Queen Victoria, Christopher Columbus and Neil Armstrong, William Caxton and Tim Berners-Lee, Pieter Bruegel the Elder and LS Lowry, Rosa Parks and Emily Davison, Mary Seacole and/or Florence Nightingale and Edith Cavell)
- **significant historical events, people and places in their own locality.**

Knowledge, Skills and Understanding breakdown for History

Year 2

Chronological understanding	Knowledge and interpretation	Historical enquiry
<ul style="list-style-type: none"> • Can they use words and phrases like: before I was born, when I was younger? • Can they use phrases and words like: 'before', 'after', 'past', 'present', 'then' and 'now'; in their historical learning? • Can they use the words 'past' and 'present' accurately? • Can they use a range of appropriate words and phrases to describe the past? • Can they sequence a set of events in chronological order and give reasons for their order? 	<ul style="list-style-type: none"> • Can they recount the life of someone famous from Britain who lived in the past giving attention to what they did earlier and what they did later? • Can they explain how their local area was different in the past? • Can they recount some interesting facts from an historical event, such as where the 'Fire of London' started? • Can they give examples of things that are different in their life from that of their grandparents when they were young? • Can they explain why Britain has a special history by naming some famous events and some famous people? • Can they explain what is meant by a parliament? 	<ul style="list-style-type: none"> • Can they find out something about the past by talking to an older person? • Can they answer questions by using a specific source, such as an information book? • Can they research the life of a famous Briton from the past using different resources to help them? • Can they research about a famous event that happens in Britain and why it has been happening for some time? • Can they research the life of someone who used to live in their area using the Internet and other sources to find out about them?

Year 2 (Challenging)

<ul style="list-style-type: none"> • Can they sequence a set of objects in chronological order and give reasons for their order? • Can they sequence events about their own life? • Can they sequence events about the life of a famous person? • Can they try to work out how long ago an event happened? 	<ul style="list-style-type: none"> • Can they give examples of things that are different in their life from that of a long time ago in a specific period of history such as the Victorian times? • Can they explain why someone in the past acted in the way they did? • Can they explain why their locality (as wide as it needs to be) is associated with a special historical event? • Can they explain what is meant by a democracy and why it is a good thing? 	<ul style="list-style-type: none"> • Can they say at least two ways they can find out about the past, for example using books and the internet? • Can they explain why eye-witness accounts may vary? • Can they research about a famous event that happens somewhere else in the world and why it has been happening for some time?
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Weaving Geographical Knowledge, Skills and Understanding into the new National Curriculum

**Key Stage 1:
Geography**



National Curriculum Requirements of Geography at Key Stage 1

Pupils should develop knowledge about the world, the United Kingdom and their locality. They should understand basic subject-specific vocabulary relating to human and physical geography and begin to use geographical skills, including first-hand observation, to enhance their locational awareness.

Pupils should be taught to:

Location knowledge

- name and locate the world's seven continents and five oceans
- name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding seas

Place knowledge

- understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country

Human and physical geography

- identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles
- use basic geographical vocabulary to refer to:
 - key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather
 - key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop

National Curriculum Requirements of Geography at Key Stage 1

Pupils should develop knowledge about the world, the United Kingdom and their locality. They should understand basic subject-specific vocabulary relating to human and physical geography and begin to use geographical skills, including first-hand observation, to enhance their locational awareness.

Pupils should be taught to (continued):

Geographical skills and fieldwork

- use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage
- use simple compass directions (North, South, East and West) and locational and directional language (e.g. 'near' and 'far'; 'left' and 'right') to describe the location of features and routes on a map
- use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key
- use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment.

Knowledge, Skills and Understanding breakdown for Geography

Year 2

Geographical Enquiry	Physical Geography	Human Geography	Geographical Knowledge
<ul style="list-style-type: none"> • Can they label a diagram or photograph using some geographical words? • Can they find out about a locality by using different sources of evidence? • Can they find out about a locality by asking some relevant questions to someone else? • Can they say what they like and don't like about their locality and another locality like the seaside? 	<ul style="list-style-type: none"> • Can they describe some physical features of their own locality? • Can they explain what makes a locality special? • Can they describe some places which are not near the school? • Can they describe a place outside Europe using geographical words? • Can they describe some of the features associated with an island? • Can they describe the key features of a place, using words like, beach, coast forest, hill, mountain, ocean, valley? 	<ul style="list-style-type: none"> • Can they describe some human features of their own locality, such as the jobs people do? • Can they explain how the jobs people do may be different in different parts of the world? • Do they think that people ever spoil the area? How? • Do they think that people try to make the area better? How? • Can they explain what facilities a town or village might need? 	<ul style="list-style-type: none"> • Can they name the continents of the world and find them in an atlas? • Can they name the world's oceans and find them in an atlas? • Can they name the major cities of England, Wales, Scotland and Ireland? • Can they find where they live on a map of the UK?

Year 2 (Challenging)

<ul style="list-style-type: none"> • Can they make inferences by looking at a weather chart? • Can they make plausible predictions about what the weather may be like in different parts of the world? 	<ul style="list-style-type: none"> • Can they find the longest and shortest route using a map? • Can they use a map, photographs, film or plan to describe a contrasting locality outside Europe? 	<ul style="list-style-type: none"> • Can they explain how the weather affects different people? 	<ul style="list-style-type: none"> • Can they locate some of the world's major rivers and mountain ranges? • Can they point out the North, South, East and West associated with maps and compass?
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Weaving Computing Knowledge, Skills and Understanding into the new National Curriculum

**Key Stage 1:
Computing**



National Curriculum Requirements of Computing at Key Stage 1

Pupils should be taught to:

- understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous of instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about context or contact on the internet or other online technologies

Knowledge, Skills and Understanding breakdown for Computing

Year 2

Algorithms and Programs	Data Retrieving and Organising	Communicating
<ul style="list-style-type: none"> • Can they predict the outcomes of a set of instructions? • Can they use right angle turns? • Can they use the repeat commands? • Can they test and amend a set of instructions? • Can they write a simple program and test it? • Can they predict what the outcome of a simple program will be? 	<ul style="list-style-type: none"> • Can they find information on a website? • Can they click links in a website? • Can they print a web page to use as a resource? • Can they experiment with text, pictures and animation to make a simple slide show? • Can they use the shape tools to draw? 	<ul style="list-style-type: none"> • Can they send and reply to messages sent by a safe email partner (within school)? • Can they word process a piece of text? • Can they insert/delete a word using the mouse and arrow keys? • Can they highlight text to change its format (B, <u>U</u>, I)?

Year 2 (Challenging)

- Can they create a presentation in a small group and record the narration?
- Can they record sounds into software and playback?
- Can they insert prerecorded sounds into a presentation?
- Can they capture still and moving images?

E-safety in Key Stage 1

Knowledge & understanding	Skills
<ul style="list-style-type: none">• Can they understand the different methods of communication (e.g. email, online forums etc)?• Do they know you should only open email from a known source?• Do they know the difference between email and communication systems such as blogs and wikis?• Do they know that websites sometimes include pop-ups that take them away from the main site?• Do they know that bookmarking is a way to find safe sites again quickly?• Can they begin to evaluate websites and know that everything on the internet is not true?• Do they know that it is not always possible to copy some text and pictures from the internet?• Do they know that personal information should not be shared online?• Do they know they must tell a trusted adult immediately if anyone tries to meet them via the internet?	<ul style="list-style-type: none">• Can they follow the school's safer internet rules?• Can they use the search engines agreed by the school?• Can they act if they find something inappropriate online or something they are unsure of (including identifying people who can help; minimising screen; online reporting using school system etc)?• Can they use the internet for learning and communicating with others, making choices when navigating through sites?• Can they send and receive email as a class?• Can they recognise advertising on websites and learn to ignore it?• Can they use a password to access the secure network?

Schools will need to review and amend their approaches to e-safety in order to take on board and address changes to technology.

Weaving Art Knowledge, Skills and Understanding into the new National Curriculum

Key Stage 1:
Art



National Curriculum Requirements of Art & Design at Key Stage 1

Pupils should be taught:

- to use a range of materials creatively to design and make products
- to use drawing, painting and sculpture to develop and share their ideas, experiences and imagination
- to develop a wider range of art and design techniques in using colour, pattern, texture, line, shape, form and space
- about the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work.

Knowledge, Skills and Understanding breakdown for Art

Year 2

Drawing	Painting	Printing	Sketch books
<ul style="list-style-type: none"> • Can they use three different grades of pencil in their drawing (4B, 8B, HB)? • Can they use charcoal, pencil and pastels? • Can they create different tones using light and dark? • Can they show patterns and texture in their drawings? • Can they use a viewfinder to focus on a specific part of an artefact before drawing it? 	<ul style="list-style-type: none"> • Can they mix paint to create all the secondary colours? • Can they mix and match colours, predict outcomes? • Can they mix their own brown? • Can they make tints by adding white? • Can they make tones by adding black? 	<ul style="list-style-type: none"> • Can they create a print using pressing, rolling, rubbing and stamping? • Can they create a print like a designer? 	<ul style="list-style-type: none"> • Can they begin to demonstrate their ideas through photographs and in their sketch books? • Can they set out their ideas, using 'annotation' in their sketch books? • Do they keep notes in their sketch books as to how they have changed their work?
3D/ Textiles	Collage	Use of IT	Knowledge
<ul style="list-style-type: none"> • Can they make a clay pot? • Can they join two finger pots together? • Can they add line and shape to their work? • Can they join fabric using glue? • Can they sew fabrics together? • Can they create part of a class patchwork? 	<ul style="list-style-type: none"> • Can they create individual and group collages? • Can they use different kinds of materials on their collage and explain why they have chosen them? • Can they use repeated patterns in their collage? 	<ul style="list-style-type: none"> • Can they create a picture independently? • Can they use simple IT mark-making tools, e.g. brush and pen tools? • Can they edit their own work? • Can they take different photographs of themselves displaying different moods? • Can they change their photographic images on a computer? 	<ul style="list-style-type: none"> • Can they link colours to natural and man-made objects? • Can they say how other artist/craft maker/designer have used colour, pattern and shape? • Can they create a piece of work in response to another artist's work?

Weaving Design and Technology Knowledge, Skills and Understanding into the new National Curriculum

**Key Stage 1:
DT**



National Curriculum Requirements of DT at Key Stage 1

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts, (for example the home and school, gardens and playgrounds, the local community, industry and the wider environment).

When designing and making, pupils should be taught to:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks, (for example, cutting, shaping, joining and finishing)
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms, (for example levers, sliders, wheels and axles), in their products.

National Curriculum Requirements of Cooking and Nutrition at Key Stage 1

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Pupils should be taught to:

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

Knowledge, Skills and Understanding breakdown for Design and Technology

Year 2

Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products	Evaluating processes and products
<ul style="list-style-type: none"> • Can they think of ideas and plan what to do next? • Can they choose the best tools and materials? Can they give a reason why these are best? • Can they describe their design by using pictures, diagrams, models and words? 	<ul style="list-style-type: none"> • Can they join things (materials/ components) together in different ways? 	<ul style="list-style-type: none"> • Can they explain what went well with their work? • If they did it again, can they explain what they would improve?

Breadth of study

Cooking and nutrition	Textiles	Mechanisms	Use of materials	Construction
<ul style="list-style-type: none"> • Can they describe the properties of the ingredients they are using? • Can they explain what it means to be hygienic? • Are they hygienic in the kitchen? 	<ul style="list-style-type: none"> • Can they measure textile? • Can they join textiles together to make something? • Can they cut textiles? • Can they explain why they chose a certain textile? 	<ul style="list-style-type: none"> • Can they join materials together as part of a moving product? • Can they add some kind of design to their product? 	<ul style="list-style-type: none"> • Can they measure materials to use in a model or structure? • Can they join material in different ways? • Can they use joining, folding or rolling to make it stronger? 	<ul style="list-style-type: none"> • Can they make sensible choices as to which material to use for their constructions? • Can they develop their own ideas from initial starting points? • Can they incorporate some type of movement into models? • Can they consider how to improve their construction?

Weaving Music Knowledge, Skills and Understanding into the new National Curriculum

**Key Stage 1:
Music**



National Curriculum Requirements of Music at Key Stage 1

In music pupils should be taught to:

- use their voices expressively by singing songs and speaking chants and rhymes
- play tuned and untuned instruments musically
- listen with concentration and understanding to a range of high-quality live and recorded music
- experiment with, create, select and combine sounds using the inter-related dimensions of music.

Knowledge, Skills and Understanding breakdown for Music

Year 2

Performing	Composing (<i>incl notation</i>)	Appraising
<ul style="list-style-type: none"> • Do they sing and follow the melody (tune)? • Do they sing accurately at a given pitch? • Can they perform simple patterns and accompaniments keeping a steady pulse? • Can they perform with others? • Can they play simple rhythmic patterns on an instrument? • Can they sing/clap a pulse increasing or decreasing in tempo? 	<ul style="list-style-type: none"> • Can they order sounds to create a beginning, middle and end? • Can they create music in response to <different starting points>? • Can they choose sounds which create an effect? • Can they use symbols to represent sounds? • Can they make connections between notations and musical sounds? 	<ul style="list-style-type: none"> • Can they improve their own work? • Can they listen out for particular things when listening to music?

Year 2 (Challenging)

<ul style="list-style-type: none"> • Can they sing/play rhythmic patterns in contrasting tempo; keeping to the pulse? 	<ul style="list-style-type: none"> • Can they use simple structures in a piece of music? • Do they know that phrases are where we breathe in a song? 	<ul style="list-style-type: none"> • Do they recognise sounds that move by steps and by leaps?
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Weaving Dance Knowledge, Skills and Understanding into the new National Curriculum

**Key Stage 1:
Dance**



National Curriculum Requirements of Dance at Key Stage 1

Pupils should be taught to:

- perform dances using simple movement patterns

Knowledge, Skills and Understanding breakdown for Dance

Year 2

- Can they perform body actions with control and co-ordination?
- Can they choose movements with different dynamic qualities to make a dance phrase that expresses an idea, mood or feeling?
- Can they link actions?
- Can they remember and repeat dance phrases?
- Can they perform short dances, showing an understanding of expressive qualities?
- Can they describe the mood, feelings and expressive qualities of dance?
- Can they describe how dancing affects their body?
- Do they know why it is important to be active?
- Can they suggest ways they could improve their work?

Year 2 (Challenging)

- Can they create, improve and perform more complex dance phrases?
- Do they perform short dances, linking actions fluently and with control?
- Can they use dynamic and expressive qualities clearly in their dance?
- Can they use some simple dance vocabulary to describe and interpret dance?
- Do they know how particular activities can help them to be healthy?

Weaving PE Knowledge, Skills and Understanding into the new National Curriculum

**Key Stage 1:
PE**



National Curriculum Requirements of PE at Key Stage 1

Pupils should develop fundamental movement skills, become increasingly competent and confident and access a broad range of opportunities to extend their agility, balance and co-ordination, individually and with others. They should be able to engage in competitive (both against self and against others) and co-operative physical activities, in a range of increasingly challenging situations.

Pupils should be taught to:

- master basic movements, including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activities
- participate in team games, developing simple tactics for attacking and defending
- perform dances using simple movement patterns

Knowledge, Skills and Understanding breakdown for Physical Education

Year 2

Acquiring and developing skills	Evaluating and improving	Health and fitness
<ul style="list-style-type: none"> • Can they copy and remember actions? • Can they repeat and explore actions with control and coordination? 	<ul style="list-style-type: none"> • Can they talk about what is different between what they did and what someone else did? • Can they say how they could improve? 	<ul style="list-style-type: none"> • Can they show how to exercise safely? • Can they describe how their body feels during different activities? • Can they explain what their body needs to keep healthy?
Dance (also covered in Dance section)	Games	Gymnastics
<ul style="list-style-type: none"> • Can they dance imaginatively? • Can they change rhythm, speed, level and direction? • Can they dance with control and co-ordination? • Can they make a sequence by linking sections together? • Can they link some movements to show a mood or feeling? 	<ul style="list-style-type: none"> • Can they use hitting, kicking and/or rolling in a game? • Can they stay in a 'zone' during a game? • Can they decide where the best place to be is during a game? • Can they use one tactic in a game? • Can they follow rules? 	<ul style="list-style-type: none"> • Can they plan and show a sequence of movements? • Can they use contrast in their sequences? • Are their movements controlled? • Can they think of more than one way to create a sequence which follows a set of 'rules'? • Can they work on their own and with a partner to create a sequence?