Walton on the Hill Primary

Assessment Materials – Progression Documents for Science and All Foundation Subjects

Walton on the Hill Primary Progression Documents

Overview of the Materials

These assessment materials are directly linked to the expectations of National Curriculum 2014 and will enable class teachers and senior leaders to track the progress and attainment of children against 'Key Learning Indicators of Performance' (KLIPs) in 'Scientific Knowledge and Conceptual Understanding and Working Scientifically Skills' in Science and against 'End of Year Expectations' in the Foundation Subjects.

These materials have been written to inform planning and support high quality teaching and learning across the primary phase whilst at the same time providing a simple and time effective method of assessing the learning of children from Years 1 to 6 in Science and the Foundation Subjects.

Core Subjects

▶ Science: Scientific Knowledge and Conceptual Understanding and Working Scientifically Skills

Foundation Subjects - End of Year Expectations

▶ Art and Design
▶ Computing
▶ Design and Technology
▶ Geography
▶ History
▶ Languages (KS2)
▶ Music
▶ Physical Education

Walton on the Hill – Progression Document - Science

Guidance for Using Scientific Knowledge and Conceptual Understanding and Working Scientifically Disciplinary Knowledge

The scientific knowledge and conceptual understanding for each year group show the National Curriculum 2014 statutory requirements for each unit. These can be used to support the assessment of knowledge and concepts across the primary phase.

The disciplinary knowledge for each year group are presented in two grids. In each grid, the titles of each column (the white text in the orange boxes) are the statutory requirements for the end of KS1, end of lower KS2 or the end of upper KS2.

The grids show the range of 'working scientifically' skills as follows:

- **Grid 1**

  - Exploring / Observing
  - Grouping and Classifying
  - Questioning
  - Research
  - Modelling
  - Collaborating
  -

- **Grid 2**

  - Planning and Testing
  - Using Equipment and Measures
  - Communicating
  - Conclusions / Considering the evidence:
  - Describing Results
  - Explaining Results
  - Trusting Results

The disciplinary knowledge grids will assist teachers with their understanding of what the skills might look like in different year groups and thus support them in making their teacher assessment judgements against the statutory statements from the National Curriculum 2014.

The National Curriculum Programmes of Study for each year group and advice for good science teaching have been used to support teachers with what 'working scientifically' looks like for the different types of skill in each year group. These have been made into knowledge ladders so teachers can see how the learning for each year group fits within the larger picture of progression.

The knowledge ladders can be used to help teachers make a judgement during the year as to whether they are **on track** to achieve the end of year expectation and at the end of the year as to whether children have achieved the expectations for that year group.

A child may not achieve every single bullet point of learning - teachers should make a judgement on a child's strengths and weaknesses in relation to development of disciplinary knowledge. Greater emphasis should be placed on the statements that have been underlined. Key vocabulary for 'working scientifically' has been highlighted in bold text in each year to support its progression and use throughout the primary phase.

The detail in the grids can be used to help support planning but **it is the underlined statements and the titles for each column** which provide a summary against which teachers can make an end of term / end of year judgement. For example, when considering the skill of questioning for a child in Y4, a teacher can consider all the text highlighted in the Y4 part of the questioning column but their judgement regarding whether the child is working at year group expectation is ultimately based on the statutory title 'LKS2 - can ask a relevant question' rather than how many of the bullet points are 'ticked off'.

It is not expected that every single bullet point in the 'working scientifically skills' grids is achieved but rather that these are used to support skill progression and assist in making a judgement against the statutory column titles.

It is important to note that a child can be on track to meet end of year expectations but can have a particular strength or need extra support with an aspect or skill. If this is a significant strength (or a significant weakness) across the majority of the skills then they could be assessed at working above (or below) year group expectation.

Below are some of the areas where a child might show particular strengths or where they might need more support in their learning.
▶ **Numeracy Skills within Science:** Data, measures, scales, tables, graphs, noticing patterns.
▶ **Literacy Skills within Science:** Using scientific vocabulary and common language effectively in sentences (verbally and written), recording their learning, background knowledge from their reading experience.
▶ **Thinking and Behaving like a Scientist:** Questioning, ideas and suggestions, planning investigations effectively, making decisions about what to do, carrying out practical science activities, linking the big ideas.

Remember, when making a judgement regarding skills, the titles in each column of the skills grids are for end of Y2, Y4 and Y6. For children in Y1, Y3 and Y5 teachers are using these to judge if they are **on track** to meet these expectations. They might not be there yet as they have another year to continue to develop them. The detailed content in each year group supports the year group expectation and provides evidence of strengths and areas requiring additional support for the next teacher within the age phase.

There is no specific number of times a child needs to demonstrate a particular skill. Teachers should use their professional judgement and consider whether a child can demonstrate and apply the skills specified for their year group both **consistently** and **independently** and **in different contexts**.

For mixed age classes, the scientific knowledge and conceptual understanding for a unit becomes the knowledge expectation for the whole class. For example, a mixed Y3 / 4 class might be learning about plants from the Y3 National Curriculum Programme of Study. The knowledge from this becomes the year group expectation for both the Y3 children **and** the Y4 children. The 'working scientifically' grids can then be used to ensure differentiation between the two age phases so teachers can ensure the skills are appropriate to the two different year groups being taught.

Science
Scientific Knowledge and Conceptual Understanding: Year 1 Expectations

Please Note: Much of the learning in Year 1 can be done throughout the year using the school and the local environment. For example plants can be observed to make a linked to seasonal change and weather at various different times. Materials could be linked to a different creative theme throughout the year. Key learning can also be covered as a blocked science unit in its own right to introduce or consolidate learning at other times.

Plants: Common Names and Basic Structure	Animals - Humans	Animals - Other Animals
▪ Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. ▪ Identify and describe the basic structure of a variety of common flowering plants, including trees (at least: flower, leaf, root, stem, trunk, seed, branch and petal).	▪ Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. ▫ Recognise that humans are animals. ▫ Compare and describe differences in their own features (eye, hair, skin colour, etc.). ▫ Recognise that humans have many similarities.	▪ Identify and name a variety of common animals including some fish, some amphibians, some reptiles, some birds and some mammals. ▪ Identify and name a variety of common animals that are carnivores, herbivores and omnivores (i.e. according to what they eat). ▪ Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, and including pets). ▫ Find out and describe how animals look different to one another. ▫ Group together animals according to their different features. ▫ Recognise similarities between animals: Structure: head, body, way of moving, senses, body covering, tail. ▫ Animals have senses to explore the world around them and to help them to survive. ▫ Recognise that animals need to be treated with care and sensitivity to keep them alive and healthy. ▫ Animals are alive; they move, feed, grow, use their senses and reproduce.

Material Properties – Everyday Materials		Light and Astronomy – Seasonal Change
▪ Distinguish between an object and the material from which it is made. ▪ Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, rock, brick, paper and cardboard. ▪ Describe the simple physical properties of a variety of everyday materials. ▪ Compare and group together a variety of everyday materials on the basis of their simple physical properties.		▪ Observe and describe changes across the four seasons. ▪ Observe and describe weather associated with the seasons and how day length and temperature varies.

Science
Scientific Knowledge and Conceptual Understanding: Year 2 Expectations

Please Note: There should be plenty of opportunities throughout the year for children to use the school/local environment to observe plant growth, changes in habitats across the seasons and life cycles of a variety of different animals (for example: chicks/other birds, tadpoles/frogs, caterpillars/butterflies, other mini-beasts, other young animals during trips to farms/zoos). This could be done through an ongoing/monthly nature journal to observe, record and review over a period of time. The unit of work on 'Animal survival and growth' can be covered in the same half term as work on 'Habitats' in order to link the concept of survival.

Environment - Living things and their habitats	Animals - Animal survival and growth	Health – How we grow and stay healthy
- Explore and compare the differences between things that are living, dead, and things that have never been alive. - Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. - Identify and name a variety of plants and animals in their habitats, including micro-habitats. - 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. - Different kinds of plants and animals live in different kinds of places. - There are different kinds of habitat near school which need to be cared for - Habitats provide the preferred conditions for the animals/plants that live there (compare local habitats and less familiar examples). - Observe living things in their habitats during different seasonal changes.	- Notice that animals have offspring which grow into adults. - Find out about and describe the basic needs of animals for survival (water, food and air).	- Notice that humans have offspring which grow into adults. - Find out about and describe the basic needs of humans, for survival (water, food and air). - Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene. - Medicines can be useful when we are ill. - Medicines can be harmful if not used properly.

Plants – Plant growth	Material Properties – Uses of Materials
- Observe and describe how seeds and bulbs grow into mature plants. - Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy (and how changing these affects the plant). - Plants are living and eventually die.	- Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, water, rock, paper and cardboard for particular uses. - Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching (applying a force). - Some materials can be found naturally; others have to be made.

Science
Scientific Knowledge and Conceptual Understanding: Year 3 Expectations

Please Note: There should be plenty of opportunities throughout the year for children to use the school/local environment to observe plant lifecycles with a particular focus on the different parts of a plant (e.g. comparing fruits and seeds and looking for examples of pollination). This could be done through an ongoing/monthly nature journal to observe, record and review over a period of time.

Plants – Functions of Parts of a Plant	Animals - Health/Nutrition	Animals - Skeletons and Movement
- Identify, locate and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. - 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. - Investigate the way in which water is transported within plants. - Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. - Roots grow downwards and anchor the plant. - Water, taken in by the roots, goes up the stem to the leaves, flowers and fruit. - Nutrients (not food) are taken in through the roots. - Stems provide support and enable the plant to grow towards the light. - Plants make their own food in the leaves using energy from the sun. - Flowers attract insects to aid pollination. - Pollination is when pollen is transferred between plants by insects, birds, other animals and the wind. - Seeds are formed after the flowers are pollinated. - Many flowers produce fruits which protect the seed and/or aid seed dispersal. - Seed dispersal, by a variety of methods, helps ensure that new plants survive. - Plants need nutrients to grow healthily (either naturally from the soil or from fertiliser added to soil).	- Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat. - An adequate and varied diet is beneficial to health (along with a good supply of air and clean water). - Regular and varied exercise *from a variety of different activities* is beneficial to health (focus on *energy in versus energy out*. Include information on making informed choices).	- Identify that humans and some other animals have skeletons and muscles for support, protection and movement. - Identify animals (vertebrates) which have a skeleton which supports their body, aids movement & protects vital organs (e.g. name and locate skull, backbone, ribs, bones for movement/limbs, pelvis and be able to name some of the vital organs protected). - Identify animals without internal skeletons/backbones (invertebrates) and describe how they have adapted other ways to support themselves, move & protect their vital organs. - Know how the skeletons of birds, mammals, fish, amphibians or reptiles are similar (backbone, ribs, skull, bones used for movement) and the differences in their skeletons. - Know that muscles, which are attached to the skeleton, help animals move parts of their body. - Explore how humans grow bigger as they reach maturity by making comparisons linked to body proportions and skeleton growth – e.g. do people with longer legs have longer arm spans? - Recognise that animals are alive; they move, feed, grow, use their senses and reproduce.

Material Properties - Rocks	Light and Astronomy - Light, reflections and shadows	Forces and Magnets
- Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. - Describe in simple terms how fossils are formed when things that have lived are trapped within rock. - Recognise that soils are made from rocks and organic matter - Recognise that rocks and soils can feel and look different. - Recognise that rocks and soils can be different in different places/environments.	- Recognise that they need light in order to see things and that dark is the absence of light. - Notice that light is reflected from surfaces. - Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. - Recognise that shadows are formed when the light from a light source is blocked by a solid object. - Find patterns in the way that the size of shadows can change.	- Compare how some things move on different surfaces. - Notice that some forces need contact between two objects but magnetic forces can act at a distance. - Observe how magnets attract or repel each other and attract some materials and not others. - 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. - Describe magnets as having two poles (like and unlike poles). - Predict whether two magnets will attract or repel each other, depending on which poles are facing.

Science
Scientific Knowledge and Conceptual Understanding: Year 4 Expectations

Please Note: There should be plenty of opportunities throughout the year for children to use the school/local environment to observe and identify how a habitat changes. This could include a focus on the relationships between the plants and animals within a habitat. This could be done through an ongoing/monthly nature journal to observe, record and review over a period of time.

Environment – Living Things and Their Habitats	Animals – Teeth, Eating and Digestion
- Recognise that living things can be grouped in a variety of ways. - Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. - Recognise that environments can change and that this can sometimes pose dangers to living things. - Use and make identification keys for plants and animals.	- Describe the simple functions of the basic parts of the digestive system in humans. - Identify the different types of teeth in humans and their simple functions. - Construct and interpret a variety of food chains, identifying producers, predators and prey *(NB Link with types of teeth and eating in this unit but this concept could be developed further in the yr4 Environment / habitats unit)*. - Describe how teeth and gums have to be cared for in order to keep them healthy.

Material Properties and Changes – States of Matter	Sound	Electricity
- Compare and group materials together, according to whether they are solids, liquids or gases. - 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). - Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. - Solids, liquids and gases can be identified by their observable properties. - Solids have a fixed size and shape (the size and shape can be changed but it remains the same after the action). - Liquids can pour and take the shape of the container in which they are put. - Liquids form a pool not a pile. - Solids in the form of powders can pour as if they were liquids but make a pile not a pool. - Gases fill the container in which they are put. - Gases escape from an unsealed container. - Gases can be made smaller by squeezing/pressure. - Liquids and gases can flow.	**Vibrations** - Identify how sounds are made, associating some of them with something vibrating. - Recognise that vibrations from sounds travel through a medium to the ear. - Find patterns between the volume of a sound and the strength of the vibrations that produced it. - Recognise that sounds get fainter as the distance from the sound source increases. - Recognise that sounds can be made in a variety of ways (pluck, bang, shake, blow) using a variety of things (instruments, everyday materials, body). - Sounds travel away from their source in all directions. - Vibrations may not always be visible to the naked eye. **Pitch** - Find patterns between the pitch of a sound and features of the object that produced it. - Sounds can be high or low pitched. - The pitch of a sound can be altered. - Pitch can be altered either by changing the material, tension, thickness or length of vibrating objects or changing the length of a vibrating air column. **Muffling/blocking sounds** - Recognise that vibrations from sounds travel through a medium to the ear. - Sounds are heard when they enter our ears (although the structure of the ear is not important key learning at this age phase). - Sounds can travel through solids, liquids and air/gas by making the materials vibrate. - Sound travel can be reduced by changing the material that the vibrations travel through. - Sound travel can be blocked.	- Identify common appliances that run on electricity. - Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. - Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. - Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. - Recognise some common conductors and insulators, and associate metals with being good conductors. - Electricity can be dangerous. - Electricity sources can be mains or battery. - Batteries 'push' electricity round a circuit and can make bulbs, buzzers and motors work. - Faults in circuits can be found by methodically testing connections. - Drawings, photographs and diagrams can be used to represent circuits (although standard symbols need not be introduced until UKS2).

Science

Scientific Knowledge and Conceptual Understanding: Year 5 Expectations

Please Note: There should be plenty of opportunities throughout the year for children to use the school/local environment to observe and identify a variety of plant and animal life cycles. This could be done through an ongoing/monthly nature journal to observe, record and review a variety of examples over a period of time. The unit on 'Human life cycles' can be linked to PSHEE work on 'Relationships' and the Year 5 Science unit 'Habitats and life cycles' rather than being taught as a separate unit.

Environment - Observing Life cycles

- Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- Describe the life process of reproduction in some plants and animals.
  - Name, locate and describe the functions of the main parts of reproductive system of plants (stigma, stamen, petal, sepal, pollen, ovary).

Material Properties – Testing Material Properties

- 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.
- Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic (advantages and disadvantages).
  - Compare a variety of materials and measure their effectiveness (e.g. hardness, strength, flexibility, solubility, transparency, thermal conductivity, electrical conductivity).

Temperature and Thermal Insulation

- Heat always moves from hot to cold.
- Some materials (insulators) are better at slowing down the movement of heat than others.
- Objects/liquids will warm up or cool down until they reach the temperature of their surroundings.

Material Changes - Reversible changes

- Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.
- Demonstrate that dissolving, mixing and changes of state are reversible changes.
  - Changes can occur when different materials are mixed.
  - Some material changes can be reversed and some cannot.
  - Recognise that dissolving is a reversible change and recognise everyday situations where dissolving occurs.
  - Distinguish between melting and dissolving.
  - Mixtures of solids (of different particle size) can be separated by sieving.
  - Mixtures of solids and liquids can be separated by filtering if the solid is insoluble (un-dissolved).
  - Evaporation helps us separate soluble materials from water.
  - Changes to materials can happen at different rates (factors affecting dissolving, factors affecting evaporation – amount of liquid, temperature, wind speed, etc).
  - Freezing, melting and boiling changes can be reversed (revision from YR4).

Material Changes – Irreversible changes

- 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 (producing a gas / fizzing).

Animals - Human Life Cycles

- Describe the changes as humans develop to old age.
  - Animals are alive; they move, feed, grow, use their senses, reproduce, breathe/respire and excrete.

Light and Astronomy – Earth and Space

- Describe the movement of the Earth, and other planets, relative to the Sun and each other in the solar system.
- Describe the movement of the Moon relative to the Earth.
- Describe Sun/Earth/Moon as approximately spherical bodies.
- Use the idea of the Earth's rotation to explain day and night.
  - The Earth spins once around its own axis in 24 hours, giving day and night.
  - The Earth orbits the Sun in one year.
  - We can see the Moon because the Sun's light reflects off it.
  - The Moon orbits the Earth in approximately 28 days and changes to the appearance of the moon are evidence of this.
  - Use the Earth's movement in space to explain the apparent movement of the sun across the sky.
  - The Sun appears to move across the sky from East to West and this causes shadows to change during the day.
  - Changes to shadow length over a day or changes to sunrise and sunset times over a year are evidence supporting the movement of the Earth.

Forces – Effects on Movement

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object.
- Identify the effects of air resistance, water resistance and friction that act between moving surfaces (causing things to slow down)
- Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.
  - There are different types of forces (push, pull, friction, air resistance, water resistance, magnetic forces, gravity) which have different effects on objects
  - Gravity can act without direct contact between the Earth and an object.
  - Friction, air resistance and water resistance can be useful or unwanted.
  - The effects of friction, air resistance and water resistance can be reduced or increased for a preferred effect.
  - More than one force can act on an object simultaneously (either reinforcing or opposing each other).

Science
Scientific Knowledge and Conceptual Understanding: Year 6 Expectations

Please Note: There should be plenty of opportunities throughout the year for children to use the school/local environment to observe and identify a variety of plants and animals that live there focusing on their adaptations for survival. This could be done through an ongoing/monthly nature journal to observe, record and review a variety of examples over a period of time and would support their learning and wider research in the 'Living Things and Their Habitats' unit and the 'Evolution and Inheritance' unit.

Living Things and their Habitats - Classification	Living Things and their Habitats – Evolution and Inheritance	Animals/Health – Exercise, Health and The Circulatory System

▪ <u>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.</u>
▪ Give reasons for classifying plants and animals based on specific characteristics.
  ▫ Living things can be grouped into micro-organisms, plants and animals.
  ▫ Vertebrates can be grouped as fish, amphibians, reptiles, birds and mammals.
  ▫ Invertebrates can be grouped as snails and slugs, worms, spiders and insects.
  ▫ Plants can be grouped as flowering plants (incl. trees and grasses) and non-flowering plants (such as ferns and mosses).
	▪ <u>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</u>
	▪ <u>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</u>
	▪ <u>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</u>
		▪ <u>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</u>
		▪ <u>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function (in the long term and short term).</u>
		▪ <u>Describe the ways in which nutrients and water are transported within animals, including humans</u>.
		  ▫ The heart is a major organ and is made of muscle.
		  ▫ The heart pumps blood around the body through vessels and this can be felt as a pulse.
		  ▫ The heart pumps blood through the lungs in order to obtain a supply of oxygen.
		  ▫ Blood carries oxygen/essential materials to different parts of the body.
		  ▫ During exercise muscles need more oxygen so the heart beats faster and our breathing and pulse rates increase.
		  ▫ Animals are alive; they move, feed, grow, use their senses, reproduce, breathe/respire and excrete.
		  ▫ An adequate, varied and balanced diet is needed to help us grow and repair our bodies (proteins), provide us with energy (fats and carbohydrates) and maintain good health (vitamins and minerals).
		  ▫ Tobacco, alcohol and other 'drugs' can be harmful.
		  ▫ All medicines are drugs, not all drugs are medicines.

Light and Astronomy – How Light Travels	Electricity
▪ <u>Recognise that light appears to travel in straight lines.</u> ▪ <u>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.</u> ▪ <u>Explain that we see things because the light that travels from light sources to our eyes or from light sources to objects and then to our eyes (and represent this in simple diagrammatic form).</u> ▪ <u>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</u>	▪ <u>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</u> ▪ <u>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.</u> ▪ <u>Use recognised symbols (at least: cells, wires, switches, bulbs, buzzers and motors) when representing a simple circuit in a diagram.</u> ▫ Use/<u>interpret circuit diagrams</u> to construct a variety of more complex circuits predicting whether they will 'work'.

Science

Year Group Expectations for Working Scientifically - Disciplinary Knowledge (Grid 1)

Year 6	• Use correct scientific knowledge and understanding and relevant scientific language to discuss their observations and explorations (linked to Y6 PoS). • Identify changes that have occurred over a very long period of time (evolution) and discuss how changes have impacted the world. • Explore more abstract systems / functions / changes / behaviours and record their understanding of these *(e.g. the relationship between diet, exercise, drugs, lifestyle and health; evolutionary changes; how light travels).*	• Recognise the importance of classification to the scientific world and form a conclusion from their sorting and classifying. • Compare and contrast more complex processes, systems, functions (e.g. sexual and asexual reproduction). • Construct a classification key / branching database using more than two items. • Compare and contrast things beyond their locality and discuss advantages / disadvantages, pros / cons of the similarities and differences. • Use *research** to identify and classify things. • Use classification systems, keys and other information records [databases] to help classify or identify things.	• Recognise scientific questions that do not yet have definitive answers (linked to Y6 PoS). • Refine a scientific question to make it testable i.e. ask a testable question which includes the change and measure variables, *e.g. what would happen to...if we changed...? e.g. What effect would we have on ... if we...? e.g. How would exercise affect the pulse rate?* • Use observations to suggest a further (testable or research) question. • Independently ask a variety of scientific questions and decide the type of enquiry needed to answer them.	• Research how scientific ideas have developed over time and had an impact on our lives. • Use evidence from a variety of sources to justify their ideas • Recognise which secondary sources will be most useful to research their ideas and begin to separate opinion from fact. • Interview people to find out information	• Make / perform and use their own versions of simple models to describe and explain scientific ideas *(e.g. circulatory system drama, periscopes to explain how light travels, burglar alarm to explain components in a circuit).*	• Propose their own ideas and make decisions with agreement in a group. • Support, listen to and acknowledge others in the group. • Check the clarity of each other's suggestions. • Build on / add to someone else's idea to improve a plan or suggestion. • Understand that it is okay to disagree with their peers and offer reasons for their opinion.
Year 5	• Use their developing scientific knowledge and understanding and relevant scientific language and terminology to discuss, communicate and explain their observations (incl. more abstract ideas from Y5 PoS (e.g. friction, air resistance, forces, Earth and space, reversible and irreversible changes). • Evaluate their observations and suggest a further test, offer another question or make a **prediction.** • Observe (including changes over time) and suggest a reason for what they notice.	• Suggest reasons for similarities and differences. • Compare and contrast things beyond their locality and use these similarities and differences to help to classify *(e.g. features of animals, life cycles of different living things, melting compared with dissolving, etc).* • Use secondary sources of information to identify and classify. • Decide which sources of information (and / or equipment and / or test) to help identify and classify.	• Recognise scientific questions that do not yet have definitive answers (linked to Y5 PoS). • Refine a scientific question so that it can be tested e.g. 'What would happen to... if we changed...?' • Decide whether their questions can be answered by researching or by testing. • Independently ask their own scientific questions taking some ownership for finding out the answers.	• Find out how scientific ideas have changed / developed over time (linked to Y5 PoS). • Articulate and explain findings from their research using scientific knowledge and understanding. • Make decisions about which information to use from a wide range of sources.	• Perform / create simple models to exemplify scientific ideas using scientific terminology where appropriate *(e.g. spheres to represent movements of the Sun and Earth, solar system models, shadow clocks, a simple lever or mechanism).*	• Propose their own ideas and make decisions with agreement in a group. • Support, listen to and acknowledge others in the group *e.g. Yes. I prefer that one too.* • Check the clarity of each other's suggestions *e.g. are you saying you think this one is a herbivore?* • Build on / add to someone else's idea to improve a plan or suggestion. • Understand that it is okay to disagree with their peers and offer a reasons for their opinion.
Year 4	• Suggest their own ideas on a concept and compare these with what they observe / find out. • Use observations to suggest what to do next. • Discuss ideas and develop descriptions from their observations using relevant scientific language and vocabulary (from Y4 PoS). • Observe and record relationships between structure and function or between different parts of a processes (linked to Y4 PoS). • Observe and record changes / stages over time (linked to Y4 PoS).	• Make a simple guide to local living things. • Use guides or simple keys to classify / identify [animals, flowering plants and non-flowering plants]. • Use their observations to identify and classify. • Begin to give reasons for these similarities and differences. • Record similarities as well as differences and / or changes related to simple scientific ideas or processes or more complex groups of objects / living things / events *(e.g. evaporation and condensation, different food chains, different electrical circuits).*	• Ask / raise their own relevant questions with increasing confidence and independence that can be explored, observed, tested or investigated further. • Ask questions such as 'What will happen if...?" or 'What if we changed...? (linked with Y4 PoS). • Choose / select a relevant question that can be answered [by research or experiment / test].	• Make decisions about which information to use from a wide range of sources and make decisions about how to present their research. • Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations.	• Make a visual representation or a model of something to represent something they have seen or a process that is difficult to see. • Suggest their own ideas on a concept and compare these with models or images.	• Make some decisions about an idea within a group *(e.g. I think we should find out by testing...)* • Increasingly support, listen to and acknowledge others in the group. • Build on / add to someone else's idea to improve a plan. • Understand that it is okay to disagree with their peers and offer reasons for their opinion.
	EXPLORING / OBSERVING *UKS2 - Developing a deeper understanding of a wide range of scientific ideas and encountering more abstract ideas.* *LKS2 - Developing their own ideas and their understanding of the world around them.*	**GROUPING AND CLASSIFYING** *UKS2 - Compare and contrast a variety of examples linked to UKS2 PoS.* *LKS2 - Compare and contrast a variety of examples linked to LKS2 PoS.*	**QUESTIONING** *UKS2 - Asking their own questions about scientific phenomena.* *LKS2 - Asking relevant questions.*	**RESEARCH** *UKS2 – Summarise research from a wide variety of sources and recognising that scientific ideas change and develop over time.* *LKS2 - Finding things out using a wide range of secondary sources of information.*	**MODELLING** *Non Statutory* *Using dance, drama and a visual aid to represent science in the real world.*	**COLLABORATING** *Non Statutory* *Interacting effectively as part of a group.*

Science

Year Group Expectations for Working Scientifically Skills (Grid 1)

Year3	▪ Observe and record relationships between structure and function (linked to Y3 PoS). ▪ Observe and record changes /stages over time (linked to Y3 PoS). ▪ Explore / observe things in the local environment / real contexts and record observations (linked to Y3 PoS) – see 'Communicating' section also re links to vocabulary.	▪ Decide ways and give reasons for sorting, grouping, classifying, identifying things / objects, living things, processes or events based on specific characteristics. ▪ Compare and contrast and begin to consider the relationships between different things *(e.g. structures of plants, functions of plant parts, diets, skeletons of humans and other animals, changes over time, etc.).* ▪ Record similarities as well as differences *(e.g. what do all skeletons have? as well as the differences between skeletons).*	▪ Explore their own ideas about 'what if….?' scenarios e.g. humans did not have skeletons. ▪ Ask questions such as 'What if we tried….? or 'What if we changed...?' ▪ Begin to understand that some questions can be tested in the classroom and some cannot. ▪ Within a group suggest questions that can be explored, observed, tested or investigated further. ▪ Within a group suggest relevant questions about what they observe and about the world around them.	▪ Find things out using a range of secondary sources of information *(e.g. books, photographs, videos and other technology).*	▪ Act out or make a model of something to represent something in the real world using appropriate scientific vocabulary verbally.	▪ Begin to make some decisions about an idea within a group from a list of choices *(e.g. let's put them all in a pile first OR I think we should try...).* ▪ With help; support, listen to and acknowledge others in the group *(e.g. Yes. I prefer that one too).* ▪ Build on / add to someone else's idea. *(e.g. we could use x as well as y).* ▪ Begin to understand that it is okay to disagree with their peers and offer a reason for their opinion.
Year2	▪ Use simple scientific language from the Y2 PoS to talk about / record what they have noticed. ▪ Use observations to make suggestions and / or ask questions. ▪ **Observe** and describe simple processes / cycles / changes with several steps *(e.g. growth cycle, simple food chain, saying how living things depend on one another).* ▪ **Observe** closely and communicate with increasing accuracy the features or properties of things in the real world.	▪ **Name / identify** common examples, some common features or different uses. ▪ **Sort** and **group** objects, materials or living things by observable and/or behavioural features. ▪ **Compare** and contrast... a variety of things [objects, materials or living things] - focusing on the similarities as well as the differences.	▪ Raise their own logical questions based on or linked to things they have observed. ▪ With help / scaffolds, begin to ask questions such as 'What will happen if...?"	▪ Talk about how useful the information source was and express opinion about findings. ▪ Make suggestions about who to ask or where to look for information. ▪ Ask people questions to help them answer their questions. ▪ Use simple and appropriate secondary sources (such as books, photographs, videos and other technology) to find things out / find answers.	▪ Act out something to represent something else about the world around us *(e.g a life cycle).*	▪ Share ideas in a group and listen to the ideas of others. ▪ Work cooperatively with others on a science task making some choices.
Year1	▪ Begin to use simple scientific language (from Y1 PoS) to talk about or **record** what they have noticed. ▪ Use observations to make suggestions and / or ask questions. ▪ Look / **observe** closely and communicate changes over time. ▪ Look / **observe** closely and communicate the features or properties of things in the real world. ▪ **Observe** closely using their senses.	▪ **Name** / identify common examples and some common features. ▪ With help, decide how to sort and **group** objects, materials or living things. ▪ **Name** basic features of objects, materials and living things. ▪ Say how things are similar or different. ▪ **Compare** and contrast simple observable features / characteristics of objects, materials and living things.	▪ Ask simple questions about what they notice about the world around them. ▪ Demonstrate curiosity by the questions they ask.	▪ Ask people questions (e.g. an expert or hot-seating). ▪ Use simple primary and secondary sources (such as objects, books and photographs) to find things out.	▪ With help, follow movements (dance / drama) to act out their science.	▪ Share ideas in a group and listen to the ideas of others. ▪ Work with others on a science task.
	EXPLORING / OBSERVING *LKS2 - Developing their own ideas and their understanding of the world around them.* *KS1 - Observing closely Using their observations and ideas to suggest answers to questions.*	**GROUPING AND CLASSIFYING** *LKS2 - Compare and contrast a variety of examples linked to LKS2 PoS.* *KS1 - Compare and contrast a variety of examples linked to KS1 PoS.*	**QUESTIONING** *LKS2 - Asking relevant questions.* *KS1 - Asking simple questions.*	**RESEARCH** *LKS2 - Finding things out using a wide range of secondary sources of information.* *KS1 - Finding things out using secondary sources of information.*	**MODELLING** *Non Statutory* *Using dance, drama or a visual aid to represent science in the real world.*	**COLLABORATING** *Non Statutory* *Interacting effectively as part of a group.*

Science
Year Group Expectations for Working Scientifically Disciplinary Knowledge (Grid 2)

Year 6	- Predict what a graph might look like before collecting results. - Make a hypothesis where they say how one thing will affect another and give a reason for their suggestion with a developing understanding of the scientific concept. - Identify **variables** to change, measure and keep the same in order for a test to be **fair.** - Independently plan investigations and explain planning decisions. - Decide when it is appropriate to carry out a **fair test** investigation, comparative test or alternative.	- Decide whether to **repeat** any **readings** and justify the reason for doing so. - Make their own decisions about what measurements to take (and begin to identify the ranges used). - Make, and act on, suggestions to control / reduce risks to themselves and others. - Use equipment fit for purpose to take measurements which are increasingly **accurate** and precise. - Decide the most appropriate equipment to use to collect data.	- Articulate understanding of the concept using scientific language and terminology when describing abstract ideas, observations and findings (linked to the Y6 PoS). - Record data and results of increasing complexity using scientific diagrams and labels, recognised symbols, classification keys, tables, bar and line graphs, and models. - Make decisions about how to present and explain their findings through talk, in written forms or in other ways (e.g. using technology).	- Spot unexpected results that do not fit the pattern (anomalies). - Identify patterns in results collected and describe them using the **change and measure variables** (causal relationships) *(e.g. as we increased the number of batteries the brightness the bulb increased.*	- Identify **evidence** that refutes or **supports** their ideas. - Independently form a conclusion which draws on the **evidence** from the test (linked to Y6 PoS). - Use scientific language and terminology (linked to Y6 PoS) to explain why something happened.	- Be able to suggest reasons for unexpected results (anomalies). - Describe how to improve planning to produce more **reliable** results. - Say how confident they are that their results are **reliable** and give a reason.
Year 5	- Carry our **fair tests** and other investigations with increasing independence. - Suggest more than one possible prediction and begin to suggest which is the most likely. Justify their reason with some knowledge and understanding of the scientific concept. - Make decisions about which **variables** to change, measure and keep the same (linked to the appropriate units in the Y5 PoS). - Make most of the planning decisions for an investigation. - Recognise when it is appropriate to carry out a **fair test**.	- Make their own decisions about what observations to make or measurements to use and how long to take them for (recognising the need for repeat readings on some occasions). - Take measurements using a range of scientific equipment with increasing accuracy and using more complex scales / **units.** - Identify possible risks to themselves and others and suggest ways of reducing these. - Choose the most appropriate equipment and make **accurate** measurements.	- Use their developing scientific knowledge and understanding and relevant scientific language and terminology to communicate more abstract concepts (linked to Y5 PoS). - Present and explain their findings through talk, in written forms or in other ways (e.g. using technology) for a range of audiences / purposes. - Record data and results of increasing complexity using different formats e.g. tables, annotated scientific diagrams, classification keys, graphs and models. - Make decisions about the most appropriate way of recording data.	- Describe straightforward patterns in results linking cause and effect e.g. using er or the word 'more' *(e.g. the longer, thinner shapes move through the water more quickly OR the larger the wings, the longer it takes the spinner to fall).* - Look for / notice relationships between things and begin to describe these. - Comment on the results and whether they **support** the initial **prediction.**	- Use their scientific knowledge and understanding and appropriate scientific language and terminology (linked to Y5 PoS) to explain their findings and data and answer their initial question. - Draw a valid **conclusion** (explain *why* it happened) based on their data and observations (from Y5 PoS).	- Begin to recognise how repeated readings improve the **reliability** of results. - Compare results with others and comment on how **reliable** they are.
Year 4	- Carry out simple **fair tests** with increasing confidence investigating the effect of something on something else (linked to Y4 PoS). - Start to make their own decisions about the most appropriate type of science enquiry they might use to answer scientific questions *(is a fair test the best way to investigate their question?)* - Make a **prediction** based on the knowledge acquired from previous explorations / observations and apply it to a new situation. - Explain their planning decisions and choices. - Make some of the planning decisions about what to change and measure / observe. - Begin to recognise when a **fair test** is necessary.	- Begin to identify where patterns might be found and use this to begin to identify what data to collect. - Make more of the decisions about what observations to make, how long to make them for and the type of equipment that might be used. - Recognise obvious risks and how to keep themselves and others safe. - Learn how to use new equipment, such as data loggers and measure temperature in degrees Celsius (°C) using a thermometer. - Collect data from their own observations and measurements, using notes / simple tables / standard **units**. - Make **accurate** measurements using standard **units** [and more complex units and parts of units] using a range of equipment and scales.	- Record findings using relevant scientific language and vocabulary (from Y4 PoS), including discussions, oral and written explanations, notes, drawings (annotated), pictorial representations, labelled diagrams, tables and bar charts [where intervals and ranges agreed through discussion], displays or presentations. - Begin to select the most useful ways to collect, record, classify and present data from a range of choices. - Make decisions on how best to communicate their findings in ways that are appropriate for different audiences.	- Notice / find patterns in their observations and data. (Describe the effect of something on something else). *(e.g. as I lengthen the ruler I notice that the pitch gets lower).* - With some independence, analyse results / observations by writing a sentence that matches the **evidence** i.e. deciding the important aspect of the result and summarising in a **conclusion** *(e.g. metals tend to be good conductors of electricity).*	- Begin to develop their ideas about relationships and interactions between things and explain them. - Use relevant scientific language and vocabulary (from Y4 PoS) to begin to say / explain *why* something happened.	- Use results to suggest improvements, new questions and / or predictions for setting up further tests. - Compare their results with others and give reasons why results might be different.

PLANNING AND TESTING	**USING EQUIPMENT AND MEASURES**	**COMMUNICATING**	**CONSIDERING THE RESULTS OF AN INVESTIGATION / WRITING A CONCLUSION**		
UKS2 - Using different types of scientific enquiry making decisions about and explaining choices for testing. *LKS2 - Making decisions about and setting up simple practical enquiries, comparative tests and fair test.*	*UKS2 - Increasing complexity and increasing accuracy and precision* *Make their own decisions about the data to collect.* *LKS2 - Making accurate measurements and gathering data.*	*UKS2 / LKS2 / KS1* *Reporting findings, recording data, presenting findings.* *Read, spell and pronounce scientific vocabulary correctly linked to the relevant year group.*	**DESCRIBING RESULTS / LOOKING FOR PATTERNS** *UKS2 - Looking for patterns analysing functions, relationships and interactions more systematically.* *LKS2 - Describing their findings/ results.*	**EXPLAINING RESULTS** *UKS2 - Draw conclusions based on / supported by evidence.* *LKS2 - Reporting on findings saying why something happened.*	**TRUSTING RESULTS** *UKS2 - Comment on how reliable the data is.* *LKS2 - Suggest improvements for further tests.*

Science
Year Group Expectations for Working Scientifically Disciplinary Knowledge (Grid 2)

Year 3	▪ Help to decide about how to set up a simple **fair test** and begin to recognise when a test is not **fair**. ▪ Make a **prediction** based on everyday experience. ▪ With support / as a group, set up simple practical enquiries including comparative and **fair tests** e.g. make a choice from a list of a things (variables) to change when conducting a **fair test**. (e.g. choose which magnets to compare and which method to use to test their strength). ▪ As a group, begin to make some decisions about the best way of answering their questions. ▪ Find / suggest a practical way to compare things e.g. rocks, magnets.	▪ Collect data from their own observations and measurements using notes / simple tables / standard units. ▪ Help to make some decisions about what observations to make, how long to make them for, the type of simple equipment that might be used and how to work safely. ▪ Make simple **accurate** measurements using whole number standard **units**, using a range of equipment. ▪ Gather data in a variety of ways to help in answering questions. ▪ Use equipment **accurate**ly to improve the detail of their measurements / observations (e.g. microscopes, measuring syringes, measuring cylinders, hand lenses).	▪ Record and present findings using simple scientific language and vocabulary from the Y3 PoS, including discussions, oral and written explanations, notes, annotated drawings, pictorial representations, labelled diagrams, simple tables, bar charts (using scales chosen for them), displays or presentations. ▪ With scaffold / support record, and present data in a variety of ways to help in answering questions. ▪ Communicate their findings in ways that are appropriate for different audiences. (linked to Y3 PoS).	▪ With scaffold / support, describe and compare the effect of different factors on something (e.g. we noticed that larger magnets are not always stronger). ▪ With help, look for changes and simple patterns in their observations, data, chart or graph. ▪ Use their results to consider whether they met their **predictions**.	▪ Use their experience and some **evidence** or results to draw a simple **conclusion** to answer their original question. ▪ Write a simple explanation of why things happened (using the word 'because') and using simple scientific language and vocabulary from the Y3 PoS.	▪ Say whether what happened was what they expected and notice any results that seem odd. ▪ Begin to recognise when a test is not **fair** and suggest improvements.
Year 2	▪ Carry out simple comparative tests as part of a group, following a **method** with some independence. ▪ Make a simple prediction about what might happen and try to give a vague reason (even though it might not be correct). ▪ With support, make suggestions on a **method** for setting up a simple comparative test. ▪ Talk about a practical way to find answers to their questions.	▪ **Measure** using non-standard and simple standard measures (e.g. cm, time) with increasing accuracy. ▪ Begin to make decisions about which equipment to use. ▪ Correctly and safely use **equipment** provided to make observations and/or take simple measurements.	▪ **Record** and communicate their findings in a range of ways to a variety of audiences. ▪ Use simple scientific language with increasing accuracy (from Y2 PoS). ▪ **Record** simple data with some accuracy to help in answering questions: – With support or using frameworks, make decisions about how to complete a variety of tables/charts (e.g. a 2 column table, tally charts, Venn diagram, pictograms, block graphs with 1:1 scale). – Present findings in a class displays. – Sequence / annotate photographs of change over time. ▪ Produced increasingly detailed drawings which are labelled / annotated.	▪ With guidance, begin to notice **patterns** in their data e.g. order their findings, sequence best to worst, say what happened over time, etc. ▪ Recognise if **results** matched **predictions** (say if results were what they expected). ▪ Use their recordings to talk about and describe what has happened.	▪ Begin to use simple scientific language (from Y2 PoS) to explain what they have found out. ▪ Give a simple, logical reason why something happened (e.g. I think ... because...).	▪ Begin to discuss if the test was un**fair**.
Year 1	▪ With help, **carry out** a simple test / comparative test. ▪ With help, make a simple prediction or suggestion about what might happen. ▪ Begin to suggest some ideas e.g. choose which equipment to use, choose which materials to test from a selection. ▪ **Talk** about ways of setting up a test.	▪ **Measure** using non-standard units e.g. how many lolly sticks / cubes / handfuls, etc. ▪ Observe closely, using simple **equipment** (e.g. hand lenses, egg timers). ▪ Use senses to **compare** different textures, sounds and smells.	▪ Communicate their ideas to a range of audiences in a variety of ways. ▪ Complete a pre-constructed table / chart using picture records or simple words. ▪ Contribute to a class display. ▪ Add annotations to drawings or photographs. ▪ Begin to use some simple scientific language from Y1 PoS. ▪ **Record** simple visual representations of observations made.	▪ Use recordings to talk about and describe what happened. ▪ Sequence photographs of an event / observation.	▪ Begin to use simple scientific language (from Y1 PoS) to talk about what they have found out or why something happened.	▪ N/A in Y1.
	PLANNING AND TESTING *LKS2 - Making decisions about and setting up simple practical enquiries, comparative tests and fair tests.* *KS1 - Performing simple tests.*	**USING EQUIPMENT AND MEASURES** *LKS2 - Making accurate measurements and gathering data.* *KS1 - Using simple equipment and gathering data to help in answering their questions.*	**COMMUNICATING** *UKS2 / LKS2 / KS1* *Reporting findings, recording data, presenting findings.* *Read, spell and pronounce scientific vocabulary correctly linked to the relevant Year Group.*	**CONSIDERING THE RESULTS OF AN INVESTIGATION / WRITING A CONCLUSION**		
				DESCRIBING RESULTS / LOOKING FOR PATTERNS *LKS2 - Describing their findings / results.* *KS1 - Talk about what happened / what they noticed.*	**EXPLAINING RESULTS** *LKS2 - Reporting on findings saying why something happened.* *KS1 - Talk about what they found out.*	**TRUSTING RESULTS** *LKS2 - Suggest improvements for further tests.* *KS1 – Beginning to spot when a method is not fair.*

WOTH National Curriculum Assessment Materials
Guidance for Using End of Year Expectations in the Foundation Subjects

The 'end of year expectations' for each subject have been written as statements for each year group and are presented in a grid. This will enable teachers to reflect on the expectations for a specific year group, whilst being aware of the expectations for the year groups below and above.

The titles at the bottom of the grids have been taken from the National Curriculum 2014 requirements for KS1 and KS2. Communication has been included in some subject grids as the National Curriculum states '*Teachers should develop pupils' spoken language, reading, writing and vocabulary as integral aspects of the teaching of every subject*'. *(NC2014 p10)*

Teachers can use these statements to assess progress and to make an accurate judgement on a child's attainment at the end of each year. Using the end of year expectation statements to make an overall judgement about a child's achievement in each of the foundation subjects will support class teachers, subject leaders and leadership to track a child's progress through a key stage in relation to the programmes of study requirements set out in National Curriculum 2014.

When making a judgement as to whether a child has achieved the year group statements in each of the foundation subjects, teachers should build their knowledge of what a child can do over the course of the year, and then consider whether a child can apply and understand the skills and processes, knowledge, understanding specified in the relevant programme of study, consistently and independently in different contexts.

The statements within each year group are not hierarchical, and should not be used as a checklist. Evidence from a range of contexts (observations, pupil work, discussion, collaboration, planning, etc.) should be used to formulate a 'best fit' judgement as to whether a child has achieved the year group expectations outlined across the columns in the grid.

The end of year group expectations are cumulative – what is learnt in one year group should continue to be used in the next.

The assessment grids should be used in conjunction with the programmes of study specified in the National Curriculum 2014 for each foundation subject and identified within a school's own curriculum. Teachers need to reflect on the key learning for each foundation subject as outlined in the curriculum to ensure effective teaching and assessment is in place across the primary phase.

Art and Design
End of Year Expectations

Year 6	▶ Independently investigate a range of starting points for their work, and confidently develop their ideas further. ▶ Record their thoughts and experiences in a sketch book / 'ideas journal', and review and revisit these ideas as their work develops. ▶ Are confident to work creatively, adapting ideas, and taking risks when choosing tools, materials and media. ▶ Confidently use language appropriate to the chosen art form, to help them to explain their ideas.	▶ Critically analyse the styles of a range of artists, craft makers or designers and use this to inform their own work. ▶ Explain how a chosen artist or art form has contributed to the culture and /or history of a specific nation.	▶ Use their knowledge of drawing, painting, sculpture and other art, craft and design techniques, imaginatively to create their own style, e.g. use spray paint on canvas. ▶ Develop their own style when working with a wide range of tools and materials, e.g. working into prints using their own choice of media such as pens, ballpoint pens, paints.	▶ Use language specific to a range of techniques to identify effective and ineffective features and use this to inform and evaluate their own work. ▶ Use sketch book / 'ideas journal' to adapt and critically evaluate their work as their ideas develop. ▶ Annotations reflect their critical evaluations and development of ideas. ▶ Reflect on the ways in which their imaginative work has developed from a range of starting points.
Year 5	▶ Investigate a range of starting points for their work, and choose which idea to develop further. ▶ Record their thoughts and experiences in a sketch book / 'ideas journal', and annotate these in order to aid the development of their ideas. ▶ Explain how they are developing their ideas as they work, and use language appropriate to the chosen art form. ▶ Use creative thinking to adapt an initial idea, e.g. experiment with alternative colour palette.	▶ Critically analyse the styles of artists, craft makers or designers and use this to inform their own work. ▶ Understand how a chosen artist or art form has contributed to the culture and / or history of a specific nation.	▶ Use their knowledge of drawing, painting, sculpture and other art, craft and design techniques to work creatively e.g. adapting the style of an artist to create their own effect. ▶ Are confident when working with a wide range of tools and materials to create different effects, e.g. use a graphics package to manipulate an image by applying a filter.	▶ Use appropriate language when comparing ideas, methods and approaches in their own and others' work. ▶ Describe what they think and feel about their own and others' work and how this might influence their designs. ▶ Use sketch book /'ideas journal' to evaluate and adapt their work as their ideas develop; make annotations in their books to show their ongoing evaluations and how they might develop their work further.
Year 4	▶ Investigate different starting points for their work, and choose which idea to develop further. ▶ Record their thoughts and experiences in a sketch book / 'ideas journal', and begin to annotate these. ▶ Explain how they are developing their ideas as they work, and are beginning to use language appropriate to the chosen style of art. ▶ Use creative thinking to begin to adapt an initial idea, e.g. experiment with alternative colour palette.	▶ Discuss and analyse the styles of artists, craft makers or designers and use this to inform their own work. ▶ Understand the historical and / or cultural significance of the work of a chosen artist / art form.	▶ Use learnt techniques in drawing, painting, sculpture and other art, craft and design in different contexts and with a variety of materials, e.g. use knowledge of weaving to create a willow sculpture. ▶ Demonstrate control of a range of tools and materials to create desired effects, e.g. when drawing use different grades of pencil to create variations in tone.	▶ Compare ideas, methods and approaches in their own and others' work, e.g. talk about the features they like and the changes they would make to a piece of art work. ▶ Use sketch book / 'ideas journal' to adapt their work as their ideas develop; make annotations in their books to describe how they might develop their work further.

Art and Design
End of Year Expectations

Year 3	▸ Choose their own starting point from a range of ideas e.g. a visit to an art gallery, an artefact, digital images, experiences. ▸ Begin to record their thoughts and experiences in a sketch book / 'ideas journal'. ▸ Explain the reasons for their ideas, and discuss and answer questions about how their ideas have developed. ▸ Show confidence and independence when working creatively e.g. with a range of media on different scales.	▸ Discuss the styles of artists, craft makers or designers and use this to inform their own work. ▸ Begin to understand the historical and/or cultural significance of a chosen artist /art form.	▸ Beginning to use learnt techniques in drawing, painting, sculpture and other art, craft and design in different contexts, e.g. work on different scales both independently and collaboratively. ▸ Demonstrate control of chosen tools and materials to create a desired effect, e.g. carve a design into a printing block.	▸ Compare ideas, methods and approaches in their own and others' work, e.g. talk about the features they like in a piece of art work. ▸ Use sketch book / 'ideas journal' to adapt their work as their ideas develop, and discuss this with others.
Year 2	▸ Develop and record their ideas through painting, drawing, sculpture in response to first hand observations, e.g. real objects, photographs, artefacts, and experiences. ▸ Talk about and answer questions about the starting point, and choices they have made, e.g. chosen tools, media, materials. ▸ Show confidence in working creatively e.g. with a range of media on different scales.	▸ Recognise the styles of artists, craft makers or designers and use this to inform their own work. ▸ Talk about the similarities and differences between different artists, craft makers or designers.	▸ Confidently use drawing, painting, sculpture and other art, craft and design techniques to explore the use of line, texture, colour, shape to create different effects, e.g. cross hatching with felt tip pens. ▸ Begin to demonstrate control of tools and materials of their choice to create a desired effect, e.g. select, cut and shape faux fur fabric for a tiger hand puppet.	▸ Talk about the techniques, materials and equipment used in their work and the work of others, e.g. 'I have used a cotton bud to add dots'. ▸ Describe what they like about their own work and the work of others using appropriate language e.g. 'I like the way a fine tip brush is used to add detail'. ▸ Adapt and make changes to their work and the tools they use as it develops. ▸ Describe how they have changed and adapted their work for a specific purpose, e.g. use of specific tools to create more texture.
Year 1	▸ Explore and record their own ideas through painting, drawing, sculpture, in response to first hand observations, e.g. real objects, pictures, artefacts, and experiences. ▸ Talk about their ideas and the choices they have made, e.g. chosen tools, media, materials. ▸ Beginning to work creatively e.g. with a range of media on different scales.	▸ Describe what they think and feel about the work of a chosen artist, craft maker or designer. ▸ Begin to talk about the style of a chosen artist, craft maker or designer.	▸ Begin to use drawing, painting, sculpture and other art, craft and design techniques to explore the use of line, texture, colour, shape to create different effects, e.g. to apply acrylic paint thickly to add texture. ▸ Begin to demonstrate control of given tools and materials to create a desired effect, e.g. change the size of brushes in a simple graphics package.	▸ Describe some of the art and design techniques they have used in their work, e.g. painting, collage, printing, drawing and sculpture. ▸ Talk about the features they like in their own work and in the work of others. ▸ Talk about what they might change in their own work.
	Produce creative work, exploring their ideas and recording their experiences	**Know about great artists, craft makers and designers and understand the historical and cultural development of their art forms**	**Become proficient in drawing, painting, sculpture and other art, craft and design techniques**	**Evaluate and analyse creative works using the language of art, craft and design**

Computing
End of Year Expectations

Year 6	▸ Be competent users of technology using it safely, respectfully and responsibly and know about digital footprints and 'strong' passwords. ▸ Demonstrate that they can identify the risks involved with content and contact and they know a wide range of ways of reporting any concerns they have. ▸ Understand what acceptable and unacceptable online behaviour is. ▸ Use strategies to verify and evaluate the reliability and accuracy of information on the internet and understand what copyright and plagiarism is and how it relates to their work.	▸ Independently select, use and combine a wide range of software on a variety of devices. ▸ Design and create a range of digital assets such as programs, systems and multimedia content for a defined purpose and audience. ▸ Use advanced searches including the use of operators. ▸ Create spreadsheet models to investigate real life problems, using their knowledge to make predictions.	▸ Know how search engines work and what 'ranking' is when related to search engines. ▸ Design and create more complex programs using sequence, repetition, selection and variables appropriately. ▸ Develop their computational thinking can demonstrate that they can decompose and evaluate their tasks and correct errors in their algorithms and programs. ▸ Be confident in their knowledge of inputs and outputs and plan and write programs to solve tasks to control external devices such as sensors and motors. ▸ Know how different computer networks work, including the roles of the components and the opportunities and benefits that they offer for communication and collaboration. ▸ Understand the difference between the internet and internet services.
Year 5	▸ Use technology safely, respectfully and responsibly and continue to develop skills to identify risks involved with contact and content including developing an understanding of digital footprints. ▸ Know a range of ways of reporting concerns about content and contact involving the internet and other communication technologies. ▸ Understand what acceptable and unacceptable online behaviour is. ▸ Use strategies to verify the reliability and accuracy of information on the internet and understand copyright.	▸ Select, use and combine a range of software and use a wider range of devices to create a variety of digital assets such as programs, systems, databases, spreadsheets and multimedia content for a defined purpose. ▸ Understand about the use of operators in searching and continue developing their effective search techniques by using Boolean operators in their searches. ▸ Create simple spreadsheet models to investigate real life problems.	▸ Design and write programs using sequence, repetition, selection and variables. ▸ Develop greater understanding of how to use selection and repetition in more complex programs. ▸ Understand how search engines work. ▸ Further develop their computational thinking showing they can plan and decompose tasks; explain how the algorithms they write work and correct errors in their programs. ▸ Plan and write programs to control external devices such as sensors and motors and explain about the inputs and outputs used. ▸ Have an understanding of how a computer network works and the opportunities that it offers for communication and collaboration.
Year 4	▸ Use technology respectfully, responsibly and safely, knowing how to keep their information and passwords secure. ▸ Know different ways of reporting concerns about content and contact involving the internet and other communication technologies. ▸ Have a greater understanding of what is acceptable and unacceptable online behaviour. ▸ Start to develop strategies to verify the reliability and accuracy of information on the internet and develop an awareness of copyright.	▸ Use and combine a variety of software and devices with increasing independence, to create a range of digital assets such as programs, databases, systems and multimedia content. ▸ Understand how Boolean operators can change searches and select appropriate information for their tasks. ▸ Use models and simulations to produce graphs and explore patterns and relationships.	▸ Design and write more complex algorithms and programs using sequence, repetition and selection. ▸ Further develop their computational thinking to help debug their programs and design and solve problems and tasks. ▸ Have a simple understanding of how search engines work. ▸ Develop their understanding of inputs and outputs further, demonstrating how they can use programs to control external devices such as sensors, motors and robots. ▸ Understand the difference between the internet and World Wide Web.

Computing
End of Year Expectations

	Digital Literacy	Information Technology	Computer Science
Year 3	▶ Use technology safely and respectfully and have an understanding of how to keep information secure. ▶ Realise the importance of reporting any concerns they have using the internet and other communication technologies, and know some ways in which they can do it. ▶ Develop an understanding of what is acceptable and unacceptable online behaviour. ▶ Realise that not all information on the internet is trustworthy and there is a need to verify its reliability.	▶ Use a variety of software and devices to create digital assets such as programs, graphs and multimedia content for a defined purpose. ▶ Develop their search strategies further by refining their use of keywords and starting to use appropriate key phrases and questions. ▶ Use more complex simulations and understand the effects of changing variables.	▶ Plan and write algorithms and programs using sequence and repetition and further develop their computational thinking strategies to solve problems and errors in their algorithms and programs. ▶ Have knowledge and experience of using a range of different inputs and outputs. ▶ Describe some of components of a computer network and some of the ways in which computer networks can be used.
Year 2	▶ Know their responsibilities from their school's acceptable use policy and how to report any concerns they have. ▶ Recognise situations using technology and the internet involving content and contact that are not safe and know where to go for help. ▶ Begin to develop an understanding of the importance of computers and the internet to communicate. ▶ Develop their knowledge of the technology used in everyday life in a range of situations and be able to discuss their ideas.	▶ Use technology with purpose to create, store, organise, retrieve and manipulate digital content. ▶ Learn to make a range of simple digital assets such as presentations, movies, audio files and graphs. ▶ Navigate the web and carry out simple searches using suitable search engines and begin to understand that not everything on the internet is true. ▶ Use simple simulations and understand how they work.	▶ Use algorithms and know that they can be implemented as programs on devices. ▶ Know what debugging is and find errors in their programs. ▶ Understand that programs execute by following a precise set of instructions. ▶ Create simple programs and further develop their strategies and logical thinking to find bugs and predict outcomes in their algorithms and programs.
Year 1	▶ Recognise common uses of information technology beyond school. ▶ Understand the rules and responsibilities outlined by the school's acceptable use policy and begin to understand where to go for help when they have concerns. ▶ Develop an understanding of how to keep their personal information private and understand they need to use technology safely and respectfully.	▶ Use technology with support, to create, store and retrieve digital content such as text and images. ▶ Use a simple search to find information or files. ▶ Develop understanding of how simulations work through exploring simple examples.	▶ Understand what algorithms are and develop strategies to help find bugs in them. ▶ Make very simple programs.

Design and Technology
End of Year Expectations

Year 6	▶ Plan the sequence of work. ▶ Devise step by step plans which can be read / followed by someone else. ▶ Use exploded diagrams and cross-sectional diagrams to communicate ideas.	▶ Make prototypes. ▶ Use researched information to inform decisions. ▶ Produce detailed lists of ingredients / components / materials and tools. ▶ Refine their product – review and rework / improve.	▶ Identify the strengths and weaknesses of their design ideas. ▶ Report using correct technical vocabulary. ▶ Discuss how well the finished product meets the design criteria having tested on/discussed outcomes with the user. ▶ Understand how key people have influenced design in a variety of contexts. ▶ Investigate key events and individuals in design and technology.	▶ Use the correct vocabulary appropriate to the project. ▶ Join materials using appropriate methods. ▶ Create 3=-D textile products using pattern pieces. ▶ Understand pattern layout with textiles. ▶ Cut strip wood, dowel, square section wood accurately to 1mm. ▶ Build frameworks to support mechanisms. ▶ Stiffen and reinforce complex structures. ▶ Use mechanical systems such as cams, pulleys and gears. ▶ Use electrical systems such as motors and switches. ▶ Program, monitor and control using ICT.	▶ Understand and apply the principles of a healthy and varied diet. ▶ Choose ingredients to support healthy eating choices when designing their food products. ▶ Prepare and cook a variety of mostly savoury dishes using a range of cooking techniques.
Year 5	▶ Record ideas using annotated diagrams. ▶ Use models, kits and drawings to help formulate design ideas. ▶ Sketch and model alternative ideas. ▶ Decide which design idea to develop.	▶ Develop one idea in depth. ▶ Select from and use a wide range of tools. ▶ Cut accurately and safely to a marked line. ▶ Select from and use a wide range of materials.	▶ Research and evaluate existing products. ▶ Consider user and purpose. ▶ Consider and explain how the finished product could be improved related to design criteria. ▶ Investigate key events and individuals in design and technology.		▶ Join and combine a widening range of ingredients. ▶ Select and prepare foods for a particular purpose. ▶ Know where and how ingredients are grown and processed.
Year 4	▶ Record the plan by drawing using annotated sketches. ▶ Use prototypes to develop and share ideas. ▶ Consider aesthetic qualities of materials chosen. ▶ Use CAD where appropriate.	▶ Prepare pattern pieces as templates for their design. ▶ Select from techniques for different parts of the process.	▶ Draw / sketch existing products in order to analyse and understand how products are made. ▶ Identify the strengths and weaknesses of their design ideas in relation to purpose / user. ▶ Consider and explain how the finished product could be improved. ▶ Investigate key events and individuals in design and technology.	▶ Use an increasingly appropriate technical vocabulary for tools materials and their properties. ▶ Understand seam allowance. ▶ Prototype a product. ▶ Sew on buttons and make loops. ▶ Strengthen frames with diagonal struts. ▶ Measure and mark square section, strip and dowel accurately to 1cm. ▶ Incorporate a circuit into a model. ▶ Use electrical systems such as switches bulbs and buzzers. ▶ Use ICT to control products. ▶ Use linkages to make movement larger or more varied.	▶ Make healthy eating choices – use the *Eatwell plate*. ▶ Understand seasonality. ▶ Know where and how ingredients are reared and caught. ▶ Prepare and cook using different cooking techniques.

Design and Technology
End of Year Expectations

	Design	Make	Evaluate	Technical Knowledge (Select as appropriate to the focus of the design and technology focuses in the year group)	Cooking and Nutrition
Year 3	▶ Develop more than one design or adaptation of an initial design. ▶ Plan a sequence of actions to make a product. ▶ Think ahead about the order of their work and decide upon tools and materials. ▶ Propose realistic suggestions as to how they can achieve their design ideas.	▶ Select from a range of tools for cutting, shaping, joining and finishing. ▶ Use tools with accuracy. ▶ Select from materials according to their functional properties. ▶ Use appropriate finishing techniques.	▶ Investigate similar products to the one to be made to give starting points for a design. ▶ Research needs of user. ▶ Decide which design idea to develop. ▶ Consider and explain how the finished product could be improved. ▶ Discuss how well the finished product meets the user's design criteria. ▶ Investigate key events and individuals in design and technology.	▶ Use an increasingly appropriate technical vocabulary for tools materials and their properties. ▶ Understand seam allowance. ▶ Prototype a product. ▶ Sew on buttons and make loops. ▶ Strengthen frames with diagonal struts. ▶ Measure and mark square section, strip and dowel accurately to 1cm. ▶ Incorporate a circuit into a model. ▶ Use electrical systems such as switches bulbs and buzzers. ▶ Use ICT to control products. ▶ Use linkages to make movement larger or more varied.	▶ Follow instructions / recipes. ▶ Join and combine a range of ingredients. ▶ Begin to understand the food groups on the *Eatwell Plate*.
Year 2	▶ Propose more than one idea for their product. ▶ Use ICT to communicate ideas. ▶ Use drawings to record ideas as they are developed. ▶ Add notes to drawings to help explanations.	▶ Discuss their work as it progresses. ▶ Select and name the tools needed to work the materials. ▶ Explain which materials they are using and why.	▶ Decide how existing products do / do not achieve their purpose. ▶ Discuss how closely their finished product meets their own design criteria.	▶ Start to use technical vocabulary. ▶ Cut out shapes which have been created by drawing round a template. ▶ Join materials in a variety of ways. ▶ Decorate using a variety of techniques. ▶ Know some ways of making structures stronger.	▶ Cut, peel, grate, chop a range of ingredients. ▶ Work safely and hygienically. ▶ Know about the *Eatwell Plate*. ▶ Understand where food comes from.
Year 1	▶ Use pictures and words to convey what they want to design / make. ▶ Explore ideas by rearranging materials. ▶ Select pictures to help develop ideas. ▶ Use mock-ups e.g. recycled material trial models to try out their ideas.	▶ Select materials from a limited range. ▶ Explain what they are making. ▶ Name the tools they are using.	▶ Explore existing products and investigate how they have been made (including teacher-made examples). ▶ Talk about their design as they develop and identify good and bad points. ▶ Say what they like and do not like about items they have made and attempt to say why.	▶ Show how to stiffen some materials. ▶ Know how to make a simple structure more stable. ▶ Attach wheels to a chassis using an axle. ▶ Know some different ways of making things move in a 2-D plane.	▶ Group familiar food products e.g. fruit and vegetables. ▶ Cut and chop a range of ingredients. ▶ Work safely and hygienically. ▶ Know about the need for a variety of foods in a diet.

Geography
End of Year Expectations

Year 6	▶ Name and locate an extensive range of places in the world including globally and topically significant features and events.	▶ Recognise patterns in human and physical features and understand some of the conditions, processes or changes which influence these patterns. ▶ Explain some links and interactions between people, places and environments.	▶ Ask and respond to questions that are more causal e.g. What happened in the past to cause that? How is it likely to change in the future? ▶ Make predictions and test simple hypotheses about people, places and geographical issues.	▶ Use a range of numerical and quantitative skills to analyse, interpret and present data collected from fieldwork observations, measurements and recordings.	▶ Interpret a wider range of geographical information and maps including scale, projections, thematic, and digital maps. ▶ Recognise an increasing range of Ordnance Survey symbols on maps and locate features using six-figure grid references.	▶ Develop their views and attitudes to critically evaluate responses to local geographical issues or global issues and events. ▶ Communicate geographical information using a wide range of methods including writing at increasing length.
Year 5	▶ Name and locate an increasing range of places in the world including globally and topically significant features and events.	▶ Use geographical language to identify and explain key aspects of human and physical features and patterns as well as links and interactions between people, places and environments. ▶ Demonstrate understanding of how and why some features or places are similar or different and how and why they change.	▶ Ask and respond to questions that are more causal e.g. Why is that happening in that place? Could it happen here? ▶ Recognise geographical issues affecting people in different places and environments.	▶ Observe, measure, and record human and physical features using a range of methods e.g. sketch maps, plans, graphs, and digital technologies.	▶ Use a range of maps and other sources of geographical information and select the most appropriate for a task. ▶ Demonstrate an understanding of the difference between Ordnance Survey and other maps and when it is most appropriate to use each.	▶ Express and explain their opinions on geographical and environmental issues and recognise why other people may think differently. ▶ Choose from a range of methods e.g. digital maps, plans, graphs and presentations when communicating geographical information.
Year 4	▶ Name and locate a wider range of places in their locality, the UK and wider world including some globally significant features.	▶ Use geographical language to identify and explain some aspects of human and physical features and patterns. ▶ Describe how features and places change and the links between people and environments.	▶ Ask and respond to more searching geographical questions including 'how?' and 'why?' ▶ Identify and describe similarities, differences and patterns when investigating different places, environments and people.	▶ Observe, record, and explain physical and human features of the environment.	▶ Use a range of sources including digital and Ordnance Survey maps, atlases, globes and satellite images to research geographical information. ▶ Recognise Ordnance Survey symbols on maps and locate features using four-figure grid references.	▶ Express their opinions on environmental issues and recognise that other people may think differently. ▶ Communicate geographical information through a range of methods including digital maps, plans, graphs and presentations.

Geography
End of Year Expectations

	Locational and Place knowledge	Human and Physical Geography	Geographical Skills: Enquiry and Investigation	Geographical Skills: Fieldwork	Geographical Skills: Interpret a Range of Sources of Geographical Information	Geographical Skills: Communicate Geographical Information
Year 3	▶ Name and locate a wider range of places in their locality, the UK and wider world.	▶ Use geographical language to describe some aspects of human and physical features and patterns. ▶ Make observations about places and features that change over time.	▶ Ask and answer more searching geographical questions when investigating different places and environments. ▶ Identify similarities, differences and patterns when comparing places and features.	▶ Observe, record, and name geographical features in their local environments.	▶ Use a range of sources including digital maps, atlases, globes and satellite images to research and present geographical information. ▶ Use the eight compass points and recognise some Ordnance Survey symbols on maps.	▶ Express their opinions on environmental issues and recognise how people can affect the environment both positively and negatively. ▶ Communicate geographical information through a range of methods including the use of ICT.
Year 2	▶ Name and locate significant places in their locality, the UK and wider world.	▶ Describe places and features using simple geographical vocabulary. ▶ Make observations about features that give places their character.	▶ Ask and answer simple geographical questions when investigating different places and environments. ▶ Describe similarities, differences and patterns e.g. comparing their lives with those of children in other places and environments.	▶ Identify seasonal and daily weather patterns. ▶ Develop simple fieldwork and observational skills when studying the geography of their school and local environment.	▶ Use a range of sources such as maps, globes, atlases and aerial photos to identify features and places as well as to follow routes. ▶ Use simple compass directions as well as locational and directional language when describing features and routes.	▶ Express views about the environment and can recognise how people sometimes affect the environment. ▶ Create their own simple maps and symbols.
Year 1	▶ Name and locate some places in their locality, the UK and wider world.	▶ Describe some places and features using basic geographical vocabulary. ▶ Express their views on some features of their environment e.g. what they do or do not like.	▶ Ask and answer simple geographical questions. ▶ Describe some similarities and differences when studying places and features e.g. hot and cold places of the world.	▶ Observe and describe daily weather patterns. ▶ Use simple fieldwork and observational skills when studying the geography of their school and its grounds.	▶ Use a range of sources such as simple maps, globes, atlases and images. ▶ Know that symbols mean something on maps.	▶ Use maps and other images to talk about everyday life e.g. where they live, journeys to school etc. ▶ Draw, speak or write about simple geographical concepts such as what they can see where.

History
End of Year Expectations

Year 6	▶ Use dates and a wide range of historical terms when sequencing events and periods of time. ▶ Develop chronologically secure knowledge of the events and periods of time studied. ▶ Analyse links and contrasts within and across different periods of time including short-term and long-term time scales.	▶ Describe aspects of the Viking and Anglo-Saxon struggle for the Kingdom of England in the time of Edward the Confessor. ▶ Demonstrate knowledge of an aspect or theme in British history that extends their chronological knowledge beyond 1066.	▶ Regularly address and sometimes devise historically valid questions and hypotheses. ▶ Give some reasons for contrasting arguments and interpretations of the past. ▶ Describe the impact of historical events and changes. ▶ Recognise that some events, people and changes are judged as more significant than others.	▶ Acknowledge contrasting evidence and opinions when discussing and debating historical issues. ▶ Use appropriate vocabulary when discussing, describing and explaining historical events. ▶ Construct informed responses to historical questions and hypotheses that involve thoughtful selection and organisation of relevant historical information including appropriate dates and terms. ▶ Choose the most appropriate way of communicating different historical findings.
Year 5	▶ Use dates and appropriate historical terms to sequence events and periods of time. ▶ Identify where people, places and periods of time fit into a chronological framework. ▶ Describe links and contrasts within and across different periods of time including short-term and long-term time scales.	▶ Describe some aspects of Britain's settlement by Anglo-Saxons and Scots. ▶ Demonstrate knowledge of Ancient Greece including greek life and achievements and their influence on the western world. ▶ Describe key aspects of a non-European society such as the early Islamic civilisation.	▶ Use a wider range of sources as a basis for research to answer questions and to test hypotheses. ▶ Recognise how our knowledge of the past is constructed from a range of sources. ▶ Evaluate sources and make simple inferences. ▶ Choose relevant sources of evidence to support particular lines of enquiry.	▶ Discuss and debate historical issues. ▶ Use appropriate vocabulary when discussing and describing historical events. ▶ Construct responses to historical questions and hypotheses that involve selection and organisation of relevant historical information including dates and terms. ▶ Choose relevant ways to communicate historical findings.
Year 4	▶ Use dates and historical terms when ordering events and objects. ▶ Identify where people and events fit into a chronological framework. ▶ Explore links and contrasts within and across different periods of time.	▶ Describe and compare some of the characteristic features and achievements of the earliest civilisations including where and when they appeared. ▶ Demonstrate more in-depth knowledge of one specific civilisation e.g. Ancient Egypt. ▶ Demonstrate knowledge of an aspect or theme in British History that extends their chronological knowledge beyond 1066.	▶ Use sources to address historically valid questions and hypotheses. ▶ Recognise how sources of evidence are used to make historical claims. ▶ Recognise why some events happened and what happened as a result. ▶ Identify historically significant people and events in different situations.	▶ Discuss significant aspects of, and connections between, different historical events. ▶ Select and organise relevant historical information to present in a range of ways. ▶ Use relevant and appropriate historical terms and vocabulary linked to chronology.

History

End of Year Expectations

	Chronology	Events, People and Changes	Interpretation, Enquiry and Using Sources	Communication
Year 3	▸ Use some dates and historical terms when ordering events and objects. ▸ Demonstrate awareness that the past can be divided into different periods of time. ▸ Explore trends and changes over time.	▸ Describe and give reasons for some of the changes in Britain from the Stone Age to the Iron Age. ▸ Describe some aspects of the Roman Empire and recognise its impact on Britain. ▸ Demonstrate knowledge of aspects of history significant in their locality.	▸ Use sources to address historically valid questions. ▸ Recognise that our knowledge of the past is constructed from different sources of evidence. ▸ Recognise that different versions of past events may exist. ▸ Describe some of the ways the past can be represented.	▸ Discuss some historical events, issues, connections and changes. ▸ Select and organise historical information to present in a range of ways. ▸ Use relevant historical terms and vocabulary linked to chronology.
Year 2	▸ Order and sequence events and objects. ▸ Recognise that their own lives are similar and / or different from the lives of people in the past. ▸ Use common words and phrases concerned with the passing of time.	▸ Demonstrate awareness of the lives of significant individuals in the past who have contributed to national and international achievements. ▸ Develop awareness of significant historical events, people and places in their own locality.	▸ Ask and answer simple questions about the past through observing and handling a range of sources. ▸ Consider why things may change over time. ▸ Recognise some basic reasons why people in the past acted as they did. ▸ Choose parts of stories and other sources to show what they know about significant people and events.	▸ Talk about what / who was significant in simple historical accounts. ▸ Demonstrate simple historical concepts and events through role-play, drawing and writing. ▸ Use a variety of simple historical terms and concepts.
Year 1	▸ Recognise the distinction between past and present. ▸ Order and sequence some familiar events and objects. ▸ Identify some similarities and differences between ways of life at different times. ▸ Use some everyday terms about the passing of time such as 'a long time ago' and 'before'.	▸ Retell some events from beyond their living memory which are significant nationally or globally. ▸ Describe some changes within their living memory (including aspects of national life where appropriate).	▸ Make simple observations about different people, events, beliefs and communities. ▸ Use sources to answer simple questions about the past. ▸ Identify some of the basic ways in which the past can be represented. ▸ Choose parts of stories and other sources to show what they know about the past.	▸ Describe special or significant events. ▸ Retell simple stories or events from the past. ▸ Use simple historical terms.
	Chronology	**Events, People and Changes**	**Interpretation, Enquiry and Using Sources**	**Communication**

Languages
End of Year Expectations

	Understand and respond to spoken language from a variety of resources (Listening)	Speak with increasing fluency, confidence and spontaneity continually improving the accuracy of their pronunciation and intonation (speaking)	Understand and respond to written language from a variety of authentic resources and develop an appreciation of a range of writing (reading)	Write at varying length for different purposes and audiences (writing)	Use a variety of grammatical structures
Year 6	▶ Understand the main points and some detail from a short spoken passage e.g. someone talking about their friends, their home town, school, likes and dislikes etc.	▶ Take part in longer conversations with increasing spontaneity and fluency. ▶ Can express simple opinions and their pronunciation is generally confident and accurate.	▶ Understand the main points and some detail including simple opinions of a longer written passage e.g. email, postcard, story, poem, recipe, advert etc.	▶ Write a short text on a familiar topic using reference materials / support. ▶ Write for a range of audiences and purpose. ▶ Use formal and informal 'you'.	▶ Use basic language structures accurately and with confidence e.g. apply correct verb endings to regular and some high frequency irregular verbs (faire, aller, avoir, etre). ▶ Use prepositions and use some adverbial phrases to talk about the past or future in a simple way e.g. there was / there will be. ▶ Understand the word tense and have an awareness that whether an event is ongoing or finished can be expressed differently in a FL compared to English.
Year 5	▶ Understand the main points from a spoken passage with some repetition e.g. items from a shopping list, simple opinions about school depending on topics taught in Y5.	▶ Ask and answer simple questions and use a negative. ▶ Take part in brief pre-prepared tasks e.g. a weather forecast, a short interview about school, interests / transactional role play with increasing confidence and fluency.	▶ Understand the main points from a short written passage in clear printed script. ▶ Are beginning to use a bilingual dictionary independently with some success.	▶ Write two or three short sentences as a personal response accurately and can use reference materials / support.	▶ Understand some basic aspects of language structure e.g. how to use personal pronouns, an awareness of verb patterns, word order, use of adjectival agreement with accuracy and the conjugation of some regular high frequency verbs e.g. aimer, jouer, porter etc.
Year 4	▶ Understand a range of familiar spoken phrases e.g. classroom instructions.	▶ Ask and answer simple questions and give basic information (including a simple negative statement) based on topics covered in Y4. ▶ Take part in a simple conversation and their pronunciation and confidence is improving. ▶ Observe social conventions when speaking to someone i.e. formal and informal greetings and use of 'you').	▶ Understand simple written phrases and match sounds to familiar written words as they become more aware of spelling patterns.	▶ Write simple, familiar phrases accurately using a writing frame or scaffold.	▶ Understand some basic aspects of language structure e.g. question words, how to use the negative, the position of the adjective in a sentence and an awareness of word order.
Year 3	▶ Identify the meanings of simple words and phrases they hear by matching to an object / picture/ person etc.	▶ Understand a few familiar spoken words and phrases and respond to simple questions e.g. What's your name? How are you? etc. and others depending on topics covered. ▶ Say or repeat some familiar words and short simple phrases Year 3.	▶ Identify the meanings of simple words and phrases they see by matching to an object / picture/ person etc. ▶ Recognise and read out a few familiar words and phrases and are starting to notice the sound spelling patterns.	▶ Write or copy a few simple words or symbols accurately. ▶ Be aware that symbols e.g. accents, umlauts exist and what they do (also capital letters in German).	▶ Understand some basic aspects of language structure e.g. gender, definite and indefinite articles, singular and plural, nouns, adjectives.

Music
End of Year Expectations

Year 6	▶ Independently sing songs, speak chants and rhymes in unison and two parts, with confident clear diction, control of pitch, a sense of phrase and musical expression. ▶ Practise, rehearse and present a variety of solo and ensemble performances with confidence and awareness of the audience.	▶ Know that time and place can influence the way music is created, performed and heard. Can make informed suggestions of suitable pieces of music for various occasions. ▶ Develop a better understanding of the history of music. Begin to investigate the different eras of music.	▶ Improvise with their voice or on a musical instrument both solo and ensemble to develop a wide range of rhythmic and melodic material when composing. ▶ Can compose for different moods and use dynamic levels such as accents (*sudden loud or sudden quiet notes*).	▶ Explore and compare a variety of sounds in a piece of music, identifying the prominent melodies.	▶ Recognise a metre (the way in which beats are grouped) of three (such as in a Waltz) or four (most pop songs) and begin to recognise a change of metre within a piece. ▶ Use Italian musical terms for gradually getting louder *crescendo* and gradually getting quieter *diminuendo*.
Year 5	▶ Independently sing songs, speak chants and rhymes in unison and two parts, with increasing clear diction, control of pitch, a sense of phrase and musical expression. ▶ Perform a variety of repeated rhythmic patterns (ostinato) on percussion instruments.	▶ Begin to make suggestions of how the inter-related dimensions can be enhanced within musical structures to communicate different moods and effects (*e.g. how can the tempo be changed to create excitement?*) ▶ Demonstrate a better understanding of the history of music. Begin to make appropriate suggestions of suitable pieces for music for various occasions.	▶ Improvise and develop a wider range of rhythmic and melodic material when composing. ▶ Choose, combine and organise a variety of the inter-related dimension of musical elements when composing with staff and other musical notations, such as graphic scores and / or using ICT.	▶ Begin to explore and compare a variety of contrasting sounds, recognising where the texture (thick (*many sounds*) and thin (*few*) layers of sound) varies in a song or piece of music.	▶ Recognise a musical phrase is like a musical sentence and can identify its duration as short or long. ▶ Can identify a silence in a rhythmic pattern with a gesture such as raised hand. ▶ Begin to use various Italian musical terms such as *crescendo*, *diminuendo*, *forte* and *piano*.
Year 4	▶ Sing solo songs demonstrating call and response form, speak chants and rhymes in unison with clear diction, control of pitch, a sense of phrase and musical expression. ▶ Identify contrasting sections of a song, such as the verse and refrain (chorus).	▶ Review their own ideas and feelings about music using art, movement, dance, expressive language and musical vocabulary. ▶ Understand that time and place can influence how and why music is created, performed and heard. Listen to and review music from a culture different to their own.	▶ Improvise and develop rhythmic and melodic material when composing. ▶ Experiment with gestures to show the overall contour of the pitch of a melody as it moves upwards, downwards or stays the same. ▶ Combine a variety of musical elements when composing using staff and other musical notations.	▶ Explore and compare sounds from the different instrumental families (percussion, woodwind, brass, string), name a variety of instruments. ▶ Hear in a piece of music, refer to and compare the different sounds instruments make as their tone colour such as brassy, wooden and metallic. ▶ Sequence various famous composers on a timeline.	▶ Identify through gestures such as clapping or using percussion, the strong / first beat whilst singing. ▶ Keep a steady beat and maintain rhythmic accuracy holding their own beat against another contrasting part. ▶ Recognise pitch movement by step, leaps or as repeats.

Music
End of Year Expectations

	Performing	Listening and Reviewing	Creating and Composing	Understanding and Exploring	Inter-Related Dimensions: (Pitch / Duration / Dynamics / Tempo / Timbre / Texture / Structure)
Year 3	▶ Sing songs (also imitating melody patterns as an echo), speak chants and rhymes in unison, with clear diction, control of pitch and musical expression presenting performances with an awareness of the audience. ▶ Play tuned and untuned instruments with increasing control and rhythmic accuracy, responding through gestures or movement to changes in the speed of the beat.	▶ Listen with extended concentration and begin to express their opinion on a range of live and recorded music. ▶ Explain their ideas and feelings about music using movement, dance and expressive language. ▶ Begin to understand how music can be organised to communicate different moods and effects (e.g. listening to loud and fast music will create a different feeling to slow and quiet). ▶ Determine upwards and downwards direction in pitch when listening and reviewing music.	▶ Begin to improvise and develop rhythmic and melodic material when composing, improving their own and others' work in relation to its intended effect. ▶ Begin to create and combine a variety of the inter-related dimensions when composing (e.g. composing using both dynamics and tempo).	▶ Explore and compare sounds of groups of musical instruments, identifying the differences between them, e.g. strings, woodwind, orchestra, rock band etc. ▶ Begin to explore the history of music, understanding that time and place can influence how and why music is created, performed and heard. ▶ Explore music from a culture different to their own.	▶ Understand that dynamics means volume and can recognise various different levels. ▶ Understand that texture refers to the difference between thick (*many sounds*) and thin (*few*) layers of sounds. ▶ Experience how music can be produced in different ways, including through ICT, and described through relevant established and invented notations.
Year 2	▶ Play tuned and untuned instruments. ▶ Use their voices expressively to rehearse and perform with others, recognising a song with an accompaniment (*instrumental backing*) and one without. ▶ Can start and finish together and can keep to a steady pulse.	▶ Listen with concentration to music of a longer duration and recognise simple structures (for example, a beginning, middle and end). ▶ Understand that music can be used for particular purposes and occasions.	▶ Experiment with creating their own musical patterns and begin to identify one strand (*section*) of music or more. ▶ Begin to improve their own and others' work.	▶ Recognise and match sounds with pictures of different instruments. ▶ Explore a variety of vocal qualities through singing and speaking. ▶ Begin to use onomatopoeia sound words to describe selected sounds and the ways in which they are produced.	▶ Recognise the difference between a steady beat and no beat and identify sections within a piece of music which sound the same or different. ▶ Understand that tempo means speed, and identify the tempo of music as fast, moderate, slow, getting faster or getting slower.
Year 1	▶ Rehearse and perform with others, using untuned instruments and voices to sing songs, speak chants and rhymes. ▶ Perform with confidence cumulative songs (*songs with a simple melody that changes each verse*).	▶ Understand how sounds can be made in different ways and described using given and invented signs and symbols. ▶ Listen to contrasting songs (such as lullabies and dance / up-tempo) with concentration, remembering specific instrumental names and sounds.	▶ Experiment with creating and copying musical patterns. ▶ Begin to explore the sounds of their voices and various musical instruments, recognising the differences between singing and speaking and wood, metal, skin (*drum*) and 'shaker' sounds.	▶ Begin to explore their feelings about music using movement, dance and expressive language. ▶ Develop an understanding that music has been composed throughout history.	▶ Identify high and low pitches, sounds of long and short duration and recognise the difference between long and short sounds. ▶ Identify silence and sounds that are loud and quiet and the differences between fast and slow speeds.

Physical Education
End of Year Expectations

Year 6	▶ Continue to develop sport specific skills, applying them with control and precision. ▶ Perform a number of travelling skills, i.e. with and without equipment, sending and receiving skills with consistency, accuracy, confidence, control and speed. ▶ Perform dances fluently and with control and can perform to an accompaniment expressively and sensitively. ▶ Follow a simple route on an OS map and keep it set and identify different features and successfully complete a timed orienteering course (competition). ▶ Accept responsibility when working in a team.	▶ Examples of developing sport specific skills may include: o Chest bounce, shoulder, swing pass, dribbling a ball, running with a ball. o Bowl, underarm / overarm. o Catch a small ball. o Counter balance and counter tension with a group.	▶ Collaborate as a team and apply attacking and defending skills through modified versions of 4V4 or 5V5 invasion games. ▶ Apply a range of skills and tactics in a range of other games such as net / wall or striking / fielding type activities.	▶ Create and perform longer sequences of actions (8-10) with a partner that show an awareness of their audience in a range of activities such as gymnastic activities. ▶ Work creatively and imaginatively on their own, with a partner and in a group to compose motifs and structure simple dances and dance.	▶ Identify aspects of their own and others' performances that need improvement and suggest how to improve them, i.e. which aspects were performed consistently, accurately, fluently and clearly. ▶ Watch performances and games and use criteria to make judgements and suggest improvements.
Year 5	▶ Continue to develop sport specific skills applying them with coordination and control. Perform a number of skills, i.e. travelling with and without equipment, sending and receiving skills with consistency, accuracy, confidence and control. ▶ Perform different styles of dance clearly and fluently, adapt and refine the way they use weight, space and rhythm in their dances to express themselves in the style of dance. ▶ Perform symmetrical and asymmetrical actions and counter balance and counter tension with a partner. ▶ Follow a simple course using eight points of the compass and mark on a map the position of a ground. ▶ Work cooperatively with a partner and small group.	▶ Examples of sport specific skills may include: o Chest bounce, shoulder pass, catching, push pass, kicking, shooting. o Bowl underarm / overarm. o Strike a ball (rounders / cricket). o Catch a small ball. o Counter balance with a partner.	▶ Collaborate as a team and develop defending skills through modified versions of 5V3 or 5V4 invasion games. ▶ Apply a range of skills and tactics in a range of other games such as net / wall or striking / fielding type activities.	▶ Create and perform longer sequences of actions (6-8) with a partner in a range of activities such as gymnastic activities. ▶ Compose motifs and plan dances creatively and collaboratively in groups.	▶ Recognise their own and others strengths and explain why a performance is good using appropriate terminology when evaluating both their own and others performances.
Year 4	▶ Master fundamental movement skills and start to develop sport specific skills. Develop a broader range of skills using different sports and activities. ▶ Perform using a number of sending and receiving skills with consistency and accuracy. Travel with an object i.e. running or dribbling a ball with / without equipment. ▶ Perform movements, shapes and balances that are matched and / or mirrored. ▶ Perform dances clearly and fluently, show sensitivity to the dance idea and the accompaniment. ▶ Orientate a map consistently and accurately. Follow a simple star orienteering course and simple point to point orienteering course on school grounds recording controls. ▶ Work cooperatively with others to solve challenges.	▶ Examples of developing sport specific skills may include: o Chest bounce pass, swing pass, catching. o Bouncing a ball, running with a ball. o Underarm bowl. o Throwing overarm. o Strike a ball with implement. o Matched and mirrored balances.	▶ Develop attacking skills in a 4V2 invasion game. ▶ Apply skills and tactics in a range of other games such as net / wall or striking / fielding type activities.	▶ Create and perform sequences of actions (6) with control and precision in a range of activities such as gymnastic activities. ▶ Use simple motifs and movement patterns to structure dance phrases on their own and with a partner.	▶ Describe what is successful in their own performances. ▶ Identify aspects of their game that needs improving and say how they could go about improving them.

Physical Education
End of Year Expectations

	Developing Skills	Examples of Skills	Application of Skills: Attacking and Defending Strategies	Application of Skills: Linking Actions and Sequences of Movement	Evaluating Success
Year 3	▶ Master most fundamental skills and start to develop sport specific skills. Develop throwing and catching skills using different sports and activities. ▶ Perform using a number of sending and receiving skills with some accuracy. ▶ Travelling - change direction easily. ▶ Perform travelling, rolling, jumping and balancing skills. ▶ Perform freely, translating ideas from a stimulus into movement using dynamic, rhythmic and expressive qualities clearly and with control. ▶ Plan routes around obstacles (e.g. PE apparatus, table / chairs in classroom). ▶ Begin to work cooperatively with others to solve challenges.	▶ Examples of developing sport specific skills may include: ○ Chest pass, bounce pass, swing pass, catching. ○ Dodging and swerving. ○ Underarm bowl. ○ Throwing overarm. ○ Strike a ball with implement. ○ Travelling on hands and feet, balance on large and small body parts.	▶ Develop simple attacking skills in a 3V1 invasion game. ▶ Apply skills and tactics in a range of other games such as net / wall or striking / fielding type activities.	▶ Create and perform sequences of actions (4-6) smoothly in a range of activities such as gymnastic activities and dance. ▶ Share and create dance phrases with a partner and in a small group; repeat, remember and perform these phrases in a dance.	▶ Identify what they do best and what they find difficult. ▶ Make simple assessments of performance based on simple criteria given by the teacher.
Year 2	▶ Perform fundamental movement skills at a developing level and start to master some basic movements in: ○ Travelling skills. ○ Sending skills. ○ Receiving skills. ▶ Perform body actions with control and coordination and perform short dances, showing an understanding of expressive qualities.	▶ Examples of FMS may include: ○ Travelling skills - running, galloping, dodging. ○ Sending skills - throwing, kicking, bouncing and striking a ball. ○ Receiving skills - trapping and catching an object.	▶ Apply simple tactics in a 3V1 game. ▶ Engage in simple competitive and cooperative activities.	▶ Create and link simple combinations of 3 or 4 actions in ways that suit the physical activity *(for example gymnastic activities)*. ▶ Link body actions and remember and repeat dance phrases.	▶ Describe what they have done or seen others doing. ▶ Comment on a skill or combination of skills and say how it could be improved.
Year 1	▶ Perform fundamental movement skills at a developing level in: ○ Travelling skills. ○ Sending skills. ○ Receiving skills. ▶ Perform basic body actions with control and show some sense of dynamic, expressive and rhythmic qualities in their own dance.	▶ Examples of FMS may include: ○ Travelling skills - running, hopping, skipping. ○ Sending skills – rolling, kicking, throwing. ○ Receiving skills - catching.	▶ Apply a simple tactic in a 1V1 or 2V2 net type game. ▶ Engage in simple competitive and cooperative activities.	▶ Create and link simple combinations of 2 or 3 actions in ways that suit the physical activity *(for example gymnastic activities)*. ▶ Choose appropriate movements for different dance ideas and repeat short dance phrases.	▶ Describe what they have done or seen others doing.