Published in the UK in 2013 by Focus Education (UK) Ltd
Updated January 2014

Focus Education (UK) Ltd
Talking Point Conference Centre
Huddersfield Road
Scouthead
Saddleworth
OL4 4AG

Focus Education (UK) Ltd Reg. No 4507968

ISBN 978 1909038 04 2

www.focus-education.co.uk
customerservice@focus-education.co.uk
Printed in Great Britain by Focus Education UK Ltd, Scouthead

Contents

Introduction

The National Curriculum (2014) sets out the following aims:

- *to ensure that the new National Curriculum embodies rigour and high standards and creates coherence in what is taught in schools*
- *to ensure that all children are taught the essential knowledge in the key subject disciplines*
- *beyond that core, to allow teachers greater freedom to use their professionalism and expertise to help all children realise their potential.*

- This book provides a breakdown of the Knowledge, Skills and Understanding expected to be covered in each non-core subject area (including science).
- It is set out in year group expectations to make it easier for planning. In most subjects there is an additional section which is aimed at challenging more able pupils.
- Science may well be a 'stand alone' subject with the disciplines being seen as too complex to interweave in a cross-curricular way. However, science, geography and history are seen as the drivers of the non-core subject areas with the creative arts (art and design technology) and the performing arts (music and dance) seen as the enhancers. The following sections have been set out to reflect this.
- Each set of Knowledge, Skills and Understanding statements could form a very valuable assessment tool for schools and should provide invaluable support for planning an exciting, comprehensive and broad curriculum.
- The National Curriculum framework provides clarity in terms of objectives for both English and mathematics and therefore the Knowledge, Skills and Understanding for these two subjects are not included.

This publication will be of use for all primary schools; regardless of their curricular philosophy and model.

This publication can be used by schools who wish to adopt an entirely subject based approach as well as schools that adopt an entirely thematic approach. The vast majority of primary schools are at neither of these extremes but take a mid-ground approach with some thematic work with links that are meaningful and add value alongside some discrete subject-specific work. Above all this publication will help teachers and leaders embed well defined progression and challenge into the curriculum.

Many schools use the Focus Learning Challenge Approach. This is an approach to planning and delivery rather than a scheme of work. It is driven by ensuring that the curriculum meets the distinctive needs of the pupils based on their context. The following pages outlines the principles which underpin the Learning Challenge Approach.

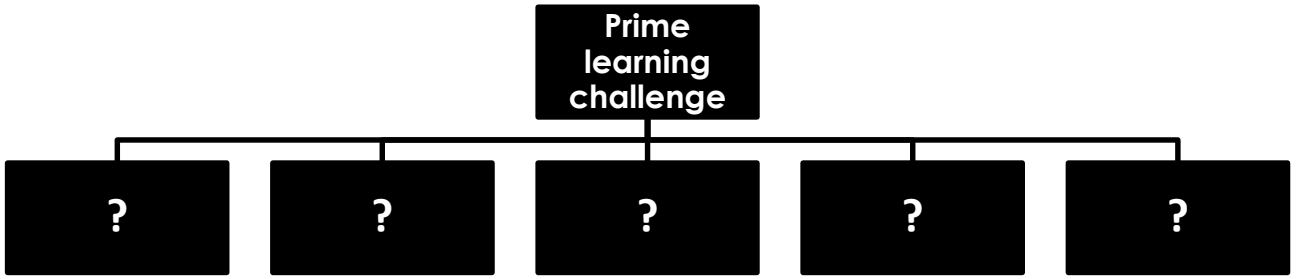
The Learning Challenge™ CURRICULUM

The Learning Challenge Curriculum: What are the main principles?

The Learning Challenge™ CURRICULUM

- The Learning Challenge concept is built around the principle of greater **learner involvement** in their work. It requires deep thinking and encourages learners to work using a question as the starting point.

- In designing the curriculum, teachers and learners are using a **prime learning challenge**, expressed as a question, as the starting point. Using the information gained from pre-learning tasks and the school's context, a series of **subsidiary challenges** are then planned. Each subsidiary learning challenge is also expressed as a question. Importantly, the learning challenges need to make sense to the learners and be something that is within their immediate understanding.



Big Question

Small Questions
Which help to answer the big question.

The Learning Challenge Curriculum: What are the main principles?

The Learning Challenge™ CURRICULUM

- **Pre-learning tasks** ensure that learners are directly involved in the planning process. Well planned pre-learning tasks should help to bring out what learners already know; what misconceptions they may have and what really interests them. Teachers should take account of the outcomes from pre-learning tasks to plan the subsidiary learning challenges for each major area of study.

- Continuity and progression in the curriculum will be built around a set of matrices known as essential knowledge, understanding and key skills within subject disciplines. These are broken into year group expectations and have additional challenges for the most able learners. The '**Essential Knowledge, Skills and Understanding**' matrices within the Learning Challenge Curriculum will allow schools to guarantee that the learners' essential skills are being developed, alongside National Curriculum requirements (where appropriate), whilst allowing individual schools to have a great deal of autonomy with their methodology.

The Learning Challenge Curriculum: **What are the main principles?**

The Learning Challenge™ CURRICULUM

- In addition, there is an expectation that teachers **apply English, mathematics and ICT** skills where it is appropriate to do so. The main idea is to use the knowledge, skills and understanding matrices for each subject to bring to teachers' attention the level of work expected around each learning challenge. In addition, there should be careful consideration given to the quality of work produced by learners in the core subject areas.

- Time for learners to reflect or review their learning is central to the whole process. This is in keeping with the 'Learning to Learn' principles where **reflection** is seen as a very important part of individuals' learning programmes. Within the Learning Challenge Curriculum it is suggested that the final subsidiary learning challenge is handed over for learners to reflect on their learning. The idea is that learners present their learning back to the rest of the class or another appropriate audience making the most of their oracy and ICT skills to do so. Initially, learners may require a great deal of direction so the reflection time may need to be presented in the form of a question which helps them to review their work.

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 1:

Science

Knowledge, Skills and Understanding breakdown for Working Scientifically

Year 1

Observing closely	Performing Tests	Identifying and Classifying	Recording findings
• Can they talk about what they <see, touch, smell, hear or taste>? • Can they use simple equipment to help them make observations?	• Can they perform a simple test? • Can they tell other people about what they have done?	• Can they identify and classify things they observe? • Can they think of some questions to ask? • Can they answer some scientific questions? • Can they give a simple reason for their answers? • Can they explain what they have found out?	• Can they show their work using pictures, labels and captions? • Can they record their findings using standard units? • Can they put some information in a chart or table?

Year 1 (Challenging)

• Can they find out by watching, listening, tasting, smelling and touching?	• Can they give a simple reason for their answers?	• Can they talk about similarities and differences? • Can they explain what they have found out using scientific vocabulary?	• Can they use ICT to show their working? • Can they make accurate measurements?

Knowledge, Skills and Understanding breakdown for Plants and Animals, including humans

Year 1

Plants	Animals, including humans	
• Can they name the petals, stem, leaf, bulb, flower, seed, stem and root of a plant? • Can they identify and name a range of common plants and trees? • Can they recognise deciduous and evergreen trees? • Can they name the trunk, branches and root of a tree? • Can they describe the parts of a plant (roots, stem, leaves, flowers)?	• Can they point out some of the differences between different animals? • Can they sort photographs of living things and non-living things? • Can they identify and name a variety of common animals? (birds, fish, amphibians, reptiles, mammals, invertebrates) • Can they describe how an animal is suited to its environment? • Can they identify and name a variety of common animals that are carnivores, herbivores and omnivores?	• Can they name the parts of the human body that they can see? • Can they draw & label basic parts of the human body? • Can they identify the main parts of the human body and link them to their senses? • Can they name the parts of an animal's body? • Can they name a range of domestic animals? • Can they classify animals by what they eat? (carnivore, herbivore, omnivore) • Can they compare the bodies of different animals?

Year 1 (Challenging)

• Can they name the main parts of a flowering plant?	• Can they begin to classify animals according to a number of given criteria? • Can they point out differences between living things and non-living things?	• Can they name some parts of the human body that cannot be seen? • Can they say why certain animals have certain characteristics? • Can they name a range of wild animals?

Knowledge, Skills and Understanding breakdown for Everyday Materials

Year 1

Everyday materials (classifying and grouping)

- Can they distinguish between an object and the material from which it is made?
- Can they describe materials using their senses?
- Can they describe materials using their senses, using specific scientific words?
- Can they explain what material objects are made from?
- Can they explain why a material might be useful for a specific job?
- Can they name some different everyday materials? e.g. wood, plastic, metal, water and rock
- Can they sort materials into groups by a given criteria?
- Can they explain how solid shapes can be changed by squashing, bending, twisting and stretching?

Year 1 (Challenging)

- Can they describe things that are similar and different between materials?
- Can they explain what happens to certain materials when they are heated, e.g. bread, ice, chocolate?
- Can they explain what happens to certain materials when they are cooled, e.g. jelly, heated chocolate?

Knowledge, Skills and Understanding breakdown for Seasonal Changes

Year 1

Seasonal Changes

- Can they observe changes across the four seasons?
- Can they name the four seasons in order?
- Can they observe and describe weather associated with the seasons?
- Can they observe and describe how day length varies?

Year 1 (Challenging)

- Can they observe features in the environment and explain that these are related to a specific season?
- Can they observe and talk about changes in the weather?
- Can they talk about weather variation in different parts of the world?

Knowledge, Skills and Understanding breakdown for Working Scientifically

Year 2

Observing closely	Performing Tests	Identifying and Classifying	Recording findings
• Can they use <see, touch, smell, hear or taste> to help them answer questions? • Can they use some scientific words to describe what they have seen and measured? • Can they compare several things?	• Can they carry out a simple fair test? • Can they explain why it might not be fair to compare two things? • Can they say whether things happened as they expected? • Can they suggest how to find things out? • Can they use prompts to find things out?	• Can they organise things into groups? • Can they find simple patterns (or associations)? • Can they identify animals and plants by a specific criteria, eg, lay eggs or not; have feathers or not?	• Can they use <text, diagrams, pictures, charts, tables> to record their observations? • Can they measure using <simple equipment>?

Year 2 (Challenging)

• Can they suggest ways of finding out through listening, hearing, smelling, touching and tasting?	• Can they say whether things happened as they expected and if not why not?	• Can they suggest more than one way of grouping animals and plants and explain their reasons?	• Can they use information from books and online information to find things out?

Knowledge, Skills and Understanding breakdown for Living Things and their Habitats

Year 2

Living Things & their Habitats	Animals, including humans	Plants
• Can they match certain living things to the habitats they are found in? • Can they explain the differences between living and non-living things? • Can they describe some of the life processes common to plants and animals, including humans? • Can they decide whether something is living, dead or non-living? • Can they describe how a habitat provides for the basic needs of things living there? • Can they describe a range of different habitats? • Can they describe how plants and animals are suited to their habitat?	• Can they describe what animals need to survive? • Can they explain that animals grow and reproduce? • Can they explain why animals have offspring which grow into adults? • Can they describe the life cycle of some living things? (e.g. egg, chick, chicken) • Can they explain the basic needs of animals, including humans for survival? (water, food, air) • Can they describe why exercise, balanced diet and hygiene are important for humans?	• Can they describe what plants need to survive? • Can they observe and describe how seeds and bulbs grow into mature plants? • Can they find out & describe how plants need water, light and a suitable temperature to grow and stay healthy?

Year 2 (Challenging)

• Can they name some characteristics of an animal that help it to live in a particular habitat? • Can they describe what animals need to survive and link this to their habitats?	• Can they explain that animals reproduce in different ways?	• Can they describe what plants need to survive and link it to where they are found? • Can they explain that plants grow and reproduce in different ways?

Knowledge, Skills and Understanding breakdown for Uses of Everyday Materials

Year 2

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

Year 2 (Challenging)

• Can they describe the properties of different materials using words like, transparent or opaque, flexible, etc.? • Can they sort materials into groups and say why they have sorted them in that way? • Can they say which materials are natural and which are man made?	• Can they explain how materials are changed by heating and cooling? • Can they explain how materials are changed by bending, twisting and stretching? • Can they tell which materials cannot be changed back after being heated, cooled, bent, stretched or twisted?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 2:

Science

Knowledge, Skills and Understanding breakdown for Working Scientifically

Year 3

Planning	Obtaining and presenting evidence	Considering evidence and evaluating
• Can they use different ideas and suggest how to find something out? • Can they make and record a prediction before testing? • Can they plan a fair test and explain why it was fair? • Can they set up a simple fair test to make comparisons? • Can they explain why they need to collect information to answer a question?	• Can they measure using different equipment and units of measure? • Can they record their observations in different ways? <labelled diagrams, charts etc> • Can they describe what they have found using scientific language? • Can they make accurate measurements using standard units?	• Can they explain what they have found out and use their measurements to say whether it helps to answer their question? • Can they use a range of equipment (including a data-logger) in a simple test?

Year 3 (Challenging)

• Can they record and present what they have found using scientific language, drawings, labelled diagrams, bar charts and tables?	• Can they explain their findings in different ways (display, presentation, writing)? • Can they use their findings to draw a simple conclusion? • Can they suggest improvements and predictions for further tests?	• Can they suggest how to improve their work if they did it again?

Knowledge, Skills and Understanding breakdown for Plants and Animals, including Humans

Year 3

Animals, including humans	Plants
• Can they explain the importance of a nutritionally balanced diet? • Can they describe how nutrients, water and oxygen are transported within animals and humans? • Can they identify that animals, including humans, cannot make their own food: they get nutrition from what they eat? • Can they describe and explain the skeletal system of a human? • Can they describe and explain the muscular system of a human?	• Can they identify and describe the functions of different parts of flowering plants? (roots, stem/trunk, leaves and flowers)? • Can they explore the requirement of plants for life and growth (air, light, water, nutrients from soil, and room to grow)? • Can they explain how they vary from plant to plant? • Can they investigate the way in which water is transported within plants? • Can they explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal?

Year 3 (Challenging)

• Can they explain how the muscular and skeletal systems work together to create movement? • Can they classify living things and non-living things by a number of characteristics that they have thought of? • Can they explain how people, weather and the environment can affect living things? • Can they explain how certain living things depend on one another to survive?	• Can they classify a range of common plants according to many criteria (environment found, size, climate required, etc.)?

Knowledge, Skills and Understanding breakdown for Rocks

Year 3

Rocks

- Can they compare and group together different rocks on the basis of their appearance and simple physical properties?
- Can they describe and explain how different rocks can be useful to us?
- Can they describe and explain the differences between sedimentary and igneous rocks, considering the way they are formed?
- Can they describe in simple terms how fossils are formed when things that have lived are trapped within rock?
- Can they recognise that soils are made from rocks and organic matter?

Year 3 (Challenging)

- Can they classify igneous and sedimentary rocks?
- Can they begin to relate the properties of rocks with their uses?

Knowledge, Skills and Understanding breakdown for Light, Forces and Magnets

Year 3

Forces and magnets	Light
• Can they compare how things move on different surfaces? • Can they observe that magnetic forces can be transmitted without direct contact? • Can they observe how some magnets attract or repel each other? • Can they classify which materials are attracted to magnets and which are not? • Can they notice that some forces need contact between two objects, but magnetic forces can act at a distance? • Can they compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet? • Can they identify some magnetic materials? • Can they describe magnets have having two poles (N & S)? • Can they predict whether two magnets will attract or repel each other depending on which poles are facing?	• Can they recognise that they need light in order to see things? • Can they recognise that dark is the absence of light? • Can they notice that light is reflected from surfaces? • Can they recognise that light from the sun can be dangerous and that there are ways to protect their eyes? • Can they recognise that shadows are formed when the light from a light source is blocked by a solid object? • Can they find patterns in the way that the size of shadows change?

Year 3 (Challenging)

• Can they investigate the strengths of different magnets and find fair ways to compare them?	• Can they explain why lights need to be bright or dimmer according to need? • Can they explain the difference between transparent, translucent and opaque? • Can they explain why lights need to be bright or dimmer according to need? • Can they make a bulb go on and off? • Can they say what happens to the electricity when more batteries are added? • Can they explain why their shadow changes when the light source is moved closer or further from the object?

Knowledge, Skills and Understanding breakdown for Working Scientifically

Year 4

Planning	Obtaining and presenting evidence	Considering evidence and evaluating
• Can they set up a simple fair test to make comparisons? • Can they plan a fair test and isolate variables, explaining why it was fair and which variables have been isolated? • Can they suggest improvements and predictions? • Can they decide which information needs to be collected and decide which is the best way for collecting it? • Can they use their findings to draw a simple conclusion?	• Can they take measurements using different equipment and units of measure and record what they have found in a range of ways? • Can they make accurate measurements using standard units? • Can they explain their findings in different ways (display, presentation, writing)?	• Can they find any patterns in their evidence or measurements? • Can they make a prediction based on something they have found out? • Can they evaluate what they have found using scientific language, drawings, labelled diagrams, bar charts and tables? • Can they use straightforward scientific evidence to answer questions or to support their findings? • Can they identify differences, similarities or changes related to simple scientific ideas or processes?

Year 4 (Challenging)

• Can they plan and carry out an investigation by controlling variables fairly and accurately? • Can they use test results to make further predictions and set up further comparative tests?	• Can they record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models?	• Can they report findings from investigations through written explanations and conclusions? • Can they use a graph or diagram to answer scientific questions?

Knowledge, Skills and Understanding breakdown for Living Things, their Habitats and Animals, including humans

Year 4

Animals, including humans	Living Things and their Habitats
• Can they identify and name the basic parts of the digestive system in humans? • Can they describe the simple functions of the basic parts of the digestive system in humans? • Can they identify the simple function of different types of teeth in humans? • Can they compare the teeth of herbivores and carnivores? • Can they explain what a simple food chain shows? • Can they construct and interpret a variety of food chains, identifying producers, predators and prey?	• Can they recognise that living things can be grouped in a variety of ways? • Can they explore and use a classification key to group, identify and name a variety of living things? (plants, vertebrates, invertebrates) • Can they compare the classification of common plants and animals to living things found in other places? (under the sea, prehistoric) • Do they recognise that environments can change and this can sometimes pose a danger to living things?

Year 4 (Challenging)

• Can they classify living things and non-living things by a number of characteristics that they have thought of? • Can they explain how people, weather and the environment can affect living things? • Can they explain how certain living things depend on one another to survive?	• Can they give reasons for how they have classified animals and plants, using their characteristics and how they are suited to their environment? • Can they explore the work of pioneers in classification? (e.g. Carl Linnaeus) • Can they name and group a variety of living things based on feeding patterns? (producer, consumer, predator, prey, herbivore, carnivore, omnivore)

Knowledge, Skills and Understanding breakdown for States of Matter

Year 4

States of Matter

- Can they compare and group materials together, according to whether they are solids, liquids or gases?
- Can they explain what happens to materials when they are heated or cooled?
- Can they measure or research the temperature at which different materials change state in degrees Celsius?
- Can they use measurements to explain changes to the state of water?
- Can they identify the part that evaporation and condensation has in the water cycle?
- Can they associate the rate of evaporation with temperature?

Year 4 (Challenging)

- Can they group and classify a variety of materials according to the impact of temperature on them?
- Can they explain what happens over time to materials such as puddles on the playground or washing hanging on a line?
- Can they relate temperature to change of state of materials?

Knowledge, Skills and Understanding breakdown for Sound and Electricity

Year 4

Sound	Electricity
• Can they describe a range of sounds and explain how they are made? • Can they associate some sounds with something vibrating? • Can they compare sources of sound and explain how the sounds differ? • Can they explain how to change a sound (louder/softer)? • Can they recognise how vibrations from sound travel through a medium to a ear? • Can they find patterns between the pitch of a sound and features of the object that produce it? • Can they find patterns between the volume of the sound and the strength of the vibrations that produced it? • Can they recognise that sounds get fainter as the distance from the sound source increases? • Can they explain how you could change the pitch of a sound? • Can they investigate how different materials can affect the pitch and volume of sounds?	• Can they identify common appliances that run on electricity? • Can they construct a simple series electric circuit? • Can they identify and name the basic part in a series circuit, including cells, wires, bulbs, switches and buzzers? • Can they 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? • Can they recognise that a switch opens and closes a circuit? • Can they associate a switch opening with whether or not a lamp lights in a simple series circuit? • Can they recognise some common conductors and insulators? • Can they associate metals with being good conductors?

Year 4 (Challenging)

• Can they explain why sound gets fainter or louder according to the distance? • Can they explain how pitch and volume can be changed in a variety of ways? • Can they work out which materials give the best insulation for sound?	• Can they explain how a bulb might get lighter? • Can they recognise if all metals are conductors of electricity? • Can they work out which metals can be used to connect across a gap in a circuit? • Can they explain why cautions are necessary for working safely with electricity?

Knowledge, Skills and Understanding breakdown for Working Scientifically

Year 5

Planning	Obtaining and presenting evidence	Considering evidence and evaluating
• Can they plan and carry out a scientific enquiry to answer questions, including recognising and controlling variables where necessary? • Can they make a prediction with reasons? • Can they use test results to make predictions to set up comparative and fair tests? • Can they present a report of their findings through writing, display and presentation?	• Can they take measurements using a range of scientific equipment with increasing accuracy and precision? • Can they take repeat readings when appropriate? • Can they record more complex data and results using scientific diagrams, labels, classification keys, tables, scatter graphs, bar and line graphs?	• Can they report and present findings from enquiries through written explanations and conclusions? • Can they use a graph to answer scientific questions?

Year 5 (Challenging)

• Can they explore different ways to test an idea, choose the best way and give reasons? • Can they vary one factor whilst keeping the others the same in an experiment? • Can they use information to help make a prediction? • Can they explain, in simple terms, a scientific idea and what evidence supports it?	• Can they decide which units of measurement they need to use? • Can they explain why a measurement needs to be repeated?	• Can they find a pattern from their data and explain what it shows? • Can they link what they have found out to other science? • Can they suggest how to improve their work and say why they think this?

Knowledge, Skills and Understanding breakdown for Living Things, their Habitats and Animals, including humans

Year 5

Animals, including humans	Living things and their habitats
• Can they describe the changes as humans develop to old age?	• Can they describe the differences in the life cycles of a mammal, an amphibians, an insects and a bird? • Can they describe the life cycles of common plants? • Can they explore the work of well know naturalists and animal behaviourists? (David Attenborough and Jane Goodall)

Year 5 (Challenging)

• Can they create a timeline to indicate stages of growth in certain animals, such as frogs and butterflies? • Can they describe the changes experienced in puberty? • Can they draw a timeline to indicate stages in the growth and development of humans?	• Can they observe their local environment and draw conclusions about life-cycles, e.g. plants in the vegetable garden or flower border? • Can they compare the life cycles of plants and animals in their local environment with the life cycles of those around the world, e.g. rainforests?

Knowledge, Skills and Understanding breakdown for Properties and Changes to Materials

Year 5

Properties and changes to materials

- Can they compare and group together everyday materials on the basis of their properties, including hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets?
- Can they explain how some materials dissolve in liquid to form a solution?
- Can they describe how to recover a substance from a solution?
- Can they use their knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving, evaporating?
- Can they give reasons, based on evidence for comparative and fair tests for the particular uses of everyday materials, including metals wood and plastic?
- Can they describe changes using scientific words? (evaporation, condensation)
- Can they demonstrate that dissolving, mixing and changes of state are reversible changes?
- Can they explain that some changes result in the formation of new materials, and that this kid of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda?
- Can they use the terms 'reversible' and 'irreversible'?

Year 5 (challenging)

- Can they describe methods for separating mixtures? (filtration, distillation)
- Can they work out which materials are most effective for keeping us warm or for keeping something cold?
- Can they use their knowledge of materials to suggest ways to classify? (solids, liquids, gases)
- Cant hey explore changes that are difficult to reverse, e.g. burning, rusting and reactions such as vinegar with bicarbonate of soda?
- Can they explore the work of chemists who created new materials, e.g. Spencer Silver (glue on sticky notes) or Ruth Benerito (wrinkle free cotton)?

Knowledge, Skills and Understanding breakdown for Earth, Space and Forces

Year 5

Earth and Space	Forces
• Can they identify and explain the movement of the Earth and other plants relative to the sun in the solar system? • Can they explain how seasons and the associated weather is created? • Can they describe and explain the movement of the Moon relative to the Earth? • Can they describe the sun, earth and moon as approximately spherical bodies? • Can they use the idea of the earth's rotation to explain day and night and the apparent movement of the sun across the sky?	• Can they explain that unsupported objects fall towards the earth because of the force of gravity acting between the earth and the falling object? • Can they identify the effects of air resistance, water resistance and friction that act between moving surfaces? • Can they recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect?

Year 5 (Challenging)

• Can they compare the time of day at different places on the earth? • Can they create shadow clocks? • Can they begin to understand how older civilizations used the sun to create astronomical clocks, e.g. Stonehenge? • Can they explore the work of some scientists? (Ptolemy, Alhazen, Copernicus)	• Can they describe and explain how motion is affected by forces? (including gravitational attractions, magnetic attraction and friction) • Can they design very effective parachutes? • Can they work out how water can cause resistance to floating objects? • Can they explore how scientists, such as Galileo Galilei and Isaac Newton helped to develop the theory of gravitation?

Knowledge, Skills and Understanding breakdown for Working Scientifically

Year 6

Planning	Obtaining and presenting evidence	Considering evidence and evaluating
• Can they explore different ways to test an idea, choose the best way, and give reasons? • Can they vary one factor whilst keeping the others the same in an experiment? Can they explain why they do this? • Can they plan and carry out an investigation by controlling variables fairly and accurately? • Can they make a prediction with reasons? • Can they use information to help make a prediction? • Can they use test results to make further predictions and set up further comparative tests? • Can they explain, in simple terms, a scientific idea and what evidence supports it? • Can they present a report of their findings through writing, display and presentation?	• Can they explain why they have chosen specific equipment? (incl ICT based equipment) • Can they decide which units of measurement they need to use? • Can they explain why a measurement needs to be repeated? • Can they record their measurements in different ways? (incl bar charts, tables and line graphs) • Can they take measurements using a range of scientific equipment with increasing accuracy and precision?	• Can they find a pattern from their data and explain what it shows? • Can they use a graph to answer scientific questions? • Can they link what they have found out to other science? • Can they suggest how to improve their work and say why they think this? • Can they record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models? • Can they report findings from investigations through written explanations and conclusions? • Can they identify scientific evidence that has been used to support to refute ideas or arguments? • Can they report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations?

Year 6 (Challenging)

• Can they choose the best way to answer a question? • Can they use information from different sources to answer a question and plan an investigation? • Can they make a prediction which links with other scientific knowledge? • Can they identify the key factors when planning a fair test? • Can they explain how a scientist has used their scientific understanding plus good ideas to have a breakthrough?	• Can they plan in advance which equipment they will need and use it well? • Can they make precise measurements? • Can they collect information in different ways? • Can they record their measurements and observations systematically? • Can they explain qualitative and quantitative data?	• Can they draw conclusions from their work? • Can they link their conclusions to other scientific knowledge? • Can they explain how they could improve their way of working?

Knowledge, Skills and Understanding breakdown for Living Things, their Habitats and Animals, including humans

Year 6

Evolution and Inheritance	Living Things & their habitats	Animals, including humans
• Can they recognise that living things have changed over time and that fossils provide information about living things that inhabited the earth millions of years ago? • Can they recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents? • Can they give reasons why offspring are not identical to each other or to their parents? • Can they explain the process of evolution and describe the evidence for this? • Can they identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution?	• Can they describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences including microorganisms, plants and animals? • Can they give reasons for classifying plants and animals based on specific characteristics?	• Can they identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood? • Can they recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function? • Can they describe the ways in which nutrients and water and transported within animals, including humans?

Year 6 (Challenging)

• Can they talk about the work of Charles Darwin, Mary Anning and Alfred Wallace? • Can they explain how some living things adapt to survive in extreme conditions? • Can they analyse the advantages and disadvantages of specific adaptations, such as being on two rather than four feet? • Can they begin to understand what is meant by DNA?	• Can they explain why classification is important? • Can they readily group animals into reptiles, fish, amphibians, birds and mammals? • Can they sub divide their original groupings and explain their divisions? • Can they group animals into vertebrates and invertebrates? • Can they find out about the significance of the work of scientists such as Carl Linnaeus, a pioneer of classification?	• Can they explore the work of medical pioneers, for example, William Harvey and Galen and recognise how much we have learnt about our bodies? • Can they compare the organ systems of humans to other animals? • Can they make a diagram of the human body and explain how different parts work and depend on one another? • Can they name the major organs in the human body? • Can they locate the major human organs? • Can they make a diagram that outlines the main parts of a body?

Knowledge, Skills and Understanding breakdown for Light and Electricity

Year 6

Electricity	Light
• Can they identify and name the basic parts of a simple electric series circuit? (cells, wires, bulbs, switches, buzzers) • Can they compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers, the on/off position of switches? • Can they use recognised symbols when representing a simple circuit in a diagram?	• Can they recognise that light appears to travel in straight lines? • Can they 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? • Can they explain that we see things because light travels from light sources to our eyes or from light sources to object s and then to our eyes? • Can they use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them?

Year 6 (Challenging)

• Can they make their own traffic light system or something similar? • Can they explain the danger of short circuits? • Can they explain what a fuse is? • Can they explain how to make changes in a circuit? • Can they explain the impact of changes in a circuit? • Can they explain the effect of changing the voltage of a battery?	• Can they explain how different colours of light can be created? • Can they use and explain how simple optical instruments work? (periscope, telescope, binoculars, mirror, magnifying glass, Newton's first reflecting telescope) • Can they explore a range of phenomena, including rainbows, colours on soap bubbles, objects looking bent in water and coloured filters.

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 1:
History

National Curriculum Requirements of History at Key Stage 1

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

Pupils should be taught about:

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

Knowledge, Skills and Understanding breakdown for History

Year 1

Chronological understanding	Knowledge and interpretation	Historical enquiry
• Can they put up to three objects in chronological order (recent history)? • Can they use words and phrases like: old, new and a long time ago? • Can they tell me about things that happened when they were little? • Can they recognise that a story that is read to them may have happened a long time ago? • Do they know that some objects belonged to the past? • Can they retell a familiar story set in the past? • Can they explain how they have changed since they were born?	• Do they appreciate that some famous people have helped our lives be better today? • Do they recognise that we celebrate certain events, such as bonfire night, because of what happened many years ago? • Do they understand that we have a queen who rules us and that Britain has had a king or queen for many years? • Can they begin to identify the main differences between old and new objects? • Can they identify objects from the past, such as vinyl records?	• Can they ask and answer questions about old and new objects? • Can they spot old and new things in a picture? • Can they answer questions using a artefact/ photograph provided? • Can they give a plausible explanation about what an object was used for in the past?

Year 1 (Challenging)

• Can they put up to five objects/events in chronological order (recent history)? • Can they use words and phrases like: very old, when mummy and daddy were little? • Can they use the words before and after correctly? • Can they say why they think a story was set in the past?	• Can they explain why certain objects were different in the past, e.g. iron, music systems, televisions? • Can they tell us about an important historical event that happened in the past? • Can they explain differences between past and present in their life and that of other children from a different time in history? • Do they know who will succeed the queen and how the succession works?	• Can they answer questions using a range of artefacts/ photographs provided? • Can they find out more about a famous person from the past and carry out some research on him or her?

Knowledge, Skills and Understanding breakdown for History

Year 2

Chronological understanding	Knowledge and interpretation	Historical enquiry
• Can they use words and phrases like: before I was born, when I was younger? • Can they use phrases and words like: 'before', 'after', 'past', 'present', 'then' and 'now'; in their historical learning? • Can they use the words 'past' and 'present' accurately? • Can they use a range of appropriate words and phrases to describe the past? • Can they sequence a set of events in chronological order and give reasons for their order?	• Can they recount the life of someone famous from Britain who lived in the past giving attention to what they did earlier and what they did later? • Can they explain how their local area was different in the past? • Can they recount some interesting facts from an historical event, such as where the 'Fire of London' started? • Can they give examples of things that are different in their life from that of their grandparents when they were young? • Can they explain why Britain has a special history by naming some famous events and some famous people? • Can they explain what is meant by a parliament?	• Can they find out something about the past by talking to an older person? • Can they answer questions by using a specific source, such as an information book? • Can they research the life of a famous Briton from the past using different resources to help them? • Can they research about a famous event that happens in Britain and why it has been happening for some time? • Can they research the life of someone who used to live in their area using the Internet and other sources to find out about them?

Year 2 (Challenging)

• Can they sequence a set of objects in chronological order and give reasons for their order? • Can they sequence events about their own life? • Can they sequence events about the life of a famous person? • Can they try to work out how long ago an event happened?	• Can they give examples of things that are different in their life from that of a long time ago in a specific period of history such as the Victorian times? • Can they explain why someone in the past acted in the way they did? • Can they explain why their locality (as wide as it needs to be) is associated with a special historical event? • Can they explain what is meant by a democracy and why it is a good thing?	• Can they say at least two ways they can find out about the past, for example using books and the internet? • Can they explain why eye-witness accounts may vary? • Can they research about a famous event that happens somewhere else in the world and why it has been happening for some time?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 2:
History

National Curriculum Requirements of History at Key Stage 2

Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study. They should note connections, contrasts and trends over time and develop the appropriate use of historical terms. They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance. They should construct informed responses that involve thoughtful selection and organisation of relevant historical information. They should understand how our knowledge of the past is constructed from a range of sources and that different versions of past events may exist, giving some reasons for this.
In planning to ensure the progression described above through teaching the British, local and world history outlined below, teachers should combine overview and depth studies to help pupils understand both the long arc of development and the complexity of specific aspects of the content.

Pupils should be taught about:

Changes in Britain from the Stone Age to the Iron Age

This could include:

- late Neolithic hunter-gatherers and early farmers, e.g. Skara Brae
- Bronze Age religion, technology and travel, e.g. Stonehenge
- Iron Age hill forts: tribal kingdoms, farming, art and culture

The Roman Empire and its impact on Britain

This could include:

- Julius Caesar's attempted invasion in 55-54 BC
- the Roman Empire by AD 42 and the power of its army
- successful invasion by Claudius and conquest, including Hadrian's Wall
- British resistance, e.g. Boudica
- "Romanisation" of Britain: sites such as Caerwent and the impact of technology, culture and beliefs, including early Christianity

National Curriculum Requirements of History at Key Stage 2

Pupils should be taught about:

Britain's settlement by Anglo-Saxons and Scots

This could include:

- Roman withdrawal from Britain in c. AD 410 and the fall of the western Roman Empire
- Scots invasions from Ireland to north Britain (now Scotland)
- Anglo-Saxon invasions, settlements and kingdoms: place names and village life
- Anglo-Saxon art and culture
- Christian conversion – Canterbury, Iona and Lindisfarne

The Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor

This could include:

- Viking raids and invasion
- resistance by Alfred the Great and Athelstan, first king of England
- further Viking invasions and Danegeld
- Anglo-Saxon laws and justice
- Edward the Confessor and his death in 1066

A local history study

For example:

- a depth study linked to one of the British areas of study listed above
- a study over time tracing how several aspects of national history are reflected in the locality (this can go beyond 1066)
- a study of an aspect of history or a site dating from a period beyond 1066 that is significant in the locality

A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066

For example:

- the changing power of monarchs using case studies such as John, Anne and Victoria
- changes in an aspect of social history, such as crime and punishment from the Anglo-Saxons to the present or leisure and entertainment in the 20th Century
- the legacy of Greek or Roman culture (art, architecture or literature) on later periods in British history, including the present day
- a significant turning point in British history, e.g. the first railways or the Battle of Britain

National Curriculum Requirements of History at Key Stage 2	
Pupils should be taught about:	
The achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following: Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty of Ancient China.	**Ancient Greece** – a study of Greek life and achievements and their influence on the western world.
A non-European society that provides contrasts with British history - one study chosen from: early Islamic civilization, including a study of Baghdad c. AD 900; Mayan civilization c. AD 900; Benin (West Africa) c. AD 900-1300.	

Knowledge, Skills and Understanding breakdown for History

Year 3

Chronological understanding	Knowledge and interpretation	Historical enquiry
• Can they describe events and periods using the words: BC, AD and decade? • Can they describe events from the past using dates when things happened? • Can they describe events and periods using the words: ancient and century? • Can they use a timeline within a specific time in history to set out the order things may have happened? • Can they use their mathematical knowledge to work out how long ago events would have happened?	• Do they appreciate that the early Brits would not have communicated as we do or have eaten as we do? • Can they begin to picture what life would have been like for the early settlers? • Can they recognise that Britain has been invaded by several different groups over time? • Do they realise that invaders in the past would have fought fiercely, using hand to hand combat? • Can they suggest why certain events happened as they did in history? • Can they suggest why certain people acted as they did in history?	• Do they recognise the part that archaeologists have had in helping us understand more about what happened in the past? • Can they use various sources of evidence to answer questions? • Can they use various sources to piece together information about a period in history? • Can they research a specific event from the past? • Can they use their 'information finding' skills in writing to help them write about historical information? • Can they, through research, identify similarities and differences between given periods in history?

Year 3 (Challenging)

• Can they set out on a timeline, within a given period, what special events took place? • Can they begin to recognise and quantify the different time periods that exists between different groups that invaded Britain?	• Can they begin to appreciate why Britain would have been an important country to have invaded and conquered? • Can they appreciate that war/s would inevitably have brought much distress and bloodshed? • Do they have an appreciation that wars start for specific reasons and can last for a very long time? • Do they appreciate that invaders were often away from their homes for very long periods and would have been 'homesick'?	• Can they begin to use more than one source of information to bring together a conclusion about an historical event? • Can they use specific search engines on the Internet to help them find information more rapidly?

Knowledge, Skills and Understanding breakdown for History

Year 4

Chronological understanding	Knowledge and interpretation	Historical enquiry
• Can they plot recent history on a timeline using centuries? • Can they place periods of history on a timeline showing periods of time? • Can they use their mathematical skills to round up time differences into centuries and decades?	• Can they explain how events from the past have helped shape our lives? • Do they appreciate that wars have happened from a very long time ago and are often associated with invasion, conquering or religious differences? • Do they know that people who lived in the past cooked and travelled differently and used different weapons from ours? • Do they recognise that the lives of wealthy people were very different from those of poor people? • Do they appreciate how items found belonging to the past are helping us to build up an accurate picture of how people lived in the past?	• Can they research two versions of an event and say how they differ? • Can they research what it was like for a child in a given period from the past and use photographs and illustrations to present their findings? • Can they give more than one reason to support an historical argument? • Can they communicate knowledge and understanding orally and in writing and offer points of view based upon what they have found out?

Year 4 (Challenging)

• Can they use their mathematical skills to help them work out the time differences between certain major events in history? • Can they begin to build up a picture of what main events happened in Britain/ the world during different centuries?	• Can they recognise that people's way of life in the past was dictated by the work they did? • Do they appreciate that the food people ate was different because of the availability of different sources of food? • Do they appreciate that weapons will have changed by the developments and inventions that would have occurred within a given time period? • Do they appreciate that wealthy people would have had a very different way of living which would have impacted upon their health and education?	• Can they independently, or as part of a group, present an aspect they have researched about a given period of history using multi-media skills when doing so?

Knowledge, Skills and Understanding breakdown for History

Year 5

Chronological understanding	Knowledge and interpretation	Historical enquiry
• Can they use dates and historical language in their work? • Can they draw a timeline with different time periods outlined which show different information, such as, periods of history, when famous people lived, etc.? • Can they use their mathematical skills to work out exact time scales and differences as need be?	• Can they describe historical events from the different period/s they are studying/have studied? • Can they make comparisons between historical periods; explaining things that have changed and things which have stayed the same? • Can they explain the role that Britain has had in spreading Christian values across the world? • Can they begin to appreciate that how we make decisions has been through a Parliament for some time? • Do they appreciate that significant events in history have helped shape the country we have today? • Do they have a good understanding as to how crime and punishment has changed over the years?	• Can they test out a hypothesis in order to answer a question? • Do they appreciate how historical artefacts have helped us understand more about British lives in the present and past?

Year 5 (Challenging)

• Can they create timelines which outline the development of specific features, such as medicine; weaponry; transport, etc.	• Do they appreciate how plagues and other major events have created huge differences to the way medicines and health care was developed?	• Can they research the life of one person who has had an influence on the way Great Britain is divided into four separate countries?

Knowledge, Skills and Understanding breakdown for History

Year 6

Chronological understanding	Knowledge and interpretation	Historical enquiry
• Can they say where a period of history fits on a timeline? • Can they place a specific event on a timeline by decade? • Can they place features of historical events and people from past societies and periods in a chronological framework?	• Can they summarise the main events from a specific period in history, explaining the order in which key events happened? • Can they summarise how Britain has had a major influence on world history? • Can they summarise what Britain may have learnt from other countries and civilizations through time gone by and more recently? • Can they describe features of historical events and people from past societies and periods they have studied? • Can they recognise and describe differences and similarities/ changes and continuity between different periods of history?	• Can they look at two different versions and say how the author may be attempting to persuade or give a specific viewpoint? • Can they identify and explain their understanding of propaganda? • Can they describe a key event from Britain's past using a range of evidence from different sources?

Year 6 (Challenging)

• Do they appreciate that some ancient civilizations showed greater advancements than people who lived centuries after them?	• Can they suggest relationships between causes in history? • Can they appreciate how Britain once had an Empire and how that has helped or hindered our relationship with a number of countries today? • Can they trace the main events that define Britain's journey from a mono to a multi-cultural society?	• Can they suggest why there may be different interpretations of events? • Can they suggest why certain events, people and changes might be seen as more significant than others? • Can they pose and answer their own historical questions?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 1:

Geography

National Curriculum Requirements of Geography at Key Stage 1

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

Pupils should be taught to:

Location knowledge

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

Place knowledge

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

Human and physical geography

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

National Curriculum Requirements of Geography at Key Stage 1

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

Pupils should be taught to (continued):

Geographical skills and fieldwork

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

Knowledge, Skills and Understanding breakdown for Geography

Year 1

Geographical Enquiry	Physical Geography	Human Geography	Geographical Knowledge
• Can they say what they like about their locality? • Can they sort things they like and don't like? • Can they answer some questions using different resources, such as books, the internet and atlases? • Can they think of a few relevant questions to ask about a locality? • Can they answer questions about the weather? • Can they keep a weather chart?	• Can they tell someone their address? • Can they explain the main features of a hot and cold place? • Can they describe a locality using words and pictures? • Can they explain how the weather changes with each season? • Can they name key features associated with a town or village, e.g. 'church', 'farm', 'shop', 'house'?	• Can they begin to explain why they would wear different clothes at different times of the year? • Can they tell something about the people who live in hot and cold places? • Can they explain what they might wear if they lived in a very hot or a very cold place?	• Can they identify the four countries making up the United Kingdom? • Can they name some of the main towns and cities in the United Kingdom? • Can they point out where the equator, north pole and south pole are on a globe or atlas?

Year 1 (Challenging)

• Can they answer questions using a weather chart? • Can they make plausible predictions about what the weather may be like later in the day or tomorrow?	• Can they name key features associated with a town or village, e.g. 'factory', 'detached house', 'semi-detached house', 'terrace house'?	• Can they name different jobs that people living in their area might do?	• Can they name a few towns in the south and north of the UK?

Knowledge, Skills and Understanding breakdown for Geography

Year 2

Geographical Enquiry	Physical Geography	Human Geography	Geographical Knowledge
• Can they label a diagram or photograph using some geographical words? • Can they find out about a locality by using different sources of evidence? • Can they find out about a locality by asking some relevant questions to someone else? • Can they say what they like and don't like about their locality and another locality like the seaside?	• Can they describe some physical features of their own locality? • Can they explain what makes a locality special? • Can they describe some places which are not near the school? • Can they describe a place outside Europe using geographical words? • Can they describe some of the features associated with an island? • Can they describe the key features of a place, using words like, beach, coast forest, hill, mountain, ocean, valley?	• Can they describe some human features of their own locality, such as the jobs people do? • Can they explain how the jobs people do may be different in different parts of the world? • Do they think that people ever spoil the area? How? • Do they think that people try to make the area better? How? • Can they explain what facilities a town or village might need?	• Can they name the continents of the world and find them in an atlas? • Can they name the world's oceans and find them in an atlas? • Can they name the major cities of England, Wales, Scotland and Ireland? • Can they find where they live on a map of the UK?

Year 2 (Challenging)

• Can they make inferences by looking at a weather chart? • Can they make plausible predictions about what the weather may be like in different parts of the world?	• Can they find the longest and shortest route using a map? • Can they use a map, photographs, film or plan to describe a contrasting locality outside Europe?	• Can they explain how the weather affects different people?	• Can they locate some of the world's major rivers and mountain ranges? • Can they point out the North, South, East and West associated with maps and compass?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 2:

Geography

National Curriculum Requirements of Geography at Key Stage 2

Pupils should extend their knowledge and understanding beyond the local area to include the United Kingdom and Europe, North and South America. This will include the location and characteristics of a range of the world's most significant human and physical features. They should develop their use of geographical tools and skills to enhance their locational and place knowledge.

Pupils should be taught to:

Location knowledge

- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time
- identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)

Place knowledge

- understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America

National Curriculum Requirements of Geography at Key Stage 2

Pupils should extend their knowledge and understanding beyond the local area to include the United Kingdom and Europe, North and South America. This will include the location and characteristics of a range of the world's most significant human and physical features. They should develop their use of geographical tools and skills to enhance their locational and place knowledge.

Pupils should be taught to:

Human and physical geography

- describe and understand key aspects of:
- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Geographical skills and fieldwork

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- use fieldwork to observe, measure and record the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

Knowledge, Skills and Understanding breakdown for Geography

Year 3

Geographical Enquiry	Physical Geography	Human Geography	Geographical Knowledge
• Do they use correct geographical words to describe a place and the events that happen there? • Can they identify key features of a locality by using a map? • Can they begin to use 4 figure grid references? • Can they accurately plot NSEW on a map? • Can they use some basic OS map symbols? • Can they make accurate measurement of distances within 100Km?	• Can they use maps and atlases appropriately by using contents and indexes? • Can they describe how volcanoes are created? • Can they describe how earthquakes are created? • Can they confidently describe physical features in a locality? • Can they locate the Mediterranean and explain why it is a popular holiday destination? • Can they recognise the 8 points of the compass (N,NW, W, S, SW, SE, E, NE)?	• Can they describe how volcanoes have an impact on people's lives? • Can they confidently describe human features in a locality? • Can they explain why a locality has certain human features? • Can they explain why a place is like it is? • Can they explain how the lives of people living in the Mediterranean would be different from their own?	• Can they name a number of countries in the Northern Hemisphere? • Can they locate and name some of the world's most famous volcanoes? • Can they name and locate some well-known European countries? • Can they name and locate the capital cities of neighbouring European countries? • Are they aware of different weather in different parts of the world, especially Europe?

Year 3 (Challenging)

• Can they work out how long it would take to get to a given destination taking account of the mode of transport?	• Can they explain why a locality has certain physical features?	• Can they explain how people's lives vary due to weather?	• Can they name the two largest seas around Europe?

Knowledge, Skills and Understanding breakdown for Geography

Year 4

Geographical Enquiry	Physical Geography	Human Geography	Geographical Knowledge
• Can they carry out a survey to discover features of cities and villages? • Can they find the same place on a globe and in an atlas? • Can they label the same features on an aerial photograph as on a map? • Can they plan a journey to a place in England? • Can they accurately measure and collect information(e.g. rainfall, temperature, wind speed, noise levels etc.)?	• Can they describe the main features of a well-known city? • Can they describe the main features of a village? • Can they describe the main physical differences between cities and villages? • Can they use appropriate symbols to represent different physical features on a map?	• Can they explain why people are attracted to live in cities? • Can they explain why people may choose to live in a village rather than a city? • Can they explain how a locality has changed over time with reference to human features? • Can they find different views about an environmental issue? What is their view? • Can they suggest different ways that a locality could be changed and improved?	• Can they locate the Tropic of Cancer and the Tropic of Capricorn? • Do they know the difference between the British Isles, Great Britain and UK? • Do they know the countries that make up the European Union? • Can they name up to six cities in the UK and locate them on a map? • Can they locate and name some of the main islands that surround the UK? • Can they name the areas of origin of the main ethnic groups in the UK & in their school?

Year 4 (Challenging)

• Can they give accurate measurements between 2 given places within the UK?	• Can they explain how a locality has changed over time with reference to physical features?	• Can they explain how people are trying to manage their environment?	• Can they name the counties that make up the home counties of London? • Can they name some of the main towns and cities in Yorkshire and Lancashire?

Knowledge, Skills and Understanding breakdown for Geography

Year 5

Geographical Enquiry	Physical Geography	Human Geography	Geographical Knowledge
• Can they collect information about a place and use it in a report? • Can they map land use? • Can they find possible answers to their own geographical questions? • Can they make detailed sketches and plans; improving their accuracy later? • Can they plan a journey to a place in another part of the world, taking account of distance and time?	• Can they explain why many cities of the world are situated by rivers? • Can they explain how a location fits into its wider geographical location; with reference to physical features? • Can they explain how the water cycle works? • Can they explain why water is such a valuable commodity?	• Can they explain why people are attracted to live by rivers? • Can they explain how a location fits into its wider geographical location; with reference to human and economical features? • Can they explain what a place might be like in the future, taking account of issues impacting on human features?	• Can they name and locate many of the world's major rivers on maps? • Can they name and locate many of the world's most famous mountain regions on maps? • Can they locate the USA and Canada on a world map and atlas? • Can they locate and name the main countries in South America on a world map and atlas?

Year 5 (Challenging)

• Can they work out an accurate itinerary detailing a journey to another part of the world?	• Can they explain what a place (open to environmental and physical change) might be like in the future taking account of physical features?	• Can they report on ways in which humans have both improved and damaged the environment?	• Can they begin to recognise the climate of a given country according to its location on the map?

Knowledge, Skills and Understanding breakdown for Geography

Year 6

Geographical Enquiry	Physical Geography	Human Geography	Geographical Knowledge
• Can they confidently explain scale and use maps with a range of scales? • Can they choose the best way to collect information needed and decide the most appropriate units of measure? • Can they make careful measurements and use the data? • Can they use OS maps to answer questions? • Can they use maps, aerial photos, plans and web resources to describe what a locality might be like?	• Can they give extended descriptions of the physical features of different places around the world? • Can they describe how some places are similar and others are different in relation to their human features? • Can they accurately use a 4 figure grid reference? • Can they create sketch maps when carrying out a field study?	• Can they give an extended description of the human features of different places around the world? • Can they map land use with their own criteria? • Can they describe how some places are similar and others are different in relation to their physical features?	• Can they recognise key symbols used on ordnance survey maps? • Can they name the largest desert in the world? • Can they identify and name the Tropics of Cancer and Capricorn as well as the Artic and Antarctic circles? • Can they explain how the time zones work?

Year 6 (Challenging)

• Can they define geographical questions to guide their research? • Can they use a range of self selected resources to answer questions?	• Can they plan a journey to another part of the world which takes account of time zones? • Do they understand the term sustainable development? Can they use it in different contexts?	• Can they explain how human activity has caused an environment to change? • Can they analyse population data on two settlements and report on findings and questions raised?	• Can they name and locate the main canals that link different continents? • Can they name the main lines of latitude and meridian of longitude?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 1:

Computing

National Curriculum Requirements of Computing at Key Stage 1

Pupils should be taught to:

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

Knowledge, Skills and Understanding breakdown for Computing

Year 1

Algorithms and Programs	Data Retrieving and Organising	Communicating
• Can they create a simple series of instructions - left and right? • Can they record their routes? • Do they understand forwards, backwards, up and down? • Can they put two instructions together to control a programmable toy? • Can they begin to plan and test a Bee-bot journey?	• Can they capture images with a camera? • Can they print out a photograph from a camera with help? • Can they record a sound and play it back? • Can they enter information into a template to make a graph? • Can they talk about the results shown on a graph?	• Do they recognise what an email address looks like? • Have they joined in sending a class email? • Can they use the @ key and type an email address? • Can they word process ideas using a keyboard? • Can they use the spacebar, back space, enter, shift and arrow keys? • Can they print out a page from the internet?

Year 1 (Challenging)

- Can they record pupils' voices as a voice over?
- Can they use a teacher prepared photo story to create a slideshow of photos?

Knowledge, Skills and Understanding breakdown for Computing

Year 2

Algorithms and Programs	Data Retrieving and Organising	Communicating
• Can they predict the outcomes of a set of instructions? • Can they use right angle turns? • Can they use the repeat commands? • Can they test and amend a set of instructions? • Can they write a simple program and test it? • Can they predict what the outcome of a simple program will be?	• Can they find information on a website? • Can they click links in a website? • Can they print a web page to use as a resource? • Can they experiment with text, pictures and animation to make a simple slide show? • Can they use the shape tools to draw?	• Can they send and reply to messages sent by a safe email partner (within school)? • Can they word process a piece of text? • Can they insert/delete a word using the mouse and arrow keys? • Can they highlight text to change its format (B, U, *I*)?

Year 2 (Challenging)

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

E-safety in Key Stage 1

Knowledge & understanding	Skills
• Can they understand the different methods of communication (e.g. email, online forums etc)? • Do they know you should only open email from a known source? • Do they know the difference between email and communication systems such as blogs and wikis? • Do they know that websites sometimes include pop-ups that take them away from the main site? • Do they know that bookmarking is a way to find safe sites again quickly? • Can they begin to evaluate websites and know that everything on the internet is not true? • Do they know that it is not always possible to copy some text and pictures from the internet? • Do they know that personal information should not be shared online? • Do they know they must tell a trusted adult immediately if anyone tries to meet them via the internet?	• Can they follow the school's safer internet rules? • Can they use the search engines agreed by the school? • Can they act if they find something inappropriate online or something they are unsure of (including identifying people who can help; minimising screen; online reporting using school system etc)? • Can they use the internet for learning and communicating with others, making choices when navigating through sites? • Can they send and receive email as a class? • Can they recognise advertising on websites and learn to ignore it? • Can they use a password to access the secure network?

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

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 2:

Computing

National Curriculum Requirements of Computing at Key Stage 2

Pupils should be taught to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content, that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Knowledge, Skills and Understanding breakdown for Computing: Year 3

Algorithms and Programs	Data Retrieving and Organising	Communicating
• Can they experiment with variables to control models? • Can they use 90 degree and 45 degree turns? • Can they give an on-screen robot directional instructions? • Can they draw a square, rectangle and other regular shapes on screen, using commands? • Can they write more complex programs?	• Can they review images on a camera and delete unwanted images? • Have they experienced downloading images from a camera into files on the computer? • Can they use photo editing software to crop photos and add effects? • Can they manipulate sound when using simple recording story boarding?	• Can they use the email address book? • Can they open and send an attachment?
Using the Internet	**Databases**	**Presentation**
• Can they find relevant information by browsing a menu. • Can they search for an image, then copy and paste it into a document? • Can they use 'Save picture as' to save an image to the computer? • Can they copy and paste text into a document? • Do they begin to use note making skills to decide what text to copy?	• Can they input data into a prepared database? • Can they sort and search a database to answer simple questions? • Can they use a branching database?	• Can they create a presentation that moves from slide to slide and is aimed at a specific audience? • Can they combine text, images and sounds and show awareness of audience? • Do they know how to manipulate text, underline text, centre text, change font and size and save text to a folder?

Year 3 (Challenging)

- Can they search by keyword using a child friendly search engine?
- Can they bookmark a page into your favourites?
- Can they contribute to a class blog?
- Can they use repeat command in logo to create a pattern?

Knowledge, Skills and Understanding breakdown for Computing: Year 4

Algorithms and Programs

- Can they use repeat instructions to draw regular shapes on screen, using commands?
- Can they experiment with variables to control models?
- Can they make turns specifying the degrees?
- Can they give an on-screen robot specific directional instructions that takes them from x to y?
- Can they make accurate predictions about the outcome of a program they have written?

Data Retrieving and Organising

- Can they capture images using webcams, screen capture, scanning, visualiser and internet?
- Can they choose images and download into a file?
- Can they download images from the camera into files on the computer?
- Can they copy graphics from a range of sources and paste into a desktop publishing program?

Communicating

- Do they appreciate the benefits of ICT to send messages and to communicate?
- Can they use the automatic spell checker to edit spellings?

Using the Internet

- Can they use a search engine to find a specific website?
- Can they use note-taking skills to decide which text to copy and paste into a document?
- Can they use tabbed browsing to open two or more web pages at the same time?
- Can they open a link to a new window?
- Can they open a document (PDF) and view it?

Databases

- Can they input data into a prepared database?
- Can they sort and search a database to answer simple questions?
- Do they recognise what a spread sheet is?
- Can they use the terms 'cells', 'rows' and 'columns'?
- Can they enter data, highlight it and make bar charts?

Presentation

- Can they create a lengthy presentation that moves from slide to slide and is aimed at a specific audience?
- Can they insert sound recordings into a multi media presentation?
- Do they know how to manipulate text, underline text, centre text, change font and size and save text to a folder?

Year 4 (Challenging)

- Can they use photo editing software to crop photographs and add effects?
- Can they copy and paste the graph/bar chart and use it in a WP document?
- Can they use animation in their presentation?

E-safety in Years 3 and 4

Knowledge & understanding	Skills
• Do they understand the need for rules to keep them safe when exchanging learning and ideas online? • Can they recognise that information on the internet may not be accurate or reliable and may be used for bias, manipulation or persuasion? • Do they understand that the internet contains fact, fiction and opinion and begin to distinguish between them? • Can they use strategies to verify information, e.g. cross-checking? • Dot hey understand the need for caution when using an internet search for images and what to do if they find an unsuitable image? • Do they understand that copyright exists on most digital images, video and recorded music? • Do they understand the need to keep personal information and passwords private? • Do they understand that if they make personal information available online it may be seen and used by others? • Do they know how to respond if asked for personal information or feel unsafe about content of a message? • Can they recognise that cyber bullying is unacceptable and will be sanctioned in line with the school's policy? • Do they know how to report an incident of cyber bullying? • Do they know the difference between online communication tools used in school and those used at home? • Do they understand the need to develop an alias for some public online use? • Do they understand that the outcome of internet searches at home may be different than at school?	• Do they follow the school's safer internet rules? • Do they recognise the difference between the work of others which has been copied (plagiarism) and re-structuring and re-presenting materials in ways which are unique and new? • Can they begin to identify when emails should not be opened and when an attachment may not be safe? • Can they explain how to use email safely? • Can they use different search engines?

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

Knowledge, Skills and Understanding breakdown for Computing: Year 5

Algorithms and Programs

- Can they combine sequences of instructions and procedures to turn devices on or off?
- Do they understand input and output?
- Can they use an ICT program to control an external device that is electrical and/or mechanical?
- Can they use ICT to measure sound or light or temperate using sensors?
- Can they explore 'What is' questions by playing adventure or quest games?
- Can they write programs that have sequences and repetitions?

Data Retrieving and Organising

- Can they listen to streaming audio such as online radio?
- Can they download and listen to podcasts?
- Can they produce and upload a podcast?
- Can they manipulate sounds using Audacity?
- Can they select music from open sources and incorporate it into multimedia presentations?
- Can they work on simple film editing?

Communicating

- Can they use instant messaging to communicate with class members?
- Can they conduct a video chat with someone elsewhere in the school or in another school?

Using the Internet

- Can they use a search engine using keyword searches?
- Can they compare the results of different searches?
- Can they decide which sections are appropriate to copy and paste from at least two web pages?
- Can they save stored information following simple lines of enquiry?
- Can they download a document and save it to the computer?

Databases

- Can they create a formula in a spreadsheet and then check for accuracy and plausibility?
- Can they search databases for information using symbols such as = > or <?
- Can they create databases planning the fields, rows and columns?
- Can they create graphs and tables to be copied and pasted into other documents?

Presentation

- Can they use a range of presentation applications?
- Do they consider audience when editing a simple film?
- Do they know how to prepare and then present a simple film?
- Can they use ICT to record sounds and capture both still and video images?
- Can they make a home page for a website that contains links to other pages?
- Can they capture sounds, images and video?
- Can they use the word count tool to check the length of a document?
- Can they use bullets and numbering tools?

Year 5 (Challenging)

- Can they make a multimedia presentation that contains: sound; animation; video and buttons to navigate?
- Can they save an image document as a gif or i peg. file format using the 'save as' command?
- Can they make an information poster using graphics skills to good effect?

Knowledge, Skills and Understanding breakdown for Computing: Year 6

Algorithms and Programs

- Can they explain how an algorithm works?
- Can they detect errors in a program and correct them?
- Can they use an ICT program to control a number of events for an external device?
- Can they use ICT to measure sound, light or temperature using sensors and interpret the data?
- Can they explore 'what if' questions by planning different scenarios for controlled devices?
- Can they use input from sensors to trigger events?
- Can they check and refine a series of instructions?

Data Retrieving and Organising

- Can they explore the menu options and experiment with images (colour effects, options, snap to grid, grid settings etc.)?
- Can they add special effects to alter the appearance of a graphic?
- Can they 'save as' gif or i peg. wherever possible to make the file size smaller (for emailing or downloading)?
- Can they make an information poster using their graphics skills to good effect?

Communicating

- Can they conduct a video chat with people in another country or organisation?

Using the Internet

- Can they contribute to discussions online?
- Can they use a search engine using keyword searches?
- Can they use complex searches using such as '+' 'OR' "Find the phrase in inverted commas"?

Databases

- Can they collect live data using data logging equipment?
- Can they identify data error, patterns and sequences?
- Can they use the formulae bar to explore mathematical scenarios?
- Can they create their own database and present information from it?

Presentation

- Can they present a film for a specific audience and then adapt same film for a different audience?
- Can they create a sophisticated multimedia presentation?
- Can they confidently choose the correct page set up option when creating a document?
- Can they confidently use text formatting tools, including heading and body text?
- Can they use the 'hanging indent' tool to help format work where appropriate (e.g. a play script)?

Year 6 (Challenging)

- Can they incorporate graphics where appropriate, using the most effective text wrapping formats?
- Can they conduct a video chat with more than one person at a time?
- Can they compare the information provided on two tabbed websites looking for bias and perspective?

E-safety in Years 5 and 6

Knowledge & understanding	Skills
• Can they discuss the positive and negative impact of the use of ICT in their own lives and those of their peers and family? • Do they understand the potential risk of providing personal information online? • Do they recognise why people may publish content that is not accurate and understand the need to be critical evaluators of content? • Do they understand that some websites and/or pop-ups have commercial interests that may affect the way the information is presented? • Do they recognise the potential risks of using internet communication tools and understand how to minimise those risks (including scams and phishing)? • Do they understand that some material on the internet is copyrighted and may not be copied or downloaded? • Do they understand that some messages may be malicious and know how to deal with this? • Do they understand that online environments have security settings, which can be altered, to protect the user? • Do they understand the benefits of developing a 'nickname' for online use? • Do they understand that some malicious adults may use various techniques to make contact and elicit personal information? • Do they know that it is unsafe to arrange to meet unknown people online? • Do they know how to report any suspicions? • Do they understand they should not publish other people's pictures or tag them on the internet without permission? • Do they know that content put online is extremely difficult to remove? • Do they know what to do if they discover something malicious or inappropriate?	• Do they follow the school's safer internet rules? • Can they make safe choices about use of technology? • Do they use technology in ways which minimises risk, e.g. responsible use of online discussions, etc? • Can they create strong passwords and manage them so that they remain strong? • Can they independently, and with regard for e-safety, select and use appropriate communication tools to solve problems by collaborating and communicating with others within and beyond school? • Can they competently use the internet as a search tool? • Can they reference information sources? • Can they use appropriate strategies for finding, critically evaluating, validating and verifying information, e.g. using different keywords, skim reading to check relevance of information, cross checking with different websites or other non ICT resources? • Can they use knowledge of the meaning of different domain names and common website extensions (e.g. .co.uk; .com; .ac; .sch; .org; .gov; .net) to support validation of information?

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

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 1:

Art

National Curriculum Requirements of Art & Design at Key Stage 1

Pupils should be taught:

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

Knowledge, Skills and Understanding breakdown for Art

Year 1

Drawing	Painting	Printing	Textiles
• Can they communicate something about themselves in their drawing? • Can they create moods in their drawings? • Can they draw using pencil and crayons? • Can they draw lines of different shapes and thickness, using 2 different grades of pencil?	• Can they communicate something about themselves in their painting? • Can they create moods in their paintings? • Can they choose to use thick and thin brushes as appropriate? • Can they paint a picture of something they can see? • Can they name the primary and secondary colours?	• Can they print with sponges, vegetables and fruit? • Can they print onto paper and textile? • Can they design their own printing block? • Can they create a repeating pattern?	• Can they sort threads and fabrics? • Can they group fabrics and threads by colour and texture? • Can they weave with fabric and thread?
3D	**Collage**	**Use of IT**	**Knowledge**
• Can they add texture by using tools? • Can they make different kinds of shapes? • Can they cut, roll and coil materials such as clay, dough or plasticine?	• Can they cut and tear paper and card for their collages? • Can they gather and sort the materials they will need?	• Can they use a simple painting program to create a picture? • Can they use tools like fill and brushes in a painting package? • Can they go back and change their picture?	• Can they describe what they can see and like in the work of another artist/craft maker/designer? • Can they ask sensible questions about a piece of art?

Knowledge, Skills and Understanding breakdown for Art

Year 2

Drawing	Painting	Printing	Sketch books
• Can they use three different grades of pencil in their drawing (4B, 8B, HB)? • Can they use charcoal, pencil and pastels? • Can they create different tones using light and dark? • Can they show patterns and texture in their drawings? • Can they use a viewfinder to focus on a specific part of an artefact before drawing it?	• Can they mix paint to create all the secondary colours? • Can they mix and match colours, predict outcomes? • Can they mix their own brown? • Can they make tints by adding white? • Can they make tones by adding black?	• Can they create a print using pressing, rolling, rubbing and stamping? • Can they create a print like a designer?	• Can they begin to demonstrate their ideas through photographs and in their sketch books? • Can they set out their ideas, using 'annotation' in their sketch books? • Do they keep notes in their sketch books as to how they have changed their work?
3D/ Textiles	**Collage**	**Use of IT**	**Knowledge**
• Can they make a clay pot? • Can they join two finger pots together? • Can they add line and shape to their work? • Can they join fabric using glue? • Can they sew fabrics together? • Can they create part of a class patchwork?	• Can they create individual and group collages? • Can they use different kinds of materials on their collage and explain why they have chosen them? • Can they use repeated patterns in their collage?	• Can they create a picture independently? • Can they use simple IT mark-making tools, e.g. brush and pen tools? • Can they edit their own work? • Can they take different photographs of themselves displaying different moods? • Can they change their photographic images on a computer?	• Can they link colours to natural and man-made objects? • Can they say how other artist/craft maker/designer have used colour, pattern and shape? • Can they create a piece of work in response to another artist's work?

The Learning Challenge™
CURRICULUM

FOCUS EDUCATION

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

Key Stage 2:

Art

National Curriculum Requirements of Art at Key Stage 2

Pupils should be taught to develop their techniques, including their control and their use of materials, with experimentation and an increasing awareness of different kinds of art, craft and design.

Pupils should be taught:

- to create sketch books to record their observations and use them to review and revisit ideas
- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials (e.g. pencil, charcoal, paint, clay)
- about the greatest artists, architects and designers in history.

Knowledge, Skills and Understanding breakdown for Art

Year 3

Drawing	Painting	Printing	Sketch books
• Can they show facial expressions in their drawings? • Can they use their sketches to produce a final piece of work? • Can they write an explanation of their sketch in notes? • Can they use different grades of pencil shade, to show different tones and texture?	• Can they predict with accuracy the colours that they mix? • Do they know where each of the primary and secondary colours sits on the colour wheel? • Can they create a background using a wash? • Can they use a range of brushes to create different effects?	• Can they make a printing block? • Can they make a 2 colour print?	• Can they use their sketch books to express feelings about a subject and to describe likes and dislikes? • Can they make notes in their sketch books about techniques used by artists? • Can they suggest improvements to their work by keeping notes in their sketch books?
3D/ Textiles	**Collage**	**Use of IT**	**Knowledge**
• Can they add onto their work to create texture and shape? • Can they work with life size materials? • Can they create pop-ups? • Can they use more than one type of stitch? • Can they join fabric together to form a quilt using padding? • Can they use sewing to add detail to a piece of work? • Can they add texture to a piece of work?	• Can they cut very accurately? • Can they overlap materials? • Can they experiment using different colours? • Can they use mosaic? • Can they use montage?	• Can they use the printed images they take with a digital camera and combine them with other media to produce art work? • Can they use IT programs to create a piece of work that includes their own work and that of others (using web)? • Can they use the web to research an artist or style of art?	• Can they compare the work of different artists? • Can they explore work from other cultures? • Can they explore work from other periods of time? • Are they beginning to understand the viewpoints of others by looking at images of people and understand how they are feeling and what the artist is trying to express in their work?

Knowledge, Skills and Understanding breakdown for Art

Year 4

Drawing	Painting	Printing	Sketch books
• Can they begin to show facial expressions and body language in their sketches? • Can they identify and draw simple objects, and use marks and lines to produce texture? • Can they organise line, tone, shape and colour to represent figures and forms in movement? • Can they show reflections? • Can they explain why they have chosen specific materials to draw with?	• Can they create all the colours they need? • Can they create mood in their paintings? • Do they successfully use shading to create mood and feeling?	• Can they print using at least four colours? • Can they create an accurate print design? • Can they print onto different materials?	• Can they use their sketch books to express their feelings about various subjects and outline likes and dislikes? • Can they produce a montage all about themselves? • Do they use their sketch books to adapt and improve their original ideas? • Do they keep notes about the purpose of their work in their sketch books?
3D/ Textiles	**Collage**	**Use of IT**	**Knowledge**
• Do they experiment with and combine materials and processes to design and make 3D form? • Can they begin to sculpt clay and other mouldable materials? • Can they use early textile and sewing skills as part of a project?	• Can they use ceramic mosaic? • Can they combine visual and tactile qualities?	• Can they present a collection of their work on a slide show? • Can they create a piece of art work which includes the integration of digital images they have taken? • Can they combine graphics and text based on their research?	• Can they experiment with different styles which artists have used? • Can they explain art from other periods of history?

Knowledge, Skills and Understanding breakdown for Art

Year 5

Drawing	Painting	Printing	Sketch books
• Can they identify and draw simple objects, and use marks and lines to produce texture? • Do they successfully use shading to create mood and feeling? • Can they organise line, tone, shape and colour to represent figures and forms in movement? • Can they show reflections? • Can they explain why they have chosen specific materials to draw with?	• Can they create a range of moods in their paintings? • Can they express their emotions accurately through their painting and sketches?	• Can they print using a number of colours? • Can they create an accurate print design that meets a given criteria? • Can they print onto different materials?	• Do they keep notes in their sketch books as to how they might develop their work further? • Do they use their sketch books to compare and discuss ideas with others?
3D/ Textiles	**Collage**	**Use of IT**	**Knowledge**
• Do they experiment with and combine materials and processes to design and make 3D form? • Can they sculpt clay and other mouldable materials? • Can they use textile and sewing skills as part of a project, e.g. hanging, textile book, etc.? This could include running stitch, cross stitch, backstitch, appliqué and/or embroidery.	• Can they use ceramic mosaic to produce a piece of art? • Can they combine visual and tactile qualities to express mood and emotion?	• Can they create a piece of art work which includes the integration of digital images they have taken? • Can they combine graphics and text based on their research? • Can they scan images and take digital photos, and use software to alter them, adapt them and create work with meaning? • Can they create digital images with animation, video and sound to communicate their ideas?	• Can they experiment with different styles which artists have used? • Do they learn about the work of others by looking at their work in books, the Internet, visits to galleries and other sources of information?

Knowledge, Skills and Understanding breakdown for Art

Year 6

Drawing	Painting	Printing	Sketch books
• Do their sketches communicate emotions and a sense of self with accuracy and imagination? • Can they explain why they have combined different tools to create their drawings? • Can they explain why they have chosen specific drawing techniques?	• Can they explain what their own style is? • Can they use a wide range of techniques in their work? • Can they explain why they have chosen specific painting techniques?	• Can they overprint using different colours? • Do they look very carefully at the methods they use and make decisions about the effectiveness of their printing methods?	• Do their sketch books contain detailed notes, and quotes explaining about items? • Do they compare their methods to those of others and keep notes in their sketch books? • Do they combine graphics and text based research of commercial design, for example magazines etc., to influence the layout of their sketch books. • Do they adapt and refine their work to reflect its meaning and purpose, keeping notes and annotations in their sketch books?
3D/ Textiles	**Collage**	**Use of IT**	**Knowledge**
• Can they create models on a range of scales? • Can they create work which is open to interpretation by the audience? • Can they include both visual and tactile elements in their work?	• Can they justify the materials they have chosen? • Can they combine pattern, tone and shape?	• Do they use software packages to create pieces of digital art to design. • Can they create a piece of art which can be used as part of a wider presentation?	• Can they make a record about the styles and qualities in their work? • Can they say what their work is influenced by? • Can they include technical aspects in their work, e.g. architectural design?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 1:
DT

National Curriculum Requirements of DT at Key Stage 1

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

When designing and making, pupils should be taught to:

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

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

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

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

National Curriculum Requirements of Cooking and Nutrition at Key Stage 1

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

Pupils should be taught to:

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

Knowledge, Skills and Understanding breakdown for Design and Technology

Year 1

Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products	Evaluating processes and products
• Can they think of some ideas of their own? • Can they explain what they want to do? • Can they use pictures and words to plan?	• Can they explain what they are making? • Can they explain which tools are they using?	• Can they describe how something works? • Can they talk about their own work and things that other people have done?

Breadth of study

Cooking and nutrition	Textiles	Mechanisms	Use of materials	Construction
• Can they cut food safely? • Can they describe the texture of foods? • Do they wash their hands and make sure that surfaces are clean? • Can they think of interesting ways of decorating food they have made, eg, cakes?	• Can they describe how different textiles feel? • Can they make a product from textiles by gluing?	• Can they make a product which moves? • Can they cut materials using scissors? • Can they describe the materials using different words? • Can they say why they have chosen moving parts?	• Can they make a structure/model using different materials? • Is their work tidy? • Can they make their model stronger if it needs to be?	• Can they talk with others about how they want to construct their product? • Can they select appropriate resources and tools for their building projects? • Can they make simple plans before making objects, e.g. drawings, arranging pieces of construction before building?

Knowledge, Skills and Understanding breakdown for Design and Technology

Year 2

Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products	Evaluating processes and products
• Can they think of ideas and plan what to do next? • Can they choose the best tools and materials? Can they give a reason why these are best? • Can they describe their design by using pictures, diagrams, models and words?	• Can they join things (materials/ components) together in different ways?	• Can they explain what went well with their work? • If they did it again, can they explain what they would improve?

Breadth of study

Cooking and nutrition	Textiles	Mechanisms	Use of materials	Construction
• Can they describe the properties of the ingredients they are using? • Can they explain what it means to be hygienic? • Are they hygienic in the kitchen?	• Can they measure textile? • Can they join textiles together to make something? • Can they cut textiles? • Can they explain why they chose a certain textile?	• Can they join materials together as part of a moving product? • Can they add some kind of design to their product?	• Can they measure materials to use in a model or structure? • Can they join material in different ways? • Can they use joining, folding or rolling to make it stronger?	• Can they make sensible choices as to which material to use for their constructions? • Can they develop their own ideas from initial starting points? • Can they incorporate some type of movement into models? • Can they consider how to improve their construction?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 2:
DT

National Curriculum Requirements of DT at Key Stage 2

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

When designing and making, pupils should be taught to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- select from and use a wider range of tools and equipment to perform practical tasks, such as cutting, shaping, joining and finishing, accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products, (for example as gears, pulleys, cams, levers and linkages)
- understand and use electrical systems in their products, (for example series circuits incorporating switches, bulbs, buzzers and motors)
- apply their understanding of computing to programme, monitor and control their products.

National Curriculum Requirements of Cooking and Nutrition at Key Stage 2

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

Pupils should be taught to:

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Knowledge, Skills and Understanding breakdown for Design and Technology

Year 3

Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products	Evaluating processes and products
• Can they show that their design meets a range of requirements? • Can they put together a step-by-step plan which shows the order and also what equipment and tools they need? • Can they describe their design using an accurately labelled sketch and words? • How realistic is their plan?	• Can they use equipment and tools accurately?	• Can they explain what they changed which made their design even better?

Breadth of study

Cooking and nutrition	Textiles	Electrical and mechanical components	Stiff and flexible sheet materials	Mouldable materials
• Can they choose the right ingredients for a product? • Can they use equipment safely? • Can they make sure that their product looks attractive? • Can they describe how their combined ingredients come together? • Can they set out to grow plants such as cress and herbs from seed with the intention of using them for their food product?	• Can they join textiles of different types in different ways? • Can they choose textiles both for their appearance and also qualities?	• Do they select the most appropriate tools and techniques to use for a given task? • Can they make a product which uses both electrical and mechanical components? • Can they use a simple circuit? • Can they use a number of components?	• Do they use the most appropriate materials? • Can they work accurately to make cuts and holes? • Can they join materials?	• Do they select the most appropriate materials? • Can they use a range of techniques to shape and mould? • Do they use finishing techniques?

Knowledge, Skills and Understanding breakdown for Design and Technology

Year 4

Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products	Evaluating processes and products
• Can they come up with at least one idea about how to create their product? • Do they take account of the ideas of others when designing? • Can they produce a plan and explain it to others? • Can they suggest some improvements and say what was good and not so good about their original design?	• Can they tell if their finished product is going to be good quality? • Are they conscience of the need to produce something that will be liked by others? • Can they show a good level of expertise when using a range of tools and equipment? • Do they work at their product even though their original idea might not have worked?	• Have they thought of how they will check if their design is successful? • Can they begin to explain how they can improve their original design? • Can they evaluate their product, thinking of both appearance and the way it works? • Do they take time to consider how they could have made their idea better?

Breadth of study

Cooking and nutrition	Textiles	Electrical and mechanical components	Stiff and flexible sheet materials	Mouldable materials
• Do they know what to do to be hygienic and safe? • Have they thought what they can do to present their product in an interesting way?	• Do they think what the user would want when choosing textiles? • Have they thought about how to make their product strong? • Can they devise a template? • Can they explain how to join things in a different way?	• Can they add things to their circuits? • How have they altered their product after checking it? • Are they confident about trying out new and different ideas?	• Can they measure carefully so as to make sure they have not made mistakes? • How have they attempted to make their product strong?	• Can they use a range of advanced techniques to shape and mould? • Do they use finishing techniques, showing an awareness of audience?

Knowledge, Skills and Understanding breakdown for Design and Technology

Year 5

Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products	Evaluating processes and products
• Can they come up with a range of ideas after they have collected information? • Do they take a user's view into account when designing? • Can they produce a detailed step-by-step plan? • Can they suggest some alternative plans and say what the good points and drawbacks are about each?	• Can they explain why their finished product is going to be of good quality? • Can they explain how their product will appeal to the audience? • Can they use a range of tools and equipment expertly? • Do they persevere through different stages of the making process?	• Do they keep checking that their design is the best it can be? • Do they check whether anything could be improved? • Can they evaluate appearance and function against the original criteria?

Breadth of study

Cooking and nutrition	Textiles	Electrical and mechanical components	Stiff and flexible sheet materials	Mouldable materials
• Can they describe what they do to be both hygienic and safe? • How have they presented their product well?	• Do they think what the user would want when choosing textiles? • How have they made their product attractive and strong? • Can they make up a prototype first? • Can they use a range of joining techniques?	• Can they incorporate a switch into their product? • Can they refine their product after testing it? • Can they incorporate hydraulics and pneumatics?	• Are their measurements accurate enough to ensure that everything is precise? • How have they ensured that their product is strong and fit for purpose?	• Are they motivated enough to refine and further improve their product using mouldable materials?

Knowledge, Skills and Understanding breakdown for Design and Technology

Year 6

Developing, planning and communicating ideas	Working with tools, equipment, materials and components to make quality products	Evaluating processes and products
• Can they use a range of information to inform their design? • Can they use market research to inform plans? • Can they work within constraints? • Can they follow and refine their plan if necessary? • Can they justify their plan to someone else? • Do they consider culture and society in their designs?	• Can they use tools and materials precisely? • Do they change the way they are working if needed?	• How well do they test and evaluate their final product? • Is it fit for purpose? • What would improve it? • Would different resources have improved their product? • Would they need more or different information to make it even better? • Does their product meet all design criteria? • Did they consider the use of the product when selecting materials?

Breadth of study

Cooking and nutrition	Textiles	Electrical and mechanical components	Stiff and flexible sheet materials	Mouldable materials
• Can they explain how their product should be stored with reasons? • Can they set out to grow their own products with a view to making a salad, taking account of time required to grow different foods?	• Have they thought about how their product could be sold? • Have they given considered thought about what would improve their product even more?	• Can they use different kinds of circuit in their product? • Can they think of ways in which adding a circuit would improve their product?	• Can they justify why they selected specific materials? • How have they ensured that their work is precise and accurate? • Can they hide joints so as to improve the look of their product?	• Can they justify why the chosen material was the best for the task? • Can they justify design in relation to the audience?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 1:

Music

National Curriculum Requirements of Music at Key Stage 1

In music pupils should be taught to:

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

Knowledge, Skills and Understanding breakdown for Music

Year 1

Performing	Composing *(incl notation)*	Appraising
• Can they use their voice to speak/sing/chant? • Do they join in with singing? • Can they use instruments to perform? • Do they look at their audience when they are performing? • Can they clap short rhythmic patterns? • Can they copy sounds?	• Can they make different sounds with their voice? • Can they make different sounds with instruments? • Can they identify changes in sounds? • Can they change the sound? • Can they repeat (short rhythmic and melodic) patterns? • Can they make a sequence of sounds? • Can they show sounds by using pictures?	• Can they respond to different moods in music? • Can they say how a piece of music makes them feel? • Can they say whether they like or dislike a piece of music? • Can they choose sounds to represent different things? • Can they recognise repeated patterns? • Can they follow instructions about when to play or sing?

Year 1 (Challenging)

• Can they make loud and quiet sounds? • Do they know that the chorus keeps being repeated?	• Can they tell the difference between long and short sounds? • Can they tell the difference between high and low sounds? • Can they give a reason for choosing an instrument?	• Can they tell the difference between a fast and slow tempo? • Can they tell the difference between loud and quiet sounds? • Can they identify two types of sound happening at the same time?

Knowledge, Skills and Understanding breakdown for Music

Year 2

Performing	Composing *(incl notation)*	Appraising
• Do they sing and follow the melody (tune)? • Do they sing accurately at a given pitch? • Can they perform simple patterns and accompaniments keeping a steady pulse? • Can they perform with others? • Can they play simple rhythmic patterns on an instrument? • Can they sing/clap a pulse increasing or decreasing in tempo?	• Can they order sounds to create a beginning, middle and end? • Can they create music in response to <different starting points>? • Can they choose sounds which create an effect? • Can they use symbols to represent sounds? • Can they make connections between notations and musical sounds?	• Can they improve their own work? • Can they listen out for particular things when listening to music?

Year 2 (Challenging)

• Can they sing/play rhythmic patterns in contrasting tempo; keeping to the pulse?	• Can they use simple structures in a piece of music? • Do they know that phrases are where we breathe in a song?	• Do they recognise sounds that move by steps and by leaps?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 2:

Music

National Curriculum Requirements of Music at Key Stage 2

Pupils should be taught to sing and play musically with increasing confidence and control. They should develop an understanding of musical composition, organising and manipulating ideas within musical structures and reproducing sounds from aural memory.

Pupils should be taught to:

- play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression
- improvise and compose music using the inter-related dimensions of music
- listen with attention to detail and recall sounds with increasing aural memory
- use and understand staff and other musical notations
- appreciate and understand a wide range of high-quality live and recorded music from different traditions and from great composers and musicians
- develop an understanding of the history of music.

Knowledge, Skills and Understanding breakdown for Music

Year 3

Performing	Composing *(incl notation)*	Appraising
• Do they sing in tune with expression? • Do they control their voice when singing? • Can they play clear notes on instruments?	• Can they use different elements in their composition? • Can they create repeated patterns with different instruments? • Can they compose melodies and songs? • Can they create accompaniments for tunes? • Can they combine different sounds to create a specific mood or feeling?	• Can they improve their work; explaining how it has improved? • Can they use musical words (the elements of music) to describe a piece of music and compositions? • Can they use musical words to describe what they like and dislike? • Can they recognise the work of at least one famous composer?

Year 3 (Challenging)

• Can they work with a partner to create a piece of music using more than one instrument?	• Do they understand metre in 2 and 3 beats; then 4 and 5 beats? • Do they understand how the use of tempo can provide contrast within a piece of music?	• Can they tell whether a change is gradual or sudden? • Can they identify repetition, contrasts and variations?

Knowledge, Skills and Understanding breakdown for Music

Year 4

Performing	Composing *(incl notation)*	Appraising
• Can they perform a simple part rhythmically? • Can they sing songs from memory with accurate pitch? • Can they improvise using repeated patterns?	• Can they use notations to record and interpret sequences of pitches? • Can they use standard notation? • Can they use notations to record compositions in a small group or on their own? • Can they use their notation in a performance?	• Can they explain the place of silence and say what effect it has? • Can they start to identify the character of a piece of music? • Can they describe and identify the different purposes of music? • Can they begin to identify with the style of work of Beethoven, Mozart and Elgar?

Year 4 (Challenging)

• Can they use selected pitches simultaneously to produce simple harmony?	• Can they explore and use sets of pitches, e.g. 4 or 5 note scales? • Can they show how they can use dynamics to provide contrast?	• Can they identify how a change in timbre can change the effect of a piece of music?

Knowledge, Skills and Understanding breakdown for Music

Year 5

Performing	Composing *(incl notation)*	Appraising
• Do they breathe in the correct place when singing? • Can they sing and use their understanding of meaning to add expression? • Can they maintain their part whilst others are performing their part? • Can they perform 'by ear' and from simple notations? • Can they improvise within a group using melodic and rhythmic phrases? • Can they recognise and use basic structural forms e.g. rounds, variations, rondo form?	• Can they change sounds or organise them differently to change the effect? • Can they compose music which meets specific criteria? • Can they use their notations to record groups of pitches (chords)? • Can they use a music diary to record aspects of the composition process? • Can they choose the most appropriate tempo for a piece of music?	• Can they describe, compare and evaluate music using musical vocabulary? • Can they explain why they think their music is successful or unsuccessful? • Can they suggest improvements to their own or others' work? • Can they choose the most appropriate tempo for a piece of music? • Can they contrast the work of famous composers and show preferences?

Year 5 (Challenging)

• Can they use pitches simultaneously to produce harmony by building up simple chords? • Can they devise and play a repeated sequence of pitches on a tuned instrument to accompany a song?	• Do they understand the relation between pulse and syncopated patterns? • Can they identify (and use) how patterns of repetitions, contrasts and variations can be organised to give structure to a melody, rhythm, dynamic and timbre?	• Can they explain how tempo changes the character of music? • Can they identify where a gradual change in dynamics has helped to shape a phrase of music?

Knowledge, Skills and Understanding breakdown for Music

Year 6

Performing	Composing *(incl notation)*	Appraising
• Can they sing a harmony part confidently and accurately? • Can they perform parts from memory? • Can they perform using notations? • Can they take the lead in a performance? • Can they take on a solo part? • Can they provide rhythmic support?	• Can they use a variety of different musical devices in their composition? (incl melody, rhythms and chords) • Do they recognise that different forms of notation serve different purposes? • Can they use different forms of notation? • Can they combine groups of beats?	• Can they refine and improve their work? • Can they evaluate how the venue, occasion and purpose affects the way a piece of music is created? • Can they analyse features within different pieces of music? • Can they compare and contrast the impact that different composers from different times will have had on the people of the time?

Year 6 (Challenging)

• Can they perform a piece of music which contains two (or more) distinct melodic or rhythmic parts, knowing how the parts will fit together?	• Can they show how a small change of tempo can make a piece of music more effective? • Do they use the full range of chromatic pitches to build up chords, melodic lines and bass lines?	• Can they appraise the introductions, interludes and endings for songs and compositions they have created?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 1:

Dance

National Curriculum Requirements of Dance at Key Stage 1

Pupils should be taught to:

- perform dances using simple movement patterns

Knowledge, Skills and Understanding breakdown for Dance

Year 1

- Can they explore and perform basic body actions?;
- Do they use different parts of the body singly and in combination?;
- Do they show some sense of dynamic, expressive and rhythmic qualities in their own dance?;
- Do they choose appropriate movements for different dance ideas?;
- Can they remember and repeat short dance phrases and simple dances?;
- Do they move with control?;
- Do they vary the way they use space?;
- Do they describe how their lungs and heart work when dancing?;
- Do they describe basic body actions and simple expressive and dynamic qualities of movement?

Year 1 (Challenging)

- Can they perform more complicated combinations of movement fluently and with control?;
- Can they perform clearly and expressively?;
- Do they show an awareness of phrasing and music?;
- Can they choose movements that show a clear understanding of the dance idea?;
- Can they say why their heart beats faster and their temperature rises when dancing?;
- Do they talk about dance using a range of descriptive language?

Knowledge, Skills and Understanding breakdown for Dance

Year 2

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

Year 2 (Challenging)

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

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 2:

Dance

National Curriculum Requirements of Dance at Key Stage 2

Pupils should be taught to:

- perform dances using a range of movement patterns

Knowledge, Skills and Understanding breakdown for Dance

Year 3

- Do they improvise freely, translating ideas from a stimulus into movement?
- Can they create dance phrases that communicate ideas?
- Do they share and create phrases with a partner and in small groups?
- Can they repeat, remember and perform these phrases in a dance?
- Do they use dynamic, rhythmic and expressive qualities clearly and with control?
- Do they understand the importance of warming-up and cooling-down?
- Do they recognise and talk about the movements used and the expressive qualities of dance?
- Can they suggest improvements to their own and other people's dances?

Year 3 (Challenging)

- Do they use a wide range of movements when improvising?
- Can they choose appropriate movements to express the idea, mood and feeling of a dance?
- Can they take the lead when creating dances with a partner or in a group?
- Do they show a greater understanding of how to compose dance phrases?
- Can they show greater fluency and control in their movements?
- Do they interpret rhythm well, using a range of musical accompaniments?
- Do they interpret and express their thoughts clearly when talking about dance?
- Can they make appropriate suggestions about how work could be improved?

Knowledge, Skills and Understanding breakdown for Dance

Year 4

- Can they respond imaginatively to a range of stimuli related to character and narrative?
- Do they use simple motifs and movement patterns to structure dance phrases on their own, with a partner and in a group?
- Can they refine, repeat and remember dance phrases and dances?
- Can they perform dances clearly and fluently?
- Can they show sensitivity to the dance idea and the accompaniment?
- Do they show a clear understanding of how to warm-up and cool-down safely?
- Do they describe, interpret and evaluate dance, using appropriate language?

Year 4 (Challenging)

- Can they structure and vary longer dances?
- Do they develop movement ideas for others?
- Do they show a good sense of rhythm and style when performing?
- Can they remember and perform a range of warm-up and cool-down activities?
- Can they give reasons why physical activity is good for health?
- Do they use a range of dance vocabulary to describe, interpret and evaluate dance?

Knowledge, Skills and Understanding breakdown for Dance

Year 5

- Do they plan and perform dances confidently?
- Can they compose motifs and plan dances creatively and collaboratively in groups?
- Can they adapt and refine the way they use weight, space and rhythm in their dances to express themselves in the style of dance they use?
- Can they perform different styles of dance clearly and fluently?
- Do they organise their own warm-up and cool-down exercises?
- Do they show an understanding of safe exercising?
- Can they recognise and comment on dances, showing an understanding of style?
- Can they suggest ways to improve their own and other people's work?

Year 5 (Challenging)

- Do they use their understanding of composition to create dance phrases for themselves and others in their group?
- Do they use their knowledge of dance to adapt their skills to meet the demands of a range of dance styles?
- Can they show expression in their dances and sensitivity to music?
- Can they organise their own warm-up and cool-down exercises?
- Can they show that they understand why warming-up is important for a good performance?
- Can they identify the form and structure of a dance?
- Can they make imaginative suggestions as to how to improve their own and other people's work?

Knowledge, Skills and Understanding breakdown for Dance

Year 6

- Can they work creatively and imaginatively on their own and/or with a partner to compose motifs and structure simple dances?
- Can they perform to an accompaniment expressively and sensitively?
- Can they perform dances fluently and with control?
- Can they warm-up and cool-down independently?
- Do they understand how dance helps to keep them healthy?
- Do they use appropriate criteria to evaluate and refine their own and others' work?
- Do they talk about dance with understanding, using appropriate language and terminology?

Year 6 (Challenging)

- Can they interpret different stimuli with imagination and flair?
- Can they create, refine and structure movements and patterns with artistic understanding?
- Can they communicate the artistic intention of a dance clearly, fluently, musically and with control?
- Do they take the lead when working in a group?
- Can they help others to refine and structure movements and patterns?
- Do they understand why dancing is good for their health?
- Can they organise their own warm-up and cool-down activities to prepare for, and recover from, dance?
- Do they describe, interpret and evaluate dance, using appropriate language and terminology?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 1 and 2:

Languages

National Curriculum Requirements of Language at Key Stage 2 only

- Teaching may be of any modern or ancient foreign language and should focus on enabling pupils to make substantial progress in one language. The teaching should provide an appropriate balance of spoken and written language and should lay the foundations for further foreign language teaching at Key Stage 3. It should enable pupils to understand and communicate ideas, facts and feelings in speech and writing, focused on familiar and routine matters, using their knowledge of phonology, grammatical structures and vocabulary.

- The focus of study in modern languages will be on practical communication. If an ancient language is chosen the focus will be to provide a linguistic foundation for reading comprehension and an appreciation of classical civilisation. Pupils studying ancient languages may take part in simple oral exchanges, while discussion of what they read will be conducted in English. A linguistic foundation in ancient languages may support the study of modern languages at key stage 3.

Pupils should be taught to:

- listen attentively to spoken language and show understanding by joining in and responding

- explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words

- engage in conversations; ask and answer questions; express opinions and respond to those of others; seek clarification and help*

- speak in sentences, using familiar vocabulary, phrases and basic language structures

- develop accurate pronunciation and intonation so that others understand when they are reading aloud or using familiar words and phrases*

National Curriculum Requirements of Language at Key Stage 2 only

Pupils should be taught to (continued):

- present ideas and information orally to a range of audiences*
- read carefully and show understanding of words, phrases and simple writing
- appreciate stories, songs, poems and rhymes in the language
- broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary
- write phrases from memory, and adapt these to create new sentences, to express ideas clearly
- describe people, places, things and actions orally* and in writing
- understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English.

The starred (*) content above will not be applicable to ancient languages.

Knowledge, Skills and Understanding breakdown for Foreign Languages

Although the National Curriculum only sets out Key Stage 2 Programme of Study, the following may be of assistance to schools wishing to start the languages earlier

Year 1

Listening and responding	Speaking	Reading and responding	Writing
• Do they understand simple classroom commands? • Do they understand short statements? • Do they understand simple questions? • Do they understand clearly spoken speech?	• Can they answer with a single word? • Can they answer with a short phrase?	• Can they read and understand a single word?	• Can they copy a single word correctly? • Can they label items? • Can they choose the right words to complete a phrase? • Can they choose the right words to complete a short sentence?
May need a lot of help, e.g. gesture and repetition.	*Pronunciation may be approximate, and may need considerable support from a spoken model and from visual cues.*	*Presented in clear script in familiar context. May need visual cues.*	

Knowledge, Skills and Understanding breakdown for Foreign Languages

Although the National Curriculum only sets out Key Stage 2 Programme of Study, the following may be of assistance to schools wishing to start the languages earlier

Year 2

Listening and responding	Speaking	Reading and responding	Writing
• Do they understand a range of familiar statements? • Do they understand a range of familiar questions? *May need items repeated.*	• Can they give short and simple responses to what they see and hear? • Can they name and describe people? • Can they name and describe places? • Can they name and describe objects? • Can they use (set) phrases? *Pronunciation may still be approximate and delivery hesitant, but their meaning is clear.*	• Can they read and understand short phrases? • Can they read aloud single words and phrases? • Can they use books or glossaries to find the meanings of new words?	• Can they copy a short familiar phrase? • Can they write or word-process set phrases we use in class? *When they write familiar words from memory their spelling may be approximate.*

Knowledge, Skills and Understanding breakdown for Foreign Languages

Years 3 and 4

Listening and responding	Speaking	Reading and responding	Writing
• Do they understand short passages made up of familiar language? • Do they understand instructions, messages and dialogues within short passages? • Can they identify and note the main points and give a personal response on a passage? *Spoken at near normal speed with no interference. May need short sections repeated.*	• Can they have a short conversation where they are saying 2-3 things? • Can they use short phrases to give a personal response? *Although they use mainly memorised language, they occasionally substitute items of vocabulary to vary the questions or statements.*	• Can they read and understand short texts using familiar language? • Can they identify and note the main points and give a personal response? • Can they read independently? • Can they use a bilingual dictionary or glossary to look up new words?	• Can they write 2-3 short sentences on <a familiar topic>? • Can they say what they like and dislike about <a familiar topic>? *They write short phrases from memory and their spelling is readily understandable.*

Knowledge, Skills and Understanding breakdown for Foreign Languages

Years 5 and 6

Listening and responding	Speaking	Reading and responding	Writing
• Do they understand longer passages made up of familiar language in simple sentences? • Can they identify the main points and some details? *Spoken at near normal speed with no interference. May need some items to be repeated.*	• Can they hold a simple conversation with at least 3-4 exchanges? • Can they use their knowledge of grammar to adapt and substitute single words and phrases? *Their pronunciation is generally accurate and they show some consistency in their intonation.*	• Can they understand a short story or factual text and note some of the main points? • Can they use context to work out unfamiliar words?	• Can they write a paragraph of about 3-4 simple sentences? • Can they adapt and substitute individual words and set phrases? • Can they use a dictionary or glossary to check words they have learnt? *They will draw largely on memorised language.*

Knowledge, Skills and Understanding breakdown for Foreign Languages: Using the Languages Ladder

		Listening	Speaking	Reading	Writing
Early Stage	**Grade 1**	- Do they understand a few familiar spoken words and phrases?	- Can they say and repeat single words in short and simple phrases?	- Can they recognise and read out a few familiar words and phrases?	- Can they write or copy simple words or symbols correctly?
	Grade2	- Do they understand a range of familiar spoken phrases?	- Can they answer simple questions and give basic information?	- Can they understand and read out familiar written phrases?	- Can they write one or two short sentences to a model? - Can they fill in the words on a simple form?
	Grade3	- Do they understand the main points from a short spoken passage made up of familiar language?	- Can they ask and answer simple questions and talk about their interests?	- Can they understand the main points from a short written text in clear printed script?	- Can they write a few short sentences with support, using expressions which have already been learnt?
On completing the early stage		*Should be able to understand a basic range of everyday expressions relating to personal details and needs. May need to listen several times to get the information needed, depending how fast the speaker talks. Should have some understanding of a few simple grammatical structures and sentence patterns. Should be familiar with the sound system of the language. Should be aware how to address people both formally and informally as appropriate.*	*Should be able to use basic range of everyday expression relating to personal details and needs. Pronunciation may not always be completely accurate but meaning will be clear. Should be able to understand and use a few simple grammatical structures and sentence patterns. Should be familiar with the sound system of the language. Should be aware of how to address people both formally and informally as appropriate.*	*Should be able to understand a basic range of everyday expressions relating to personal details and needs. Should have some understanding of a few simple grammatical structures and sentence patterns. Should be familiar with the writing system of the language. Should be aware of how to address people both formally and informally as appropriate.*	*Should be able to use a basic range of everyday expressions relating to personal details and needs. Spelling may not always be completely accurate but meaning will be clear. Should be able to understand and use a few simple grammatical structures and sentence patterns. Should be familiar with the writing system of the language. Should be aware of how to address people both formally and informally as appropriate.*
Prelim Stage	**Grade 4**	- Do they understand the main points and some of the detail from a spoken passage made up of familiar language in simple sentences?	- Can they take part in a simple conversation and express their own opinions?	- Can they understand the main points and some detail from short written texts in familiar contexts?	- Can they write a short text on a familiar topic, adapting language which they have already learned?
	Grade 5	- Do they understand the main points and opinions in spoken passages made up of familiar material from various contexts?	- Can they give a short prepared talk, on a topic of their choice, including expressing their opinions?	- Can they understand the main points and opinions in written texts from various contexts?	- Can they write a short text on a range of familiar topic, using simple sentences?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 1:

PE

National Curriculum Requirements of PE at Key Stage 1

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

Pupils should be taught to:

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

Knowledge, Skills and Understanding breakdown for Physical Education

Year 1

Acquiring and developing skills	Evaluating and improving	Health and fitness
• Can they copy actions? • Can they repeat actions and skills? • Can they move with control and care?	• Can they talk about what they have done? • Can they describe what other people did?	• Can they describe how their body feels before, during and after an activity?
Dance (also covered in Dance section)	**Games**	**Gymnastics**
• Can they move to music? • Can they copy dance moves? • Can they perform some dance moves? • Can they make up a short dance? • Can they move around the space safely?	• Can they throw underarm? • Can they roll a piece of equipment? • Can they hit a ball with a bat? • Can they move and stop safely? • Can they catch with both hands? • Can they throw in different ways? • Can they kick in different ways?	• Can they make their body tense, relaxed, curled and stretched? • Can they control their body when travelling? • Can they control their body when balancing? • Can they copy sequences and repeat them? • Can they roll in different ways? • Can they travel in different ways? • Can they balance in different ways? • Can they climb safely? • Can they stretch in different ways? • Can they curl in different ways?

Knowledge, Skills and Understanding breakdown for Physical Education

Year 2

Acquiring and developing skills	Evaluating and improving	Health and fitness
• Can they copy and remember actions? • Can they repeat and explore actions with control and coordination?	• Can they talk about what is different between what they did and what someone else did? • Can they say how they could improve?	• Can they show how to exercise safely? • Can they describe how their body feels during different activities? • Can they explain what their body needs to keep healthy?
Dance (also covered in Dance section)	**Games**	**Gymnastics**
• Can they dance imaginatively? • Can they change rhythm, speed, level and direction? • Can they dance with control and co-ordination? • Can they make a sequence by linking sections together? • Can they link some movements to show a mood or feeling?	• Can they use hitting, kicking and/or rolling in a game? • Can they stay in a 'zone' during a game? • Can they decide where the best place to be is during a game? • Can they use one tactic in a game? • Can they follow rules?	• Can they plan and show a sequence of movements? • Can they use contrast in their sequences? • Are their movements controlled? • Can they think of more than one way to create a sequence which follows a set of 'rules'? • Can they work on their own and with a partner to create a sequence?

The Learning Challenge™ CURRICULUM

FOCUS EDUCATION

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

Key Stage 2:

PE

National Curriculum Requirements of PE at Key Stage 2

Pupils should continue to implement and develop a broader range of skills, learning how to use them in different ways and to link them to make actions and sequences of movement. They should enjoy communicating, collaborating and competing with each other. They should develop an understanding of how to improve in different physical activities and sports and learn how to evaluate and recognise their own success.

Pupils should be taught to:

- use running, jumping, catching and throwing in isolation and in combination
- play competitive games, modified where appropriate, (for example badminton, basketball, cricket, football, hockey, netball, rounders and tennis) and apply basic principles suitable for attacking and defending
- develop flexibility, strength, technique, control and balance, (for example through gymnastics and athletics)
- perform dances using a range of movement patterns
- take part in outdoor and adventurous activity challenges both individually and within a team
- compare their performances with previous ones and demonstrate improvement to achieve their personal best.

Swimming and water safety

All schools must provide swimming instruction either in Key Stage 1 or Key Stage 2.
In particular, pupils should be taught to:

- swim competently, confidently and proficiently over a distance of at least 25 metres
- use a range of strokes effectively, (for example front crawl, backstroke and breaststroke)
- perform safe self-rescue in different water-based situations.

Knowledge, Skills and Understanding breakdown for Physical Education

Year 3

Acquiring and developing skills	Evaluating and improving	Health and fitness	Dance (also covered in Dance section)
• Can they select and use the most appropriate skills, actions or ideas? • Can they move and use actions with co-ordination and control?	• Can they explain how their work is similar and different from that of others? • With help, do they recognise how performances could be improved?	• Can they explain why it is important to warm-up and cool-down? • Can they identify some muscle groups used in gymnastic activities?	• Can they improvise freely, translating ideas from a stimulus into movement? • Can they share and create phrases with a partner and in small groups? • Can they repeat, remember and perform these phrases in a dance?
Games	**Gymnastics**	**Athletics**	**Outdoor/ adventurous**
• Can they throw and catch with control when under limited pressure? • Are they aware of space and use it to support team-mates and cause problems for the opposition? • Do they know and use rules fairly to keep games going? • Can they keep possession with some success when using equipment that is not used for throwing and catching skills?	• Can they use a greater number of their own ideas for movement in response to a task? • Can they adapt sequences to suit different types of apparatus and their partner's ability? • Can they explain how strength and suppleness affect performances? • Can they compare and contrast gymnastic sequences, commenting on similarities and differences?	• Can they run at fast, medium and slow speeds, changing speed and direction? • Can they link running and jumping activities with some fluency, control and consistency? • Can they make up and repeat a short sequence of linked jumps? • Can they take part in a relay activity, remembering when to run and what to do? • Do they throw a variety of objects, changing their action for accuracy and distance?	• Can they follow a map in a familiar context? • Can they move from one location to another following a map? • Can they use clues to follow a route? • Can they follow a route safely?

Knowledge, Skills and Understanding breakdown for Physical Education

Year 4

Acquiring and developing skills	Evaluating and improving	Health and fitness	Dance (also covered in Dance section)
• Can they select and use the most appropriate skills, actions or ideas? • Can they move and use actions with co-ordination and control? • Can they make up their own small-sided game?	• Can they explain how their work is similar and different from that of others? • Can they use their comparison to improve their work?	• Can they explain why warming up is important? • Can they explain why keeping fit is good for their health?	• Can they take the lead when working with a partner or group? • Can they use dance to communicate an idea? • Can they work on their movements and refine them? • Is their dance clear and fluent?
Games	**Gymnastics**	**Athletics**	**Outdoor/ adventurous**
• Can they catch with one hand? • Can they throw and catch accurately? • Can they hit a ball accurately and with control? • Can they keep possession of the ball? • Can they move to find a space when they are not in possession during a game? • Can they vary tactics and adapt skills according to what is happening?	• Can they work in a controlled way? • Can they include change of speed? • Can they include change of direction? • Can they include range of shapes? • Can they follow a set of 'rules' to produce a sequence? • Can they work with a partner to create, repeat and improve a sequence with at least three phases?	• Can they run over a long distance? • Can they spring over a short distance? • Can they throw in different ways? • Can they hit a target? • Can they jump in different ways?	• Can they follow a map in a more demanding familiar context? • Can they move from one location to another following a map? • Can they use clues to follow a route? • Can they follow a route accurately, safely and within a time limit?

Knowledge, Skills and Understanding breakdown for Physical Education

Year 5

Acquiring and developing skills	Evaluating and improving	Health and fitness	Dance (also covered in Dance section)
• Can they link skills, techniques and ideas and apply them accurately and appropriately? • Do they show good control in their movements?	• Can they compare and comment on skills, techniques and ideas that they and others have used? • Can they use their observations to improve their work?	• Can they explain some important safety principles when preparing for exercise? • Can they explain what effect exercise has on their body? • Can they explain why exercise is important?	• Can they compose their own dances in a creative and imaginative way? • Can they perform to an accompaniment, expressively and sensitively? • Are their movements controlled? • Does their dance show clarity, fluency, accuracy and consistency?
Games	**Gymnastics**	**Athletics**	**Outdoor/ adventurous**
• Can they gain possession by working as a team? • Can they pass in different ways? • Can they use forehand and backhand with a racquet? • Can they field? • Can they choose the best tactics for attacking and defending? • Can they use a number of techniques to pass, dribble and shoot?	• Can they make complex or extended sequences? • Can they combine action, balance and shape? • Can they perform consistently to different audiences? • Are their movements accurate, clear and consistent?	• Are they controlled when taking off and landing in a jump? • Can they throw with accuracy? • Can they combine running and jumping? • Can they follow specific rules?	• Can they follow a map in an unknown location? • Can they use clues and compass directions to navigate a route? • Can they change their route if there is a problem? • Can they change their plan if they get new information?

Knowledge, Skills and Understanding breakdown for Physical Education

Year 6

Acquiring and developing skills	Evaluating and improving	Health and fitness	Dance (also covered in Dance section)
• Do they apply their skills, techniques and ideas consistently? • Do they show precision, control and fluency?	• Can they analyse and explain why they have used specific skills or techniques? • Can they modify use of skills or techniques to improve their work? • Can they create their own success criteria for evaluating?	• Can they explain how the body reacts to different kinds of exercise? • Can they choose appropriate warm ups and cool downs? • Can they explain why we need regular and safe exercise?	• Can they develop imaginative dances in a specific style? • Can they choose their own music, style and dance?
Games	**Gymnastics**	**Athletics**	**Outdoor/ adventurous**
• Can they explain complicated rules? • Can they make a team plan and communicate it to others? • Can they lead others in a game situation?	• Do they combine their own work with that of others? • Can they link their sequences to specific timings?	• Can they demonstrate stamina? • Can they use their skills in different situations?	• Can they plan a route and series of clues for someone else? • Can they plan with others taking account of safety and danger?

Knowledge, Skills and Understanding breakdown for Physical Education

Swimming

Lower attainers	Mid attainers	Higher attainers
• Can they swim between 25 and 50 metres unaided? • Can they keep swimming for 30 to 45 seconds, using swimming aids and support? • Can they use a variety of basic arm and leg actions when on their front and on their back? • Can they swim on the surface and lower themselves under water? • Can they take part in group problem-solving activities on personal survival? • Do they recognise how their body reacts and feels when swimming? • Can they recognise and concentrate on what they need to improve?	• Can they swim between 50 and 100 metres and keep swimming for 45 to 90 seconds? • Do they use 3 different strokes, swimming on their front and back? • Can they control their breathing? • Can they swim confidently and fluently on the surface and under water? • Do they work well in groups to solve specific problems and challenges, sharing out the work fairly? • Do they recognise how swimming affects their body, and pace their efforts to meet different challenges? • Can they suggest activities and practices to help improve their own performance?	• Can they swim further than 100 metres? • Can they swim fluently and confidently for over 90 seconds? • Do they use all 3 strokes with control? • Can they swim short distances using butterfly? • Do they breathe so that the pattern of their swimming is not interrupted? • Can they perform a wide range of personal survival techniques confidently? • Do they know what the different tasks demand of their body, and pace their efforts well to meet challenges? • Can they describe good swimming technique and show and explain it to others?