

The Northstead Curriculum

'Inspiring children since 1937'

Northstead Community Primary School
2019

This is our curriculum.

It is not the National Curriculum, it is so much more than that.

Our curriculum is what we believe as a community is important for the children and families of Scarborough.

Our curriculum is focused on questioning, inquiring, creating and doing and means we focus on the impact of the activities on learners, not the activities themselves.

Our curriculum means children leave us happy, fulfilled, confident and ready for the next challenge in their lives.

Our curriculum will develop children's personal and social understanding with an attitude of care, respect, compassion and tolerance towards others in the community and the wider world.

The Northstead Curriculum

Welcome to 'The Northstead Curriculum'. This document embodies all the hopes and dreams we have for the pupils and families we work with.

This document is our curriculum handbook for what happens in school. It is a functional, working document - and a constant work in progress. We don't believe this is the final draft - but it is the final draft at the moment as we learn to explore the boundaries of just what is possible across 'The Northstead Curriculum'

If you are a prospective parent and wondering whether this is the right school for you, your child and your family, please come and visit the school and see the information contained in these pages come to life in our school.

Our Mission

To be the best that we can be.

Our Ethos

The Northstead Community of staff, pupils and their families are committed to providing a nurturing and inspiring environment where everyone is safe, respected, supported and challenged.

Aims of the Northstead Curriculum

The curriculum at Northstead is designed to provide a broad and balanced education that meets the needs of all pupils and gives them the skills, knowledge and understanding to prepare them for their future lives.

It ensures that academic success, creativity and problem solving, reliability, responsibility and resilience, as well as physical development, well-being and mental health are key elements that support the development of the whole child and promote a positive attitude to learning.

The curriculum celebrates the local community we serve and builds upon our rich cultural heritage as a seaside town. It also supports the pupils' spiritual, moral, social and cultural development through a range of

experiences designed to enhance their cultural capital and understanding of the world around them.

Our Curriculum Drivers

At Northstead Community Primary School the curriculum is planned around a series of themes which are all underpinned by a key focus on developing the basic skills of English and maths at every opportunity. Aside from the national curriculum, our curriculum drivers will help us to focus on the whole child and developing them as confident children with a sense of purpose and with excitement for their future.

Environmental and Community Responsibility

We want to enhance and enrich our children's understanding of their local and wider environment by providing opportunities for learning within and beyond the classroom.

We will aim to develop an attitude of care and respect, where children understand their actions and decisions impact on our community and on the world.

Understanding the World

Northstead children are all part of a global community. Our aim is to help the children to gain a sense of place and understand they are part of its future.

We will provide opportunities for them to explore the world and the many ways in which the world and its inhabitants have similarities and differences.

Physical, Emotional and Social Awareness

Our curriculum will provide opportunities for children to learn to respect and appreciate the diverse nature of an ever changing society.

We aim to nurture confident, resilient, independent children who are able to make responsible life choices and have the ability to show empathy and compassion towards others and know how to look after themselves and others both physically and emotionally.

Creativity

Northstead children will have many opportunities to engage in the various forms of creative arts to enable them to express their ideas in a variety of creative forms.

We will give the children opportunities to be imaginative, to use experiences and observations to make connections in their learning and appreciate that learning can be accomplished in different forms.

The Curriculum Journey

Each year group will study a variety of learning themes throughout the year which will allow children to accumulate knowledge, skills and understanding as they progress through school and build on previous learning. We do not 'do' themes. We provide a series of well structured, well thought out sequences of learning which enable children to build their vocabulary, their knowledge and develop their skills and understanding in many different ways.

We do not have a preferred model of how we teach but use a variety of different methods to engage children in their learning. We do have a working curriculum model which we use to ensure children get the most out of each theme covered.

Immersion (1-3 days)

Every theme starts with a block of immersive days whereby children are exposed to knowledge, ideas and stimuli designed to provoke and inspire them. This may include a visit or visitor into school, children spending time looking at artefacts, pictures, videos or other sources of evidence as well as a story or stories which involve the theme.

Children will be engaged in a variety of different learning opportunities over these days which will allow them to develop 'initial' knowledge of the learning theme and prompt questions/enquiries from them for later discovery.

Discovery

During the immersive days the teacher will provide opportunities for the children to discuss the theme and to gain an insight into what aspects of the theme the children would be interested in discovering further.

The teacher will then 'marry' the interests with the curriculum expectations to ensure coverage and depth of learning. Through class discussions, the teacher and children will also develop an idea of who the audience for this learning will be and how it will be communicated to them.

Exploring

Following a trajectory of objectives across the curriculum, the children explore the theme further with learning based on the children's initial discovery questions. These objectives may change as the children delve further into the topic with the teacher ensuring skills, knowledge and vocabulary are developed and objectives are met. Children should be able to answer their own questions and questions of others at the end of this phase of learning.

The Three C's - Collate, create and communicate

Towards the end of the theme, children will collate their new knowledge, skills and understanding to create works in any medium which is relevant. The children will understand how this work is going to be communicated with the specific audience and so prepare for this. Following preparation, the children share their learning with their specific audience. The children will act as teachers in sharing their learning, their new found knowledge/skills and vocabulary.

Reflection and Evaluation

Children evaluate what they have learnt through the learning theme, how they learnt it, how they presented it and how effective their presentations were. They reflect on themselves - considering their personal development needs. They may revisit some learning to improve it or refine it. (Developing meta-cognition and understanding their own learning needs and performance).

Why an audience?

Much of what is asked of children in school requires isolated knowledge and skills. We give them an audience so as to give them something authentic to share, based on solid foundations of deep knowledge.

Examples of audience

The World (Social media inc school youtube channel) / School assemblies / Learning showcase / Performance
Class blog/book / Exhibition / Competitions / School leaders and governors / Parents/carers / School and/or local community
Stay and learn sessions.

Important Notes

Following the immersive days, The Write Stuff methodology for learning to become an effective writer should begin. This should on the whole be married to the theme being taught, which in turn will be working alongside reciprocal reading texts to ensure maximum exposure to the learning theme and therefore developing knowledge and vocabulary at all times possible.

White Rose Maths

The school uses the White Rose maths scheme of learning and maths coverage will be monitored using this as well as end of term assessment.

Planning

Planning is by teachers for teachers. It therefore should be under the control of teachers to determine how much planning is needed to provide an effective learning experience for all children. However, some elements are key to ensure that there is some consistency across the school. Immersive days will be planned as a year group team and will involve a variety of immersive experiences including varied stimuli around the theme, as well as opportunities to apply skills from across the curriculum in developing their curious minds.

Stimuli

By stimuli, we mean anything linked to the theme which will stimulate children's curiosity and wonder and make them think further about the theme being discovered. It will work to ensure children ask questions, speculate and opens doors to new learning. Examples of stimuli used in school are: visitors, visits, photographs, videos, leaflets, artefacts, artwork, stories and drama.

Step One

Using the National Curriculum, year group teams will design their long term plans.

Step Two

After designing their long term plan, teachers will take the Northstead Curriculum subject by subject, selecting appropriate objectives to fit each theme and deciding which skills will be developed across the curriculum. Knowledge to be learnt and remembered, as well as tier 2 and 3 vocabulary will also feature on the 'Key Theme Thinking' document. The number of objectives selected should be representative of the age and stage of the children in the classroom as well as the amount of time for the learning theme. **Not every subject is expected to be taught for or be a part of every theme.**

Step Three

After completing the 'Key Theme Thinking' document, year group teams will meet to map out a trajectory (or flow) of learning which will allow children to develop the skills, knowledge and vocabulary in a variety of ways within the classroom.

Certain aspects of the theme may need a sequence of lessons to gradually build up their knowledge and skills over time. E.g. If creating a piece of Egyptian artwork, the objective of "Use watercolour paint to

produce washes for backgrounds then add detail” needs to be taught over a series of lessons before it is applied to the theme being learnt. It should not be a one-off activity to say we have ‘done’ art.

Step Four

The teacher, considering what the children will be learning, must decide on how the pupils will eventually share their learning. This could be a community event, an assembly, an open classroom for parents or other pupils or anything else. This adds a purpose to the learning, a deadline for learning and the realisation that their work will be scrutinised and observed by other people who will judge them. When decided upon and a date is in place this should be communicated with the whole school as well as parents/carers at the earliest opportunity.

Step Five

Knowing the end point for the learning, the teacher will return to the objective trajectories for each subject and begin to cluster the learning so it builds day on day. There is enormous flexibility in timetabling, recognising that the learning may not be best with ‘an hour a week’. If geographical knowledge will underpin further work in art, history and maths, then one would expect geography to feature heavily towards the start of the enquiry, and later to be replaced by other subject areas.

Step Six

The planning detailed above represents both medium and weekly planning. Daily lesson planning simply requires the teacher to take the mapped out objectives, plan the teaching and activity requirements for that day, and ensure that the work is differentiated* appropriate to ensure all pupils can make good progress. This will include specific provision for SEND pupils where relevant. This daily planning is by and for the teacher and should be in enough depth that they can ensure good and outstanding learning. If these outcomes are not seen, specific planning will be undertaken with support of SLT / phase leaders or subject leaders to ensure learning is accelerated.

*Differentiation is classed as any alteration to the learning to ensure all children can achieve the objective or an abridged version of the objective.

We do not differentiate by perceived ability at Northstead School and therefore do not limit learning in any way for any child.

Monitoring for effectiveness (What has been the impact?)

As all teachers are free to cover foundation subject objectives in different sequences, as suiting their classes, rigorous monitoring is vital to ensure coverage and compatibility. Record keeping is therefore a vital part of a teacher's responsibilities, with both subject leaders and senior leaders regularly monitoring outcomes in books and the records of learning teachers will have.

Monitoring responsibility - teachers and subject leaders

Teachers will use the curriculum monitoring documents in their curriculum file to keep a permanent record of the development of understanding of objectives as outlined in their planning. This will provide a broad overview, primarily for use by the teachers, to ensure that over the course of the year they have developed understanding of the curriculum for that year/key stage. Monitoring by subject leaders will ensure that teachers complete this and provide opportunities for all of the objectives to be studied over the year or the key stage (LKS2 for example) A simple tick on the outline for each subject is evidence of coverage against the objectives for the key stage but not evidence of development. Coverage is not important - development of skills is.

Monitoring responsibility 2 - teachers (What will this look like?)

It is the class teacher's responsibility to ensure they keep an accurate and up-to-date record of how children have understood the objectives in all subjects being taught and to what extent their knowledge/skills are developing.

Assessment against objectives is recorded in one of three ways:

- 1) The objective has been taught but not met
- 2) The objective has been taught and met
- 3) The objective has been taught and exceeded

Monitoring responsibility 3 - Subject leaders and teachers

Subject leaders will collect summary data at the end of each academic year from class teachers which will categorise children's achievements against the objectives taught across all subjects in three ways shown above.

This data will be provided by all teachers at Data point 3 and will be analysed by subject leaders to ascertain strengths and weaknesses in their subject areas, planning actions to improve this in the future.

Monitoring Responsibility 4 - Senior Leaders

Throughout the year, senior leaders will work alongside subject leaders to ensure that the intent of the curriculum for the school, the implementation of it in classrooms and the impact is clear. As part of this, they will:

- Complete subject specific learning walks, book looks, pupil interviews and staff discussions.
- Look carefully at whether there is evidence of the content taught being coherently planned and sequenced in a way that is helping children to accumulate knowledge and develop skills across the curriculum.
- Look for evidence that the curriculum is not being narrowed.
- Look for evidence that reading is being prioritised
- Look for evidence that the content being taught is being used to integrate into larger ideas and the 'bigger picture'.
- Look for evidence that pupils work across the curriculum is of a good standard.
- Look for evidence that pupils are practising skills regularly in order to develop them (not just covering them).
- Look for evidence of assessment being used to help pupils embed knowledge fluently, or to check understanding and inform teaching.
- Look for evidence of the materials being used supporting the intent of the curriculum.

Observations will focus on:

- Do teachers present subject matter clearly, promoting appropriate and thoughtful discussion about the subject matter being taught?
- Do teachers check pupils' understanding systematically, identifying misconceptions accurately and provide clear, direct feedback?
- The use of assessment to inform teaching and learning.
- An environment which focuses on pupils
- Are the materials being used chosen to meet the knowledge being learnt or the skills being taught? (The activity materials are chosen to represent the learning, not the other way round).
- Have the activities chosen impacted on children's development of knowledge, developed their skills or developed their understanding? (The learning not the activity!)

The Northstead Curriculum – Art and Design

National Curriculum Purpose

Art, craft and design embody some of the highest forms of human creativity. A high-quality art and design education should engage, inspire and challenge pupils, equipping them with the knowledge and skills to experiment, invent and create their own works of art, craft and design. As pupils progress, they should be able to think critically and develop a more rigorous understanding of art and design. They should also know how art and design both reflect and shape our history, and contribute to the culture, creativity and wealth of our nation.

Intent

At Northstead school, we recognise the vital role of art and design in allowing curiosity, creativity and self-expression to develop alongside resilience, confidence and critical thinking skills. Fostering a love of art can enhance learning across other subjects and those children who may be less confident in some curriculum areas, can use art to spark their imagination and express themselves fully.

Our art curriculum develops children's skills, knowledge and exposure to art; either through visits to galleries, high quality images or visits from local artists. Teachers collectively work to design lessons that build on prior learning, can be connected to a wider context and link to curriculum topics. For example, a history lesson about the second world war would lend itself to learning about artists such as Henry Moore, who has produced work that prompts discussions about war. Meaningful links are made to science and maths lessons too. E.g. Ks1 children might look at the use of shapes in artworks, such as those by Paul Klee. or learn about the science illustrator Maria Sibylla Merian, one of the first to show the full life cycle of an insect.

Each year group, introduces pupils to a range of artists, architects and designers in history which are culturally and ethnically diverse. They are exposed to different styles and genres of art, websites, books and local artists/art galleries. To develop knowledge of artists, their work, context and influence, the selection of artists and work is important. Pupils are encouraged to read the stories that paintings and art work tells, they learn how to be 'painting detectives' and use the 'clues' present in the details of many great artworks. In this way a strong art curriculum can also support and develop visual literacy.

Skill development in art is promoted by giving pupils regular opportunities to express themselves, linked to a variety of themes using different media and materials such as paint, collage, clay and textiles. Whilst working for a sustained amount of time on creative endeavours is valued, bite-sized classes (anything from 10-30 minutes) also allows short bursts of creativity to be incorporated into the day. This could include looking at a piece of art and discussing it, practising drawing skills or free flow doodling.

Explicit teaching of art skills in each year group, with recognition of prior learning means that pupils use tools and techniques with increasing mastery. Each pupil from Years 1 to 6 has their own sketchbook and art portfolio which moves with them through school. This provides them with concrete evidence of their skills development, which they apply to a final piece of work. This long term-approach means that pupils have a clear view of the progress they have made over time and it is this which builds confidence to tackle more demanding work. Each class in school keeps their own Arts Book which records responses to art, photos of work produced and also involvement in Arts from beyond the classroom. This raises the profile of artwork and DT projects they complete in their own time.

The impact of Northstead's Art and Design curriculum is that it equips children to be risk takers, evaluators and reflective learners. There is great pleasure to be derived from Art and Design and, through deeper understanding; pupils can gain access to cultural richness and diversity.

Early Years

During the Early Years, young children will be given the opportunity to explore colour, texture, shape and form in two and three dimensions. The children will have access to a wide range of constructions, collage, painting and drawing activities, using appropriate tools and art materials. In order to tap into their artistic potential, the children will be encouraged to develop their own creative ideas.

Key Stage 1

During Key Stage 1, Art and Design is about expanding children's creativity and imagination through providing art, craft and design activities relating to the children's own identity and experiences, to natural and manufactured objects and materials with which they are familiar, and the locality in which they live. Children will explore the visual, tactile and sensory qualities of materials and processes and begin to understand and use colour, shape and space, pattern and

texture, to represent their own ideas and feelings. Children will focus on the work of artists, craftspeople, other cultures, and sculptors and designers by asking and answering questions, such as: 'What is it like?' 'What do I think about it?'

Key Stage 2

During Key Stage 2, Art and Design is about fostering children's creativity and imagination by building on their knowledge, skills and understanding of materials and processes, through providing more complex activities. Children's experiences help them to understand the diverse roles and functions of Art and Design in the world around them. Pupils should be taught to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.

Implementation

As a school and in accordance with the National Curriculum's expectations, we aim to ensure that all pupils:

Produce creative work, exploring their ideas and recording their experiences

Become proficient in drawing painting, sculpture and other art, craft and design techniques

Evaluate and analyse creative works using the language of art, craft and design

Know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms

Class teachers are responsible for teaching art and design technology, although there will be occasions when professional artists/helpers will be involved in the teaching of the topic. Northstead seeks to develop links within our local community and with artists where possible. We also encourage trips to the local Secondary School, in order to enrich our Art and Design provision.

Intended Impact

- Our children enjoy the self-expression that they experience in both Art and Design Technology.

- Children talk positively about their experiences of Art and Design at Northstead.
- Pupils are always keen to learn new skills and work hard to perfect those shown to them. The children's art is very often cross-curricular, and helps them to express feelings and emotions in art, as well as show their knowledge and understanding in history, geography, maths and science.
- The process of producing artwork is recognised and celebrated, as well as 'finished' pieces of artwork.
- Art work can be celebrated in assemblies to raise the profile of art.
- Artwork can be uploaded to the school twitter feed.
- Through their art and design, the children are able to reach out into the community, with our pupil's artwork proudly displayed around the school, in the local library and church.

EYFS	Core Area Art Techniques	EYFS Art objectives/ Skills Development
	Drawing Line, shape	<ul style="list-style-type: none"> ✚ Create simple representation of events, people and objects ✚ Holds a pencil correctly ✚ Choose particular colours for a purpose <p>Key Questions:</p> <ul style="list-style-type: none"> ✚ Can you use marks to represent hair, clothing and body parts? ✚ Can you intentionally represent or symbolise an object or an emotion?
	Painting & Printing Colour, shape & space	<ul style="list-style-type: none"> ✚ Explore and talk about what happens when colours are mixed ✚ Choose particular colours for a purpose ✚ Experiments to create different textures, adding in saw dust, glue, tissue to paints ✚ Use different brush sizes, handprints, finger prints and printing equipment to create marks and patterns. <p>Key Questions:</p> <ul style="list-style-type: none"> ✚ Can you name the primary colours? ✚ Can you mix your own colours? ✚ Can you print with sponges, vegetables and fruit? ✚ Can you repeatedly use marks to create a pattern?
	Collage Texture and form	<ul style="list-style-type: none"> ✚ Experiment to create different textures (Texture) ✚ To explore materials by tearing, scrunching, folding and rolling to make a collage picture (Collage) ✚ Use strips of paper to make your own paper weaving. ✚ Manipulate materials to achieve a planned effect - e.g. manipulate modelling clay/dough by pulling, pinching, twisting and rolling to make shapes? (Form) ✚ Using materials to build and construct their own model (Form) <p>Key Questions:</p> <ul style="list-style-type: none"> ✚ Can you join things together and combine materials using glue, string, elastic bands and tape? ✚ Can you notice the changes when clay gets wet, dry or flaky? ✚ Can you make a collection of natural objects? (Artist-Andy Goldsworthy)
	Artist/Designer/Craftmaker -Making links to their own work	<ul style="list-style-type: none"> ✚ Talk about your own art work. ✚ Talk about what you can see and like in the work of another artist/craft maker/designer
Use of ICT	<ul style="list-style-type: none"> ✚ Begin to use a simple painting program to create a picture. ✚ Use 'fill' tools and different brushes/pens in a painting package. 	
	Key Vocabulary:	

Core Area Art Techniques	KSI Objectives - Step 1	Objectives - Step 2	Skills & Techniques
<p style="text-align: center;">Drawing- Line, shape</p> <p>Key Vocabulary: Experiment, bold, strong and soft lines Dots, dashes, sweeping, wavy and curved line, smudged line, thick line, thin line. Light, dark, tone, shading, texture, shape, Background, foreground, pastel, chalk, charcoal, smudge. Pencil - 2b,4b,6b Portrait, famous, art gallery,</p> <p>Can you communicate something about yourself in your drawing?</p>	<ul style="list-style-type: none"> To use drawing as a medium to develop and share ideas. To incorporate known experiences. To focus on using line and known geometric shapes to create. 	<ul style="list-style-type: none"> To refine skills in drawing and develop and share ideas To focus on using lines (movement, contours and feelings) and known shapes (geometric) to create. 	<p>Step 1</p> <ul style="list-style-type: none"> Use bold, strong and soft lines. Use dots, dashes, sweeping, wavy and straight lines Use 3 different pencil grades (2b,4b,6b) To explore making tones, recognising light and dark tones. Draw and describe geometric shapes in artwork. <p>Step 2</p> <ul style="list-style-type: none"> Experiment with different types of pens and crayons. Use pastels and charcoal to blend and smudge.
<p style="text-align: center;">Painting- Colour, shape & space</p> <p>Key Vocabulary: Create, explore, experiment, watercolour, warm colour, cool colour, colour wheel, colouring mixing, paint palette, water colour, shade Paintbrush, lighter shade, darker shade. bright, dull, primary and secondary colours, image, painting.</p> <p>Dab, smooth, wash, sponge, stipple. Stroke, lines, blobs, dots</p>	<ul style="list-style-type: none"> To use painting as a medium to develop and share ideas. To involve experiences and imagination. To focus on using colour and shape for effect To develop understanding of primary and secondary colour knowledge. 	<ul style="list-style-type: none"> To refine skills in painting and develop and share ideas. To choose and use own experiences or imagination. To consolidate understanding of primary and secondary colour knowledge. 	<p>Step 1</p> <ul style="list-style-type: none"> Use different brush size. Develop skills: Dab, smooth, wash, sponge, stipple, and stroke. Explore using lines, blobs, dots and dashes. Name primary and secondary colours. Mix secondary colours and use different thicknesses. <p>Step 2</p> <ul style="list-style-type: none"> To refine the skills above with increasing independence Make lighter tints of a colour by adding white. Make darker shades of a colour by adding black. To apply painting skills to their own work To talk about how an artist has used colour in their artwork
<p style="text-align: center;">Printing Colour, shape & space</p> <p>Key Vocabulary: Print, string printing, printing block, repeating pattern, pressing, rolling, rubbing, stamping techniques, textiles</p>	<ul style="list-style-type: none"> To explore basic aspects of printing 	<ul style="list-style-type: none"> To create a print like a designer 	<p>Step 1</p> <ul style="list-style-type: none"> To explore printing onto paper and textiles. To create a print using pressing, rolling, rubbing and stamping techniques. <p>Step 2</p> <ul style="list-style-type: none"> To design your own string printing block and make a repeating pattern
<p style="text-align: center;">Sculpting- Texture and form</p> <p>Key Vocabulary:</p>	<ul style="list-style-type: none"> To use ceramics as a medium to develop and share ideas 	<ul style="list-style-type: none"> To refine skills in sculpture and develop and share ideas 	<p>Step 1</p> <ul style="list-style-type: none"> To experiment by cutting, rolling and coiling materials such as clay and plasticine?

	<p>3-D, model, materials, word, clay, stone, objects, tools, join, clay, slap, slip, tool</p>	<ul style="list-style-type: none"> • To create using imagination • To develop and use a texture for effect • To incorporate known experiences or imagination 	<ul style="list-style-type: none"> • To develop and use a texture for effect, using different marks 	<ul style="list-style-type: none"> ✚ Explain how they are making their sculpture ✚ Make shapes from rolled up paper, straws and card. ✚ Use natural and manmade materials <p>Step 2</p> <ul style="list-style-type: none"> ✚ Develop texture to your models using tools.
	<p>Artists/Designers and Craftmakers Making links to own work</p> <p><u>Key Vocabulary:</u> Famous, painter, architect, frame, art gallery, museum, landscape, portrait, real, observation, observational, abstract, imagination.</p>	<ul style="list-style-type: none"> • To link their work/products to well-known artists. • To attempt to make links to the local artistic community 	<ul style="list-style-type: none"> • To examine a piece of work from a well-known artist and use it to create a success criterion 	<p>Step 1</p> <ul style="list-style-type: none"> ✚ Compare paintings and sculptures by well-known artists and designers. ✚ Discuss differences and similarities between drawings and their work. ✚ Use some art vocabulary appropriately <p>Step 2</p> <ul style="list-style-type: none"> ✚ Use key vocabulary more confidently
	<p>Use of ICT</p>			<p>Step 1</p> <ul style="list-style-type: none"> • To create a picture on a painting program independently? • To Take photos of their own sculptures and 3d work <p>Step 2</p> <ul style="list-style-type: none"> • To change photographic images on a computer.
				<ul style="list-style-type: none"> ✚ To simply evaluate and edit a picture ✚ Use simple IT mark-making tools, e.g. brush, shape and pen tools. ✚ Take different photographs (of yourself) displaying different moods

Core Area Art Techniques	LKS2 Objectives - Step 1	LKS2 Objectives - Step 2	LKS2 Skills & Techniques
<p>Drawing- Pencil, charcoal and pastel Key Vocabulary Line: pencil, mark, hard soft lines, free flowing, smudging, sweeping, broken, faint, hard lines, strong, bold, fine, wavy, angular, outline, contour Tone: scribble, stippling, shade, hatch, cross hatch, dot, dash, circle and spiral. Detail, contrast, bright, dark, light, faded, smooth, soft, harsh gradient, graduated, mid-tone, shading, range, highlight, reflected, blended, solid, tonal value, tone, two dimensional, three dimensional Texture: Rough, smooth, hard, soft, furry, scaly, cracked, grainy, dry, wet, spiky, glossy, matt, shiny, bumpy, coarse, uneven.</p>	<ul style="list-style-type: none"> To develop drawing skills-charcoal, pencil and sketching. To incorporate previously learned techniques .e.g. Line, shape (irregular and geometric), colour and space. 	<ul style="list-style-type: none"> To choose the appropriate techniques e.g. line, shape, colour, space. To introduce the concept of negative space To evaluate, beginning to use artistic language. 	<ul style="list-style-type: none"> Use hard and soft lines. Use different grades of pencil shade, to show different tones and texture. Use free flowing, sweeping, broken, faint and hard lines. Develop pencil/pen control for fine detail Begin to show facial expressions and body language in their sketches Explore tone- scribble, stippling, shade, hatch. Cross hatch, dot, dash, circle and spiral in drawings. Use sketches/technique work to produce a final piece
<p>Painting- Acrylic Review and revisit ideas Key Vocabulary: Create, explore, experiment, warm colour, cool colour, colour wheel, colouring mixing, paint palette, water colour, shade, paintbrush, thickness, thin, lighter shade, darker shade. bright, dull, primary and secondary colours, complimentary, bright, vibrant, pastel, hue, pure, dull, pale, deep. Dab, smooth, wash, sponge, stipple. Stroke, lines, blobs, dots</p>	<ul style="list-style-type: none"> To use acrylic paint recap on techniques/techniques previously learnt (<i>Dab, smooth, wash, sponge, stipple, and stroke. To use lines, blobs, dots and dashes</i>) To make changes by painting over with acrylics. 	<ul style="list-style-type: none"> To conduct an in-depth analysis of a watercolour painting and comment on the form, line, technique and other observations. To plan, create and evaluate a painting using acrylics. Compare this with painting the same example in ready-mix or watercolour To add to your sketchbook about what you have discovered. To review and evaluate using artistic language (discuss opinions) 	<ul style="list-style-type: none"> Use techniques- Dab, smooth, wash, sponge, stipple, and stroke. Explore using lines, blobs, dots and dashes.. Mix secondary colours with greater confidence and use different thicknesses of paint. Use different tints and shades of colour in their work. To use different brush size for effect Evaluate how artists have used colour and talk about own use.
<p>Sculpture I Key Vocabulary: 3-D, model, materials, word, clay, stone, objects, tools, join, clay, slap, slip, tool, ceramic, pottery, fired</p>	<ul style="list-style-type: none"> To introduce children to a wide range of sculptures and artists. To choose one for in-depth analysis. Children can replicate work to gain understanding 	<ul style="list-style-type: none"> To encourage children to refer to their sketchbook and use it for planning. To evaluate using artistic language 	<ul style="list-style-type: none"> Improve technique and control when working with clay Rolling, squeezing the clay, coiling, adding clay pieces and pulling forms out of the clay.

		and improve technique and control.		<ul style="list-style-type: none"> Evaluate and analyse their work and form their own opinion Use artistic vocabulary.
	<p align="center">Sculpture 2</p> <p align="center">Key Vocabulary</p> <p>Pattern, motif, technique, control, visual texture</p>	<ul style="list-style-type: none"> To plan, create and evaluate a sculpture 	<ul style="list-style-type: none"> To create visual texture using different marks and tools To create patterns and motifs with repeated mark making To evaluate using artistic language 	<p>Step 1</p> <ul style="list-style-type: none"> Use a range of materials (clay tools/everyday objects) to create visual texture. Create models on different scales (large and small) <p>Step 2</p> <ul style="list-style-type: none"> Combine materials and processes to design and make 3d forms Improve technique and control
	<p align="center">Artists/designers/Craftmakers-</p> <p align="center">Making links to their own work</p> <p>Key Vocabulary:</p> <p>Famous, painter, architect, frame, art gallery, museum, landscape, portrait, real, image, observation, observational, abstract, imagination, portrait landscape, background, foreground, middle ground, perspective, figurative, sculpture, textiles, style, art movement</p>	<ul style="list-style-type: none"> To continuously refer back to artists, architects/designers in history for inspiration & comparison To critically evaluate their work. Sketchbooks to record observations/develop ideas. 	<ul style="list-style-type: none"> To develop their drawing skills- charcoal, pencil and sketching. To choose the appropriate techniques e.g. line, shape, colour, space. To introduce the concept of negative space To evaluate, using some artistic language. 	<ul style="list-style-type: none"> Create images in the style of an artist Say who your work is influenced by. Describe and compare art work/artists. Discuss and describe artists, architects and craftmakers work Use hard and soft lines. Use free flowing, sweeping, broken, faint and hard lines. - Use pen for fine detail, Use tone- scribble, shade, hatch. Cross hatch, dot, dash, spiral
	Use of ICT			
	<p>Step 1</p> <ul style="list-style-type: none"> Use printed images that you have taken and combine them with other media to produce art work? Use IT programs to create a piece of work that includes their own work and that of others (using the internet)? Use the internet to research an artist or style of art. <p>Step 2</p> <ul style="list-style-type: none"> Present a collection of your work on a slide show. Create a piece of art work which includes the integration of digital images that you have taken. 			

Development of Art Skills/Techniques across Upper Key Stage 2

Core Area Art Techniques	Upper KS2 Objectives Step 1	Upper KS2 Objectives Step 2	Upper KS2 Skills and Techniques
<p>Drawing- Charcoal, pastel -Line, texture, colour</p> <p>Key Vocabulary Line: pencil, mark, hard soft lines, free flowing, smudging, sweeping, broken, faint, hard lines, strong, bold, fine, wavy, angular, outline, contour Tone: scribble, stippling, shade, hatch, cross hatch, dot, dash, circle and spiral. Detail, contrast, bright, dark, light, faded, smooth, soft, harsh gradient, graduated, mid-tone, shading, range, highlight, reflected, blended, solid, tonal value, tone, two dimensional, three dimensional Texture: Rough, smooth, hard, soft, furry, scaly, cracked, grainy, dry, wet, spiky, glossy, matt, shiny, bumpy, coarse, uneven.</p>	<ul style="list-style-type: none"> To experiment with shading and perspective to create form and texture. To know that a short, hard lines gives a different feeling to a more flowing one. 	<ul style="list-style-type: none"> To use wax crayons to apply a top layer, then scrape the surface to create a picture. To use hard and soft lines to record detail in the distance and create shadow. Layer colour to create depth of colour, tone and different effects (wash and texture) Use charcoal and pastel to smudge. Use pens to add detail. 	<p>Step 1</p> <ul style="list-style-type: none"> Use wax crayons to apply a top layer, then scrape the surface to create a picture. Use hard and soft lines to record detail in the distance and create shadow. <p>Layer colour to create depth of colour, tone and different effects (wash and texture)</p> <ul style="list-style-type: none"> Use charcoal and pastel to smudge. Use pens to add detail. Explain why you have chosen specific techniques, tools and materials to draw with. <p>Step 2</p> <ul style="list-style-type: none"> Use a variety of techniques to create form and texture e.g. shading and perspective. Explore shading to create mood and feeling. Organise line, tone, texture, shape and colour to represent figures and form in movement.
<p>Painting - Oil paint Key Vocabulary: Create, explore, experiment, warm colour, cool colour, colour wheel, colouring mixing, paint palette, water colour, shade, paintbrush, thickness, thin, lighter shade, darker shade. bright, dull, primary and secondary colours, complimentary, bright, vibrant, pastel, hue, pure, dull, pale, deep.</p>	<ul style="list-style-type: none"> To plan, create and evaluate a painting using oil paints. To encourage children to refer to their sketchbook and use it for planning. To evaluate using artistic language 	<ul style="list-style-type: none"> To use artistic vocabulary (explain why you have used certain techniques) Talk about emotions in art and how to express your emotions through painting and sketching. 	<p>Step 1</p> <ul style="list-style-type: none"> Review and revisit their work. Critically evaluate and edit (paint over their work) Work in pairs to recreate a well-known piece Try to use the colour wheel to use 'harmonious colours' and 'contrasting colours' To develop the use of texture through brush techniques and paint mixing Create layers using paint to add detail to background colours.
<p>Sculpture Texture, pattern, experimenting Key Vocabulary: 3-D, model, materials, word, clay, stone, objects, tools, join, clay, slap, slip, tool, ceramic, pottery, fired</p>	<ul style="list-style-type: none"> To plan and create a sculpture To evaluate using artistic language 	<ul style="list-style-type: none"> To use tools to add detail and use a range of joining techniques. 	<ul style="list-style-type: none"> Plan, create and evaluate a sculpture (As independently as possible) Incorporate form, pattern, and texture Use a wide variety of tools and refine skills. Use imagination and experience to influence work. Evaluate and edit using artistic language. Use tools to add detail and use a range of joining techniques.

	<p>Artists, architects and designers in history</p> <p>Key Vocabulary: Famous, painter, architect, frame, art gallery, museum, landscape, portrait, real, observation, observational, abstract, imagination, portrait landscape, background, foreground, middle ground, perspective, figurative, sculpture, textiles, style art movement</p>	<ul style="list-style-type: none"> To continuously refer back to artists, architects and designers in history for inspiration or comparison. To critically evaluate their work. Use sketchbooks to record observations and develop ideas. 	<ul style="list-style-type: none"> To replicate images by well-known artists and discuss similarities and differences To discuss artists and architects impact of work on society 	<p>Step 1</p> <ul style="list-style-type: none"> Use their sketch books to record, revisit and review their ideas. <p>Step 2</p> <ul style="list-style-type: none"> Apply the skills that they have learnt when using the chosen material/s to work with
	<p>Project/using sketchbooks</p> <p>*Additional Art Techniques = Printing, textiles and collage</p>	<ul style="list-style-type: none"> To use sketch books for planning, recording, revisiting and reviewing ideas To refer to artists, architects and designers in history to explain choices. To choose from a range of materials - pencil, charcoal, paint and clay 	<ul style="list-style-type: none"> To apply the skills that they have learnt when using the chosen material/s to work with 	<p>Step 1</p> <ul style="list-style-type: none"> Continually refer back to artists, architects and designers in history for inspiration or comparison Critically evaluate their work Make notes about techniques used by artists and techniques used in own work Use sketchbooks to record observations, and develop ideas. <p>Step 2</p> <ul style="list-style-type: none"> To discuss artists and architects impact of work on society
	<p>Use of ICT</p>	<ul style="list-style-type: none"> To combine graphics and text (online mood board) Scan images and take digital photos, and use software to adapt them. Create digital images with animation, video and sound to communicate their ideas. Use software packages to create and design pieces of digital art (e.g. revelation art) 		

The Northstead Curriculum - Computing

Purpose

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate - able to use, and express themselves and develop their ideas through, information and communication technology - at a level suitable for the future workplace and as active participants in a digital world.

Aim to ensure that all pupils:

Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.

Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.

Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.

Are responsible, competent, confident and creative users of information and communication technology.

	Key Stage One	
Coding	<p>Motion - Control motion by specifying the number of steps to travel, direction and turn.</p> <p>Looks - Add text strings, show and hide objects and change the features of an object.</p> <p>Sound - Select sounds and control when they are heard, their duration and volume.</p> <p>Draw - Control when drawings appear and set the pen colour, size and shape.</p> <p>Events - Specify user inputs (such as clicks) to control events.</p> <p>Control - Specify the nature of events (such as a single event or loop)</p> <p>Sensing - Create conditions for actions by waiting for a user input (e.g. in response to a question).</p>	
Connecting	<p>Understand online risks and the age rules for sites.</p> <p>Understand what emails are.</p> <p>Can use certain websites independently in school through use of a laptop or tablet..</p>	
Communicating	<p>Use a range of applications and devices in order to communicate ideas, work and messages.</p>	
Collecting	<p>Use simple databases to record information across the curriculum.</p>	
Vocabulary	<p>Keyboard, mouse, monitor, code, coding, control, scratch, programme, algorithm, input, output, loop, motion, steps, travel, turn, direction, show, hide, silent, heard, risks, e-safety, emails,</p>	
Breadth of coverage		

	Lower Key Stage Two	
Coding	<p>Motion - Use specified screen coordinates to control movement.</p> <p>Looks - Set the appearance of objects and create sequences of changes.</p> <p>Sound - Create and edit sounds and control when they are heard, their volume, duration and rests.</p> <p>Draw - Control the shade of pens.</p> <p>Events - Specify condition to trigger events.</p> <p>Control - Use IF and THEN conditions to control events or objects.</p> <p>Sensing - Create conditions for actions by sensing proximity or by waiting for a user input.</p> <p>Variable and Lists - use variables to store a value and use the functions to define, set, change, show and hide to control the variable.</p> <p>Operators - Use the reporter operators $() + ()$ and $() - ()$ and $() * ()$ and $() / ()$ to perform calculations.</p>	
Connecting	<p>Give examples of the risks posed by online communications.</p> <p>Understand the term 'copyright'</p> <p>Understand that comments made online that are hurtful or offensive are the same as bullying.</p>	
Communicating	<p>Use some of the advanced features of applications and devices in order to communicate ideas, work or messages professionally.</p>	
Collecting	<p>Devise and construct databases using applications designed for this purpose in areas across the curriculum.</p>	
Vocabulary	<p>All KSI vocabulary plus: coordinates, edit, volume, duration, specify, conditions, proximity, variable, operators, cyber bullying, copyright, database,</p>	
Breadth of coverage		

	Upper Key Stage Two	
Coding	<p>Motion - Set IF conditions for movements. Specify types of rotation giving the number of degrees.</p> <p>Looks - Change the position of objects between screen layers.</p> <p>Sound - Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation.</p> <p>Draw - Combine the use of PENS with movement to create interesting effects.</p> <p>Events - Set events to control other events by 'broadcasting' information as a trigger.</p> <p>Control - Use IF THEN ELSE conditions to control events or objects.</p> <p>Sensing - Use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events.</p> <p>Variables and Lists - Use lists to create a set of variables.</p> <p>Operators - Use the Boolean operators:, e.g. () < () to define conditions and reports operators e.g. () * () to perform calculations.</p>	
Connecting	<p>Collaborate with others online on sites agreed with the school.</p> <p>Know the risks of online communities and demonstrate how to stay safe online.</p> <p>Know the SMART rules for online safety.</p> <p>Understand that it is illegal to download copyrighted material, including music or games.</p> <p>Understand the effect of online comments and show responsibility and sensitivity online.</p> <p>Understand what my digital footprint is.</p>	
Communicating		
Collecting	<p>Select appropriate applications to devise, construct and manipulate data and present this in an effective manner.</p>	
Vocabulary	<p>All previous vocabulary plus: boolean operators, rotation, screen layers, fade in and out, broadcasting, social media, digital footprint</p>	
Breadth of coverage		

The Northstead Curriculum - Design and Technology

Purpose

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Aim to ensure that all pupils:

Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.

Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.

Critique, evaluate and test their ideas and products and the work of others.

Understand and apply the principles of nutrition and learn how to cook.

	Key Stage One	
Food	<p>Cut, peel or grate ingredients safely and hygienically. Measure or weigh using measuring cups or electronic scales. Assemble or cook ingredients.</p>	
Materials	<p>Cut materials safely using the tools provided. Measure and mark out to the nearest centimetre. Demonstrate a range of cutting and shaping techniques such as: tearing, cutting, folding and curling. Demonstrate a range of joining materials such as gluing, hinges or combining materials to strengthen</p>	
Textiles	<p>Shape textiles using templates. Join textiles using a running stitch. Colour and decorate textiles using a number of techniques such as: dyeing, adding sequins or printing.</p>	
Construction	<p>Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.</p>	
Mechanics	<p>Create products using levers, wheels and winding mechanisms.</p>	
Designing, making, evaluating, and improving.	<p>Design products that have a clear purpose and an intended user. Make products, refining the design as work progresses, Use software to design</p>	
Taking inspiration	<p>Explore objects and designs to identify likes and dislikes of the designs. Suggest improvements to existing designs. Explore how products have been created.</p>	
Vocabulary	<p>Cut, peel, grate, ingredients, bake, hygiene, germs, measure, weigh, scales, assemble, cook, centimetre, tearing, cutting, folding, curling, gluing, hinges, stitching, dyeing, printing, drilling, screwing, nailing, strengthen, weaken, levers, wheels, winding, mechanism, purpose, refine, design.</p>	
Breadth of coverage		

	Lower Key Stage Two	
Food	<p>Prepare ingredients hygienically using appropriate utensils. Measure ingredients accurately. Follow a recipe. Assemble or cook ingredients.</p>	
Materials	<p>Cut materials accurately and safely by selecting appropriate tools. Measure and mark out to the nearest millimetre. Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs). Select appropriate joining techniques.</p>	
Textiles	<p>Understand the need for a seam allowance. Join textiles with appropriate stitching. Select the most appropriate techniques to decorate textiles.</p>	
Construction	<p>Choose suitable techniques to construct products or to repair items. Strengthen materials using suitable techniques.</p>	
Mechanics	<p>Use scientific knowledge of the transference of forces to choose appropriate mechanisms, e.g. pulley, levers etc).</p>	
Designing, making, evaluating, and improving.	<p>Design with a purpose by identifying opportunities to design. Make products by working efficiently Refine work and techniques as work progresses, continually evaluating the product design. Use software to design and represent product designs.</p>	
Taking inspiration	<p>Identify some of the great designers in all areas of the study to generate ideas for designs. Improve upon existing designs, giving reasons for choices. Disassemble products to understand how they work.</p>	
Vocabulary	<p>All previously learnt vocabulary plus: millimetre, seam allowance, forces, pulleys,</p>	
Breadth of coverage		

	Upper Key Stage Two	
Food	<p>Understand the importance of correct storage and handling of ingredients.</p> <p>Measure accurately and calculate ratios of ingredients to scale up or down a recipe.</p> <p>Demonstrate a range of baking and cooking techniques.</p> <p>Create and refine recipes, including ingredients, methods, cooking times and temperatures.</p>	
Materials	<p>Cut materials with precision and refine the finish with appropriate tools.</p> <p>Show an understanding of the qualities of materials to choose appropriate tools to cut and shape.</p>	
Textiles	<p>Create objects (such as a cushion) that employ a seam allowance.</p> <p>Join textiles with a combination of stitching techniques.</p> <p>Use the qualities of materials to create suitable visual and tactile effects in the decoration of textiles.</p>	
Construction	<p>Develop a range of practical skills to create products such as: cutting, drilling, screwing, gluing, filing and sanding.</p>	
Mechanics	<p>Convert rotary motion to linear using CAMS.</p> <p>Use innovative combinations of electronics (or computing) and mechanics in product designs.</p>	
Designing, making, evaluating, and improving.	<p>Design with the user in mind, motivated by the service a product will offer.</p> <p>Make products through stages of prototypes, making continual refinements following testing.</p> <p>Ensure products have a high quality finish, using art skills where appropriate.</p> <p>Use prototypes, cross-sectional diagrams and computer aided designs to represent designs.</p>	
Taking inspiration	<p>Combine elements of design from a range of inspirational designers throughout history.</p> <p>Create innovative designs that improve existing products.</p> <p>Evaluate the design of products so as to suggest improvements to the user experience.</p>	
Vocabulary	<p>All previous vocabulary plus: prototypes, Computer aided design, cross-sectional, rotary motion, sanding,</p>	
Breadth of coverage		

The Northstead Curriculum - Geography

Purpose

Inspire children to be curious about the world around them and how that world is always changing.

Equip pupils with knowledge about diverse places, people, resources and natural and human environments, together with a deep understanding of the Earth's key physical and human processes.

Inspire children to make a difference to the world and become responsible citizens by educating them about pollution, recycling and other environmental issues and how their actions can make a difference.

Aim to ensure all pupils:

Develop contextual knowledge of many different places around the world, both terrestrial and marine, and their human and physical characteristics.

Become competent in many different geographical skills including:

- collecting and analysing data
- fieldwork
- interpreting sources e.g. maps, diagrams, globes, atlases and

photographs.

Become competent in communicating geographical information in variety of ways including through: maps, numerical data and charts/graphs as well as through writing at length.

Key Stage One									
Investigating Places	<p>Ask and answer geographical questions such as: What is this place like? What or who will I see in this place? What do people do in this place? Identify the features of a location to say whether it is a village, town, city, coastal or rural area.</p> <p>Use atlases, globes, maps to identify the United Kingdom and its countries as well as other countries, continents and oceans studied.</p> <p>Name, locate and identify characteristics of the four countries of the UK and its surrounding seas.</p> <p>Use plan perspectives, aerial images and digital technologies to recognise landmarks and basic physical features.</p> <p>Name and locate the world's continents and oceans.</p>								
Investigating Patterns	<p>Understanding geographical similarities and differences through studying the human and physical features of different locations.</p> <p>Use simple fieldwork and observational skills to study the geography of the school and the key human and physical features of its surrounding environment.</p> <p>Identify seasonal and daily weather patterns in the UK and the location of hot and cold areas of the world in relation to the Equator and North and South Poles.</p>								
Communicating geographically	<p>Use compass directions and locational language to describe the features on a map.</p> <p>Devise a simple map: and use and construct basic symbols in a key.</p> <p>Use simple grid references e.g. A1, B1 etc.</p> <p>Refer to key physical features, including: beach, forest, coast, forest, hill, mountain, ocean, river, soil, valley, vegetation and weather. (Visit these places where possible)</p> <p>Refer to key human features including: city, town, village, factory, farm, house, office and shop.</p>								
Vocabulary	<p>Beach, forest, farm, soil, valley, ocean, river, sea, hill, mountain, city, town, village, factory, shop, office, school, church, castle, hotel, weather, climate, countries, continents, United Kingdom, England, Wales, Scotland, Northern Ireland, features, equator, north pole, south pole, compass, map, grid reference, atlas, globe, satellite image, Caribbean, local, national, global.</p>								
Breadth of coverage	<table border="0"> <tr> <td>Y1</td> <td>Y2</td> </tr> <tr> <td>Wonderful weather</td> <td>Amazing Places and Spaces in Great Britain</td> </tr> <tr> <td>Land Ahoy - Pirates</td> <td>The UK and the Caribbean</td> </tr> <tr> <td></td> <td>Our school and the area</td> </tr> </table>	Y1	Y2	Wonderful weather	Amazing Places and Spaces in Great Britain	Land Ahoy - Pirates	The UK and the Caribbean		Our school and the area
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Wonderful weather	Amazing Places and Spaces in Great Britain								
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<i>Lower Key Stage Two</i>			
<i>Investigating Places</i>	<p>Ask and answer geographical questions about the physical and human characteristics of a location.</p> <p>Explain own views about locations, giving reasons.</p> <p>Use fieldwork to observe and record the human and physical features in the local area using a range of methods including sketch maps, plans, maps and digital technologies.</p> <p>Name and locate the Equator, Northern and Southern Hemispheres, Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, Time Zones and describe some of the characteristics of these geographical areas.</p> <p>Use maps, atlases, globes and digital/computer mapping to locate countries and describe features.</p>		
<i>Investigating Patterns</i>	<p>Describe geographical similarities and differences between villages/towns/cities and between countries.</p> <p>Describe key aspects of physical geography including: rivers and the river system, the water cycle, mountains, coral reef, Jurassic coastline, fossils and rocks.</p> <p>Describe key aspects of human geography including settlements and land use.</p> <p>Name and locate counties and cities of the United Kingdom, and identify their human and physical characteristics, including hills, mountains, cities, rivers, populations and land use.</p> <p>Name and locate the countries of Europe and identify their main physical and human characteristics.</p>		
<i>Communicating geographically</i>	<p>Use the eight points of a compass, four-figure grid references, symbols and key to communicate knowledge of the United Kingdom and the World.</p>		
<i>Vocabulary</i>	<p>Country, city, town, village, beach, hills, mountains, rivers, stream, valley, sea, ocean, meander, tributary, population, equator, tropics, arctic and Antarctic, time zones, map, atlas, globe, water cycle, condensation, evaporation, coral reef, fossils, rocks, Jurassic coastline, settlements, castle, compass, grid, north, east, south, west, plus names of counties and cities of the united kingdom and countries in mainland Europe.</p>		
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Upper Key Stage Two			
Investigating Places	<p>Use a range of geographical resources to give characteristic and opinions of the characteristic features of a location.</p> <p>Collect and analyse statistics and other information in order to draw clear conclusions about locations.</p> <p>Identify and describe the significance of longitude, latitude, compass points, hemispheres, tropics of cancer and Capricorn, arctic and Antarctic and time zones.</p> <p>Use different types of fieldwork to observe, measure and record the human and physical features of the local area.</p>		
Investigating Patterns	<p>Name and locate some countries and cities of the world and their identifying human and physical characteristics, including hills, mountains, rivers and key topographical features and land use patterns.</p> <p>Create maps of locations identifying patterns such as land use, climate zones, population densities, height of land.</p> <p>Name and locate the countries of North and South America and identify their main physical and human characteristics.</p> <p>Describe and understand key aspects of :</p> <p>Physical Geography - climate zones, biomes, vegetation belts, rivers, mountains, volcanoes, earthquakes and the water cycle</p> <p>Human Geography - settlements, land use, economic activity, distribution of natural resources including energy, food, minerals and water supplies.</p>		
Communicating geographically	<p>Describe geographical diversity across the world.</p> <p>Describe how countries and geographical regions are interconnected and interdependent.</p>		
Vocabulary	<p>Country, city, town, village, beach, hills, mountains, rivers, stream, valley, sea, ocean, meander, tributary, population, equator, tropics, arctic and Antarctic, time zones, map, atlas, globe, water cycle, condensation, evaporation, coral reef, fossils, rocks, Jurassic coastline, settlements, castle, compass, grid, north, east, south, west, plus names of counties and cities of the united kingdom and countries in mainland Europe, climate zones, biomes, vegetation belts, volcanoes, tsunami, earthquake, economics, energy, food, minerals, water plus countries of North, South and Central America.</p>		
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The Northstead Curriculum - History

Purpose

Enable all pupils to:

- Think critically
- Be curious about past eras, events and people
- Understand chronology
- Weigh evidence and sift arguments
- Develop perspective and judgement -
- Understand the complexities of people's lives
- Develop a good understanding of local, national and global history over time.

Aim to ensure all pupils:

Know and understand the history of the UK from earliest times to the present day.

Know and understand how people's lives have shaped this nation.

Know and understand how Britain has been influenced and has influenced the wider world.

Know and understand significant aspects of the history of the wider world.

Know and understand the nature of ancient civilizations.

Know and understand the expansion and dissolution of empires.

Know and understand the characteristic features of past non-European societies.

Know and understand achievements and follies of mankind.

Understand historical concepts such as continuity and change, cause and consequence, similarities and difference and use them to make connections, draw contrasts, analyse trends, frame questions and create own structured accounts including written narratives and analyses.

Develop a historically grounded understanding of abstract terms such as empire, civilization, parliament etc

Understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed.

Gain historical perspective by placing their own growing knowledge into different contexts, understanding the connections between local, regional, national and international history between cultural, economic, military, political, religious and social history; and between short+ long term timescales.

<i>Key Stage One</i>			
<i>Investigate and interpret the past</i>	<p>Recount changes that have occurred in their own lives.</p> <p>Recognise that there are reasons why people in the past acted as they did.</p> <p>Observe and handle evidence to ask questions and find answers to questions about the past.</p> <p>Use artefacts, pictures, stories, online sources and visitors to find out about the past.</p> <p>Show an understanding of concepts such as civilization, monarchy, parliament, democracy and war and peace.</p>		
<i>Build an overview of world history</i>	Show an understanding of the concept of nation and a nation's history.		
<i>Understand chronology</i>	<p>Use words and phrases such as: a long time ago, recently, when my parents/carers were children, years, decades and centuries to describe the passing of time.</p> <p>Place events and artefacts in order on a timeline.</p> <p>Label timelines with words or phrases such as: past, present, older and newer.</p> <p>Use dates where appropriate.</p>		
<i>Communicate historically</i>	<p>Describe historical events.</p> <p>Describe significant people from the past.</p>		
<i>Vocabulary</i>	Past, present, future, artefact, source, evidence, nation, democracy, civilisation, monarchy, war, peace, timeline, chronology, older, newer, decades, centuries,		
<i>Breadth of coverage</i>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Y1</p> <p>Changes within living memory</p> <p>Great fire of London</p> <p>Gunpowder Plot</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Y2</p> <p>The Titanic</p> <p>The Lives of Significant Individuals and their impact on the world.</p> </td> </tr> </table>	<p>Y1</p> <p>Changes within living memory</p> <p>Great fire of London</p> <p>Gunpowder Plot</p>	<p>Y2</p> <p>The Titanic</p> <p>The Lives of Significant Individuals and their impact on the world.</p>
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<i>Lower Key Stage Two</i>			
<i>Investigate and interpret the past</i>	<p>Use evidence to ask questions and find answers about the past.</p> <p>Suggest suitable sources of evidence for historical enquiries.</p> <p>Use more than one source of evidence for historical enquiry in order to gain a more accurate understanding of history.</p> <p>Describe different accounts of a historical event, explaining some of the reasons the accounts may differ.</p> <p>Suggest causes and consequences of some of the main events and changes in history.</p> <p>Describe changes that have happened in the locality of the school throughout history.</p>		
<i>Build an overview of world history</i>	<p>Compare some of the times studied with those other areas of interest around the world.</p> <p>Describe the social, ethnic, cultural or religious diversity of past society.</p> <p>Describe the characteristic features of the past, including ideas, beliefs, attitudes and experiences of men, women and children.</p>		
<i>Understand chronology</i>	<p>Place events, artefacts and historical figures on a timeline using dates.</p> <p>Understand the concept of change over time, representing this, along with evidence on a timeline.</p> <p>Use dates and terms to describe events.</p>		
<i>Communicate historically</i>	<p>Use literacy, numeracy and computing skills to a good standard in order to communicate information about the past.</p>		
<i>Vocabulary</i>	<p>Use appropriate historical vocabulary to communicate, including : dates, time, period, era, change and chronology as well as theme specific vocabulary.</p>		
<i>Breadth of coverage</i>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Y3</p> <p>Changes in Britain from the Stone Age to the Iron Age</p> <p>Dinosaurs</p> <p>Ancient Egypt</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Y4</p> <p>The Roman Empire and its impact on Great Britain and the wider world.</p> <p>The Mayan Civilization</p> </td> </tr> </table>	<p>Y3</p> <p>Changes in Britain from the Stone Age to the Iron Age</p> <p>Dinosaurs</p> <p>Ancient Egypt</p>	<p>Y4</p> <p>The Roman Empire and its impact on Great Britain and the wider world.</p> <p>The Mayan Civilization</p>
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<i>Upper Key Stage Two</i>			
<i>Investigate and interpret the past</i>	<p>Use sources of evidence to deduce information from the past. Select suitable sources of evidence and use these to analyse and justify claims about the past. Show an awareness of the concept of propaganda and how historians must understand the social context of evidence studied. Identify continuity and change in the history of the locality of the school.</p>		
<i>Build an overview of world history</i>	<p>Compare some of the times studies with those of the other areas of interest around the world. Describe the social, ethnic, cultural or religious diversity of the past. Describe the characteristic features of the past, including ideas, beliefs, attitudes and experiences of men, women and children. Describe the main changes in a period of history using terms such as: social, religious, political, technological and cultural. Understand the concepts of continuity and change over time, representing them, along with evidence, on a time line.</p>		
<i>Understand chronology</i>	<p>Identify periods of rapid change in history and contrast them with times of relatively little change.</p>		
<i>Communicate historically</i>	<p>Use literacy, numeracy and computing skills in order to communicate information about the past. Use original ways to present information and ideas.</p>		
<i>Vocabulary</i>	<p>Use appropriate historical vocabulary to communicate including: dates, time, period, era, change, chronology, continuity, change, century, decade and legacy.</p>		
<i>Breadth of coverage</i>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Y5 Ancient Greece - A study of Greek Life and achievements and their influence on the western world. Anglo-Saxons and Scots leading into Vikings / York</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Y6 Victorians - A local and national study. World War 2 and its impact on Great Britain and the Wider World Scarborough - A town through time.</p> </td> </tr> </table>	<p>Y5 Ancient Greece - A study of Greek Life and achievements and their influence on the western world. Anglo-Saxons and Scots leading into Vikings / York</p>	<p>Y6 Victorians - A local and national study. World War 2 and its impact on Great Britain and the Wider World Scarborough - A town through time.</p>
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The Northstead Curriculum - Modern Foreign Languages

Purpose

Learning a foreign language is a liberation from insularity and provides an opening to other cultures. A high-quality languages education should foster pupils' curiosity and deepen their understanding of the world. The teaching should enable pupils to express their ideas and thoughts in another language and to understand and respond to its speakers, both in speech and in writing. It should also provide opportunities for them to communicate for practical purposes, learn new ways of thinking and read great literature in the original language. Language teaching should provide the foundation for learning further languages, equipping pupils to study and work in other countries.

Aim to ensure all pupils:

Understand and respond to spoken and written language from a variety of authentic sources

Speak with increasing confidence, fluency and spontaneity, finding ways of communicating what they want to say, including through discussion and asking questions, and continually improving the accuracy of their pronunciation and intonation

Can write at varying length, for different purposes and audiences, using the variety of grammatical structures that they have learnt

Discover and develop an appreciation of a range of writing in the language studied.

	Lower Key Stage Two	Upper Key Stage Two
To read fluently	<p>Read and understand the main points in short-written texts. Read short texts independently. Use a translation dictionary or glossary to look up new words.</p>	<p>Read and understand the main points and some of the detail in short written texts. Use the context of a sentence or a translation dictionary to work out the meaning of unfamiliar words. Read and understand the main points and opinions written texts from various contexts, including present, past or future events. Show confidence in reading aloud.</p>
Speaking and listening	<p>Appreciate stories, songs, poems and rhymes in the language. Explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words. Understand the main points from spoken phrases. Ask others to repeat words or phrases if necessary. Ask and answer simple questions and talk about interests. Take part in discussions and tasks. Demonstrate a growing vocabulary.</p>	<p>Understand the main points and opinions in spoken language. Take part in conversations. Be understood with little or difficulty. Appreciate stories, songs, poems and rhymes in the language. Explore the patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words.</p>
To write imaginatively	<p>Write a few words or short sentences using familiar expressions. Express personal experiences and responses. Write short phrases from memory with spelling that is readily understandable.</p>	<p>Write short texts on familiar topics. Use knowledge of grammar to enhance or change the meaning of phrases. Use dictionaries or glossaries to check words. Convey meaning (although there may be mistakes).</p>
Grammar	<p>Understand basic grammar appropriate to the language being studied, including feminine, masculine and neuter forms.</p>	<p>Understand basic grammar appropriate to the language being studied, including 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.</p>
Culture of the country	<p>Describe with some interesting details some aspects of countries or communities where the language is spoken. Make comparisons between life in countries or communities where the language is spoken and this country.</p>	<p>Give detailed accounts of the customs, history and culture of the countries and communities where French is spoken.</p>

The Northstead Curriculum - Music

Purpose

Music is a universal language that embodies one of the highest forms of creativity. A high-quality music education should engage and inspire pupils to develop a love of music and their talent as musicians, and so increase their self-confidence, creativity and sense of achievement. As pupils progress, they should develop a critical engagement with music, allowing them to compose, and to listen with discrimination to the best in the musical canon.

Aim to ensure all pupils:

Perform, listen to, review and evaluate music across a range of historical periods, genres, styles and traditions, including the works of the great composers and musicians

Learn to sing and to use their voices, to create and compose music on their own and with others, have the opportunity to learn a musical instrument, use technology appropriately and have the opportunity to progress to the next level of musical excellence

Understand and explore how music is created, produced and communicated, including through the inter-related dimensions: pitch, duration, dynamics, tempo, timbre, texture, structure and appropriate musical notations.

Key Stage One	
Performing	Take part in singing, accurately following a melody. Following instructions on how and when to sing or play an instrument. Make long and control long and short sounds, using voice and instruments.
Composing	Create a sequence of long and short sounds. Clap rhythms. Create a mixture of different sounds (long and short, loud and quiet, high and low) Choose sounds to create an effect. Sequence sounds to create an overall effect. Create short, musical patterns. Create short, rhythmic patterns.
Transcribing	Use symbols to help with composition and use them to help with a performance.
Describing	Identify the beat of a tune. Recognise changes in timbre, dynamics and pitch. Listen to appraise a wide range of music from many different eras and genres, saying what they like and don't like and giving reasons for their opinions.
Vocabulary	Melody, instrument, long, short, vibration, patterns, rhythm, beat, tune, timbre, dynamic, pitch, volume. Plus names and details of a wide range of music from different genres and eras.
Breadth of Coverage	Linked to theme work in class where possible E.g. In Y2 - Caribbean music and in Y1 - Sea Shantys If link to theme is not possible - use www.charanga.com for developmental learning in music.

Lower Key Stage Two	
Performing	Sing from memory with appropriate pitch. Maintain a simple part within a group. Pronounce words within a song clearly. Play notes on an instrument with care so that they are clear.
Composing	Compose and perform melodic songs. Use sounds to create abstract effects. Create repeated patterns with a range of instruments. Choose, order, combine and control sounds to create effects. Use digital technologies to compose a piece of music.
Transcribing	Devise non-standard symbols to indicate when to play and when to rest. Recognise that notes EGBDF and FACE on the musical stave. Recognise the symbols for a minim, crotchet, and semibreve and say how many beats they represent.
Describing	Use the terms: duration, timbre, pitch, beat, tempo, texture and use of silence to describe music. Evaluate music using musical vocabulary to identify areas of likes and dislikes. Listen to appraise a wide range of music from many different eras and genres
Vocabulary	Quaver, crotchet, minim, semibreve, rest, treble clef, stave, duration, timbre, pitch, beat/pulse, tempo, texture, dynamics, canon/round, drones, ostinato plus continue to develop awareness and understanding of music of different genres and eras.
Breadth of Coverage	Linked to topic work in class where possible E.g. In Y3 - STOMP music (linked to dinosaurs and stone age) In Y4 - Battle of the Bands

Upper Key Stage Two	
Performing	Sing or play from memory with confidence. Perform solos or as part of an ensemble. Sing or play expressively and in a tune.
Composing	Create songs with verses and a chorus. Create rhythmic patterns with an awareness of timbre and duration. Use digital technologies to compose, edit and refine pieces of music. (E.g. Using garage band or charanga).
Transcribing	Use the standard musical notation of crotchet, minim and semibreve to indicate how many beats to play. Read and create notes on a musical staff. Understand the purpose of the treble and bass clefs and use them in transcribing compositions.
Describing	Choose from a wide range of musical vocabulary to accurately describe and appraise music including: pitch, dynamics, tempo, texture, lyrics, melody, texture, timbre, sense of occasion, expressive, solo, rounds, harmonies, accompaniments, drones, cyclic patterns. Describe how lyrics can reflect the cultural context of music and have social meaning. Listen to and appraise a wide range of music from many different eras and genres
Vocabulary	All previous vocabulary plus: solo, harmonies, accompaniments, major, minor, bass clef, time signature
Breadth of Coverage	Linked to topic work in class where possible E.g. In Y5 - Creating music to the beat and rhythm of natural disasters In Y6 - Musical influences on Scarborough's identity

The Northstead Curriculum - Physical Education

Purpose

A high-quality physical education curriculum inspires all pupils to succeed and excel in competitive sport and other physically-demanding activities. It should provide opportunities for pupils to become physically confident in a way which supports their health and fitness.

Opportunities to compete in sport and other activities build character and help to embed values such as fairness and respect.

Aim to ensure all pupils:

Develop competence to excel in a broad range of physical activities

Are physically active for sustained periods of time

Engage in competitive sports and activities

Lead healthy, active lives.

Key Stage One	
Games and athletics	<p>Use the terms 'opponent' and 'team-mate'</p> <p>Use rolling, hitting, running, jumping, catching and kicking skills in combination.</p> <p>Develop tactics.</p> <p>Lead others when appropriate.</p>
Gymnastics	<p>Copy and remember actions.</p> <p>Move with some control and awareness of space.</p> <p>Link two or more actions to make a sequence.</p> <p>Show contrasts (Such as small/tall straight/curved and wide/narrow)</p> <p>Travel by rolling forwards, backwards and sideways.</p> <p>Hold a position whilst balancing on different points of the body.</p> <p>Climb and land safely on/off equipment.</p> <p>Stretch and curl to develop flexibility.</p> <p>Jump in a variety of ways and land with increasing control and balance.</p>
Dance	<p>Copy and remember moves and positions.</p> <p>Move with careful control and coordination.</p> <p>Link two or more actions to perform a sequence.</p> <p>Choose movements to communicate a mood, feeling or idea.</p>
Sporting ethics	<p>Follow the rules of the game and play fairly.</p> <p>Explain and demonstrate what it means to be a team player.</p> <p>Explain the rules of games they play both in PE lessons and at other times and describe the consequences of breaking these rules.</p> <p>Challenge 'unsportsmanlike' behaviour during game play</p>
Vocabulary	<p>Opponent, team-mate, rolling, jumping, sequence, contrasts, forwards, backwards, sideways, throw, catch, kick, stop, go, stretch, curl, balance, climb, rules, consequences, jump, land plus any other associated vocabulary linked to PE sessions and games that take place.</p>
Breadth of Coverage	<p>Gymnastics</p> <p>Dance</p> <p>Multi-Skills</p> <p>Develop some understanding of why exercise is important for a healthy body and a healthy mind and how exercise changes how our body works (e.g. heart rate gets faster, we breathe faster).</p> <p>Plus any other physical education activity linked to themes covered in key stage one.</p>

Lower Key Stage Two

Games	<p>Throw and Catch with control and accuracy. Strike a ball and field with control. Choose appropriate tactics to cause problems for the opposition. Follow the rules of the game and play fairly. Maintain possession of the ball. Pass to a team mate at appropriate times. Lead others and act as a respectful team member.</p>
Gymnastics and Dance	<p>Plan, perform and repeat sequences. Move in a clear, fluent and expressive manner. Refine movements into sequences. Create dances and movements that convey an idea. Change speed, direction and levels of performance. Travel in a variety of ways. Swing and hang from equipment (Gym)</p>
OAA	<p>Use maps, compasses and digital devices to orientate themselves. Follow an orienteering course in the school grounds successfully. Understand the need to show accomplishment in managing risks. Remain aware of changing conditions and change plans if necessary. Take part in a range of OAA activities whilst on school residential.</p>
Swimming	<p>Swim 25 metres unaided. Swim at the surface and below the water. Tread water and know how to stay safe in water.</p>
Athletics	<p>Sprint over a short distance. Run longer distances, knowing how to conserve energy. Use a range of throwing and jumping techniques. Compete with others in order to improve performance.</p>
Sporting ethics	<p>Demonstrate good sportsmanship in a range of activities. Lead others and act as a respectful team member. Apply the rules of a game fairly. Invent own rules for games and consequences for breaking them. Challenge 'unsportsmanlike' behaviour during game play and wider experiences.</p>
Vocabulary	<p>All KSI vocabulary plus additional vocabulary related to swimming and OAA activities plus any other associated vocabulary linked to PE sessions and games that take place.</p>
Breadth of Coverage	<p>Gymnastics / Dance / OAA / Swimming / Athletics / Games / Multi-Skills Develop their understanding of why exercise is important for a healthy body and a healthy mind and how exercise changes how our body works. Plus any other physical education activity linked to themes covered in lower key stage two.</p>

Upper Key Stage Two	
Games	<p>Choose and combine techniques in game situations</p> <p>Work alone, or with team mates in order to gain points of possession.</p> <p>Strike a bowled or volleyed ball with accuracy.</p> <p>Use forehand and backhand when playing racket games.</p> <p>Field, defend and attack tactically.</p> <p>Play in the spirit of the game and act as good role model.</p>
Gymnastics and Dance	<p>Compose creative and imaginative dance sequences.</p> <p>Perform expressively and hold a precise and strong posture.</p> <p>Perform complex moves that combine strength and stamina gained through gymnastics activities.</p> <p>Perform and create complex sequences.</p> <p>Create complex and well-executed sequences that include a full range of movements including: travelling, balances, swinging, springing, flight, vaults, inversions, rotations, bending, stretching and twisting.</p> <p>Hold shapes that are strong, fluent and expressive.</p> <p>Practise and refine the gymnastic techniques used in performances.</p> <p>Use equipment to vault and to swing.</p>
OAA	<p>Embrace both leadership and team roles in OAA.</p> <p>Remain positive even in the most challenging of circumstances.</p> <p>Take part in a variety of OAA activities in school and whilst on residential.</p>
Athletics	<p>Combine sprinting with low hurdles.</p> <p>Choose the best pace for running a variety of distances.</p> <p>Throw accurately and refine performance by analysing body movement.</p> <p>Compete with others and keep track of own performance, setting targets for improvement.</p>
Sporting ethics	<p>Demonstrate good sportsmanship in a range of activities.</p> <p>Watch a variety of familiar team games (football/rounders), analysing player's performance.</p> <p>Uphold the spirit of fair play and respect in all competitive situations.</p> <p>Compare fair and unfair play (different tackles, foul play, deliberate offences) and how this affects other members in a team.</p> <p>Recognise and challenge 'unsportsmanlike' behaviour during game play and wider experiences.</p>
Vocabulary	<p>All previously learnt vocabulary from KSI and LKS2 plus additional vocabulary related to additional OAA activities plus any other associated vocabulary linked to PE sessions and games that take place.</p>
Breadth of Coverage	<p>Gymnastics / Dance / OAA / Athletics / Games / Multi-Skills</p> <p>Develop their understanding of why exercise is important for a healthy body and a healthy mind and how exercise changes how our body works.</p> <p>Plus any other physical education activity linked to themes covered in upper key stage two.</p>

The Northstead Curriculum – Personal, Social and Health Education (Including Relationships Education)

Purpose

PSHE education is a planned, developmental programme of learning through which children and young people acquire the knowledge, understanding and skills they need to manage their lives now and in the future. As part of a whole-school approach, PSHE education develops the qualities and attributes pupils need to thrive as individuals, family members and members of society.

PSHE education equips pupils with the knowledge of how to live healthy, safe, productive, capable, responsible and balanced lives. It encourages them to be enterprising and supports them in making effective transitions, positive learning and career choices and in achieving economic wellbeing. A critical component of PSHE education is providing opportunities for children and young people to reflect on and clarify their own values and attitudes and explore the complex and sometimes conflicting range of values and attitudes they encounter now and in the future.

PSHE education contributes to personal development by helping pupils to build their confidence, resilience and self-esteem, and to identify and manage risk, make informed choices and understand what influences their decisions. It enables them to recognise, accept and shape their identities, to understand and accommodate difference and change, to manage emotions and to communicate constructively in a variety of settings. Developing an understanding of themselves, empathy and the ability to work with others will help pupils to form and maintain good relationships, develop the essential skills for future employability and better enjoy and manage their lives.

Aim for PSHE education is to provide pupils with:

Accurate, balanced and relevant knowledge.

Opportunities to turn that knowledge into personal understanding.

Opportunities to explore, clarify and if necessary challenge, their own and others' values, attitudes, beliefs, rights and responsibilities.

The skills, language and strategies they need in order to live healthy, safe, fulfilling, responsible and balanced lives.

Opportunities to develop positive personal attributes such as resilience, self-confidence, self-esteem, and empathy.

	Key Stage One
Respecting ourselves (Health and Wellbeing)	<p>Demonstrate that they can identify, name and manage a wider range of feelings and recognise and express with confidence their positive qualities. Make choices about a wider range of aspects of their health and wellbeing, and be more confident in their understanding about what keeps them healthy. Explain ways of keeping clean, name the main parts of the body and describe some of the changes as people grow from young to old and the implications of this.</p> <p>Describe more confidently their knowledge of the harmful aspects of some household products and medicines, and ways of keeping safe and ensuring the safety of others in familiar situations.</p>
Respecting others (Relationships)	<p>Understand simple definitions of bullying, describe why bullying is wrong and simple strategies for dealing with it and how to help victims. Recognise the effect of their behaviour on others, and be able to cooperate with others and support those with difficulties.</p> <p>Identify, describe with confidence and respect differences and similarities between people and explain a wider range of ways that family and friends should care for one another.</p> <p>Take part in discussions with one other person, in small groups and with the whole class, and contribute more confidently to simple debates.</p> <p>Recognise and be able to describe more confidently choices they can make and the difference between right and wrong.</p> <p>Contribute more ideas for rules for the group and classroom, and refer to the rules in the context of their and others' behaviour.</p>
Respecting the community (Living in the wider world.)	<p>Describe what improves and what harms their local, natural and built environments, what can be done and take more responsibility for looking after them.</p> <p>Describe more confidently different groups and communities they belong to, including family and school, and contribute actively to the life of the class and school.</p>
Vocabulary	Respect, environment, community, partnership, collaboration, choice, consequence, self-esteem, risk, hazard, bullying, behaviour, similarities and differences, discussions, rules, responsibility,
Breadth of Coverage	

	Lower Key Stage Two
Respecting ourselves (Health and Wellbeing)	<p>Recognise their own worth, but may need support to demonstrate or express that, and also to identify ways to face new challenges.</p> <p>Express simple ideas, with support, about how to develop healthy lifestyles</p> <p>Make judgements and decisions and list, with support, some ways of resisting negative peer pressure around issues affecting their health and wellbeing.</p> <p>With support, list some commonly available substances and drugs that are legal and illegal, describe some of their effects and risks, and understand how to manage the risks in different familiar situations.</p>
Respecting others (Relationships)	<p>Express their views, and listen to those of others, sometimes needing reminders about how to show respect for others.</p> <p>Identify, with support, some factors that affect how people think and feel.</p> <p>Identify different types of relationships and, with support, show ways to maintain good relationships.</p> <p>Understand, with support, the nature and consequences of bullying, and ways of responding to it.</p> <p>Understand why and how rules are made and enforced, why different rules are needed in different situations and take part in making and changing rules.</p> <p>Demonstrate respect and tolerance towards others, sometimes needing reminders to do so, and, with support, resolve differences by looking at alternatives, making decisions and explaining choices.</p>
Respecting the community (Living in the wider world.)	<p>Name a range of jobs, understand that they will need to develop skills to work in the future, and, with support, demonstrate how to look after and save money.</p> <p>Recognise negative behaviours such as stereotyping and aggression, and understand some of the consequences of anti-social and aggressive behaviours such as bullying and racism on individuals and communities.</p> <p>With support, research, discuss and debate topical issues, problems and events.</p> <p>Understand some basic facts about democracy and about some of the institutions that support it locally and nationally.</p> <p>Understand some of the range of national, regional, religious and ethnic identities in the United Kingdom and describe, with support, some of the different beliefs and values in society.</p> <p>Understand, with support, that resources can be allocated in different ways and that these economic choices affect individuals, communities and the sustainability of the environment.</p>
Vocabulary	<p>Respect, environment, community, partnership, collaboration, choice, consequence, self-esteem, risk, hazard, bullying, behaviour, similarities and differences, discussions, rules, responsibility, discrimination, democracy, racism, sexism, ethnic, diversity, citizen, values, economic, stereotyping, anti-social, tolerance, plus vocabulary related to drugs education.</p>
Breadth of Coverage	

	Upper Key Stage Two
Respecting ourselves (Health and Wellbeing)	<p>Demonstrate more confidently that they recognise their own worth, support others in recognising theirs, and identify and demonstrate ways to face new challenges. Express their views confidently, and show how their views can develop in the light of listening to others.</p> <p>Discuss some of the bodily and emotional changes at puberty and understand how they might affect them, and demonstrate some ways of dealing with these in a positive way.</p> <p>Talk about a wider range of jobs, explain their interests and how they will develop skills to work in the future, and demonstrate how to look after and save money.</p> <p>Identify and explain some factors that affect emotional health and wellbeing, and strategies for dealing with them.</p> <p>Make and explain choices, with more confidence and independence, about how to develop healthy lifestyles.</p> <p>Make judgements and decisions and list and describe some ways, for themselves and for others, of resisting negative peer pressure around issues affecting their health and wellbeing.</p> <p>List a range of substances and drugs that are legal and illegal, including those which are commonly available, describe some of their effects and risks, and explain how to manage the risks in different familiar situations.</p>
Respecting others (Relationships)	<p>Identify different types of relationships for themselves and others, and show ways to maintain good relationships and to support others with their relationships.</p> <p>Recognise and describe the nature and consequences of bullying, express ways of responding to it, and support others to do so.</p>
Respecting the community (Living in the wider world.)	<p>Respond to, or challenge negative behaviours such as stereotyping and aggression, and realise and be able to explain the consequences of anti-social and aggressive behaviours such as bullying and racism on individuals and communities.</p> <p>Take a lead role in researching, discussing and debating topical issues, problems and events.</p> <p>Understand why and how rules are made and enforced (in different contexts), why different rules are needed in different situations, and take a lead role in making and changing rules.</p> <p>Demonstrate respect and tolerance towards others, resolve differences, and support others to resolve differences, by looking at alternatives, making decisions and explaining choices.</p> <p>Understand and describe what democracy is, institutions that support it locally and nationally and how it happens.</p> <p>Appreciate and explain the range of national, regional, religious and ethnic identities in the United Kingdom and describe some of the different beliefs and values in society.</p> <p>Understand and describe how resources can be allocated in different ways and how these economic choices affect individuals, communities and the sustainability of the environment.</p> <p>Explore and comment on how the media present information.</p>
Vocabulary	<p>Respect, environment, community, partnership, collaboration, choice, consequence, self-esteem, risk, hazard, bullying, behaviour, similarities and differences, discussions, rules, responsibility, discrimination, democracy, racism, sexism, ethnic, diversity, citizen, values, economic, stereotyping, anti-social, tolerance, plus vocabulary related to drugs and relationship education.</p>
Breadth of Coverage	

The Northstead Curriculum – Religious Education

Purpose

Good RE gives our children and young people opportunities to explore the biggest questions of human life in the light of religious, philosophical and spiritual ideas. Learners make connections between religions, beliefs and the experiences that all humans share. RE develops clear, broad and deep thinking about religions and beliefs. This Agreed Syllabus requires schools to contribute to enabling pupils in North Yorkshire to develop an overall understanding of the 6 principal religions in the UK. The balance between depth of understanding and the coverage of material in these religions is important, so the syllabus lays down the recommended religions to be taught to each age group. This is in line with the law, which states that Religious Education shall have regard to “the fact that the religious traditions in Great Britain are in the main Christian, while taking account of the other principal religions represented in Great Britain.” There is an emphasis on the depth of study of Christianity and other religions and beliefs, rather than mere “coverage”.

Aim to ensure all pupils:

Develop open, sensitive, reflective and critical approaches to understanding humankind’s varied religions and beliefs, exploring practices, values, beliefs and lifestyles, relating these to their own experiences and to questions of everyday life.

Acquire and develop knowledge and understanding of Christianity and the other principal religions and beliefs represented in the UK and globally.

Enhance their spiritual, moral, social and cultural education by developing awareness of fundamental questions of life, responding to such questions with reference to religions and beliefs and reflecting on their own beliefs values and experiences.

Develop an understanding of the influence of beliefs, values and traditions on individuals, communities, societies and cultures.

Develop positive attitudes of respect towards other people who hold views and beliefs different from their own, and towards living in a society of diverse religions and beliefs.

Develop the ability to make reasoned and informed judgements about religious and moral issues with reference to the teachings of the principal religions and beliefs represented in the UK.

Key Stage One

RE for 5-7 year olds can use play, curiosity and teamwork to explore what matters to children. Pupils will talk about beliefs about God and express their own ideas simply. They will encounter and respond to a range of stories, artefacts and other religious materials. They will begin to understand the importance and value of religion for believers. Pupils will begin to learn about some of the richness of Christianity and at least one other religion in the UK today. They will be able to use simple information about religion, recognising that ideas are communicated in a variety of ways. Pupils will be able to reflect on their own feelings and experiences and develop a sense of belonging. They will ask relevant questions, showing that they are developing an enquiring approach to religion and life and a sense of wonder at the world. They will be able to talk about what is important to them, valuing themselves.

Key Areas of Learning

The fields of enquiry should be addressed through the following themes, by helping children to think about questions to do with:

- Story: how and why are some stories special or sacred? What makes these stories important in religion?
- Myself: who I am? What makes me unique as a person in a family and community?
- Belonging: where do people belong? How do we belong? Why is belonging important?
- Leaders and teachers: what can we learn from figures who have an influence on others locally, nationally and globally in religion and beliefs?
- Celebrations: how and why are celebrations important in religion?
- Symbols: how and why do symbols express religious meaning?
- Believing: what do different people believe about God, humanity and the natural world?

Learn about religion and belief (AT1)	Learn from religion and belief (AT2)
Knowledge, skills and understanding in finding out about: <ul style="list-style-type: none">• A wide range of religious stories from sacred writings: learners will talk about their meanings and respond sensitively to them.• Different celebrations and ways of worshipping in religion, noticing some similarities between them.• Signs of belonging to religions, and symbols with meaning for religious people, noticing this makes a difference in life.• Ways in which religious beliefs and ideas can be expressed creatively, e.g. in art, buildings, music and other forms. Children respond creatively themselves.• Children begin to use a range of religious words	Engaging with, reflecting on and responding to questions about: <ul style="list-style-type: none">• Myself, and community, responding to examples of how religion makes a difference to individuals, families and communities.• Puzzling questions and beliefs, asking and responding imaginatively to puzzling questions and sharing their thoughts;• Values and commitments, engaging with questions about what matters most and thinking about some examples of religious and spiritual feelings, experiences and ideas, for example worship, wonder, praise, thankfulness, concern, joy and sadness.

Key Stage Two

RE for this age group can be a fascinating enquiry, a challenging series of discoveries. From the ages of 7 to 11 pupils will investigate and explore Christianity and at least two other religions, finding out about similarities and differences and learning to use key words and concepts. They will learn to recognise the impact of religion and belief locally, nationally and globally, connecting up different aspects of religion and life. They learn about sacred texts and other religious sources and consider their meanings. Recognising diversity in religion and belief, they will be able to think about issues of respect for all. They make connections between their learning and their own lives, considering big questions of identity, meaning and commitment for themselves.

Key Areas of Learning

The fields of enquiry should be addressed through the following themes, by raising and addressing key questions:

- Beliefs and questions: How do the beliefs of religious and non-religious people about God, the world and others make a difference to their lives?
- Teachings and authority: What do sacred texts and other sources say about God, the world and human life?
- Worship, pilgrimage and sacred places: Where, how and why do different people worship, including at particular sites?
- The journey of life and death: Why are some occasions sacred to believers? What do people think about life after death?
- Symbols and religious expression: How can religious and spiritual ideas be expressed in different ways?
- Inspirational people: Who is an inspiring figure? What impact do inspiring people have on us and on the wider world?
- Religion and the individual: What is expected of a person in following a religion or belief?
- Religion, family and community: How do religious families and communities practise their faith? What contributions does this make to local life in North Yorkshire?
- Beliefs in action in the world: How do religions and beliefs respond to global issues of human rights, fairness, social justice and the importance of the environment?

Learn about religion and belief (AT1)	Learn from religion and belief (AT2)
<p>Knowledge skills and understanding in investigating:</p> <p>Beliefs, teachings and sources</p> <ul style="list-style-type: none"> • Pupils will investigate and describe key beliefs and teachings of the religions and beliefs they study; <p>Practices and lifestyles</p> <ul style="list-style-type: none"> • Pupils will explore and describe some ways religions and beliefs have an impact on life in families, communities and wider society; <p>Expressing meaning</p> <ul style="list-style-type: none"> • Pupils will find out about and consider different forms of religious and spiritual expression including music, architecture, sacred texts, festivals, worship and pilgrimages. 	<p>Engaging with, reflecting on and responding to questions of:</p> <p>Identity, diversity and belonging</p> <ul style="list-style-type: none"> • Pupils will reflect on questions about their sense of identity and their understanding of diversity in and between the religions and beliefs they study; <p>Meaning, purpose and truth</p> <ul style="list-style-type: none"> • Pupils will express their own understanding of key beliefs, stories and leaders, and reflect on the sources of wisdom and inspiration in their own lives; <p>Values and commitments</p> <ul style="list-style-type: none"> • Pupils will explore and reflect on some ideas of right and wrong, good and evil, understanding diverse ideas and expressing ideas of their own thoughtfully.

The Northstead Curriculum – Mathematics

Purpose

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

Aim to ensure all pupils:

Become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately

Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language

Can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.

The national curriculum for mathematics reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically. The quality and variety of language that pupils hear and speak are key factors in developing their mathematical vocabulary and presenting a mathematical justification, argument or proof. They must be assisted in making their thinking clear to themselves as well as others and teachers should ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions.

Key Stage One

The principal focus of mathematics teaching in key stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the four operations, including with practical resources. At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money.

By the end of year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency. Pupils should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

Year One			
Number and Place Value	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.	Addition and Subtraction	Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.
	Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens.		Represent and use number bonds and related subtraction facts within 20.
	Given a number, identify one more and one less.		Add and subtract one-digit and two-digit numbers to 20, including zero.
	Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least.		Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = - 9$.
	Read and write numbers from 1 to 20 in numerals and words.		
Multiplication and Division	Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher	Fractions	Recognise, find and name a half as one of two equal parts of an object, shape or quantity
			Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity
Measurement	Compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half], mass/weight [for example, heavy/light, heavier than, lighter than], capacity and volume [for example, full/empty, more than, less than, half, half full, quarter], time [for example, quicker, slower, earlier, later]		
	Measure and begin to record the following: lengths and heights, mass/weight, capacity and volume, time (hours, minutes, seconds), recognise and know the value of different denominations of coins and notes		
	Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]		
	Recognise and use language relating to dates, including days of the week, weeks, months and years		
	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.		
Geometry	Properties of shapes	Position and Direction	
	Recognise and name common 2d and 3d shapes.	Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	

Year Two

<p>Number and Place Value</p>	<p>Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backwards. Recognise the place value of each digit in a two-digit number (tens, ones) Identify, represent and estimate numbers using different representations, including the number line Compare and order numbers from 0 up to 100; use and = signs Read and write numbers to at least 100 in numerals and in words Use place value and number facts to solve problems</p>	<p>Addition and Subtraction</p> <p>Solve problems with addition and subtraction by using concrete objects and pictorial representations, including those involving numbers, quantities and measures and applying their increasing knowledge of mental and written methods. Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones / a two-digit number and tens / two two-digit numbers / adding three one-digit numbers Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>
<p>Multiplication and Division</p>	<p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.</p>	<p>Fractions</p> <p>Recognise, find, name and write fractions of a length, shape, set of objects or quantity. E.g. $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ Write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{1}{2}$ = $\frac{2}{4}$.</p>
<p>Measurement</p>	<p>Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels Compare and order lengths, mass, volume/capacity and record the results using >, < and = Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value Find different combinations of coins that equal the same amounts of money Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change Compare and sequence intervals of time Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times Know the number of minutes in an hour and the number of hours in a day.</p>	
<p>Geometry</p>	<p>Properties of shapes Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. Identify 2-D shapes on the surface of 3-D shapes Compare and sort common 2-D and 3-D shapes and everyday objects.</p>	<p>Position and Direction Order and arrange combinations of mathematical objects in patterns and sequences Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).</p>
<p>Statistics</p>	<p>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity. Ask and answer questions about totalling and comparing categorical data.</p>	

Lower Key Stage Two

The principal focus of mathematics teaching in lower key stage 2 is to ensure that pupils become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value. This should ensure that pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers.

At this stage, pupils should develop their ability to solve a range of problems, including with simple fractions and decimal place value. Teaching should also ensure that pupils draw with increasing accuracy and develop mathematical reasoning so they can analyse shapes and their properties, and confidently describe the relationships between them. It should ensure that they can use measuring instruments with accuracy and make connections between measure and number.

By the end of year 4, pupils should have memorised their multiplication tables up to and including the 12 multiplication table and show precision and fluency in their work.

Pupils should read and spell mathematical vocabulary correctly and confidently, using their growing word reading knowledge and their knowledge of spelling.

Year Three

<p>Number and Place Value</p>	<p>Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). Compare and order numbers up to 1000. Identify, represent and estimate numbers using different representations. Read and write numbers up to 1000 in numerals and in words. Solve number problems and practical problems involving these ideas.</p>	<p>Addition and Subtraction</p>	<p>Add and subtract numbers mentally, including: a three-digit number and ones / a three-digit number and tens / a three-digit number and hundreds Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. Estimate the answer to a calculation and use inverse operations to check answers. Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.</p>
<p>Multiplication and Division</p>	<p>Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.</p>	<p>Fractions</p>	<p>Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. Recognise, find and write fractions of a discrete set of objects: unit fractions and nonunit fractions with small denominators. Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. Recognise and show, using diagrams, equivalent fractions with small denominators. Add and subtract fractions with the same denominator within one whole. Compare and order unit fractions, and fractions with the same denominators. Solve problems that involve all of the above.</p>
<p>Measurement</p>	<p>Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml). Measure the perimeter of simple 2-D shapes Add and subtract amounts of money to give change, using both £ and p in practical contexts. Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks. Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight. Know the number of seconds in a minute and the number of days in each month, year and leap year. Compare durations of events [for example to calculate the time taken by particular events or tasks].</p>		
<p>Geometry</p>	<p>Properties of shapes Draw 2-D shapes and make 3-D shapes using modelling materials. Recognise 3-D shapes in different orientations and describe them. Recognise angles as a property of shape or a description of a turn. Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle. Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</p>	<p>Position and Direction Interpret and present data using bar charts, pictograms and tables Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.</p>	

Year Four

<p>Number and Place Value</p>	<p>Count in multiples of 6, 7, 9, 25 and 1000. Find 1000 more or less than a given number. Count backwards through zero to include negative numbers. Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). Order and compare numbers beyond 1000. Identify, represent and estimate numbers using different representations. Round any number to the nearest 10, 100 or 1000. Solve number and practical problems that involve all of the above and with increasingly large positive numbers. Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.</p>	<p>Addition and Subtraction</p>	<p>Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate Estimate and use inverse operations to check answers to a calculation. Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>
<p>Multiplication and Division</p>	<p>Recall multiplication and division facts for multiplication tables up to 12×12 Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers. Recognise and use factor pairs and commutativity in mental calculations Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</p>	<p>Fractions</p>	<p>Recognise and show, using diagrams, families of common equivalent fractions. Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. Add and subtract fractions with the same denominator Recognise and write decimal equivalents of any number of tenths or hundredths. Recognise and write decimal equivalents to $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$ Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths. Round decimals with one decimal place to the nearest whole number. Compare numbers with the same number of decimal places up to two decimal places. Solve simple measure and money problems involving fractions and decimals to two decimal places.</p>
<p>Measurement</p>	<p>Convert between different units of measure [for example, kilometre to metre; hour to minute] Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. Find the area of rectilinear shapes by counting squares. Estimate, compare and calculate different measures, including money in pounds and pence Read, write and convert time between analogue and digital 12- and 24-hour clocks. Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</p>		
<p>Geometry</p>	<p>Properties of shapes Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. Identify acute and obtuse angles and compare and order angles up to two right angles by size. Identify lines of symmetry in 2-D shapes presented in different orientations. Complete a simple symmetric figure with respect to a specific line of symmetry.</p>	<p>Position and Direction Describe positions on a 2-D grid as coordinates in the first quadrant. Describe movements between positions as translations of a given unit to the left/right and up/down. Plot specified points and draw sides to complete a given polygon.</p>	
<p>Statistics</p>	<p>Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs</p>		

Upper Key Stage Two

The principal focus of mathematics teaching in upper key stage 2 is to ensure that pupils extend their understanding of the number system and place value to include larger integers. This should develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio.

At this stage, pupils should develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation. With this foundation in arithmetic, pupils are introduced to the language of algebra as a means for solving a variety of problems. Teaching in geometry and measures should consolidate and extend knowledge developed in number. Teaching should also ensure that pupils classify shapes with increasingly complex geometric properties and that they learn the vocabulary they need to describe them.

By the end of year 6, pupils should be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages.

Pupils should read, spell and pronounce mathematical vocabulary correctly.

Year Five

<p>Number and Place Value</p>	<p>Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit. Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000. Solve number problems and practical problems that involve all of the above. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals</p>	<p>Addition and Subtraction</p>	<p>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). Add and subtract numbers mentally with increasingly large numbers. Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p>
<p>Multiplication and Division</p>	<p>Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. Know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19. Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. Multiply and divide numbers mentally drawing upon known facts Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.</p>	<p>Fractions</p>	<p>Compare and order fractions whose denominators are all multiples of the same number Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number Add and subtract fractions with the same denominator and denominators that are multiples of the same number. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams. Read and write decimal numbers as fractions Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read, write, order and compare numbers with up to three decimal places. Solve problems involving number up to three decimal places Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal. Solve problems which require knowing percentage and decimal equivalents and those fractions with a denominator of a multiple of 10 or 25.</p>
<p>Measurement</p>	<p>Convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre). Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres. Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes Estimate volume and capacity. Solve problems involving converting between units of time. Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.</p>		
<p>Geometry</p>	<p>Properties of shapes Identify 3-D shapes, including cubes and other cuboids, from 2-D representations Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure them in degrees Identify: angles at a point and one whole turn (total 360°) / angles at a point on a straight line and ½ a turn (total 180°) / other multiples of 90 Use the properties of rectangles to deduce related facts and find missing lengths and angles. Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</p>	<p>Position and Direction Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.</p>	
<p>Statistics</p>	<p>Solve comparison, sum and difference problems using information presented in a line graph * complete, read and interpret information in tables, including timetables.</p>		

Year Six

<p>Number and Place Value</p>	<p>Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit. Round any whole number to a required degree of accuracy. Use negative numbers in context, and calculate intervals across zero. Solve number and practical problems that involve all of the above.</p>	<p>4 operations</p>	<p>Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context. Perform mental calculations, including with mixed operations and large numbers. Identify common factors, common multiples and prime numbers. Use their knowledge of the order of operations to carry out calculations involving the four operations. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why Solve problems involving addition, subtraction, multiplication and division. Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.</p>
<p>Fractions</p>	<p>Use common factors to simplify fractions; use common multiples to express fractions in the same denomination. Compare and order fractions, including fractions > 1 Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. Multiply simple pairs of proper fractions, writing the answer in its simplest form Divide proper fractions by whole numbers Associate a fraction with division and calculate decimal fraction equivalents Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places Multiply one-digit numbers with up to two decimal places by whole numbers. Use written division methods in cases where the answer has up to two decimal places. Solve problems which require answers to be rounded to specified degrees of accuracy Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.</p>		
<p>Ratio and Proportion</p>	<p>Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. Solve problems involving the calculation of percentages and the use of percentages for comparison Solve problems involving similar shapes where the scale factor is known or can be found Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples</p>		
<p>Geometry</p>	<p>Properties of shapes Draw 2-D shapes using given dimensions and angles. Recognise, describe and build simple 3-D shapes, including making nets Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons. Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius. Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles</p>	<p>Position and Direction Describe positions on the full coordinate grid (all four quadrants) * draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</p>	
<p>Algebra</p>	<p>Use simple formulae Generate and describe linear number sequences Express missing number problems algebraically Find pairs of numbers that satisfy an equation with two unknowns Enumerate possibilities of combinations of two variables.</p>		
<p>Measurement</p>	<p>Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places Convert between miles and kilometres Recognise that shapes with the same areas can have different perimeters and vice versa Recognise when it is possible to use formulae for area and volume of shapes Calculate the area of parallelograms and triangles Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units [for example, mm³ and km³].</p>		
<p>Statistics</p>	<p>Interpret and construct pie charts and line graphs and use these to solve problems Calculate and interpret the mean as an average.</p>		

The Northstead Curriculum – English

Purpose

English has a pre-eminent place in education and in society. A high-quality education in English will teach pupils to speak and write fluently so that they can communicate their ideas and emotions to others and through their reading and listening, others can communicate with them. Through reading in particular, pupils have a chance to develop culturally, emotionally, intellectually, socially and spiritually. Literature, especially, plays a key role in such development. Reading also enables pupils both to acquire knowledge and to build on what they already know. All the skills of language are essential to participating fully as a member of society; pupils, therefore, who do not learn to speak, read and write fluently and confidently are effectively disenfranchised.

The overarching aim for English in the national curriculum is to promote high standards of language and literacy by equipping pupils with a strong command of the spoken and written word, and to develop their love of literature through widespread reading for enjoyment.

Aim to ensure all pupils:

Read easily, fluently and with good understanding.

Develop the habit of reading widely and often, for both pleasure and information.

Acquire a wide vocabulary, an understanding of grammar and knowledge of linguistic conventions for reading, writing and spoken language.

Appreciate our rich and varied literary heritage.

Write clearly, accurately and coherently, adapting their language and style in and for a range of contexts, purposes and audiences.

Use discussion in order to learn; they should be able to elaborate and explain clearly their understanding and ideas.

Are competent in the arts of speaking and listening, making formal presentations, demonstrating to others and participating in debate.

The Northstead Curriculum – Spoken Language

The national curriculum for English reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically. Spoken language underpins the development of reading and writing. The quality and variety of language that pupils hear and speak are vital for developing their vocabulary and grammar and their understanding for reading and writing. Teachers should therefore ensure the continual development of pupils' confidence and competence in spoken language and listening skills. Pupils should develop a capacity to explain their understanding of books and other reading, and to prepare their ideas before they write. They must be assisted in making their thinking clear to themselves as well as to others and teachers should ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions. Pupils should also be taught to understand and use the conventions for discussion and debate.

All pupils should be enabled to participate in and gain knowledge, skills and understanding associated with the artistic practice of drama. Pupils should be able to adopt, create and sustain a range of roles, responding appropriately to others in role. They should have opportunities to improvise, devise and script drama for one another and a range of audiences, as well as to rehearse, refine, share and respond thoughtfully to drama and theatre performances.

Statutory requirements which underpin all aspects of spoken language across the six years of primary education form part of the national curriculum. These are reflected and contextualised within the reading and writing domains which follow.

Through school, pupils should be taught to:

- Listen and respond appropriately to adults and their peers.
- Ask relevant questions to extend their understanding and knowledge.
- Use relevant strategies to build their vocabulary.
- Articulate and justify answers, arguments and opinions.
- Give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings.
- Maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments.
- Use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas.
- Speak audibly and fluently with an increasing command of Standard English. Participate in discussions, presentations, performances, role play, improvisations and debates.
- Gain, maintain and monitor the interest of the listener(s).
- Consider and evaluate different viewpoints, attending to and building on the contributions of others.
- Select and use appropriate registers for effective communication.

The Northstead Curriculum – Reading

The programmes of study for reading at key stages 1 and 2 consist of two dimensions: word reading and comprehension (both listening and reading). It is essential that teaching focuses on developing pupils' competence in both dimensions; different kinds of teaching are needed for each.

Skilled word reading involves both the speedy working out of the pronunciation of unfamiliar printed words (decoding) and the speedy recognition of familiar printed words. Underpinning both is the understanding that the letters on the page represent the sounds in spoken words. This is why phonics should be emphasised in the early teaching of reading to beginners (i.e. unskilled readers) when they start school.

Good comprehension draws from linguistic knowledge (in particular of vocabulary and grammar) and on knowledge of the world. Comprehension skills develop through pupils' experience of high-quality discussion with the teacher, as well as from reading and discussing a range of stories, poems and non-fiction. All pupils must be encouraged to read widely across both fiction and non-fiction to develop their knowledge of themselves and the world in which they live, to establish an appreciation and love of reading, and to gain knowledge across the curriculum. Reading widely and often increases pupils' vocabulary because they encounter words they would rarely hear or use in everyday speech. Reading also feeds pupils' imagination and opens up a treasure-house of wonder and joy for curious young minds.

It is essential that, by the end of their primary education, all pupils are able to read fluently, and with confidence, in any subject in their forthcoming secondary education.

Year One - Reading

Word Reading	Comprehension
<p>Apply phonic knowledge and skills as the route to decode words.</p> <p>Respond speedily with the correct sound to graphemes (letters or groups of letters) for all 40+ phonemes, including, where applicable, alternative sounds for graphemes.</p> <p>Read accurately by blending sounds in unfamiliar words containing GPCs that have been taught.</p> <p>Read common exception words, noting unusual correspondences between spelling and sound and where these occur in the word * read words containing taught GPCs and -s, -es, -ing, -ed, -er and -est endings.</p> <p>Read other words of more than one syllable that contain taught GPCs.</p> <p>Read words with contractions [for example, I'm, I'll, we'll], and understand that the apostrophe represents the omitted letter(s).</p> <p>Read aloud accurately books that are consistent with their developing phonic knowledge and that do not require them to use other strategies to work out words.</p> <p>Re-read these books to build up their fluency and confidence in word reading.</p>	<p>Develop pleasure in reading, motivation to read, vocabulary and understanding by:</p> <ul style="list-style-type: none">- listening to and discussing a wide range of poems, stories and non-fiction at a level beyond that at which they can read independently- being encouraged to link what they read or hear read to their own experiences- becoming very familiar with key stories, fairy stories and traditional tales, retelling them and considering their particular characteristics- recognising and joining in with predictable phrases- learning to appreciate rhymes and poems, and to recite some by heart- discussing word meanings, linking new meanings to those already known. <p>Understand both the books they can already read accurately and fluently and those they listen to by:</p> <ul style="list-style-type: none">- drawing on what they already know or on background information and vocabulary provided by the teacher- checking that the text makes sense to them as they read and correcting inaccurate reading- discussing the significance of the title and events- making inferences on the basis of what is being said and done- predicting what might happen on the basis of what has been read so far <p>Participate in discussion about what is read to them, taking turns and listening to what others say</p> <p>Explain clearly their understanding of what is read to them.</p>

Year Two - Reading

Word Reading	Comprehension
<p>Continue to apply phonic knowledge and skills as the route to decode words until automatic decoding has become embedded and reading is fluent. Read accurately by blending the sounds in words that contain the graphemes taught so far, especially recognising alternative sounds for graphemes.</p> <p>Read accurately words of two or more syllables that contain the same graphemes as above. Read words containing common suffixes.</p> <p>Read further common exception words, noting unusual correspondences between spelling and sound and where these occur in the word.</p> <p>Read most words quickly and accurately, without overt sounding and blending, when they have been frequently encountered.</p> <p>Read aloud books closely matched to their improving phonic knowledge, sounding out unfamiliar words accurately, automatically and without undue hesitation.</p> <p>Re-read these books to build up their fluency and confidence in word reading.</p>	<p>Develop pleasure in reading, motivation to read, vocabulary and understanding by:</p> <ul style="list-style-type: none">- listening to, discussing and expressing views about a wide range of contemporary and classic poetry, stories and non-fiction at a level beyond that at which they can read independently- discussing the sequence of events in books and how items of information are related- becoming increasingly familiar with and retelling a wider range of stories, fairy stories and traditional tales- being introduced to non-fiction books that are structured in different ways- recognising simple recurring literary language in stories and poetry- discussing and clarifying the meanings of words, linking new meanings to known vocabulary- discussing their favourite words and phrases- continuing to build up a repertoire of poems learnt by heart, appreciating these and reciting some, with appropriate intonation to make the meaning clear <p>Understand both the books that they can already read accurately and fluently and those that they listen to by:</p> <ul style="list-style-type: none">- drawing on what they already know or on background information and vocabulary provided by the teacher- checking that the text makes sense to them as they read and correcting inaccurate reading- making inferences on the basis of what is being said and done- answering and asking questions- predicting what might happen on the basis of what has been read so far <p>Participate in discussion about books, poems and other works that are read to them and those that they can read for themselves, taking turns and listening to what others say</p> <p>Explain and discuss their understanding of books, poems and other material, both those that they listen to and those that they read for themselves.</p>

Year Three and Four Reading

<p><i>Word Reading</i></p> <p>Apply their growing knowledge of root words, prefixes and suffixes (etymology and morphology) as listed in English Appendix 1, both to read aloud and to understand the meaning of new words they meet</p> <p>Read further exception words, noting the unusual correspondences between spelling and sound, and where these occur in the word.</p>
<p><i>Comprehension</i></p> <p>Develop positive attitudes to reading and understanding of what they read by:</p> <ul style="list-style-type: none">- listening to and discussing a wide range of fiction, poetry, plays, non-fiction and reference books or textbooks- reading books that are structured in different ways and reading for a range of purposes- using dictionaries to check the meaning of words that they have read- increasing their familiarity with a wide range of books, including fairy stories, myths and legends, and retelling some of these orally- identifying themes and conventions in a wide range of books- preparing poems and play scripts to read aloud and to perform, showing understanding through intonation, tone, volume and action- discussing words and phrases that capture the reader's interest and imagination- recognising some different forms of poetry [for example, free verse, narrative poetry] <p>Understand what they read, in books they can read independently, by:</p> <ul style="list-style-type: none">- checking that the text makes sense to them, discussing their understanding and explaining the meaning of words in context- asking questions to improve their understanding of a text- drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence- predicting what might happen from details stated and implied- identifying main ideas drawn from more than one paragraph and summarising these- identifying how language, structure, and presentation contribute to meaning <p>Retrieve and record information from non-fiction</p> <p>Participate in discussion about both books that are read to them and those they can read for themselves, taking turns and listening to what others say.</p>

Year Five and Six Reading

<p>Word Reading</p> <p>Apply their growing knowledge of root words, prefixes and suffixes (morphology and etymology), as listed in English Appendix 1, both to read aloud and to understand the meaning of new words that they meet.</p> <p>Appendix available here: https://bit.ly/2XIEA3i</p>
<p>Comprehension</p> <p>Maintain positive attitudes to reading and understanding of what they read by:</p> <ul style="list-style-type: none">- continuing to read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and reference books or textbooks- reading books that are structured in different ways and reading for a range of purposes- increasing their familiarity with a wide range of books, including myths, legends and traditional stories, modern fiction, fiction from our literary heritage, and books from other cultures and traditions- recommending books that they have read to their peers, giving reasons for their choices- identifying and discussing themes and conventions in and across a wide range of writing- making comparisons within and across books- learning a wider range of poetry by heart- preparing poems and plays to read aloud and to perform, showing understanding through intonation, tone and volume so that the meaning is clear to an audience <p>Understand what they read by:</p> <ul style="list-style-type: none">- checking that the book makes sense to them, discussing their understanding and exploring the meaning of words in context- asking questions to improve their understanding- drawing inferences such as inferring characters' feelings, thoughts and motives from their actions, and justifying inferences with evidence- predicting what might happen from details stated and implied- summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas- identifying how language, structure and presentation contribute to meaning <p>Discuss and evaluate how authors use language, including figurative language, considering the impact on the reader</p> <p>Distinguish between statements of fact and opinion</p> <p>Retrieve, record and present information from non-fiction</p> <p>Participate in discussions about books that are read to them and those they can read for themselves, building on their own and others' ideas and challenging views courteously</p> <p>Explain and discuss their understanding of what they have read, including through formal presentations and debates, maintaining a focus on the topic and using notes where necessary</p> <p>Provide reasoned justifications for their views.</p>

The Northstead Curriculum - Writing

The programmes of study for writing at key stages 1 and 2 are constructed similarly to those for reading: transcription (spelling and handwriting) and composition (articulating ideas and structuring them in speech and writing).

It is essential that teaching develops pupils' competence in these two dimensions. In addition, pupils should be taught how to plan, revise and evaluate their writing. These aspects of writing have been incorporated into the programmes of study for composition.

Writing down ideas fluently depends on effective transcription: that is, on spelling quickly and accurately through knowing the relationship between sounds and letters (phonics) and understanding the morphology (word structure) and orthography (spelling structure) of words. Effective composition involves forming, articulating and communicating ideas, and then organising them coherently for a reader. This requires clarity, awareness of the audience, purpose and context, and an increasingly wide knowledge of vocabulary and grammar. Writing also depends on fluent, legible and, eventually, speedy handwriting.

Year One - Writing

<p>Composition</p>	<p>Write sentences by:</p> <ul style="list-style-type: none"> - saying out loud what they are going to write about - composing a sentence orally before writing it - sequencing sentences to form short narratives - re-reading what they have written to check that it makes sense <p>Discuss what they have written with the teacher or other pupils Read aloud their writing clearly enough to be heard by their peers and the teacher</p>
<p>Transcription - Spelling</p>	<p>Spell:</p> <ul style="list-style-type: none"> - words containing each of the 40+ phonemes already taught - common exception words - the days of the week <p>Name the letters of the alphabet:</p> <ul style="list-style-type: none"> - naming the letters of the alphabet in order - using letter names to distinguish between alternative spellings of the same sound <p>Add prefixes and suffixes:</p> <ul style="list-style-type: none"> - using the spelling rule for adding -s or -es as the plural marker for nouns and the third person singular marker for verbs - using the prefix un- - using -ing, -ed, -er and -est where no change is needed in the spelling of root words <p>Apply simple spelling rules and guidance, as listed in English Appendix 1 Write from memory simple sentences dictated by the teacher that include words using the GPCs and common exception words taught so far.</p>
<p>Transcription - Handwriting</p>	<p>Sit correctly at a table, holding a pencil comfortably and correctly Begin to form lower-case letters in the correct direction, starting and finishing in the right place Form capital letters Form digits 0-9 Understand which letters belong to which handwriting 'families' (i.e. letters that are formed in similar ways) and to practise these.</p>
<p>Vocabulary, grammar and punctuation</p>	<p>Develop their understanding of the concepts set out in English Appendix 2 by:</p> <ul style="list-style-type: none"> - leaving spaces between words - joining words and joining clauses using and - beginning to punctuate sentences using a capital letter and a full stop, question mark or exclamation mark - using a capital letter for names of people, places, the days of the week, and the personal pronoun 'I' - learning the grammar for year 1 in English Appendix 2 - use the grammatical terminology in English Appendix 2 in discussing their writing.

Year Two - Writing

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Composition</p>	<p>Develop positive attitudes towards and stamina for writing by:</p> <ul style="list-style-type: none"> - writing narratives about personal experiences and those of others (real and fictional) - writing about real events - writing poetry - writing for different purposes <p>Consider what they are going to write before beginning by:</p> <ul style="list-style-type: none"> - planning or saying out loud what they are going to write about - writing down ideas and/or key words, including new vocabulary - encapsulating what they want to say, sentence by sentence <p>Make simple additions, revisions and corrections to their own writing by:</p> <ul style="list-style-type: none"> - evaluating their writing with the teacher and other pupils - re-reading to check that their writing makes sense and that verbs to indicate time are used correctly and consistently, including verbs in the continuous form - proof-reading to check for errors in spelling, grammar and punctuation [for example, ends of sentences punctuated correctly] <p>Read aloud what they have written with appropriate intonation to make the meaning clear.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Transcription - Spelling</p>	<p>Spell by:</p> <ul style="list-style-type: none"> - segmenting spoken words into phonemes and representing these by graphemes, spelling many correctly - learning new ways of spelling phonemes for which one or more spellings are already known, and learn some words with each spelling, including a few common homophones - learning to spell common exception words - learning to spell more words with contracted forms - learning the possessive apostrophe (singular) [for example, the girl's book] - distinguishing between homophones and near-homophones <p>Add suffixes to spell longer words, including -ment, -ness, -ful, -less, -ly</p> <p>apply spelling rules and guidance, as listed in English Appendix 1</p> <p>Write from memory simple sentences dictated by the teacher that include words using the GPCs, common exception words and punctuation taught so far.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Transcription Handwriting</p>	<p>Form lower-case letters of the correct size relative to one another</p> <p>Start using some of the diagonal and horizontal strokes needed to join letters and understand which letters, when adjacent to one another, are best left unjoined</p> <p>Write capital letters and digits of the correct size, orientation and relationship to one another and to lower case letters</p> <p>Use spacing between words that reflects the size of the letters.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Vocabulary, grammar and punctuation</p>	<p>Develop their understanding of the concepts set out in English Appendix 2 by:</p> <ul style="list-style-type: none"> - learning how to use both familiar and new punctuation correctly, including full stops, capital letters, exclamation marks, question marks, commas for lists and apostrophes for contracted forms and the possessive (singular) <p>Learn how to use:</p> <ul style="list-style-type: none"> - sentences with different forms: statement, question, exclamation, command - expanded noun phrases to describe and specify [for example, the blue butterfly] - the present and past tenses correctly and consistently including the progressive form - subordination (using when, if, that, or because) and co-ordination (using or, and, or but) - the grammar for year 2 in English Appendix 2 - some features of written Standard English - use and understand the grammatical terminology in English Appendix 2 in discussing their writing.

Year Three and Four

<p>Composition</p>	<p>Plan their writing by:</p> <ul style="list-style-type: none"> - Discussing writing similar to that which they are planning to write in order to understand and learn from its structure, vocabulary and grammar - Discussing and recording ideas <p>Draft and write by:</p> <ul style="list-style-type: none"> - composing and rehearsing sentences orally (including dialogue), progressively building a varied and rich vocabulary and an increasing range of sentence structures (English Appendix 2) - organising paragraphs around a theme - in narratives, creating settings, characters and plot - in non-narrative material, using simple organisational devices <p>Evaluate and edit by:</p> <ul style="list-style-type: none"> - assessing the effectiveness of their own and others' writing and suggesting improvements - proposing changes to grammar and vocabulary to improve consistency, including the accurate use of pronouns in sentences - proof-read for spelling and punctuation errors - read aloud their own writing, to a group or the whole class, using appropriate intonation and controlling the tone and volume so that the meaning is clear
<p>Transcription - Spelling</p>	<p>Use further prefixes and suffixes and understand how to add them</p> <p>Spell further homophones</p> <p>Spell words that are often misspelt (English Appendix 1)</p> <p>Place the possessive apostrophe accurately in words with regular plurals and in words with irregular plurals</p> <p>Use the first two or three letters of a word to check its spelling in a dictionary</p> <p>Write from memory simple sentences, dictated by the teacher, that include words and punctuation taught so far.</p>
<p>Transcription - Handwriting</p>	<p>Use the diagonal and horizontal strokes that are needed to join letters and understand which letters, when adjacent to one another, are best left unjoined</p> <p>Increase the legibility, consistency and quality of their handwriting [for example, by ensuring that the downstrokes of letters are parallel and equidistant; that lines of writing are spaced sufficiently so that the ascenders and descenders of letters do not touch].</p>
<p>Vocabulary, grammar and punctuation</p>	<p>Develop their understanding of the concepts set out in English Appendix 2 by:</p> <ul style="list-style-type: none"> - extending the range of sentences with more than one clause by using a wider range of conjunctions, including when, if, because, although - using the present perfect form of verbs in contrast to the past tense - choosing nouns or pronouns appropriately for clarity and cohesion and to avoid repetition - using conjunctions, adverbs and prepositions to express time and cause - using fronted adverbials - learning the grammar for years 3 and 4 in English Appendix 2 <p>Indicate grammatical and other features by:</p> <ul style="list-style-type: none"> - using commas after fronted adverbials - indicating possession by using the possessive apostrophe with plural nouns - using and punctuating direct speech - use and understand the grammatical terminology in English Appendix 2 accurately and appropriately when discussing their writing and reading.

Years Five and Six - Writing

Composition	<p>Plan their writing by:</p> <ul style="list-style-type: none"> - identifying the audience for and purpose of the writing, selecting the appropriate form and using other similar writing as models for their own - noting and developing initial ideas, drawing on reading and research where necessary - in writing narratives, considering how authors have developed characters and settings in what pupils have read, listened to or seen performed <p>Draft and write by:</p> <ul style="list-style-type: none"> - selecting appropriate grammar and vocabulary, understanding how such choices can change and enhance meaning - in narratives, describing settings, characters and atmosphere and integrating dialogue to convey character and advance the action - precisising longer passages - using a wide range of devices to build cohesion within and across paragraphs - using further organisational and presentational devices to structure text and to guide the reader [for example, headings, bullet points, underlining] <p>Evaluate and edit by:</p> <ul style="list-style-type: none"> - assessing the effectiveness of their own and others' writing - proposing changes to vocabulary, grammar and punctuation to enhance effects and clarify meaning - ensuring the consistent and correct use of tense throughout a piece of writing - ensuring correct subject and verb agreement when using singular and plural, distinguishing between the language of speech and writing and choosing the appropriate register - proof-read for spelling and punctuation errors <p>Perform their own compositions, using appropriate intonation, volume, and movement so that meaning is clear</p>
Transcription - Spelling	<p>Use further prefixes and suffixes and understand the guidance for adding them</p> <p>Spell some words with 'silent' letters</p> <p>Continue to distinguish between homophones and other words which are often confused</p> <p>Use knowledge of morphology and etymology in spelling and understand that the spelling of some words needs to be learnt specifically, as listed in English Appendix 1</p> <p>Use dictionaries to check the spelling and meaning of words</p> <p>Use the first three or four letters of a word to check spelling, meaning or both of these in a dictionary</p> <p>Use a thesaurus.</p>
Transcription - Handwriting	<p>Write legibly, fluently and with increasing speed by:</p> <ul style="list-style-type: none"> - choosing which shape of a letter to use when given choices and deciding whether or not to join specific letters - choosing the writing implement that is best suited for a task.
Vocabulary, grammar and punctuation	<p>Develop their understanding of the concepts set out in English Appendix 2 by:</p> <ul style="list-style-type: none"> - recognising vocabulary and structures that are appropriate for formal speech and writing, including subjunctive forms - using passive verbs to affect the presentation of information in a sentence - using the perfect form of verbs to mark relationships of time and cause - using expanded noun phrases to convey complicated information concisely - using modal verbs or adverbs to indicate degrees of possibility - using relative clauses beginning with who, which, where, when, whose, that or with an implied (i.e. omitted) relative pronoun - learning the grammar for years 5 and 6 in English Appendix 2 <p>Indicate grammatical and other features by:</p> <ul style="list-style-type: none"> - using commas to clarify meaning or avoid ambiguity in writing - using hyphens to avoid ambiguity - using brackets, dashes or commas to indicate parenthesis - using semi-colons, colons or dashes to mark boundaries between independent clauses - using a colon to introduce a list - punctuating bullet points consistently <p>Use and understand the grammatical terminology in English Appendix 2 accurately and appropriately in discussing their writing and reading.</p>

The Northstead Curriculum - Science

Purpose

A high-quality science education provides the foundations for understanding the world through the specific disciplines of biology, chemistry and physics. Science has changed our lives and is vital to the world's future prosperity, and all pupils should be taught essential aspects of the knowledge, methods, processes and uses of science. Through building up a body of key foundational knowledge and concepts, pupils should be encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena. They should be encouraged to understand how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

Aim to ensure all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

Pupils should be able to describe associated processes and key characteristics in common language, but they should also be familiar with, and use, technical terminology accurately and precisely. They should build up an extended specialist vocabulary. They should also apply their mathematical knowledge to their understanding of science, including collecting, presenting and analysing data. The social and economic implications of science are important but, generally, they are taught most appropriately within the wider school curriculum: teachers will wish to use different contexts to maximise their pupils' engagement with and motivation to study science.

Spoken Language

The national curriculum for science reflects the importance of spoken language in pupils' development across the whole curriculum - cognitively, socially and linguistically. The quality and variety of language that pupils hear and speak are key factors in developing their scientific vocabulary and articulating scientific concepts clearly and precisely. They must be assisted in making their thinking clear, both to themselves and others, and teachers should ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions.

Years 1 and 2 - Science

The principal focus of science teaching in key stage 1 is to enable pupils to experience and observe phenomena, looking more closely at the natural and humanly-constructed world around them. They should be encouraged to be curious and ask questions about what they notice. They should be helped to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including observing changes over a period of time, noticing patterns, grouping and classifying things, carrying out simple comparative tests, and finding things out using secondary sources of information. They should begin to use simple scientific language to talk about what they have found out and communicate their ideas to a range of audiences in a variety of ways. Most of the learning about science should be done through the use of first-hand practical experiences, but there should also be some use of appropriate secondary sources, such as books, photographs and videos.

Pupils should read and spell scientific vocabulary at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

Year One - Science

Plants	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees Identify and describe the basic structure of a variety of common flowering plants, including trees.
Animals including humans	Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals Identify and name a variety of common animals that are carnivores, herbivores and omnivores Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.
Everyday materials	Distinguish between an object and the material from which it is made Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock Describe the simple physical properties of a variety of everyday materials Compare and group together a variety of everyday materials on the basis of their simple physical properties.
Seasonal Changes	Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies.
Working Scientifically	Use the following practical scientific methods, processes and skills through the teaching of the programme of study content: - asking simple questions and recognising that they can be answered in different ways - observing closely, using simple equipment - performing simple tests - identifying and classifying - using their observations and ideas to suggest answers to questions - gathering and recording data to help in answering questions

Year Two - Science

<p>Living Things and Their Habitats</p>	<p>Explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats.</p> <p>Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.</p>
<p>Plants</p>	<p>Observe and describe how seeds and bulbs grow into mature plants.</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p>
<p>Animals including humans</p>	<p>Notice that animals, including humans, have offspring which grow into adults.</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).</p> <p>Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.</p>
<p>Use of everyday materials</p>	<p>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p>
<p>Working Scientifically</p>	<p>Use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none">- asking simple questions and recognising that they can be answered in different ways- observing closely, using simple equipment- performing simple tests- identifying and classifying- using their observations and ideas to suggest answers to questions- gathering and recording data to help in answering questions

Years 3 and 4 - Science

The principal focus of science teaching in lower key stage 2 is to enable pupils to broaden their scientific view of the world around them. They should do this through exploring, talking about, testing and developing ideas about everyday phenomena and the relationships between living things and familiar environments, and by beginning to develop their ideas about functions, relationships and interactions. They should ask their own questions about what they observe and make some decisions about which types of scientific enquiry are likely to be the best ways of answering them, including observing changes over time, noticing patterns, grouping and classifying things, carrying out simple comparative and fair tests and finding things out using secondary sources of information. They should draw simple conclusions and use some scientific language, first, to talk about and, later, to write about what they have found out.

Pupils should read and spell scientific vocabulary correctly and with confidence, using their growing word reading and spelling knowledge.

Year 3 - Science

Plants	<p>Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.</p> <p>Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant.</p> <p>Investigate the way in which water is transported within plants.</p> <p>Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.</p>
Animals including humans	<p>Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.</p> <p>Identify that humans and some other animals have skeletons and muscles for support, protection and movement.</p>
Rocks	<p>Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.</p> <p>Describe in simple terms how fossils are formed when things that have lived are trapped within rock.</p> <p>Recognise that soils are made from rocks and organic matter</p>
Light	<p>Recognise that they need light in order to see things and that dark is the absence of light.</p> <p>Notice that light is reflected from surfaces.</p> <p>Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.</p> <p>Recognise that shadows are formed when the light from a light source is blocked by an opaque object.</p> <p>Find patterns in the way that the size of shadows change.</p>
Forces and Magnets	<p>Compare how things move on different surfaces.</p> <p>Notice that some forces need contact between two objects, but magnetic forces can act at a distance.</p> <p>Observe how magnets attract or repel each other and attract some materials and not others.</p> <p>Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials</p> <p>Describe magnets as having two poles.</p> <p>Predict whether two magnets will attract or repel each other, depending on which poles are facing.</p>
Working scientifically	<p>Use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <p>Asking relevant questions and using different types of scientific enquiries to answer them.</p> <p>Setting up simple practical enquiries, comparative and fair tests.</p> <p>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.</p> <p>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.</p> <p>Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.</p> <p>Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p> <p>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</p> <p>Identifying differences, similarities or changes related to simple scientific ideas and processes.</p> <p>Using straightforward scientific evidence to answer questions or to support their findings.</p>

Year Four - Science

<p>Living things and their habitats</p>	<p>Recognise that living things can be grouped in a variety of ways. Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. Recognise that environments can change and that this can sometimes pose dangers to living things.</p>
<p>Animals including humans</p>	<p>Describe the simple functions of the basic parts of the digestive system in humans. Identify the different types of teeth in humans and their simple functions Construct and interpret a variety of food chains, identifying producers, predators and prey.</p>
<p>States of matter</p>	<p>Compare and group materials together, according to whether they are solids, liquids or gases. Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C). Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p>
<p>Sound</p>	<p>Identify how sounds are made, associating some of them with something vibrating Recognise that vibrations from sounds travel through a medium to the ear. Find patterns between the pitch of a sound and features of the object that produced it. Find patterns between the volume of a sound and the strength of the vibrations that produced it. Recognise that sounds get fainter as the distance from the sound source increases.</p>
<p>Electricity</p>	<p>Identify common appliances that run on electricity. Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers. Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit. Recognise some common conductors and insulators, and associate metals with being good conductors.</p>
<p>Working scientifically</p>	<p>Use the following practical scientific methods, processes and skills through the teaching of the programme of study content: Asking relevant questions and using different types of scientific enquiries to answer them. Setting up simple practical enquiries, comparative and fair tests. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Identifying differences, similarities or changes related to simple scientific ideas and processes. Using straightforward scientific evidence to answer questions or to support their findings.</p>

Years 5 and 6 - Science

The principal focus of science teaching in upper key stage 2 is to enable pupils to develop a deeper understanding of a wide range of scientific ideas. They should do this through exploring and talking about their ideas; asking their own questions about scientific phenomena; and analysing functions, relationships and interactions more systematically. At upper key stage 2, they should encounter more abstract ideas and begin to recognise how these ideas help them to understand and predict how the world operates. They should also begin to recognise that scientific ideas change and develop over time. They should select the most appropriate ways to answer science questions using different types of scientific enquiry, including observing changes over different periods of time, noticing patterns, grouping and classifying things, carrying out comparative and fair tests and finding things out using a wide range of secondary sources of information. Pupils should draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings.

Pupils should read, spell and pronounce scientific vocabulary correctly.

Year 5 - Science

<p>Living things and their habitats</p>	<p>Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals.</p>
<p>Animals including humans</p>	<p>Describe the changes as humans develop to old age.</p>
<p>Properties and changes to materials</p>	<p>Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating. Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic. Demonstrate that dissolving, mixing and changes of state are reversible changes. Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</p>
<p>Earth and Space</p>	<p>Describe the movement of the Earth, and other planets, relative to the Sun in the solar system. Describe the movement of the Moon relative to the Earth. Describe the Sun, Earth and Moon as approximately spherical bodies. Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.</p>
<p>Forces</p>	<p>Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. Identify the effects of air resistance, water resistance and friction that act between moving surfaces. Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.</p>
<p>Working scientifically</p>	<p>Use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> - planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary - taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate - recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs - using test results to make predictions to set up further comparative and fair tests - reporting and presenting 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 - identifying scientific evidence that has been used to support or refute ideas or arguments.

Year 6 - Science

<p>Living things and their habitats</p>	<p>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.</p> <p>Give reasons for classifying plants and animals based on specific characteristics.</p>
<p>Animals including humans</p>	<p>Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.</p> <p>Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.</p> <p>Describe the ways in which nutrients and water are transported within animals, including humans.</p>
<p>Evolution and inheritance</p>	<p>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</p> <p>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>
<p>Light</p>	<p>Recognise that light appears to travel in straight lines.</p> <p>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.</p> <p>Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.</p> <p>Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.</p>
<p>Electricity</p>	<p>Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.</p> <p>Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.</p> <p>Use recognised symbols when representing a simple circuit in a diagram.</p>
<p>Working scientifically</p>	<p>Use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> - planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary - taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate - recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs - using test results to make predictions to set up further comparative and fair tests - reporting and presenting 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 - identifying scientific evidence that has been used to support or refute ideas or arguments.