



Northstar
Upper School

**NORTHSTAR NEW SCHOOL
CURRICULUM HANDBOOK
KS3**

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INTRODUCTION

Dear Parents/Carers,

The term has finally started! It has been an absolute pleasure to welcome all our pupils back on site for their learning at Northstar New School this academic year. The energy and engagement seen in classrooms and around school has been palpable and we are all excited to work with our pupils to develop them further in their educational journey.

Our teachers have done a brilliant job designing an exciting, ambitious and creative curriculum for our pupils – one which is diverse, innovative and accessible for all. Our curriculum offer takes a pupil-centered approach, with a focus on developing independent learners, fostering creativity and developing critical thinking skills for the 21st century learner.

We have worked tremendously hard at NorthStar to shape an ambitious and exciting curriculum for our pupils. We have sequenced the learning so that every subject starts with core basic knowledge and thinking and then goes on to explore the *best of what has been thought and said in our world*.

We have produced this guide to support you with the education of your son/daughter at Northstar. This guide will give you an overview of the topics being studied in each subject. We hope that you will use the information to ask questions of your child and explore the topics that they are studying this year. In addition to this, you can find these on our website under the curriculum area.

We hope you find the information useful. If you have any questions please direct them to the class teacher or Curriculum Leader and will be happy to support with any queries.

Yours faithfully,

M. Foley

Deputy Headteacher - Curriculum

ENGLISH

Intent

The school believes that English skills are vital to the development of children so they are prepared for their future life. A broad and balanced English programme using objectives from the National Curriculum, determines the skills that each year group and Key Stage must cover. A range of genres studied and promoted. A variety of resources are used to promote a reading and writing culture. Children are given a range of writing opportunities including the use of paired, group and independent writing tasks. A culture of learning from each other is promoted through use of co-operative learning structures. This is developed across both key stages, so that the children learn to respond appropriately and supportively to each other regardless of gender, age, cultural or ethnic background.

The aims of teaching writing in our school are to develop pupils who:

- show high levels of achievement and exhibit very positive attitudes towards writing
- use and understand language as speakers, readers and writers.
- are competent, confident and independent in the use of language in their writing
- have an awareness of different audiences and purposes for writing.
- apply their grammatical knowledge in their writing
- apply their phonetical and spelling knowledge
- apply the English language in all areas of the curriculum.

Special Educational Needs Disability (SEND) / Pupil Premium / Higher Attainers

Children may have work additional to and different from their peers in order to access the curriculum dependent upon their needs. As well as this, our school offers a demanding and varied curriculum, providing children with a range of opportunities in order for them to reach their full potential and consistently achieve highly from their starting points.

Implementation

Our school provides daily English lessons that are progressive and support skill development.

At Northstar we teach specific Grammar sessions which are then applied in children's writing. As part of our enriched curriculum, English opportunities are planned through a variety of ways including through our author and via other subjects.

In English lessons, teachers plan a sequence of lessons that explore quality texts and give pupils the opportunity to practice writing and reading skills through the use of co-operative learning structures. Teachers model these skills on regular basis and planning, editing, publishing and ICT based tasks can be planned in as part of the teaching sequence.

Handwriting sessions are taught regularly to the children and follow a cursive programme. The children have separate handwriting books and are expected to apply this cursive script into their daily writing.

DEAR -(Drop Everything and Read) is part of our timetable weekly across the school. Staff and pupils alike partake in a 15-minute read.

Weekly Spellings are across the stages and abilities of the pupils which are assessed in weekly Spelling Tests.

Impact

Assessment for learning strategies are used on a daily basis. These will allow a picture to be built up of the pupils' progress, any areas of strength or weakness which can then be addressed in teachers' planning.

Assessment of learning is completed termly. Children complete independent writing pieces within a unit of work, which are assessed against The Big Write criteria. Teachers will have at least 6 pieces of work through the academic year. There is also extended writing opportunities within the weekly lessons which are encouraged and assessed. Analysis of the data impacts upon teachers planning so pupils' needs can be addressed. Moderation of teacher assessment is also completed termly in order to ensure that judgements are accurate. Children are formally checked Classroom Monitor tracking to ensure that they are making at least expected progress in line with their abilities and targets. This is then monitored by SLT. Children who are not on track are identified for intervention/target teaching.

At the end of KS3 teachers use the Teacher Assessment Framework to report Teacher assessment.

Leadership and Management

The DHT's role is to empower colleagues to teach Writing to a high standard and support staff in the following ways:

- By keeping up to date on current issues; disseminating relevant information and providing training for staff members (either directly or through other professionals)
- Leading by example by modelling lessons or styles of teaching
- Having a knowledge of the quality of writing provision across the school and using this to provide a coaching and mentoring role
- Identifying and acting on development needs of staff members
- Monitoring expectations, provision and attainment across the school and providing feedback to develop practice further in order to raise standards

Monitoring and Evaluation

The quality of teaching and learning is monitored as part of the appraisal process through lesson observations and through the progress and attainment documents. In addition, continuity and progression across the school is monitored by the DHT as is the implementation and impact of Assessment for Learning. The subject action plan identifies actions intended to raise standards.

The DHT will also provide an annual summary report to the Headteacher in which s/he evaluates the strengths and weaknesses in writing and indicates areas for further improvement.

A named member of the governing body is briefed to oversee the teaching and learning. The link governor meets, at least termly, with the subject leader to review progress.

Partnerships with parents

Parents are kept informed of topics that are being covered through a newsletter sent half-termly. During Parents' Days curricular targets are shared and a written report is completed annually in the Summer Term. Homework in Key Stage 2 and Key Stage 3 is a choice of activity; they are encouraged to complete an English/mathematics choice on alternate weeks.



Curriculum Overview for English - We will study five units of work over the academic year – to encourage deeper learning and address individual pupil understanding and application of skills covered.

Please note that texts for classes will be those of class interest and suited to the needs of the individuals.

When?	What?	Why?	How?	Support
Autumn Half Term – 1 Fiction To Kill a Mockingbird	<p>Students will begin by analysing a range of existing non-fiction texts to identify key features of their construction.</p> <p>Teaching will focus in particular on the analysis of presentational features of non-fiction, as well as persuasive and rhetorical devices used. This will lead to the creation of a variety of non-fiction texts for different purposes and audiences.</p>	<p>Students will be expected to understand viewpoints in non-fiction texts and create their own.</p>	<p>Students will recap the key presentational devices of a non-fiction text and begin to understand the intended effect, using inference skills.</p> <p>In order to reinforce these skills, students will be creating a non-fiction text of their own, using the skills they have previously critiqued.</p>	<p>Encourage them to read widely – magazines, newspaper articles, travel writing and information texts – as more experience with these texts will be of benefit.</p>
Autumn Half Term – 2 To Kill A Mockingbird (continued) War Poetry	<p>Students will begin by identifying key features of poetry and will move on to analysing and evaluating their effect.</p> <p>The focus for this unit will be the analysis of language. Particular emphasis here, is placed on the connotative and symbolic meaning of word choice, looking beyond the obvious and the impact on the reader.</p>	<p>Poetry is a key component of English Literature and analysis skills make up an important constituent of all English literature-based work.</p> <p>In addition, analytical skill lends itself to work across all skill cases in English.</p>	<p>Students will study poems from a range of different sources, from poets from different cultures, as well as those from our literary heritage.</p> <p>Tasks will focus in particular on how language choices reflect the poet's viewpoint and in turn, how this shapes the reader's response.</p> <p>Activities in class will focus on looking at conceptual connotative meaning.</p>	<p>A familiarity with a range of poetry would be beneficial as well as broadening knowledge and understanding of a range of different poetic forms.</p>

<p>Spring Half Term - 1 Othello (Shakespeare)</p>	<p>Students will be focusing on the contextual importance of the key aspects of Shakespeare's key works, with a particular focus on his language choices.</p> <p>Students will also look closely at the methods used to write a critical response to literary heritage texts and how to embed quotations into their own analysis.</p>	<p>Students will be expected to understand the importance of context. This also forms part of the continued knowledge and understanding of Shakespeare.</p>	<p>Students will complete assessments based on the analysis of a key scene They will also complete an assessment based on their ability to produce an opening to their own play.</p>	<p>Encourage students to look closely at extracts from Shakespearean plays as well as watching adaptations and dramatizations of his key works, especially Hamlet.</p>
<p>Spring Half Term - 2 Modern Play DNA</p>	<p>Students will examine the themes of gangs and morality.</p> <p>Students will examine the themes of leadership and peer pressure Students will explore the use of rhetorical questions. Students will explore the use of language in the play</p>	<p>Do some people do things that they never would have done alone because they are led by others? Are the morals of a group different to individual interpretations of morality?</p>	<p>Students will create a piece of writing about what it means to be LOYAL. Write about two characters who you find interesting in DNA. Students will complete assessment based on the text: What the two characters say and do that you find interesting The methods the writer uses to present them to make you feel as you do.</p>	<p>Encourage students to Focus on what is 'right' from a moral perspective and not from loyalty to an individual or to a group.</p>
<p>Summer Half Term – 1 Pre-1914 Prose Great Expectations</p>	<p>Students will read Great Expectations</p> <p>Focus here will be on the ability to explore the writer's viewpoint.</p> <p>How characters are established.</p>	<p>Students will be expected to complete different written tasks, responding to stimulus material. Studying whole novels, is a key part of our Key Stage 3 English curriculum.</p>	<p>Students will read copies of the texts and will analyse key sections. They will Look closely at sentence construction and the associated authorial intentions.</p>	<p>Encourage students to research their novel before and during studying.</p>
<p>Summer Half Term -2 Great Expectations</p>	<p>How structural features can be used to interest the reader</p>			

Writing Skills

<p>Within each unit of work students will:</p> <p>Learn spellings, punctuation and grammar to support their progress towards Key Stage 4.</p> <p>Develop their own individual writing style and voice.</p>	<p>Students will be experimenting with different writing styles, different audiences and different purposes.</p> <p>They will be drawing on their work throughout the year, such as their analysis and understanding of language and control of sentences.</p>	<p>Students will be expected to complete descriptive or narrative writing.</p> <p>Students will be asked to write from a certain viewpoint, for example arguing or persuading.</p>	<p>Students will produce their own texts, in both fiction and non-fiction.</p> <p>Sentence structure, punctuation and sophisticated vocabulary will be the focus here, with students expected to replicate what they have read in the previous terms.</p> <p>Descriptive writing as well as “showing rather than telling” will form a major part of the fiction creative writing.</p>	<p>Weekly spelling tests throughout the year to aid spelling. Check exercise books for common punctuation errors.</p> <p>Use any opportunity you can to help them experiment with their writing and offering praise for effort.</p>
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How Are Students Assessed? Students will also be having fortnightly “Big Write” sessions across the curriculum.

When we are looking at someone else’s writing:

Understand, retrieve and organise information from other writers’ work. AO1 (LANG)
Analyse the language and the structure of a piece of writing, using subject terminology to do so. AO2 (LANG), AO2 (LIT)
Personally respond and react to a writer’s ideas and their craft. AO3 (LANG), AO1 (LIT)
Present a thorough and developing argument, embedding and exploring evidence along the way. AO4 (LANG)
Understand and present ideas about how context can shape and be reflected in a piece of writing. AO3 (LIT)

When we are producing our own writing:

Write clearly, imaginatively and effectively, following a plan. AO5 (LANG)
Craft word choices and language devices carefully to achieve highly specific goals. AO5 (LANG)
Structure work thoughtfully and carefully for clarity and effect. AO5 (LANG)
Write confidently and accurately, using an ambitious vocabulary, a range of sentence structures, and a full range of punctuation marks. AO6 (LANG), AO4 (LIT)

KS3 MATHS

Intent

At Northstar New School we aim to teach children how to make sense of the world around them by developing their ability to calculate, reason and solve problems. We aim to support children in achieving economic well-being by equipping them with a range of computational skills and the ability to solve problems in a variety of contexts.

Our aims in the teaching of mathematics are:

- to promote enjoyment of learning through practical activity, exploration and discussion;
- to develop confidence and competence with numbers and the number system;
- to develop the ability to solve problems through decision-making and reasoning in a range of contexts;
- to develop a practical understanding of the ways in which information is gathered and presented; to explore features of shape and space, and developing measuring skills in a range of contexts;
- to help children understand the importance of mathematics in everyday life.
- to 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.
- to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.

Implementation

Teachers are provided with Planning, Preparation and Assessment time (PPA) weekly in order to plan the specifics of their curriculum.

At our school, we teach mathematics to all children, whatever their ability or individual need. We provide learning opportunities that enable all pupils to make good progress. Every child has an equal right to be taught mathematics, in daily lessons of approximately 1 hour. There may be times when it is more appropriate for Key Stage 3 sessions to be over an hour.

We aim for children to master the key areas and domains in Mathematics, narrowing the gap between the most and least able learners. 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 will always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly will be challenged to deepen their understanding by being offered rich and sophisticated problems and not accelerate through to new content.

Mathematics is a symbolic, abstract language. To decode this language, symbols need to come alive and speak so clearly to children that it becomes as easy to understand as reading a story. We believe that all students, when introduced to a key new concept, should have the opportunity to build competency in this topic by taking the concrete-pictorial-abstract approach.

Concrete – students should have the opportunity to use concrete objects and manipulatives to help them understand what they are doing.

Pictorial – students should then build on this concrete approach by using pictorial representations. These representations can then be used to reason and solve problems.

Abstract – with the foundations firmly laid, students should be able to move to an abstract approach using numbers and key concepts with confidence.

All classrooms have some concrete resources that can be used in the teaching of mathematics. Some more topic specific resources are located in a central location.

During our daily lessons we encourage children to count aloud, practice fluency, problem solving and reasoning skills and ask mathematical questions. We develop their ability to independently select and use appropriate concrete apparatus to support their conceptual understanding and build procedural fluency. They have the opportunity to independently access and use a wide range of resources to support their work. We develop the children's ability to represent problems using visualisation skills, including jottings and pictorial representations. ICT is used in mathematics lessons for modelling ideas and methods. Wherever possible, we provide meaningful contexts and encourage the children to apply their learning to everyday situations. Although mathematics is best taught discretely, it has many cross-curricular links. Teachers need to use opportunities in other subjects to rehearse skills in a context. Mathematics involves developing confidence and competence in number work, geometry, measures and statistics and the using and applying of these skills.

All classrooms will have a display area specifically for mathematics. This is called a working wall and will display items that children need to support and develop the unit's learning. For example, key vocabulary, success criteria, models, key questions.

Health and Safety

Equipment will be used safely and appropriately. Specifically:

- Short pencils on compasses
- Pupils will not lift heavy objects or multiple weights in excess of 5kg to avoid strain to back muscles.

Special Educational Needs Disability (SEND) / Pupil Premium / Higher Attainers

Children may have work additional to and different from their peers in order to access the curriculum dependent upon their needs. As well as this, our school offers a demanding and varied curriculum, providing children with a range of opportunities in order for them to reach their full potential and consistently achieve highly from their starting points.

Impact

Assessment for Learning is fundamental to raising standards and enabling children to reach their potential. Assessment in mathematics takes place daily using a range of strategies such as marking and feedback of work and verbal discussions with children.

At Northstar teachers mark in purple pen. Correct answers are indicated by a ✓ and incorrect answers may be identified and discussed with children where appropriate. Some wrong answers may be part of the process a child goes through to solve a complex problem. Children are then given time to respond to marking in green pen, usually with a teacher during daily practice. All corrected work is re-marked to ensure it is correct. Children may self/peer assess, which is completed in a green pen, this allows them to have immediate feedback on their work.

Assessment of learning is formally completed termly using Puma, according to the individual's abilities. End of the Unit testing is completed. At the end of the year an assessment will be completed which reviews the whole academic years' objectives. Teachers use assessment information to inform their planning by using pre assessments. Moderation of teacher assessment is completed termly after formal assessments in order to ensure judgements are accurate. Records are kept by staff. Children are formally tracked using our tracking grids. This data is used by the teachers and Senior Leadership team to review children against Age Related Expectations based on their Key Stage starting points. Children who are not on track are identified for intervention/target teaching.

Leadership and Management

The DHT's role is to empower colleagues to teach mathematics to a high standard and support staff in the following ways:

- By keeping up to date on current issues; disseminating relevant information and providing training for staff members (either directly or through other professionals)
- Leading by example by modelling lessons or styles of teaching
- Having a knowledge of the quality of mathematics provision across the school and using this to provide a coaching and mentoring role
- Identifying and acting on development needs of staff members
- Monitoring expectations, provision and attainment across the school and providing feedback to develop practice further in order to raise standards
- Providing necessary equipment and maintaining it to a high standard

Monitoring and Evaluation

The quality of teaching and learning is monitored as part of the appraisal process through lesson observations and through the progress and attainment documents. In addition, continuity and progression across the school is monitored by the SLT as is the implementation and impact of Assessment for Learning. The mathematics action plan identifies actions intended to raise standards.

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Partnerships with parents

Parents are kept informed of topics that are being covered through a newsletter sent half-termly. During Parents' Days curricular targets are shared and a written report is completed annually in the Summer Term. Homework is a choice of activity; they are encouraged to complete an English/mathematics choice on alternate weeks.

Autumn	Algebraic Thinking			Place Value and Proportion	
<p>Sequences</p> <p><i>Describe and continue a sequence given diagrammatically</i></p> <p><i>Predict and check the next term(s) of a sequence</i></p> <p><i>Represent sequences in tabular and graphical forms</i></p> <p><i>Recognise the difference between linear and non-linear sequences</i></p> <p><i>Continue numerical linear sequences</i></p> <p><i>Continue numerical non-linear sequences</i></p> <p><i>Explain the term-to-term rule of numerical sequences in words</i></p> <p>H</p> <p><i>Find missing numbers within sequences</i></p>	<p>Understand and use algebraic notation</p> <p><i>Given a numerical input, find the output of a single function machine</i></p> <p><i>Use inverse operations to find the input given the output</i></p> <p><i>Use diagrams and letters to generalise number operations</i></p> <p><i>Use diagrams and letters with single function machines</i></p> <p><i>Find the function machine given a simple expression</i></p> <p><i>Substitute values into single operation expressions</i></p> <p><i>Find numerical inputs and outputs for a series of two function machines</i></p> <p><i>Use diagrams and letters with a series of two function machines</i></p> <p><i>Find the function machines given a two-step expression</i></p> <p><i>Substitute values into two-step expressions</i></p> <p><i>Generate sequences given an algebraic rule</i></p> <p><i>Represent one- and two-step functions graphically</i></p>	<p>Equality and equivalence</p> <p><i>Understand the meaning of equality</i></p> <p><i>Understand and use fact families, numerically and algebraically</i></p> <p><i>Solve one-step linear equations involving +/- using inverse operations</i></p> <p><i>Solve one-step linear equations involving x/÷ using inverse operations</i></p> <p><i>Understand the meaning of like and unlike terms</i></p> <p><i>Understand the meaning of equivalence</i></p> <p><i>Simplify algebraic expressions by collecting like terms, using the \equiv symbol</i></p>	<p>Place value and ordering integers and decimals</p> <p><i>Recognise the place value of any number in an integer up to one billion</i></p> <p><i>Understand and write integers up to one billion in words and figures</i></p> <p><i>Work out intervals on a number line</i></p> <p><i>Position integers on a number line</i></p> <p><i>Round integers to the nearest power of ten</i></p> <p><i>Compare two numbers using =, ≠, <, >, ≤, ≥</i></p> <p><i>Order a list of integers</i></p> <p><i>Find the range of a set of numbers</i></p> <p><i>Find the median of a set of numbers</i></p> <p><i>Understand place value for decimals</i></p> <p><i>Position decimals on a number line</i></p> <p><i>Compare and order any number up to one billion</i></p> <p><i>Round a number to 1 significant figure</i></p> <p><i>Write 10, 100, 1000 etc. as powers of ten H</i></p> <p><i>Write positive integers in the form $A \times 10^n$ H</i></p> <p><i>Investigate negative powers of ten H</i></p> <p><i>Write decimals in the form $A \times 10^n$ H</i></p>	<p>Fraction, decimal and percentage equivalence</p> <p><i>Represent tenths and hundredths as diagrams</i></p> <p><i>Represent tenths and hundredths on number lines</i></p> <p><i>Interchange between fractional and decimal number lines</i></p> <p><i>Convert between fractions and decimals – tenths and hundredths</i></p> <p><i>Convert between fractions and decimals – fifths and quarters</i></p> <p><i>Convert between fractions and decimals – eighths and thousandths</i></p> <p>H</p> <p><i>Understand the meaning of percentage using a hundred square</i></p> <p><i>Convert fluently between simple fractions, decimals and percentages</i></p> <p><i>Use and interpret pie charts</i></p> <p><i>Represent any fraction as a diagram</i></p> <p><i>Represent fractions on number lines</i></p> <p><i>Identify and use simple equivalent fractions</i></p> <p><i>Understand fractions as division</i></p> <p><i>Convert fluently between fractions, decimals and percentages</i></p> <p><i>Explore fractions above one, decimals and percentages H</i></p>	

Spring	Applications of Number			Directed Number	Fractional Thinking
	<p>Solving problems with addition & subtraction</p> <p><i>Properties of addition and subtraction</i></p> <p><i>Mental strategies for addition and subtraction</i></p> <p><i>Use formal methods for addition of integers</i></p> <p><i>Use formal methods for addition of decimals</i></p> <p><i>Use formal methods for subtraction of integers</i></p> <p><i>Use formal methods for subtraction of decimals</i></p> <p><i>Choose the most appropriate method: mental strategies, formal written or calculator</i></p> <p><i>Solve problems in the context of perimeter</i></p> <p><i>Solve financial maths problems</i> <i>Solve problems involving tables and timetables</i></p> <p><i>Solve problems with frequency trees</i></p> <p><i>Solve problems with bar charts and line charts</i></p> <p><i>Add and subtract numbers given in standard form</i> H</p>	<p>Solving problems with multiplication and division</p> <p><i>Properties of multiplication and division</i></p> <p><i>Understand and use factors</i></p> <p><i>Understand and use multiples</i></p> <p><i>Multiply and divide integers and decimals by powers of 10</i></p> <p><i>Multiply by 0.1 and 0.01</i> H</p> <p><i>Convert metric units</i></p> <p><i>Use formal methods to multiply integers</i></p> <p><i>Use formal methods to multiply decimals</i></p> <p><i>Use formal methods to divide integers</i></p> <p><i>Use formal methods to divide decimals</i></p> <p><i>Understand and use order of operations</i></p> <p><i>Solve problems using the area of rectangles and parallelograms</i></p> <p><i>Solve problems using the area of triangles</i></p> <p><i>Solve problems using the area of trapezia</i> H</p> <p><i>Solve problems using the mean</i></p> <p><i>Explore multiplication and division in algebraic expressions</i> H</p>	<p>Fractions & percentages of amounts</p> <p><i>Find a fraction of a given amount</i></p> <p><i>Use a given fraction to find the whole and/or other fractions</i></p> <p><i>Find a percentage of a given amount using mental methods</i> H</p> <p>Find a percentage of a given amount using a calculator</p> <p>Solve problems with fractions greater than 1 and percentages greater than 100% H</p>	<p>Operations and equations with directed number</p> <p><i>Understand and use representations of directed numbers</i></p> <p><i>Order directed numbers using lines and appropriate symbols</i></p> <p><i>Perform calculations that cross zero</i></p> <p><i>Add directed numbers</i></p> <p><i>Subtract directed numbers</i></p> <p><i>Multiplication of directed numbers</i></p> <p><i>Multiplication and division of directed numbers</i></p> <p><i>Use a calculator for directed number calculations</i></p> <p><i>Evaluate algebraic expressions with directed number</i></p> <p><i>Introduction to two-step equations</i></p> <p><i>Solve two-step equations</i></p> <p><i>Use order of operations with directed numbers</i></p> <p><i>Roots of positive numbers</i> H</p> <p><i>Explore higher powers and roots</i> H</p>	<p>Addition and subtraction of fractions</p> <p><i>Understand representations of fractions</i></p> <p><i>Convert between mixed numbers and fractions</i></p> <p><i>Add and subtract unit fractions with the same denominator</i></p> <p><i>Add and subtract fractions with the same denominator</i></p> <p><i>Add and subtract fractions from integers expressing the answer as a single fraction</i></p> <p><i>Understand and use equivalent fractions</i></p> <p><i>Add and subtract fractions where denominators share a simple common multiple</i></p> <p><i>Add and subtract fractions with any denominator</i></p> <p><i>Add and subtract improper fractions and mixed numbers</i></p> <p><i>Use fractions in algebraic contexts</i></p> <p><i>Use equivalence to add and subtract decimals and fractions</i></p> <p><i>Add and subtract simple algebraic fractions</i> H</p>

Summer	Lines and Angles		Reasoning with Number		
	<p>Constructing, measuring and using geometric notation</p> <p><i>Understand and use letter and labelling conventions including those for geometric figures</i></p> <p><i>Draw and measure line segments including geometric figures</i></p> <p><i>Understand angles as a measure of turn</i></p> <p><i>Classify angles</i></p> <p><i>Measure angles up to 180°</i></p> <p><i>Draw angles up to 180°</i></p> <p><i>Draw and measure angles between 180° and 360°</i></p> <p><i>Identify perpendicular and parallel lines</i></p> <p><i>Recognise types of triangle</i></p> <p><i>Recognise types of quadrilateral</i></p> <p><i>Identify polygons up to a decagon</i></p> <p><i>Construct triangles using SSS</i></p> <p><i>Construct triangles using SSS, SAS and ASA</i></p> <p><i>Construct more complex polygons</i></p> <p><i>Interpret simple pie charts using proportion</i></p> <p><i>Interpret pie charts using a protractor</i></p> <p><i>Draw pie charts</i></p>	<p>Developing geometric reasoning</p> <p><i>Understand and use the sum of angles at a point</i></p> <p><i>Understand and use the sum of angles on a straight line</i></p> <p><i>Understand and use the equality of vertically opposite angles</i></p> <p><i>Know and apply the sum of angles in a triangle</i></p> <p><i>Know and apply the sum of angles in a quadrilateral</i></p> <p><i>Solve angle problems using properties of triangles and quadrilaterals</i></p> <p><i>Solve complex angle problems</i></p> <p><i>Find and use the angle sum of any polygon H</i></p> <p><i>Investigate angles in parallel lines H</i></p> <p><i>Understand and use parallel line angle rules H</i></p> <p><i>Use known facts to obtain simple proofs. H</i></p>	<p>Developing number sense</p> <p><i>Know and use mental addition and subtraction strategies for integers</i></p> <p><i>Know and use mental multiplication and division strategies for integers</i></p> <p><i>Know and use mental arithmetic strategies for decimals</i></p> <p><i>Know and use mental arithmetic strategies for fractions</i></p> <p><i>Use factors to simplify calculations</i></p> <p><i>Use estimation as a method for checking mental calculations</i></p> <p><i>Use known number facts to derive other facts</i></p> <p><i>Use known algebraic facts to derive other facts</i></p> <p><i>Know when to use a mental strategy, formal written method or a calculator</i></p>	<p>Sets and probability</p> <p><i>Identify and represent sets</i></p> <p><i>Interpret and create Venn diagrams</i></p> <p><i>Understand and use the intersection of sets</i></p> <p><i>Understand and use the union of sets</i></p> <p><i>Understand and use the complement of a set H</i></p> <p><i>Know and use the vocabulary of probability</i></p> <p><i>Generate sample spaces for single events</i></p> <p><i>Calculate the probability of a single event</i></p> <p><i>Understand and use the probability scale</i></p> <p><i>Know that the sum of probabilities of all possible outcomes is 1</i></p>	<p>Prime numbers and proof</p> <p><i>Find and use multiples</i></p> <p><i>Identify factors of numbers and expressions</i></p> <p><i>Recognise and identify prime numbers</i></p> <p><i>Recognise square and triangular numbers</i></p> <p><i>Find common factors of a set of numbers including the HCF</i></p> <p><i>Find common multiples of a set of numbers including the LCM</i></p> <p><i>Write a number as a product of its prime factors</i></p> <p><i>Use a Venn diagram to calculate the HCF and LCM H</i></p> <p><i>Make and test conjectures</i></p> <p><i>Use counterexamples to disprove a conjecture</i></p>

YEAR 8

Autumn	Proportional Reasoning			Proportional Reasoning		
<p>Ratio and scale</p> <p>Understand the meaning and representation of ratio</p> <p>Understand and use ratio notation</p> <p>Solve problems involving ratios of the form 1 : n (or n : 1)</p> <p>Solve proportional problems involving the ratio m : n</p> <p>Divide a value into a given ratio</p> <p>Express ratios in their simplest integer form</p> <p>Express ratios in the form 1 : n H</p> <p>Compare ratios and related fractions</p> <p>Understand π as the ratio between diameter and circumference</p> <p>Understand gradient of a line as a ratio H</p>	<p>Multiplicative change</p> <p>Solve problems involving direct proportion</p> <p>Explore conversion graphs</p> <p>Convert between currencies</p> <p>Explore direct proportion graphs H</p> <p>Explore relationships between similar shapes</p> <p>Understand scale factors as multiplicative representations</p> <p>Draw and interpret scale diagrams</p> <p>Interpret maps using scale factors and ratios</p>	<p>Multiplying and dividing fractions</p> <p>Represent multiplication of fractions</p> <p>Multiply a fraction by an integer</p> <p>Find the product of a pair of unit fractions</p> <p>Find the product of a pair of any fractions</p> <p>Divide an integer by a fraction</p> <p>Divide a fraction by a unit fraction</p> <p>Understand and use the reciprocal</p> <p>Divide any pair of fractions</p> <p>Multiply and divide improper and mixed fractions H</p> <p>Multiply and divide algebraic fractions H</p>	<p>Working in the Cartesian plane</p> <p>Work with coordinates in all four quadrants</p> <p>Identify and draw lines that are parallel to the axes</p> <p>Recognise and use the line $y = x$</p> <p>Recognise and use lines of the form $y = kx$</p> <p>Link $y = kx$ to direct proportion problems</p> <p>Explore the gradient of the line $y = kx$</p> <p>Recognise and use lines of the form $y = x + a$</p> <p>Explore graphs with negative gradient ($y = -kx$, $y = a - x$, $x + y = a$)</p> <p>Link graphs to linear sequences</p> <p>Plot graphs of the form $y = mx + c$</p> <p>Explore non-linear graphs H</p> <p>Find the midpoint of a line segment H</p>	<p>Representing data</p> <p>Draw and interpret scatter graphs</p> <p>Understand and describe linear correlation</p> <p>Draw and use line of best fit</p> <p>Identify non-linear relationships</p> <p>Identify different types of data</p> <p>Read and interpret ungrouped frequency tables</p> <p>Read and interpret grouped frequency tables</p> <p>Represent grouped discrete data</p> <p>Represent continuous data grouped into equal classes</p> <p>Represent data in two-way tables</p>	<p>Tables & Probability</p> <p>Construct sample spaces for 1 or more events</p> <p>Find probabilities from a sample space</p> <p>Find probabilities from two-way tables</p> <p>Find probabilities from Venn diagrams</p> <p>Use the product rule for finding the total number of possible outcomes H</p>	

Spring	Algebraic techniques				Developing Number	
<p>Brackets, equations and inequalities</p> <p>Form algebraic expressions</p> <p>Use directed number with algebra</p> <p>Multiply out a single bracket</p> <p>Factorise into a single bracket</p> <p>Expand multiple single brackets and simplify</p> <p>Expand a pair of binomials</p> <p>Solve equations, including with brackets</p> <p>Form and solve equations with brackets</p> <p>Understand and solve simple inequalities</p> <p>Form and solve inequalities</p> <p>Solve equations and inequalities with unknowns on both sides H</p> <p>Form and solve equations and inequalities with unknowns on both sides H</p> <p>Identify and use formulae, expressions, identities and equations</p>	<p>Sequences</p> <p>Generate sequences given a rule in words</p> <p>Generate sequences given a simple algebraic rule</p> <p>Generate sequences given a complex algebraic rule</p> <p>Find the rule for the nth term of a linear sequence H</p>	<p>Indices</p> <p>Adding and subtracting expressions with indices</p> <p>Simplifying algebraic expressions by multiplying indices</p> <p>Simplifying algebraic expressions by dividing indices</p> <p>Using the addition law for indices</p> <p>Using the addition and subtraction law for indices</p> <p>Exploring powers of powers H</p>	<p>Fractions and percentages</p> <p>Convert fluently between key fractions, decimals and percentages Review</p> <p>Calculate key fractions, decimals and percentages of an amount without a calculator Review</p> <p>Calculate fractions, decimals and percentages of an amount using calculator methods Review</p> <p>Convert between decimals and percentages greater than 100%</p> <p>Percentage decrease with a multiplier</p> <p>Calculate percentage increase and decrease using a multiplier</p> <p>Express one number as a fraction or a percentage of another without a calculator</p> <p>Express one number as a fraction or a percentage of another using calculator methods</p> <p>Work with percentage change</p> <p>Choose appropriate methods to solve percentage problems</p> <p>Find the original amount given the percentage less than 100% H</p> <p>Find the original amount given the percentage greater than 100% H</p> <p>Choose appropriate methods to solve complex percentage problems H</p>	<p>Standard index form</p> <p>Investigate positive powers of 10</p> <p>Work with numbers greater than 1 in standard form</p> <p>Investigate negative powers of 10</p> <p>Work with numbers between 0 and 1 in standard form</p> <p>Compare and order numbers in standard form</p> <p>Mentally calculate with numbers in standard form</p> <p>Add and subtract numbers in standard form</p> <p>Multiply and divide numbers in standard form</p> <p>Use a calculator to work with numbers in standard form</p> <p>Understand and use negative indices H</p> <p>Understand and use fractional indices H</p>	<p>Number sense</p> <p>Round numbers to powers of 10, and 1 significant figure R</p> <p>Round numbers to a given number of decimal places</p> <p>Estimate the answer to a calculation</p> <p>Understand and use error interval notation H</p> <p>Calculate using the order of operations R</p> <p>Calculate with money</p> <p>Convert metric measures of length</p> <p>Convert metric units of weight and capacity</p> <p>Convert metric units of area H</p> <p>Convert metric units of volume H</p> <p>Solve problems involving time and the calendar</p>	

Summer

Developing Geometry

Angles in parallel lines and polygons

Understand and use basic angles rules and notation **R**

Investigate angles between parallel lines and the transversal

Identify and calculate with alternate and corresponding angles

Identify and calculate with co-interior, alternate and corresponding angles

Solve complex problems with parallel line angles

Construct triangles and special quadrilaterals **R**

Investigate the properties of special quadrilaterals

Identify and calculate with sides and angles in special quadrilaterals

Understand and use the properties of diagonals of quadrilaterals **H**

Understand and use the sum of exterior angles of any polygon

Calculate and use the sum of the interior angles in any polygon

Calculate missing interior angles in regular polygons

Prove simple geometric facts **H**

Construct an angle bisector **H**

Construct a perpendicular bisector of a line segment **H**

Area of trapezia and circles

Calculate the area of triangles, rectangles and parallelograms **R**

Calculate the area of a trapezium

Calculate the perimeter and area of compound shapes (1)

Investigate the area of a circle

Calculate the area of a circle and parts of a circle without a calculator

Calculate the area of a circle and parts of a circle with a calculator

Calculate the perimeter and area of compound shapes (2)

Line symmetry

and reflection

Recognise line symmetry

Reflect a shape in a horizontal or vertical line 1 (shapes touching the line)

Reflect a shape in a horizontal or vertical line 2 (shapes not touching the line)

Reflect a shape in a diagonal line 1 (shapes touching the line)

Reflect a shape in a diagonal line 2 (shapes not touching the line)

Reasoning with Data

The data handling cycle

Find and interpret the range

Compare distributions using charts

Identify misleading graphs

Measures of location

Understand and use the mean, median and mode

Choose the most appropriate average

Find the mean from an ungrouped frequency table **H**

Find the mean from an grouped frequency table **H**

Identify outliers

Compare distributions using averages and the range

YEAR 9

Autumn	Reasoning with Algebra			Constructing in 2 and 3 Dimensions	
<p>Straight line graphs</p> <p><i>Lines parallel to the axes, $y = x$ and $y = -x$</i>^R</p> <p><i>Using tables of values</i> ^R</p> <p><i>Compare gradients</i></p> <p><i>Compare intercepts</i></p> <p><i>Understand and use $y = mx + c$</i></p> <p><i>Write an equation in the form $y = mx + c$</i>^H</p> <p><i>Find the equation of a line from a graph</i></p> <p><i>Interpret gradient and intercepts of real-life graphs</i></p> <p><i>Model real-life graphs involving inverse proportion</i>^H</p> <p><i>Explore perpendicular lines</i></p> <p>^H</p>	<p>Forming and solving equations</p> <p><i>Solve one- and two-step equations and inequalities</i>^R</p> <p><i>Solve one- and two-step equations and inequalities with brackets</i>^R</p> <p><i>Inequalities with negative numbers</i></p> <p><i>Solve equations with unknowns on both sides</i></p> <p><i>Solve inequalities with unknowns on both sides</i></p> <p><i>Solving equations and inequalities in context</i></p> <p><i>Substituting into formulae and equations</i></p> <p><i>Rearrange formulae (one-step)</i></p> <p><i>Rearrange formulae (two-step)</i></p> <p><i>Rearrange complex formulae including brackets and squares</i></p> <p>^H</p>	<p>Testing conjectures</p> <p><i>Factors, Multiples and Primes</i>^R</p> <p><i>True or False?</i></p> <p><i>Always, Sometimes, Never true</i></p> <p><i>Show that</i></p> <p><i>Conjectures about number</i></p> <p><i>Expand a pair of binomials</i></p> <p><i>Conjectures with algebra</i></p> <p><i>Explore the 100 grid</i></p> <p><i>Expand three binomials</i></p> <p>^H</p>	<p>Three-dimensional shapes</p> <p><i>Know names of 2-D and 3-D shapes</i></p> <p><i>Recognize prisms</i></p> <p><i>Accurate nets of cuboids and other 3-D shapes</i></p> <p><i>Sketch and recognize nets of cuboids and other 3-D shapes</i></p> <p><i>Plans and elevations</i></p> <p><i>Find area of 2-D shapes</i> ^R</p> <p><i>Surface area of cubes and cuboids</i></p> <p><i>Surface area of triangular prisms</i></p> <p><i>Surface area of a cylinder</i></p> <p><i>Volume of cubes and cuboids</i></p> <p><i>Volume of other 3-D shapes – prisms and cylinders</i></p> <p><i>Explore volumes of cones, pyramids and spheres</i> ^H</p>	<p>Constructions and congruency</p> <p><i>Draw and measure angles</i> ^R</p> <p><i>Construct and interpret scale drawings</i>^R</p> <p><i>Locus of distance from a point</i></p> <p><i>Locus of distance from a straight line/shape</i></p> <p><i>Locus equidistant from two points</i></p> <p><i>Construct a perpendicular bisector</i></p> <p><i>Construct a perpendicular from a point</i></p> <p><i>Construct a perpendicular to a point</i></p> <p><i>Locus of distance from two line</i></p> <p><i>Construct an angle bisector</i></p> <p><i>Construct triangles from given information</i>^R</p> <p><i>Identify congruent figures</i></p> <p><i>Explore congruent triangles</i></p> <p><i>Identify congruent triangles</i></p>	

Spring	Reasoning with Number			Reasoning with Geometry		
<p>Numbers</p> <p><i>Integers, real and rational numbers</i></p> <p><i>Understand and use surds</i> H</p> <p><i>Work with directed number</i> R</p> <p><i>Solve problems with integers</i></p> <p><i>Solve problems with decimals</i></p> <p><i>HCF and LCM</i>R</p> <p><i>Adding and subtracting fractions</i>R</p> <p><i>Multiplying and dividing fractions</i>R</p> <p><i>Solving problems with fractions</i></p> <p><i>Numbers in standard form</i> R</p>	<p>Using percentages</p> <p><i>Use the equivalence of fractions, decimals and percentages</i>R</p> <p><i>Calculate percentage increase and decrease</i>R</p> <p><i>Express a change as a percentage</i>R</p> <p><i>Solve 'reverse' percentage problems</i></p> <p><i>Recognise and solve percentage problems (non-calculator)</i></p> <p><i>Recognise and solve percentage problems (calculator)</i>R</p> <p><i>Solve problems with repeated percentage change</i>H</p>	<p>Maths and money</p> <p><i>Solve problems with bills and bank statements</i></p> <p><i>Calculate simple interest</i></p> <p><i>Calculate compound interest</i></p> <p><i>Solve problems with Value Added Tax</i></p> <p><i>Calculate wages and taxes</i></p> <p><i>Solve problems with exchange rates</i></p> <p><i>Solve unit pricing problems</i></p>	<p>Deduction</p> <p><i>Angles in parallel lines</i> R</p> <p><i>Solving angles problems (using chains of reasoning)</i></p> <p><i>Angles problems with algebra</i></p> <p><i>Conjectures with angles</i></p> <p><i>Conjectures with shapes</i></p> <p><i>Link constructions and geometrical reasoning</i>H</p>	<p>Rotation and translation</p> <p><i>Identify the order of rotational symmetry of a shape</i></p> <p><i>Compare and contrast rotational symmetry with line symmetry</i></p> <p><i>Rotate a shape about a point on a shape</i></p> <p><i>Rotate a shape about a point not on a shape</i></p> <p><i>Translate points and shapes by a given vector</i></p> <p><i>Compare rotation and reflection of shapes</i></p> <p><i>Find the result of a series of transformations</i>H</p>	<p>Pythagoras' Theorem</p> <p><i>Squares and square roots</i> R</p> <p><i>Identify the hypotenuse of a right-angled triangle</i></p> <p><i>Determine whether a triangle is right-angled</i></p> <p><i>Calculate the hypotenuse of a right-angled triangle</i></p> <p><i>Calculate missing sides in right-angled triangles</i></p> <p><i>Use Pythagoras theorem on coordinate axes</i></p> <p><i>Explore proofs of Pythagoras' theorem</i></p> <p><i>Use Pythagoras' theorem in 3-D shapes</i>H</p>	

Summer	Reasoning with Proportion			Representations and Revision		
	<p>Enlargement and similarity</p> <p><i>Recognise enlargement and similarity</i></p> <p><i>Enlarge a shape by a positive integer scale factor</i></p> <p><i>Enlarge a shape by a positive integer scale factor from a point</i></p> <p><i>Enlarge a shape by a positive fractional scale factor</i></p> <p><i>Enlarge a shape by a negative scale factor</i>H</p> <p><i>Work out missing sides and angles in a pair of given similar shapes</i></p> <p><i>Solve problems with similar triangles</i>H</p> <p><i>Explore ratios in right-angled triangles</i>H</p>	<p>Solving ratio & proportion problems</p> <p><i>Solve problems with direct proportion</i>R</p> <p><i>Direct proportion and conversion graphs</i>R</p> <p><i>Solve problems with inverse proportion</i></p> <p><i>Graphs of inverse relationships</i>H</p> <p><i>Solve ratio problems given the whole or a part</i>R</p> <p><i>Solve 'best buy' problems</i></p> <p><i>Solve problems ratio and algebra</i>H</p>	<p>Rates</p> <p><i>Solve speed, distance and time problems without a calculator</i></p> <p><i>Solve speed, distance and time problems with a calculator</i></p> <p><i>Use distance/time graphs</i></p> <p><i>Solve problems with density, mass and volume</i></p> <p><i>Solve flow problems and their graphs</i></p> <p><i>Rates of change and their units</i></p> <p><i>Convert compound units</i>H</p>	<p>Probability</p> <p><i>Single event probability</i>R</p> <p><i>Relative frequency – include convergence</i></p> <p><i>Expected outcomes</i></p> <p><i>Independent events</i></p> <p><i>Use tree diagrams</i>H</p> <p><i>Use tree diagrams to solve 'without replacement' problems</i>H</p> <p><i>Use diagrams to work out probabilities</i></p>	<p>Algebraic representation</p> <p><i>Draw and interpret quadratic graphs</i></p> <p><i>Interpret graphs, including reciprocal and piece-wise</i></p> <p><i>Investigate graphs of simultaneous equations</i>H</p> <p><i>Represent inequalities</i></p>	<p>Revision</p>

SCIENCE

Intent:

At Northstar New School, Science should be fully inclusive to every child. Our aims are to fulfil the requirements of the National Curriculum for Science;

providing a broad, balanced and differentiated curriculum; ensuring the progressive development of knowledge, skills and vocabulary and for the children to develop a love of Science. Furthermore, we aim to inspire in pupils a curiosity and fascination about the natural and man-made world and a respect for the environment that will remain with them for the rest of their lives. This include the lesson they complete in the classroom but also the other experiences they are offered, such as educational visits, residential and enrichment days.

The aims of teaching Science in our school are to:

- Equip children to use themselves as starting points for learning about Science, and to build on their enthusiasm and natural sense of wonder about the world
- Develop through practical work the skills of observation, prediction, investigation, interpretation, communication, questioning and hypothesizing, and increased use of precise measurement skills and ICT
- Encourage and enable pupils to offer their own suggestions, and to be creative in their approach to science, devising their own invitations and taking lines of enquiry in a way that interests them
- Gain enjoyment from their scientific work
- Enable children to develop their skills of co-operation through working with others, and to encourage where possible, ways for children to explore science in forms which are relevant and meaningful to them
- Teach scientific enquiry through contexts taken from the National Curriculum for science
- Encourage children to collect relevant evidence and to question outcome and to build resilience to persevere as it is likely they will need to repeat results or will encounter unexpected results that do not support their hypothesis
- Encourage children to treat the living and non-living environment with respect and sensitivity
- Stress the need for personal and group safety by the correct usage and storage of resources
- To critically question the world around them
- To enable children to appreciate that we do not always know the answers when carrying out scientific enquiry as the world around them is continually changing and developing
- Equip children with the language to be able to discuss their learning and confidently explain their scientific understanding in small groups

Special Educational Needs Disability (SEND) / Pupil Premium / Higher Attainers

Children may have work additional to and different from their peers in order to access the curriculum dependent upon their needs. As well as this, our

school offers a demanding and varied curriculum, providing children with a range of opportunities in order for them to reach their full potential and

consistently achieve highly from their starting points.

Implementation:

To ensure high standards of teaching and learning in science, we implement a curriculum that is progressive throughout the whole school. Science is taught in discrete lessons for at least 1 hour in Key Stage 2 and Key Stage 3. We ensure that teachers have the same expectations during science lessons that they would have when teaching English or Mathematics and that any mathematical task (such as measuring or drawing graphs) is pitched at an age-appropriate level to ensure sufficient challenge. It is vital that any mathematical or English barriers should not impede a child's scientific learning, thus meaning dialogic learning is a central part to our Science teaching.

The Science curriculum at NNS is based upon the 2014 Primary National Curriculum in England, which provides a broad framework and outlines the knowledge and skills taught in each Key Stage. Teachers plan lessons for their class using our progression of knowledge and skills document, which incorporates Working Scientifically. When teaching Science, teachers should follow the children's interests to ensure their learning is engaging, broad and balanced. Before planning a unit of work, teachers should assess children's prior knowledge and understanding to ensure work is pitched at the correct level. A variety of teaching approaches are used based on the teacher's judgement. Teaching key subject specific vocabulary is also a key part out science curriculum. The vocabulary children will need for that unit are identified on the school's progression document and this builds upon the vocabulary they have learnt in earlier years. The key vocabulary will be identified in the vocabulary dozen on the children's knowledge organisers.

Science assessment is based on teacher's assessment of children. This is then reported on the school's assessment document and the percentage of children working at, above and below the expected standard are identified. At the end of a unit, teachers will identify if a child is working at the expected standard for that objective.

Science provides excellent opportunities to enhance the learning of more able pupils through planning lines of enquiry, asking opened ended problems, analysing results and drawing conclusions based on scientific findings.

At Northstar New School, we provide a variety of opportunities for Science learning inside and outside the classroom. Learning outside of the classroom setting, is an essential part to learning Science. It is essential children observe and immerse themselves in their local environment to apply their learning practically to real-life situations.

Impact

Within science, we strive to create a supportive and collaborative ethos for learning by providing opportunities for children to question and investigate to

discover answers for themselves and take their learning in a direction they are interested in.

Our science curriculum is well thought out and is planned to demonstrate progression. We focus on progression of knowledge and skills and discreet

vocabulary progression also form part of the units of work.

We measure the impact of our curriculum through the following methods:

- **Assessing children's understanding of topic linked vocabulary before and after the unit is taught**
- **Marking of written work in books**
- **Using dialogic learning tasks to assess children's understanding**
- **Summative assessment of pupil discussions about their learning.**
- **Images and videos of the children's practical learning.**
- **Interviewing the pupils about their learning (pupil voice)**
- **Moderation staff meetings where pupil's books are scrutinised and there is the opportunity for a dialogue between teachers to understand their**

class's work

- **External moderation of children's work at the end of each Key Stage**
- **Annual reporting of standards across the curriculum to parents**

The SLT will continually monitor the impact the teaching of science is having on the children's learning through book scrutinises to ensure the progress of

knowledge and skills are being taught. They will also ensure the knowledge taught is retained by the children and continually revisited and that the learners are able to apply the skills they have been taught to a variety of different settings, showing independence with their learning.



KS3 SCIENCE OVERVIEW

Atoms and The Periodic Table	MAGNETS AND ELECTRICITY
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AUTUMN TERM		SPRING TERM	
LESSON TITLE	WORKING SCIENTIFICALLY	LESSON TITLE	N.C. AIMS
Atoms and Elements To understand the difference between atoms and elements.	Understand that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas.	Introduction to Circuits To understand why some circuits fail to work.	Electric current, measured in amperes, in circuits, series and parallel circuits, currents add where branches meet and current as a flow of charge.
Compounds To understand the difference between elements, compounds and mixtures.	Make and record observations and measurements using a range of methods for different investigations.	Modelling Circuits To use an analogy to explain how electrical circuits work.	We can model voltage as an electrical push from the battery, or the amount of energy per unit of charge transferred through the electrical pathway. In a series circuit, voltage is shared between each component. In a parallel circuit, voltage is the same across each loop.
The Periodic Table To understand the principles underpinning the Mendeleev periodic Table	Understand that scientific methods and theories develop as earlier explanations are modified to take account of new evidence and ideas. Make predictions using scientific knowledge and understanding. Interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions	Measuring Voltage To investigate the best citrus fruit to make a battery from.	Present observations and data using appropriate methods, including tables and graphs. Make and record observations and measurements using a range of methods for different investigations, and evaluate the reliability of methods and suggest possible improvements.

<p>Metals and Non-Metals To understand the difference between a metal and a non-metal</p>	<p>Make predictions using scientific knowledge and understanding. Use appropriate techniques, apparatus, and materials during laboratory work, paying attention to health and safety. Make and record observations and measurements using a range of methods for different investigations. Interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions</p>	<p>Series Circuits To investigate current in series circuits.</p>	<p>Ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience. Make predictions using scientific knowledge and understanding.</p>
<p>The Alkali Metals To understand that there are patterns in the properties of the alkali metals.</p>	<p>Make predictions using scientific knowledge and understanding. Make and record observations and measurements using a range of methods for different investigations. Interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions.</p>	<p>Parallel Circuits To investigate current in parallel circuits.</p>	<p>Ask questions and develop a line of enquiry based on observations of the real world, alongside prior knowledge and experience. Make predictions using scientific knowledge and understanding</p>
<p>The Halogens To understand that there are patterns in the properties of the halogens.</p>	<p>Make predictions using scientific knowledge and understanding. Use appropriate techniques, apparatus, and materials during laboratory work, paying attention to health and safety. Make and record observations and measurements using a range of methods for different investigations. Interpret observations and data, including identifying patterns and using</p>	<p>Resistance To investigate resistance in circuits.</p>	<p>Differences in resistance between conducting and insulating components (quantitative).</p>

	observations, measurements and data to draw conclusions.		
The Noble Gases To understand that there are patterns in the properties of the noble gases.	Make predictions using scientific knowledge and understanding. Present observations and data using appropriate methods, including tables and graphs. Interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions	Magnets To investigate magnets.	Magnetic pole attraction and repulsion. Drawing magnetic field lines by plotting with a compass. The idea of electric field forces acting across space between objects, not in contact.
ASSESSMENT OF LEARNING: END OF UNIT TEST + CHECK YOUR PROGRESS + END OF CHAPTER QUESTIONS		Making Electromagnets To construct an electromagnet.	The magnetic effect of a current, electromagnets, DC motors (principles only).
		Static Electricity To investigate static electricity.	Separation of positive or negative charges when objects are rubbed together: Transfer of electrons, forces between charged objects.
		ASSESSMENT OF LEARNING: END OF UNIT TEST + CHECK YOUR PROGRESS + END OF CHAPTER QUESTIONS	

SPACE**Eating, Drinking and Breathing**

SUMMER TERM		SUMMER TERM	
LESSON TITLE	OVERARCHING OBJECTIVES	LESSON TITLE	OVERARCHING OBJECTIVES
Space and the Solar System To explore space and the solar system.	This is lesson 1 in a series of lessons that covers the topic of KS3 Space. This lesson focuses on the planets and where they lie in our Solar System. You can teach this lesson as a stand-alone lesson or use it to form the wider unit of work on space.	Exploring a healthy diet	Content of a healthy human diet: carbohydrates, lipids (fats and oils), proteins, vitamins, minerals, dietary fibre and water, and why each is needed
Investigating Gravity, Mass and Weight To understand gravity, mass and weight.	Explore the concepts of gravity, mass and weight. Students will look at what gravity, mass and weight are and then relate these to the different planets in our Solar System. Students carry out practical investigation looking at how different masses affect the surface of a planet when they collide.	Testing foods	Test foods for starch, sugars, protein and fat; predict the results of food tests for a range of foods; evaluate the risks involved in carrying out food tests. (investigation)
Mars Rover To design and evaluate a Mars rover. (2 lessons)	Students will learn about Mars rovers, including Curiosity which is currently exploring the surface of Mars. They will learn about the goals of the Perseverance rover which lands on Mars in February 2021. Students will explore the equipment needed on a rover and will then design their own rover and build a prototype to test and evaluate.	Comparing energy needs	Calculations of energy requirements in a healthy daily diet Comparing energy values of different foods (from labels) (kJ)

<p>Colonising Mars To explore whether we could live on Mars.</p>	<p>Can we colonize Mars?</p>	<p>Exploring obesity and starvation</p>	<p>The consequences of imbalances in the diet including obesity, starvation and deficiency diseases</p>
<p>Orbits To explain how objects travel in an orbit.</p>	<p>This lesson introduces students to orbits and explores the objects that might be in orbit. Students investigate the relationship between the radius of an orbit and the time taken for the orbit, which provides an ideal chance for them to work scientifically.</p>	<p>Understanding deficiency diseases</p>	<p>Identify the causes and effects of some deficiencies in the diet; suggest which foods could prevent well-known deficiencies; plan ways of communicating ideas about preventing deficiency diseases.</p>
		<p>Understanding the human digestive system</p>	<p>The tissues and organs of the digestive system, including adaptations to function</p>
		<p>Investigating the start of digestion</p>	<p>The tissues and organs of the digestive system, including adaptations to function and how the digestive system digests food (enzymes simply as biological catalysts)</p>
		<p>Understanding the roles of the digestive system</p>	<p>The tissues and organs of the digestive system, including adaptations to function</p>
		<p>Applying key ideas</p>	<p>Differentiated task to test application of ideas.</p>
		<p>Introducing enzymes</p>	<p>How the digestive system digests food (enzymes simply as biological catalysts)</p>
		<p>Recognising the role of bacteria</p>	<p>The importance of bacteria in the human digestive system</p>
		<p>Understanding how we breathe</p>	<p>The mechanism of breathing to move air in and out of the lungs,</p>

		using a pressure model to explain the movement of gases
	Measuring breathing	The mechanism of breathing to move air in and out of the lungs, including simple measurements of lung volume
ASSESSMENT OF LEARNING: END OF UNIT TEST + CHECK YOUR PROGRESS + END OF CHAPTER QUESTIONS	Evaluating gas exchange in humans	The structure and functions of the gas exchange system in humans, including adaptations to function
	Investigating diffusion	The structure and functions of the gas exchange system in humans, including adaptations to function Diffusion in liquids and gases driven by differences in concentration Diffusion in terms of the particle model
	Exploring the effects of disease and lifestyle	The impact of exercise, asthma and smoking on the human gas exchange system
	ASSESSMENT OF LEARNING: END OF UNIT TEST + CHECK YOUR PROGRESS + END OF CHAPTER QUESTIONS	

GEOGRAPHY

Geography Intent:

At Northstar New School geography education should be fully inclusive to every child. Our aims are to fulfil the requirements of the National Curriculum for Geography; providing a broad, balanced and differentiated curriculum; ensuring the progressive development of geographical concepts, knowledge and skills; and for the children to develop a love for geography. Furthermore, we aim to inspire in pupils a curiosity and fascination about the world and its people that will remain with them for the rest of their lives. Teaching should 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. (The 2014 Primary National Curriculum in England)

Geography teaching at NNS has a wide application to everyday life, teaching the children to enjoy learning about the world and to have a better understanding of how people live in different locations.

The aims of teaching geography in our school are:

- to inspire pupils' curiosity to discover more about the world
- to enable children to know about the location of the world's continents, countries, cities, seas and oceans.
- to develop in children the skills of interpreting a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS)
- to help children understand how the human and physical features of a place shapes its location and can change over time
- to provide opportunities to study mathematics across the curriculum through geography lessons

Special Educational Needs Disability (SEND) / Pupil Premium / Higher Attainers

Children may have work additional to and different from their peers in order to access the curriculum dependent upon their needs. As well as this, our school offers a demanding and varied curriculum, providing children with a range of opportunities in order for them to reach their full potential and consistently achieve highly from their starting points.

Implementation:

To ensure high standards of teaching and learning in geography, we implement a curriculum that is progressive throughout the whole school. Geography is taught as part of a termly topic, focusing on knowledge and skills stated in the National Curriculum. At NNS, we ensure that geography has the same importance given to it as the core subjects, as we feel this is important in enabling all children to gain 'real-life' experiences.

The geography curriculum at Northstar New School is based upon the 2014 Primary National Curriculum in England, which provides a broad framework and outlines the knowledge and skills and taught in each Key Stage. Teachers plan lessons for their class using our progression of knowledge and skills document. Teachers can use this document to plan their geography lessons suitable to their class's interests and what they want to learn. The progression document ensures the curriculum is covered and the skills/knowledge taught is progressive from year group to year group.

When teaching geography the teachers should follow the children's interests to ensure their learning is engaging, broad and balanced.

Geography teaching focuses on enabling children to think as geographers. A variety of teaching approaches are used based on the teacher's judgement.

Geography provides excellent opportunities to enhance the learning of more able pupils through the investigations, analysing sources and writing extending pieces

At Northstar Primary School we provide a variety of opportunities for geography learning inside and outside the classroom.

Educational visits are another opportunity for the teachers to plan for additional geography learning outside the classroom. At Northstar New School, the children have had many opportunities to experience geography on educational visits. The children have explored the local area including orienteering within the school grounds and conducting river studies in our local area. Local museums also provide an opportunity to further geography learning.

Impact:

Within geography, we strive to create a supportive and collaborative ethos for learning by providing investigative and enquiry based learning opportunities. Emphasis is placed on investigative learning opportunities to help children gain a coherent knowledge of understanding of each unit of work covered throughout the school.

Our geography curriculum is high quality, well thought out and is planned to demonstrate progression. We focus on progression of knowledge and skills and discreet vocabulary progression also form part of the units of work. Children will deepen their understanding of the interaction between physical and human processes and how this affects landscapes and environments.

We measure the impact of our curriculum through the following methods:

- Assessing children's understanding of topic linked vocabulary before and after the unit is taught.
- Summative assessment of pupil discussions about their learning.
- Images and videos of the children's practical learning.
- Interviewing the pupils about their learning (pupil voice).
- Moderation staff meetings where pupil's books are scrutinised and there is the opportunity for a dialogue between teachers to understand their class's work.
- Annual reporting of standards across the curriculum.
- Marking of written work in books.

KS3 GEOGRAPHY OVERVIEW 2022-2023

AUTUMN - WEATHER			SPRING – POLAR REGIONS		
TITLE	TOPICS COVERED	N.C. AIMS	TITLE	TOPIC COVERED	N.C. AIMS
WHAT IS WEATHER?	The different types of weather The differences between weather and climate. How the weather affects human activities.	To understand the key processes in weather and climate. To understand the interaction between weather and human activities.	EXPLORING THE POLAR REGIONS	Key features of the Arctic and Antarctica. Research information about the Arctic and Antarctica. Summarise information about the Arctic and Antarctica.	By learning about the polar biomes, KS3 children can develop their geographical knowledge by looking at the position of the Arctic and Antarctic. They can also develop their sense of how animals evolve and adapt to live in their conditions.
MEASURING THE WEATHER	Types of weather instruments and what they measure. The Beaufort Scale Measuring cloud cover. Who uses a weather forecast?	To understand the key processes in weather and climate. To collect, present, analyse and evaluate their own weather data.	POLAR ANIMALS ADAPTATION	To create a fact poster about a polar animal. To present accurate information to a group. To explain how polar animals have adapted to the polar environment.	Learn how a variety of land and sea animals have adapted to the Arctic and Antarctic.
ALL ABOUT CLOUDS	How clouds form Types of clouds and their characteristics.	To understand the key processes in weather and climate. To interpret geographical images. To collect, present, analyse and evaluate their own data.	SVALBARD!	Where is Svalbard? What Are Polar Seasons Like? What Is the Polar Climate Like?	Explain how the polar seasons are caused by the Earth's orbit. Annotate diagrams to explain the causes of the polar climate. Construct and interpret a climate graph
ALL ABOUT RAIN	How clouds and rain form. Types of rainfall – relief, frontal and convectional. Rainfall in the UK.	To understand the key processes in weather and climate. To interpret geographical information from maps.	POLAR VEGETATION ADAPTIONS	What is the Tundra Like? How Has Vegetation Adapted to the Polar Environment?	Characteristics of the tundra environment. Explain how plants have adapted to the polar environment. Apply knowledge of plant adaptations to an exam style question.

UNDER PRESSURE	<p>What is air pressure? How is air pressure shown on a weather map? Weather associated with low pressure. Weather associated with high pressure.</p>	<p>To understand the key processes in weather and climate. To collect, present, analyse and evaluate their own weather data. To understand the interaction between weather and human activities.</p>	PEOPLE OF THE ARCTIC	<p>Who Lives in the Arctic? Who Are the Nenets?</p>	<p>Students should consider the difficulties of living in the Arctic. They should have a good understanding of the challenges of this extreme environment based on previous lessons. The main difficulties include sub-zero temperatures, snow and ice cover, months of darkness and permafrost.</p>
HEATWAVE	<p>Causes of a heatwave. The social, economic and environmental impacts of the 2003 European heatwave. How to stay safe in a heatwave.</p>	<p>To understand the key processes in weather and climate. To understand the interaction between weather and human activities.</p>	ASSESSMENT	<p>Taken from End of Unit Assessments.</p>	
AIR MASSES	<p>What are air masses? The characteristics of each air mass. What weather does each air mass bring?</p>	<p>To understand the key processes in weather and climate.</p>			
DEPRESSIONS	<p>What is a weather front? A cross section of a depression. Weather associated with a depression.</p>	<p>To understand the key processes in weather and climate. To understand the interaction between weather and human activities. To interpret geographical diagrams.</p>			
STORM	<p>Causes of a storm Impacts of the 2013 storm. Causes and effects of a storm surge.</p>	<p>To understand the key processes in weather and climate.</p>			

	The role of the Environment Agency. How homes can be prepared for a food.	To understand the interaction between weather and human activities.			
CLIMATE GRAPHS	What does a climate graph show? Plotting and interpreting a climate graph. Different types of climates shown by a climate graph.	To understand the key processes in weather and climate. To interpret geographical data from climate graphs. To communicate geographical information.			
WORLD CLIMATE ZONES	Where are the world climate zones? What are the characteristics of each climate zone?	To understand the key processes in weather and climate. To interpret geographical information from maps and climate graphs. To build on atlas skills.			
CLIMATE DETECTIVES	Factors affecting climate: latitude, altitude, ocean currents, prevailing winds and distance from the sea.	To understand the key processes in weather and climate. To interpret geographical information from maps.			
UK CLIMATE	What are the characteristics of the UK climate? Causes of seasons. Reasons for variations in temperature in the UK. Reasons for variation in rainfall in the UK.	To understand the key processes in weather and climate. To interpret geographical information from maps and graphs.			
CLIMATE CLIMATES!	Students learn facts about extreme climates including which places are the hottest, coldest, driest, wettest, etc.	To understand the interaction between weather and human activities.			

WEATHER AND CLIMATE ASSESSMENT	Assessment	To understand the key processes in weather and climate. To interpret geographical information from maps and graphs.			
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SUMMER – MAP SKILLS		
TITLE	TOPICS COVERED	N.C. AIMS
ALL ABOUT MAPS	What is a Map? Types of Map	The importance of maps. Compare different types of maps. Identify who uses maps.
COMPASS DIRECTIONS	How does a compass work? What are the points of the compass?	Recognize the purpose of a compass Identify the eight points of the compass. Use the points of the compass to provide directions.
SKETCH MAPS	What is a Sketch Map? Drawing a Sketch Map of a Place Drawing a Sketch Map of a Route	Recognize the key features of a sketch map. Understand how to draw sketch maps. Draw two types of sketch map – of a place and to show route.
GRID REFERENCES	What are four – figure Grid References?	Identify the twelve OS map symbols
HOW TO DRAW A CROSS - SECTION	This lesson explains how to draw a cross-section from a topographic map.	Accurately record measurements from a map. Plot data onto a graph to create a cross-section. Interpret a cross section and identify topographic features.
RELIEF MAPS	This lesson explores how height is shown on maps using layer shading, spot height and contour lines	Consider different methods used to show height on a map. Interpret contour lines to show the height of the land. Interpret contour patterns to show the shape of the land.
ASSESSMENT	Make your own contour island.	

HISTORY

History Intent:

At Northstar New School history education should be fully inclusive to every child. Our aims are to fulfil the requirements of the National Curriculum for history; providing a broad, balanced and differentiated curriculum; ensuring the progressive development of historical concepts, knowledge and skills; and for the children to develop a love for history. Furthermore, we aim to inspire in pupils a curiosity and fascination about history that will remain with them for the rest of their lives. A high-quality history education will help pupils gain a coherent knowledge and understanding of Britain's past and that of the wider world (The 2014 Primary National Curriculum in England).

History teaching at NNS has a wide application to everyday life, teaching the children to enjoy learning about the past and to have a better understanding of the society in which they live.

The aims of teaching history in our school are:

- to inspire pupils' curiosity to discover more about the past and to develop an understanding that enables them to enjoy all that history has to offer;
- to enable children to know about significant events in British history and to appreciate how things have changed over time;
- to develop a sense of chronology;
- to know and understand how the British system of democratic government has developed and, in so doing, to contribute to a child's citizenship education;
- to understand how Britain is part of a wider European culture and to study some aspects of European history;
- to have some knowledge and understanding of historical development in the wider world;
- to help children understand society and their place within it, so that they develop a sense of their cultural heritage;
- to develop in children the skills of enquiry, investigation, analysis, evaluation, debate, interpretation, problem solving and presentation.

Special Educational Needs Disability (SEND) / Pupil Premium / Higher Attainers

Children may have work additional to and different from their peers in order to access the curriculum dependent upon their needs. As well as this, our school offers a demanding and varied curriculum, providing children with a range of opportunities in order for them to reach their full potential and consistently achieve highly from their starting points.

Implementation:

To ensure high standards of teaching and learning in history, we implement a curriculum that is progressive throughout the whole school. History is taught as part of a termly topic, focusing on knowledge and skills stated in the National Curriculum. At Northstar, we ensure that history has the same importance given to it as the core subjects, as we feel this is important in enabling all children to gain 'real-life' experiences.

The history curriculum at NNS is based upon the 2014 Primary National Curriculum in England, which provides a broad framework and outlines the knowledge and skills and taught in each Key Stage. Teachers plan lessons for their class using our progression of knowledge and skills document. Teachers can use this document to plan their history lessons suitable to their class's interests and what they want to learn. The progression document ensures the curriculum is covered and the skills/knowledge taught is progressive from year group to year group.

When teaching history, the teachers should follow the children's interests to ensure their learning is engaging, broad and balanced. History teaching focuses on enabling children to think as critically. A variety of teaching approaches are used based on the teacher's judgement.

History provides excellent opportunities to enhance the learning of more able pupils through the investigations, analysing sources and writing extending pieces.

At Northstar New School we provide a variety of opportunities for history learning inside and outside the classroom.

Educational visits are another opportunity for the teachers to plan for additional history learning outside the classroom. The children have had many opportunities to experience history on educational visits. The children have explored local museums and had visitors into school to share history learning and have hands on experiences.

Impact:

Within history, we strive to create a supportive and collaborative ethos for learning by providing investigative and enquiry- based learning opportunities. Emphasis is placed on investigative learning opportunities to help children gain a coherent knowledge of understanding of each unit of work covered throughout the school.

Our history curriculum is well thought out and is planned to demonstrate progression. We focus on progression of knowledge and skills and discreet vocabulary progression also form part of the units of work.

We measure the impact of our curriculum through the following methods:

- Assessing children's understanding of topic linked vocabulary before and after the unit is taught.
- Summative assessment of pupil discussions about their learning.
- Images and videos of the children's practical learning.
- Interviewing the pupils about their learning (pupil voice).
- Moderation staff meetings where pupil's books are scrutinised and there is the opportunity for a dialogue between teachers to understand their class's work.
- Annual reporting of standards across the curriculum.
- Marking of written work in books.

Invasion, Plague, Murder and Mystery – Britain from 1AD to 1603

Half Term One	<p>Britain before 1066:</p> <ul style="list-style-type: none"> - Roman Britain - The Anglo-Saxons - The Vikings <p>Students will study the changing face of Britain since 1AD and the way in which invasions have changed the nature of the country. Students will study the Roman invasion, followed by the Anglo-Saxons and finally the Vikings.</p>
Half Term Two	<p>1066 and the Norman conquest:</p> <ul style="list-style-type: none"> - 1066 – a ‘year of crisis’ - The Norman conquest of England <p>Students will study the Norman invasion of 1066 and the impact that it had on Britain. Once students have studied 1066 and why it was a ‘year of crisis’ they will study the establishment of Norman rule, including the feudal system, Domesday Book and castles. Students will study the impact that this had on society.</p>
Half Term Three	
Half Term Four	<p>Medieval Monarchs and the Middle Ages:</p> <ul style="list-style-type: none"> - Medieval monarchs - Life in the Middle Ages <p>Students will study various monarchs, such as Henry II, Richard I and King John, and their various struggles over power and religion. Students will study medieval society, looking at events like the Peasant’s Revolt, Black Death and Magna Carta as well as the various aspects of life in medieval towns and villages (e.g. public health, entertainment, medicine and health, crime and punishment etc.)</p>
Half Term Five	
<p>Was the Black Death a disaster for everyone? Enquiry</p> <p>Was King John really a terrible King? Interpretation power</p>	
Half Term Six	<p>The Tudors:</p> <ul style="list-style-type: none"> - Tudor monarchs - Life in Tudor England

Students will develop their KNOWLEDGE of:

- The chronology of Britain from 1AD to 1603.
- Britain before 1066, including: the Bronze Age; Iron Age; Romans; Anglo-Saxons; and Vikings.
- 1066 and the Norman Conquest, including why 1066 was a ‘year of crisis’ and the impact the Normans had on Britain.
- Medieval monarchs and the Middle Ages, including the various monarchs and their struggles, and the way in which medieval society changed and developed.
- The Tudors, including the various monarchs and their actions, and the way in which Tudor society changed and developed.

Students will develop their SKILLS in:

- Chronology
- Cause and Consequence
- Change and Continuity
- Interpretation
- Significance
- Using evidence

Assessment Criteria at KS3

	<i>"What evidence do I have?" Using evidence</i>	<i>"Why do people think that?" Interpretations</i>	<i>"What made something important?" Significance</i>	<i>"Why did things change?" Continuity & change</i>	<i>"Why did things happen?" Cause and consequence</i>
<i>Exceptional</i>	<i>You can explain your own judgements about historical questions using sources beyond those expected.</i>	<i>You can construct your own interpretation, evaluate why it is useful and limited, comparing it to existing Interpretations in their context.</i>	<i>You can explain your own judgements about historical significance using knowledge beyond that expected.</i>	<i>You can explain your own judgements about change and continuity using knowledge beyond that expected.</i>	<i>You can explain and make your own judgements about causation using knowledge beyond that expected.</i>
<i>Effective</i>	<i>You can analyse why a source is useful to a historian. e.g. useful (valuable) or convincing.</i>	<i>You can analyse a number of interpretations and make a judgement about them e.g. which is most convincing based upon the content or provenance.</i>	<i>You can analyse how significance can vary according to different viewpoints e.g. then and now.</i>	<i>You can analyse (examine in detail) change and continuity. e.g. long, short term & Political, Economic, Social.</i>	<i>You can analyse a range of causes and consequences. e.g. long, short term & Political, Economic, Social.</i>
<i>Consistent</i>	<i>You can investigate and make a judgement about evidence e.g. considering Nature, Origin, Purpose.</i>	<i>You can explain reasons for an interpretation, considering viewpoint, purpose, audience and their evidence.</i>	<i>You can investigate different reasons for significance e.g. short-term and long-term impact & make a judgement. At least three of the 5rs.</i>	<i>You can investigate events and make a judgement about change and continuity.</i>	<i>You can investigate links and make a judgement between two causes and consequences.</i>
<i>Competent</i>	<i>You can make inferences from sources to understand events.</i>	<i>You can make inferences from interpretations to understand its message.</i>	<i>You can explain why some people or events are significant. e.g. results, remembered.</i>	<i>You can explain why some changes or continuities are more important than others .</i>	<i>You can explain how one cause and/or consequences are more important than others.</i>

PSHE, SMSC, AND EMOTIONAL WELL-BEING

Northstar New School – How do we teach PHSE, SMSC and Emotional Wellbeing?

Intent:

At Northstar New School we aim to create a happy, purposeful and supportive environment where children are enabled to become successful learners, develop their full potential and achieve the highest educational standards they can. We have a passionate commitment to learning and recognition of the uniqueness of individual learners. It is driven by our desire to offer the best possible education for our pupils in partnership with parents, Governors and the local community. We believe a collaborative culture is fundamental in enabling children to develop personally and emotionally, and as young citizens.

Children grow up in a complex and ever changing world and are exposed to an increasing range of influences. As a school we aim to build on and complement the learning that has already started at home to provide the knowledge, understanding and skills that children need to lead healthy, fulfilling and meaningful lives, both now and in the future. Personal, Social, Health and Economic Education (PSHE) are central to our school's ethos, supporting children in their development, and underpinning learning in the classroom, school, and in the wider community.

Values are fundamental expressions of what we think and believe. As a school we encourage children to think about personal and social values, to become aware of, and involved in the life and concerns of their community and society, and so develop their capacity to be active and effective future citizens. Personal, Social, Health and Economic (PSHE) education equips children with the knowledge, understanding, skills and strategies required 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 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 is taught as a planned, developmental programme of learning through which children 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.

Further it can help reduce or remove many of the barriers to learning experienced by pupils, significantly improving their capacity to learn and achieve. PSHE education also makes a significant contribution to pupils' spiritual, moral, social and cultural (SMSC) development, their behaviour and safety, and to their emotional wellbeing. 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.

The aims of teaching PSHE, SMSC and Emotional Wellbeing in our school are:

The overarching aim for PSHE education is to provide pupils with:

- Accurate 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 and strategies they need in order to live healthy, safe, fulfilling, responsible and balanced lives.

Special Educational Needs Disability (SEND) / Pupil Premium / Higher Attainers

Children may have work additional to and different from their peers in order to access the curriculum dependent upon their needs. As well as this, our school offers a demanding and varied curriculum, providing children with a range of opportunities in order for them to reach their full potential and consistently achieve highly from their starting points.

Implementation:

The Government's review of Personal, Social, Health and Economic education concluded in March 2013, stating that the subject would remain non-statutory; the DfE has, however, stated in the National Curriculum Framework that 'All schools should make provision for personal, social, health and economic education (PSHE), drawing on good practice'. However, the Government has since decided that from September 2020 RSE (Relationships and Sex Education) will be compulsory in all Primary schools. (Parents will still have the opportunity to withdraw their child from SE if they wish to do so) In the absence of a government programme of study we have drawn on guidance from the PSHE Association in revising our Curriculum Framework for PSHE to ensure that it meets the needs of our pupils in today's changing society. The Framework identifies the key concepts and skills that underpin PSHE education and help us to fulfil our statutory responsibility to support children's spiritual, moral, cultural, mental and physical development, and prepare them for the opportunities, responsibilities and experiences of life. PSHE education is integrated into curriculum plans for science, computing, citizenship and physical education; and is taught as a spiral programme based on three core themes to ensure learning in PSHE is revisited, reinforced and extended in age- and stage-appropriate contexts.

Core theme 1: Health and Wellbeing In Key Stages 2 and 3, pupils are taught:

- What is meant by a healthy lifestyle.
- How to maintain physical, mental and emotional health and wellbeing.
- How to manage risks to physical and emotional health and wellbeing.
- Ways of keeping physically and emotionally safe.
- About managing change, such as puberty, transition and loss.
- How to make informed choices about health and wellbeing and to recognise sources of help with this.
- How to respond in an emergency.
- To identify different influences on health and wellbeing.

Core theme 2: Relationships In Key Stages 2 and 3, pupils are taught:

- How to develop and maintain a variety of healthy relationships within a range of social/cultural contexts.
- How to recognise and manage emotions within a range of relationships.
- How to recognise risky or negative relationships including all forms of bullying and abuse.
- How to respond to risky or negative relationships and ask for help.
- How to respect equality and diversity in relationships.

Core theme 3: Living in the Wider World In Key Stages 2 and 3 pupils focus on 'economic wellbeing and being a responsible citizen' and are taught:

- About respect for the self and others and the importance of responsible behaviours and actions.
- About rights and responsibilities as members of families, other groups and ultimately as citizens.
- About different groups and communities.
- To respect equality and to be a productive member of a diverse community.
- About the importance of respecting and protecting the environment.
- About where money comes from, keeping it safe and the importance of managing it effectively.
- How money plays an important part in people's lives
- A basic understanding of enterprise.

Emotional Wellbeing:

At *Northstar New School*, we aim to promote positive Mental Health for every member of our school community including, staff, pupils and families. We pursue this aim using both universal, whole school approaches and specialised, targeted approaches aimed at vulnerable pupils.

Teaching & Learning:

As a health promoting school our culture places teaching and learning in the wider context of the schools' approach to:

- Leadership, management and managing change
- Policy development
- Learning and teaching, curriculum planning and resourcing
- School ethos, culture, environment and SMSC development
- Giving children a voice
- Provision of support services for pupils
- Staff continuing professional development (CPD), health and wellbeing
- Partnerships with parents/carers, local communities, external agencies and volunteers to support pupils' health and wellbeing
- Recording and monitoring impact and outcomes.

During Key Stages 2 and 3 pupils gradually build on the skills, attitudes and values, knowledge and understanding they have started to acquire and develop during the KS1 and KS2 phase. PSHE education offers learning opportunities and experiences which reflect the increasing independence, and physical and social awareness of our pupils as they move through the primary phase. They learn skills to develop effective relationships, assume greater personal responsibility and keep themselves safe. It is important to remain flexible as events such as bereavement might require learning to be drawn from Key Stage 2 into Key Stages 3. PSHE education assists pupils to cope with the changes at puberty, introduces them to a wider world and enables them to make an active contribution to their communities.

Impact:

Our school uses the PSHE Association's three core themes as the basis for curriculum planning . PSHE education is taught by class teachers who take responsibility for planning, resourcing and delivering the PSHE curriculum. Beyond the planned programme for PSHE education, the curriculum provides children with a variety of experiences that have the potential to promote their personal, social development and economic education. These include:

- Assemblies of Celebration
- Circle time
- Drama and music activities and productions
- Social and fund-raising events
- Theme days/events, for example The Big Draw, World Book Day, Subject days
- Charity events
- Leadership opportunities, for example Pupil Voice, Reading Buddies, Learning Mentors

Special Educational Needs:

PSHE education is taught to all children, whatever their ability, in accordance with the school curriculum policy of providing a broad and balanced education to all children. Teachers provide learning opportunities matched to the needs of children with learning difficulties.

Spiritual, Moral, Social & Cultural Development:

PSHE education gives children specific opportunities to explore the range of attitudes and values in society, and to consider the kind of society they want to live in. Through exploration and discussion of topical political, spiritual, moral, social and cultural issues they develop skills and attitudes that promote:

- Empathy and a willingness to perceive and understand the interests, beliefs and viewpoints of others.
- A willingness and ability to apply reasoning skills to problems and to value a respect for truth and evidence in forming or holding opinions.
- A willingness and ability to participate in decision-making, to value freedom, to choose between alternatives and to value fairness as a basis for making and judging decisions.

These attributes also contribute to our understanding of British Values.

We measure the impact of our curriculum through the following methods:

In PSHE education there are two broad areas for assessment:

- Children's knowledge and understanding, for example, information on health, understanding of rules, understanding of health and safety procedures, and the meaning of ideas including democracy.

- How well children can use their knowledge and understanding in developing skills and attitudes, for example through participating in discussions, group task and activities, managing conflict, making decisions and promoting positive relationships. Assessment in PSHE education should be active and participatory, helping children to recognise the progress they are making in developing and taking part, as well as in their knowledge and understanding. Children should learn to reflect on their experiences, ask questions, make judgements about their strengths and needs, and begin to plan how to make progress and set personal targets. Teachers assess children's work in PSHE education by making informal judgements as they observe them during lessons and at other times during the school day. Progress in PSHE education should be recorded and reported to parents as part of the child's annual school report.

	Term 1 Health & wellbeing	Term 2 Living in the wider world	Term 3 Relationships	Term 4 Health & wellbeing	Term 5 Relationships	Term 6 Living in the wider world
Year 7	Transition and safety - Transition to secondary school, personal safety in and outside school, including first aid	Developing skills & aspirations - Careers, teamwork and enterprise skills, and raising aspirations	Diversity - Diversity, prejudice, and bullying	Health and puberty - Healthy routines, influences on health, puberty, unwanted contact, and FGM	Building relationships - Self-worth, romance and friendships (including online) and relationship boundaries	Financial decision making - Saving, borrowing, budgeting and making financial choices
Year 8	Drugs and alcohol - Alcohol and drug misuse and pressures relating to drug use	Community and careers - Equality of opportunity in careers and life choices, and different types and patterns of work	Discrimination - Discrimination in all its forms, including: racism, religious discrimination, disability, discrimination, sexism, homophobia, biphobia and transphobia	Emotional wellbeing - Mental health and emotional wellbeing, including body image and coping strategies	Identity and relationships - Gender identity, sexual orientation, consent, 'sexting', and an introduction to contraception	Digital literacy - Online safety, digital literacy, media reliability, and gambling hooks
Year 9	Peer influence, substance use and gangs - Healthy and unhealthy friendships, assertiveness, substance misuse, and gang exploitation	Setting goals - Learning strengths, career options and goal setting as part of the GCSE options process	Respectful relationships - Families and parenting, healthy relationships, conflict resolution, and relationship changes	Addressing extremism and radicalization - Communities, belonging and challenging extremism	Intimate relationships - Relationships and sex education including consent, contraception, the risks of STIs, and attitudes to pornography	Employability skills - Employability and online presence

CITIZENSHIP

INTENT

Our Citizenship curriculum aims to give all pupils an increased awareness of what Citizenship is and how to become thoughtful, active citizens who will contribute to Northstar New School and wider communities.

Pupils will develop deeper knowledge of democracy, government and law, and develop skills to create sustained and reasoned arguments, present various viewpoints and plan practical citizenship actions to benefit society.

Citizenship Studies reflects current issues, questions and debates; allowing pupils to access the main issues of the day and form opinions based on deeper knowledge and understanding of those issues and the impacts they have on modern society. They will be given the opportunity to become confident public speakers who advocate on the behalf of others, and potentially have a real effect on their local communities.

IMPACT

Pupils would have acquired knowledge and understanding of how the UK is governed through its political system and how they can actively participate in its democratic system of government. They should understand the role of law and the justice system which supports it, in addition to understanding how these laws are made and enforced. Pupils should have developed an interest in participating in volunteering as well as other forms of responsible activity that they can transfer into adulthood. They can now think critically and debate political questions to enable them to manage their money on a day-to-day basis and plan for the future.

IMPLEMENTATION

By the time our pupils leave NNS they will have developed a wider scope of understanding of what it means to be a citizen and they will have improved their communication skills. They will also have increased their capacity to develop and express their own opinion on a topic, thinking critically. Pupils will show their successes throughout debating and being able to develop an argument using their own knowledge on each topic. The focus is placed on analytical thinking and questioning which helps pupils gain a coherent knowledge and understanding from basic topics such as different types of families or religions in our community, to more complex ones like society, gender equality or global conflicts. So, by the time our pupils leave our school, they will be able to ask perceptive questions, think critically, weigh evidence, sift arguments, and develop perspective and judgement. Pupils will also be able to demonstrate and apply the British Values of Democracy, Rule of Law, Tolerance of different cultures and religions, Mutual Respect and Individual Liberty

	Term 1	Term 3	Half Term 4	Half term 5	Half term 6
Year 7	What type of country do we live in? What is citizenship? How could you run a country? What rights and responsibilities do we have? What makes a good citizen? How do we identify ourselves?	Why are there so many political parties? What is the political spectrum? What is a political party? What political parties do we have in the UK? Which political party would you vote for?	How did we become a 'United Kingdom'? How have campaigns and events influenced democracy in the UK? How did the British Isles become a 'United Kingdom'? How has the relationship between the Crown and the people evolved? How are different nations in the UK represented in government? Should Scotland be independent of the UK?	How does the UK Government work? Who is the Prime Minister and what does he do? What is parliament and how does it work? What is the role of an MP? How are laws made? Why is the European Union important?	What issues are the government examining today How well do we protect animals? How much aid should Britain give to foreign countries? How well do we protect the environment? How does Britain treat refugees and asylum seekers? Should Britain leave the European Union?
	Politics, parliament and government	Rights, Justice and Law	Active Citizenship	Rights, Justice and Law	UK and Wider World
Year 8 Taken from Oak National Academy	How does the Political System Work in the UK? What is the difference between government and Parliament? How do elections work? What do Political Parties do? What do MPs do? How is the government organized? How does devolved government work?	What is the Law and How Has It Changed? What are laws? How are laws made? Criminal vs. Civil Law Can citizens change laws? Should the age of criminal responsibility be changed? How is the criminal justice system applied to young people? Debate: Should we review the age of criminal responsibility?	How Can Citizens Bring About Change? How do citizens take action? What is the role of protest groups, pressure groups, and social movement? How can we campaign and influence change? Why do changemakers play an important role in democracy? Why and how should citizens take action? What can effective change look like?	Why Was The Struggle For the Vote Important Today? How have our political rights changed over time? How did the Chartists affect our political rights today? Which methods were most successful in the fight for female suffrage? What does voting matter? Should 16 and 17 year olds be allowed to vote in elections? How can we exercise democratic rights without a vote?	What Can We Do About Global Problems? Is plastic damaging the environment? Why do some people reject climate change? Why is fracking controversial? Why are there still some human rights abuses today? How can we take action on global problems? How can we take responsible action?

Year 9 Taken from Oak National Academy	Politics, parliament and government	UK and Wider World	Finance and the Economy	Media and Digital Democracy	Active Citizenship
	<p>How is the UK Governed?</p> <p>How is the country run?</p> <p>What does the civil service do?</p> <p>What are the differences between local, regional and national governance?</p> <p>How does the UK political system compare to other systems?</p> <p>What are the differences between the UK and the US political system?</p> <p>How is the UK governed?</p>	<p>Why do people move around the world?</p> <p>Why do people migrate?</p> <p>What is the relation between climate change and migration?</p> <p>Is the conflict in Syria a children's rights issue?</p> <p>What support is available for migrants?</p> <p>Should migration be controlled?</p>	<p>How Can We Manage Money Well?</p> <p>What is the best way to look after money?</p> <p>How can we pay for things?</p> <p>What are the implications of borrowing money?</p> <p>How can we keep track of our money?</p> <p>Where can we save money?</p> <p>What are our rights as consumers?</p>	<p>Can Digital Democracy Increase Political Participation?</p> <p>What is digital citizenship?</p> <p>Can political engagement increase using digital media?</p> <p>How well has digital democracy worked in other countries?</p> <p>Should MPs be allowed to vote electronically?</p> <p>How can social media be used to increase political participation?</p>	<p>How Can Young People Play An Active Role in democracy?</p> <p>How can they contribute to school decision making?</p> <p>How can they engage in local democracy?</p> <p>Should the voting age be reformed?</p> <p>How can we influence those in power using democratic processes.</p> <p>How can they make change happen?</p> <p>Should young people have the right to stand in local elections?</p>