**Maths Y2**

**National Curriculum Links**

**Fractions**

* Recognise, find, name and write fractions (1/3, ¼, 2/4 and 2/4) of a length, shape, set of objects of quantity.
* Write simple fractions, for example, ½ of 6 = 3 and recognise the equivalence of 2/4 and ½.

**Properties of Shape**

* Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.
* Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.
* Identify 2-D shapes on the surface of 3-D shapes, for example, a circle on a cylinder and a triangle on a pyramid.
* Compare and sort common 2-D and 3-D shapes and everyday objects.

**Measurement: Length and Height**

* Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers and scales.
* Compare and order lengths and record the results using >, < and =.

**Measurement: Mass, Capacity and Temperature**

* Choose and use appropriate standard units to estimate and measure mass (kg/g); temperature; capacity (litres/ml) to the nearest appropriate unit, using scales, thermometers and measuring vessels.

Compare and order mass, volume/capacity and record the results using >, < and =.

**Measurement: Time**

* Compare and sequence intervals of time.
* Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.
* Know the number of minutes in an hour and the number of hours in a day.

**Geometry: Position and Direction**

* Order and arrange combinations of mathematical objects in patterns and sequences.
* Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter-, half- and three-quarter turns (clockwise and anticlockwise).

**Statistics**

* Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.

**English Y2**

**National Curriculum Links**

**Reading Comprehension**

Develop pleasure in reading, motivation to read, vocabulary and understanding by:

* Listening to discussing and expressing views about a wide range of poems, stories and non-fiction at a level beyond that at which they can read independently.
* Recognising simple recurring literary language in stories and poetry.
* Build up a repertoire of poems learnt by heart.

Understand both the books that they can already read accurately and fluently and those that they listen to by:

* Checking that the text makes sense to them as they read and correcting inaccurate reading.
* Making inferences on the basis of what is being said and done.
* Predicting what might happen on the basis of what has been read so far.

**Writing:**

Consider what they are going to write before beginning by:

* Encapsulating what they want to say, sentence by sentence.

Make simple additions, revisions and corrections to their own writing by:

* Re-reading to check their writing makes sense and that verbs to indicate time are used correctly and consistently.
* Proof-reading to check for errors in spelling, grammar and punctuation.

Learn how to use:

* The present and past tenses correctly and consistently, including the progressive form.
* Subordination (using when, if, that or because) and coordination (using or, and or but).

Understand how nouns can be formed using suffixes such as –ness and -er and by compounding.

**Small Steps Overview**

**Fractions**

* Make equal parts
* Recognise a half
* Find a half
* Recognise a quarter
* Find a quarter
* Recognise a third
* Find a third
* Find three quarters
* Count in fractions
* Make patterns with 3D shapes

**Measurement: Length and Height**

* Measure length (cm)
* Measure length (m)
* Compare lengths
* Order lengths
* Four operations with lengths
* Problem solving with lengths

**Measurement: Mass, Capacity and Temperature**

* Compare mass
* Measure mass (g)
* Measure mass (kg)
* Four operations with mass
* Compare volume
* Measure capacity and volume (ml)
* Measure capacity and volume (l)
* Four operations with volume
* Temperature

**Properties of Shape**

* Recognise 2D and 3D shapes
* Make 2D and 3D shapes
* Count sides on 2D shapes
* Count vertices on 2D shapes
* Draw 2D shapes
* Lines of symmetry
* Sort 2D shapes
* Make patterns with 2D shapes
* Count faces on 3D shapes
* Count edges on 3D shapes
* Count vertices on 3D shapes
* Sort 3D shapes

**Possible Texts:**

**Fiction:** *Sally and the Limpet* by Simon James*; The Lighthouse Keeper’s Lunch* by Ronda and David Armitage; *Snorgh and the Sailor* by Will Buckingham; *Mrs Armitage and the Big Wave* by Quentin Blake*; Winnie at the Seaside* by Valerie Thomas; *The Storm Whale* by Benji Davies; *Can You Hear the Sea?* by Judy Cumberbatch & Ken Wilson-Max *and Lucy & Tom at the Seaside* by Shirley Hughes.

**Poetry:** *Poems about the Seaside* chosen by Brian Moses

**Non-fiction:** Instructions and recipes

**Geometry: Position and Direction**

* Describe movement
* Describe turns
* Describe movement and turns
* Make patterns with shapes

**Statistics**

* Make tally charts
* Tables
* Block diagrams
* Draw Pictograms and Interpret Pictograms

**By the Sea**

Oak Class

Summer

English & Maths Y2

**Measurement: Time**

* O’clock and half past
* Quarter past and quarter to
* Telling time to 5 minutes
* Hours and days
* Find durations of time
* Compare durations of time



**Maths Y1**

**National Curriculum Links**

Pupils should be taught to:

**Fractions**

* Recognise, find and name a half as one of two equal parts of an object, shape or quantity.
* Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

**Measurement:**

**Money**

* Recognise and know the value of different denominations of coins and notes.

**Time**

* Sequence events in chronological order using language (for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening).
* Recognise and use language relating to dates, including days of the week, weeks, months and years.
* Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.

**Compare, describe and solve practical problems for:**

* Lengths and heights (for example, long/short, longer/shorter, tall/short, double/half).
* Mass/weight (for example, heavy/light, heavier than, lighter than)
* Capacity and volume (for example, full/empty, more than, less than, half, half full, quarter).
* Time (for example, quicker, slower, earlier, later).

**Measure and begin to record the following:**

* Lengths and heights, mass/weight, capacity and volume, time (hours, minutes, second).

**Geometry-position and direction**

* Describe position, direction and movement, including whole, half, quarter and three-quarter turns.

**English Y1**

**(taught within the RWINC programme)**

**National Curriculum Links**

Speaking and listening

Pupils should be taught to:

• listen and respond appropriately to adults and their peers

• ask relevant questions to extend their understanding and knowledge

• maintain attention and participate actively in conversations.

Reading

Pupils should be taught to:

• respond speedily to match graphemes for all phonemes

• read accurately by blending sounds in unfamiliar words containing GPCs that have been taught

• read common exception words

• read aloud accurately books that are consistent with their developing phonic knowledge.

Reading Comprehension

Develop pleasure in reading, motivation to read, vocabulary and understanding by:

• listening to and discussing a wide range of poems, stories and non-fiction • being encouraged to link what they read or hear read to their own experiences

• recognising and joining in with predictable phrases

• discussing the significance of the title and events

• making inferences/predictions on the basis of what is being said and done

• participate in discussion about what is read to them, taking turns and listening to what others say.

Writing

Pupils should be taught to:

• sit correctly at a table, holding a pencil comfortably and correctly

• begin to form lower-case letters in the correct direction, starting and finishing in the right place

• spell: words containing each of the 40+ phonemes already taught; common exception words • name the letters of the alphabet in order

• form capital letters and digits

• use the spelling rule for adding –s or –es as the plural marker for nouns and the third person singular marker for verbs

• use the prefix un– • use –ing, –ed, –er and –est where no change is needed in the spelling of root words.

Pupils should be taught to write sentences by:

• saying out loud what they are going to write about

• composing a sentence orally before writing it

• re-reading what they have written to check that it makes sense

• beginning to punctuate sentences using spaces, capital letters and full stops.

**Time**

Recognise and use ‘before’ and ‘after’ vocabulary.

Recognise and use vocabulary relating to the days of the week.

Name and sequence the months within a year.

Measure and begin to record time using

hours, minutes and seconds.

Time to the hour.

Time to the half hour.

**Length and height**

Compare lengths and heights.  
Measure length using objects.

Measure length in centimetres.

**Mass and volume**

Describe something as heavier or lighter.

Measure mass.

Compare mass.

Explore full and empty.

Compare volumes.

Measure capacity.

Compare capacity.

**Small Steps Overview**

**Fractions**

Recognise a half of an object or a shape.

Find a half of an object or a shape.

Recognise a half of a quantity.

Find a half of a quantity.

Recognise a quarter of an object or a shape.

Find a quarter of an object or a shape.

Recognise a quarter of a quantity.

Find a quarter of a quantity.

**Geometry-Position and direction**

Describe turns

Describe position-left and right

Describe position-forwards and backwards

Describe position-above and below

Ordinal numbers

**Money**

‘Unitise’ by recognising that, for example, a single 5p

coin represents 5 pence.

Recognise the value of different coins.

Recongise the value of different notes.

Count up the value of coins in 2s, 5s and 10s.

**By the Sea**

Oak Class

Summer

English & Maths Y1

**Physical Education**

**Striking and Fielding (NUF)**

**Athletics and Fitness (NUF)**

**Team Games**

**National Curriculum Links**

Pupils should be taught to:

* Master basic movements including running, jumping, throwing and catching, as well as developing balance, agility and coordination, and begin to apply these in a range of activities.
* Participate in team games, developing simple tactics for attacking and defending.

**Learning Outcomes**

***Team Games***

Children will:

* Apply their throwing, catching, striking and fielding skills in a range of team games.
* Learn to follow rules and develop tactics

**Newcastle Foundation** will lead PE sessions focussing on:

***Striking and Fielding***

* developing attacking and defending tactics
* developing skill in use of equipment, such as racquets
* applying fundamental movements & learnt skills in a range of games

***Athletics and Fitness***

* improving children’s agility and speed when running, jumping and throwing
* teaching children how to compete against their peers in a competitive yet sporting way

**Music**

**National Curriculum Links**

Pupils should be taught to:

* Use their voices expressively and creatively by singing songs and speaking chants and rhymes.
* Play tuned and untuned instruments musically.
* Listen with concentration and understanding to a range of…music
* Experiment with, create, select and combine sounds using the inter-related dimensions of music.

**Learning Outcomes**

Children will:

* play warm-up games involving memory of the pulse as they move and clap.

**Round and Round**

* listen to and sing Round & Round, a Bossa Nova Latin style (a Brazilian dance movement that has syncopated guitar rhythms) focusing on pulse (the heartbeat of the music), rhythm (the connection of long and short sounds to make patterns over a pulse) and pitch (the range of high and low sounds).
* practice and perform Round & Round on the Glockenspiel using notes C, D and F (progressing to D,E, F, G and A).
* improvise over the song using un-tuned percussion instruments, such as shakers and tambourines.

**Your Imagination**

* listen to and sing the song Your Imagination and other songs about using your imagination.
* practice and perform Your Imagination on glockenspiels using notes C, G and E.
* improvise over the song.
* compose with the song.

**By the Sea**

Oak Class

Summer

**Art and Design**

**Water Colours**

**Seaside Sculpture**

**National Curriculum Links**

Pupils should be taught to:

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

**Learning Outcomes**

Children will:

***Paint***

* Explore and evaluate the work of local artist Mick Oxley (mixed media) and Robert Talbot (#paintbrushpolaroids).
* Work with watercolours to create artwork inspired by the sea:
  + Investigate mixing watercolours to create different tones.
  + Begin to control the type of marks made with a range of painting techniques (e.g. layering, mixing media and adding texture).
  + Use a brush with control to produce marks appropriate to the work (e.g. large brush for washes, small brush for detail).
  + Begin to understand symmetry using colour.

***Sculpture***

* Explore the work of sand artists, such as Sudarsan Pattnaik and Jamie Wardley.
* Create sculptures of their own using sand and clay:
  + Design and plan a sculpture before making.
  + Use moulding to create basic shapes and begin to explore carving as a form of 3D art.
  + Impress and apply simple decoration.
  + Create their designs using sand.
  + Recreate their designs in clay.
  + Compare the process and results when using these different media.

**Geography**

**Seas and Coasts**

**National Curriculum Links**

Pupils should be taught to:

* Use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage.
* Use simple compass directions (north, south, east and west) and locational and directional language [for example, near and far, left and right], to describe the location of features and routes on a map.
* Use basic geographical vocabulary to refer to:
* key physical features – beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather
* key human features – city, town, village, factory, farm, house, office, port, harbour and shop
* use aerial photos and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key
* Use simple fieldwork and observational skills to study the geography of a local coastal environment.

**Learning Outcomes**

Children can:

* confidently use an atlas to label a map of the world's oceans.
* label the seas around the UK.
* use directional language, including compass directions, to describe the location of different seas and oceans.
* use a map to find seaside locations.
* categorise human and physical features of coastal landscapes.
* use geographical vocabulary to describe the features at the beach.
* describe the functions of ports and harbours, including local examples.

**Computing**

**Programming Robots**

**On-Screen Programming**

**National Curriculum Links**

**Y1**

Pupils should be taught to:

* Understand what algorithms are. (CS)
* Create simple programs. (CS)
* [Begin] to predict the behaviour of simple programs. (CS)

**Y2**

Pupils should be taught to:

* Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. (CS)
* Create and debug simple programs. (CS)
* Use logical reasoning to predict the behaviour of simple programs. (CS)

**Learning Outcomes**

Children will:

* Use algorithms to make things happen:
  + Be able to explain that an algorithm is a sequence of instructions to make something happen.
  + Be able to explain why the order of instructions in an algorithm is important.
  + Begin to use the word algorithm.
  + Give and follow instructions for moving around.
* Create simple programs to control BeeBots and other floor robots:
  + Be able to explain that we control computers by giving them instructions.
  + Control the movement of a floor robot using single commands.
  + Control the movement of a floor robot using more than one command.
  + Give commands in the correct order to make a floor robot do what they want.
* Predict what BeeBot will do for a given set of instructions:
  + Describe what happens when they give commands to a floor robot.
  + Begin to predict what will happen for a short sequence of instructions.
* Debug simple programs when BeeBot doesn’t do what they wanted:
  + Begin to spot mistakes in simple algorithms or programs.
  + Try different possibilities to correct mistakes.
* Transfer this understanding to control, predict and debug screen sprites following the same small steps.

**PHRSE**

**Relationships (Building positive, healthy relationships)**

Pupils should be taught to:

* identify members of their family and appreciate there are lots of different types of family
* identify what being a good friend means to them
* recognise appropriate forms of physical contact
* identify people who can help in their school community
* recognise their qualities as a person and a friend
* express how they feel about someone special to them

**Learning Outcomes**

Children will:

* accept that everyone’s family is different
* understand that most people value their family
* know which types of physical contact they like and don’t like, and can talk about this
* be able to use the positive problem-solving technique to resolve conflicts with their friends
* know who to talk to if they are asked to keep a secret they don’t want to keep
* understand how it feels to trust someone
* be comfortable accepting appreciation from others.

**Changing Me (Coping positively with change)**

Pupils should be taught to:

* recognise cycles of life in nature
* describe the natural process of growing from young to old
* recognise how their body has changed since they were a baby
* recognise the physical differences between boys and girls
* use the correct names for parts of the body and appreciate that some parts of the body are private
* identify what they are looking forward to when they move to their next class.

**Learning Outcomes**

Children will:

* understand there are some changes that are outside their control and recognise how they feel about this
* identify people they respect who are older than them
* feel proud about becoming more independent
* say what they like and don’t like
* begin to consider changes they will make when in Year 2/3.

**History**

**How have holidays changed?**

**National Curriculum Links**

Pupils should be taught about:

* Changes within living memory.

**Learning Outcomes**

Children will:

* Research seaside pastimes from the past by interviewing parents and grandparents.
* Use the Internet, books and photographs to find out about seaside holidays in the past.
* Compare their experience of seaside holidays with their findings.

**RE**

**Northumberland Agreed Syllabus**

Theme: Rosh Hashanah and Yom Kippur

Religion: Judaism

Key Question: Are Rosh Hashanah and Yom Kippur important to Jewish children?

**Learning Outcomes**

Children will:

* Say how it feels to say sorry and what they have said sorry for.
* Learn about important parts of Rosh Hashanah and Yon Kippur.
* Choose a picture and say why they think this might be important to Jewish children at Rosh Hashanah or Yon Kippur.

**RE**

**Northumberland Agreed Syllabus**

Theme: Shabbat

Religion: Judaism

Key Question: Is Shabbat important to Jewish children?

**Learning Outcomes**

Children will:

* Tell others about their favourite day of the week and explain why.
* Talk about the food they would like to share in a special meal.
* Learn the names for things that are special to Jewish people during Shabbat and explain why.
* Begin to make a connection between being Jewish and decisions about behaviour.

**Science**

**Materials**

**National Curriculum Links**

* Distinguish between an object and the material from which it is made.
* Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.
* Describe the simple physical properties of a variety of everyday materials.
* Compare and group together a variety of everyday materials on the basis of their simple physical properties.
* Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.
* Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

**Learning Outcomes**

Children will be able to:

* Compare and identify different materials.
* Describe simple properties of materials using language such as hard/soft, rough/smooth, flexible/rigid, shiny/dull, waterproof/permeable etc.
* Sort materials according to various criteria.
* Identify the uses of different materials in and around school.
* Decide upon the suitability of materials for different purposes.
* Discuss and test how materials change through manipulation and changing temperature.

**Seasonal Changes**

**National Curriculum Links**

Observe changes across the four seasons

Observe and describe weather associated with the seasons and how day length varies.



**Opportunities for Outdoor Learning**

* Trip to the coast – rock pool exploration.

**Geography**

* Match aerial photos to real places.
* Identify geographical features at the coast.

**Science**

* Identify plants and animals during our trip to the coast.

**Art and Design**

* Create art using natural materials found at the coast.
* Create sketches of landscapes and detailed observational drawings.

**Design Technology**

**A Seaside Picnic**

**National Curriculum Links**

Pupils should be taught to:

* use the basic principles of a healthy and varied diet to prepare dishes
* understand where food comes from
* evaluate their ideas and products

**Learning Outcomes**

Children can:

* consider how sandwiches can form part of a healthy diet.
* try different types of bread and describe how they taste.
* research different types of sandwich fillings.
* design a sandwich making choices about breads and fillings (Y1) and also explain their decisions in terms of a healthy and varied diet (Y2).
* plant and care for cress seeds to form part of a sandwich filling.
* explain where some foods come from (eggs) and how some foods (bread) are made.
* list some rules for basic kitchen safety, food handling and hygiene.
* make their sandwich using techniques, with some support (Y1) and more independently (Y2), including spreading, chopping, slicing, grating and peeling.
* evaluate their own and their peer’s work (Y1) and justify their opinions (Y2).

**Mastering Maths**

**Opportunities for children to develop deep learning:**

**Geography**

* Using positional and directional language (map work, compass work).

**Computing**

* Using positional and directional language (BeeBot).

**Science**

* Reading scales during investigative work.
* Recording results using tables and graphs.

**Investigation Possibilities**

**Geography**

* How does the sea affect the landscape? Investigate with sand and water.

**Science**

* How can we clean dirty water?
* Can we take salt out of sea water?
* Why can people float better in the sea than in fresh water?
* Why does the sea not freeze as easily as ponds and lakes?
* Do all big objects sink?
* Can you make a structure out of paper that floats?
* What happens to sandcastles when the tide comes in?
* What is the best mixture of sand and water for making sandcastles?
* Which colour makes the best sunglasses for teddy?

**Philosophy for Children**

**Geography**

* Who owns the oceans?

**P.S.H.E.**

* Why do people drop litter?

**Science**

* Who is responsible for keeping the coast/oceans clean?
* Should we take natural resources from the beach?
* Should we holiday at the coast?

**Mastering English**

**Opportunities for children to develop deep learning:**

* Applying new topic vocabulary when writing across the curriculum.
* Using appropriate features when writing in different styles across topic areas.
* Using their speech and language skills to question, discuss and explain their thinking.
* Applying learnt grammar and punctuation conventions when writing across the curriculum.

**For example:**

* *Giving instructions on how to program a device such as a BeeBot.*
* *Writing a comparison of seaside holidays now and in the past.*