

Maths Y2

National Curriculum Links

Addition and subtraction (continued from Autumn 2)

Geometry: 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: Money

- Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.
- Find different combinations of coins that equal the same amounts of money.
- Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.

Multiplication and Division

- Recall and use multiplication and division facts for the 2, 5 and 10 times tables, including recognising odd and even numbers.
- Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs.
- Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.
- Show that the multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

Small Steps Overview

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
- Make patterns with 3D shapes

Money

- Count money – pence
- Count money – pounds
- Count money – pounds & pence
- Make amounts
- Make the same amount
- Compare amounts of money
- Find the total
- Find the difference
- Make a pound
- Find change
- Two-step problems

Multiplication & Division

- Recognise equal groups
- Make equal groups
- Add equal groups
- Introduce the multiplication symbol
- Write multiplication sentences
- Use arrays
- Make equal groups – grouping
- Make equal groups – sharing
- The 2 times table
- Divide by 2
- Doubling and halving
- Odd and even numbers
- The 10 times table
- Divide by 10
- The 5 times table
- Divide by 5

Maths Y1

National Curriculum Links

Geometry: Properties of Shape

- Recognise and name common 2-D and 3-D shapes, including:
 - 2-D shapes (for example rectangles(including squares) circles and triangles)
 - 3-D shapes (for example, cuboids (including cubes), pyramids and spheres).

Number: Place Value (within 20)

- Count to and across 100, forwards, backwards, beginning with 0, 1 or any given number.
- Count, read and write numbers to at least 100 in numerals and in words.
- Count in multiples of twos, fives and tens, then count in steps of 2,3 and 5 from 0 and in tens from any number, forward and back.
- Given a number, identify one more and one less.
- Identify, represent then estimate numbers using objects and pictorial representations including the numberline, and use the language of: equal to, more than, less than (fewer), most, least
- Read and write numbers from 1 to 20 in numerals and words.

Number: Addition and subtraction (within 20)

- Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.
- Represent and use number bonds and related subtraction facts (within 20).
- Add and subtract one-digit (and two-digit numbers to 20), including zero.
- Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$.

Small steps Overview

Properties of Shapes

- Recognise and name 3-D shapes
- Sort 3-D shapes
- Recognise and name 2-D shapes
- Sort 2-D shapes
- Patterns with 2-D and 3-D shapes

Place Value (within 20)

- Count within 20
- Understand 10
- Understand 11,12,13
- Understand 14,15,16
- Understand 17,18,19
- Understand 20
- 1 more and 1 less
- The number line to 20
- Use a number line to 20
- Estimate on a number line to 20
- Compare numbers to 20
- Order numbers to 20

Addition & Subtraction (within 20)

- Add by counting on within 20
- Add ones using number bonds
- Find and make number bonds to 20
- Doubles
- Near doubles
- Subtract ones using number bonds
- Subtraction-counting back
- Subtraction-finding the difference



Mastering Maths

Opportunities for children to develop deep learning:

Geography:

Using four compass directions.

DT:

- Measuring accurately when creating soft toy.

Science:

- Predict and time how long ice takes to melt.

Frozen
Ash Class
Spring 1



English Y2

National Curriculum Links

Pupils should be taught to:

Word Reading

- Continue to apply phonic knowledge and skills as the route to decode words until automatic decoding has become embedded and reading is fluent.
- Read accurately words of two or more syllables that contain the graphemes taught so far.

Reading Comprehension

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

- Listening to, discussing and expressing views about a wide range of contemporary and classic poetry, stories and non-fiction at a level beyond that which they can read independently.
- Becoming increasingly familiar with and retelling a wider range of stories...and traditional tales.
- Continuing to build up a repertoire of poems learnt by heart, appreciating these and reciting some, with appropriate intonation to make the meaning clear.

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

- Predicting what might happen on the basis of what has been read so far.

Participate in discussion about books, poems and other works that are read to them and those that they can read for themselves, taking turns and listening to what others say.

Explain and discuss their understanding of books that they listen to and read for themselves.

Learn about cause and effect in both narrative and non fiction (for example what has prompted a character's behaviour in a story, why certain dates are commemorated annually).

Spelling

- Segment spoken words into phonemes and represent these by graphemes.
- Learn new ways of spelling phonemes for which one or more spellings are already known, and learn some words with each spelling, including a few common homophones.
- Learn to spell common exception words.
- Learn to spell more words with contracted forms.
- Write from memory simple sentences dictated by the teacher.

Handwriting

- Start using some of the diagonal and horizontal strokes needed to join letters and understand which letters, when adjacent to one another, are best left un-joined.

Writing

Develop positive attitudes towards and stamina for writing by:

- Writing narratives about personal experiences and those of others (real and fictional).
- Writing about real events.

Consider what they are going to write before beginning by:

- Planning or saying out loud what they are going to write about.
- Using drama and role-play to develop and order their ideas through playing roles and improvising scenes in various settings.

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

- Evaluating their writing with the teacher.
- Re-reading to check that their writing makes sense.
- Proof-reading to check for errors in spelling, grammar and punctuation.

Vocabulary, Grammar & Punctuation

- Use familiar and new punctuation correctly (full stops, capital letters, exclamation marks and question marks).

Learn how to use:

- Sentences with different forms [statements, questions & commands].
- Expanded noun phrases to describe & specify.
- The present and past tenses correctly.
- Subordination and coordination.

Use and understand grammatical terminology [statement, question, exclamation, command, nouns, adjectives, verbs & adverbs].

English Y1

National Curriculum Links

Pupils should be taught to:

Word Reading

- Read words containing taught GPCs and –s. –es. –ng, -ed, -er and –est endings.

Reading Comprehension

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

- Learning to appreciate rhymes and poems and to recite some 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.
- Using role-play and other drama techniques to identify with and explore characters and to try out the language they have listened to.

Spelling

- The days of the week.
- Using –ing, -ed, -er, -est where no change is needed in the spelling of foot words (for example, helping, helped, helper, eating, quicker, quickest).

Transcription

- .write from memory simple sentences dictated by the teacher that include words using the GPCs and common exception words taught so far.

Handwriting

- Understand which letters belong to which handwriting 'families' (i.e. letters that are formed in similar ways) and to practise these.

Writing

- Write sentences by re-reading what they have written to check that it makes sense.
- Discuss what they have written with the teacher or other pupils.

Vocabulary, grammar and punctuation

- Using a capital letter for names of people, places, the days of the week, and the personal pronoun 'I.'
- Use the grammatical terminology in English Appendix 2 in discussing their writing (letter, capital letter, word. singular. plural. sentence. punctuation. full stop. question mark. exclamation mark).

Possible Texts

Fantasy stories: Jack Frost, The Journey Home, Snow, Over and Under the Snow, Snow Day, The Snow Queen.

Poems: *What I love about Winter* by Douglas Florian.

Non Fiction: *Tom Crean's Rabbit: A True Story from Scott's Last Voyage* by Meredith Hooper, Amundsen & Scott, Selection about Winter and the Arctic regions

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:

- *Writing about different adaptations of animals to their environment.*
- *Writing conclusions from science investigations.*

PSHE

Dreams and Goals (Jigsaw)

Pupils should be taught to:

- Set realistic goals and work out how to achieve them
- Persevere, even when they find tasks difficult
- Recognise who they work well with and who it is more difficult to work with
- Work well in a group to create an end product
- Recognise some of the ways they worked well in their group
- Share success with other people

Learning Outcomes

Children will:

- Learn to stay motivated when doing something challenging
- Learn how to keep trying even when a task is difficult
- Learn how to work well with a partner or in a group
- Learn to have a positive attitude
- Learn how to work with others to help them achieve their goals
- Discuss and share their dreams, goals and successes

DT

Sewing (Binca)

National Curriculum Links

Pupils should be taught to:

Design

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

Make

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

Evaluate

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

Learning Outcomes

Children will:

- Look at examples of Binca patterns
- Generate ideas through talk and drawing
- Design a Binca pattern
- Learn how to thread a needle
- Select suitable thread and materials for their design
- Use cutting tools to cut and shape their material
- Learn how to create basic running stitch designs on Binca material (Y1 and Y2) using running stitch and start to use cross stitch.
- Evaluate their finished product by comparing it to their design

Music

Rhythm in the Way We Walk and Banana Rap (Charanga) & Glockenspiel tuition

National Curriculum Links

- 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 high-quality live and recorded music.
- Experiment with, create, select and combine sounds using the inter-related dimensions of music.

Learning Outcomes

Children will:

Listen to Rhythm in the Way We Walk, The Banana Rap and a selection of classical, funk and pop songs, identifying through listening, clapping back, movement and voice, the pulse, rhythm, pitch and dynamics

Learn to sing and perform Rhythm in the Way We Walk (reggae).

Learn to rap and perform The Banana Rap (rap).

Learn to make different types of sounds with their voices and create rhythm with words.

Play rhythmic accompaniments to the song/rap learnt using untuned instruments.

Improvise using call and response games, and voices/ instruments.

Make simple compositions to accompany the song/rap, with consideration to pulse, rhythm, pitch and dynamics.

RE

Northumberland Agreed Syllabus

Theme: Jesus as a friend.

Key Question: Was it always easy for Jesus to show friendship?

Religion: Christianity

Learning Outcomes

Children will:

- talk about why friends and why they like them.
- remember a story about Jesus showing friendship and talk about it.
- say how Jesus tried to be a good friend.

History

Polar Explorers: The race to the South Pole and the lives of Amundsen and Scott

National Curriculum Links

Pupils should be taught about:

- events beyond living memory that are significant nationally or globally.
- the lives of significant individuals in the past who have contributed to national and international achievements.

Learning Outcomes

Children will:

- Ask questions as they find out about these people from the past.
- Place events on a timeline in relation to previous learning (Grace Darling, Guy Fawkes).
- Use internet/books/fact sheets to find out about the race to the South Pole.
- Retell the events in pictures and writing.

Physical Education

Football - Attacking & Defending (NUF)

Gymnastics (NUF)

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

Football

Newcastle Foundation will lead PE sessions focussing on:

- developing attacking and defending tactics
- applying fundamental movements in football

Gymnastics

Newcastle Foundation will lead sessions where children will:

- Learn and use basic jumps (tuck, star and straight) • Learn and use basic balances (L, T, arabesque)
- Learn and use basic rolls
- Link movements and balances to develop and perform movement sequences
- Self and peer evaluate performance and look for ways to improve their sequences

Computing

Internet Research

National Curriculum Links

- IT – Organise, store, retrieve and manipulate digital outcome.

Learning Outcomes

Children will:

- Explore simple websites with material relating to Arctic and Antarctic.
- Research polar regions, including animals, using online sources (e.g. DK encyclopaedia or Q-Files)
- Use art programs to create polar animals/scenes and save to own file.

Safer Internet Day

National Curriculum Links

- DL – Use technology safely and respectfully.
- Identify where to go for help and support when they have concerns about content or contact on the internet or other online.

Learning Outcomes

- Discuss how to stay safe and what procedures to follow if they need help (revisit Lee and Kim's Animal Adventure and SID's Top Tips).

Science

National Curriculum Links

Seasonal changes

Pupils should be taught to:

- Observe changes across the four seasons
- Observe and describe weather associated with the seasons and how day length varies.

Living Things and their Habitats

Pupils should be taught to: Y2

- Explore and compare the differences between things that are living, dead and things that have never been alive.
- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for basic needs of different kinds of animals and plants, and how they depend on each other.
- Identify and name a variety of plants and animals in their habitats, including micro-habitats.
- Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.

Animals, including Humans

Pupils should be taught to:

Y1;

- Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.
- Identify and name a variety of common animals that are carnivores, herbivores and omnivores.
- Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).
- Identify and name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Y2;

- Notice that animals, including humans, have offspring which grow into adults.
- Find out about and describe the basic needs of animals, including humans, for survival (water, food and air).
- Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.

Learning Outcomes

Living Things and their Habitats

Children will:

- Learn about the life processes that define all living things.
- Sort and classify things into whether they are living, dead or were never alive.
- Be introduced to the terms 'habitat' (a natural environment or home of plants and animals) and 'micro-habitats' (a very small habitat).
- Consider and describe the conditions in various (micro-)habitats, including the Arctic and Antarctic.
- Find out how the conditions affect the number and type(s) of plants and animals that live there.
- In their local environment, identify British plants and animals within a habitat, including minibeasts in micro-habitats.
- Talk about the features of plants and animals that make them suited to their (micro)habitat.
- Observe how living things depend on each other.
- Compare animals in local habitats with animals found in less familiar habitats, including the Arctic and Antarctic.
- Construct simple food chains.
- Use scientific terminology (omnivore, herbivore, carnivore, producer, consumer, predator, prey).

Animals, including Humans

Children will:

- Use the local environment to explore and answer questions about animals in their habitat.
- Understand how to take care of animals taken from their local environment and the need to return them safely after study.
- Learn about the basic needs of animals for survival.
- Learn the main parts of the body through games, actions, songs and rhymes.
- Understand the importance of exercise and nutrition for humans.
- Understand that animals, including humans, have offspring.
- Be introduced to the processes of growth in animals, e.g. lamb > sheep; baby > child > teenager > adult.
- Learn about life cycles and observe changes over time, e.g. frog spawn > tadpoles > frogs; egg > caterpillar > pupa > butterfly.

Seasons Children will observe and talk about changes in the weather and seasons.

Useful Links

http://kidsnationalgeographic.com/content/kids/en_US/animals/emperor-penguin

www.arcticantarcticcollection.com/polardifferences.htm

www.bbc.co.uk/nature/life then search 'emperor penguin' for a variety of clips

www.creativeeducation.co.uk/videos/watch-video.aspx?id=2006 teachers in the freezer. Watch the programme on teachers surviving in the Antarctic.

Investigation Possibilities

Science

- What conditions do different minibeasts prefer for their habitat?
- How do the conditions in a habitat affect the number/type of plants/animals that live there?
- How would changing the conditions in a habitat affect plants?
- Choose materials to create clothes for teachers going to Antarctic (Teachers in the Freezer video clip).
- Can we speed up how quickly ice melts?
- Who can make their ice last the longest?

Philosophy for Children

English and Art (using Wild by Emily Hughes):

- Should wild animals be kept in captivity?
- What do we mean when we say something is 'wild'?
- Should we ever try to force our ideas onto others?

History and Geography (using archival footage of Amundsen's South Pole expedition from the National Geographic):

- Why do people try to be the first to achieve something?
- Should we always try to win, whatever the cost?

R.E.:

- Was it always easy for Jesus to show friendship?
- What is friendship?

Opportunities for Outdoor Learning

Geography:

- Introduce children to directions N S E W and allow opportunity to explore with compasses outside and follow directions.
- If weather is snowy, allow children to create their own Antarctic environment (otherwise indoors with false snow).

History:

- Children will act out the race to the South Pole on the school field.

Art:

- Use ice and natural materials to make own frozen pictures.

Science:

- Ice investigation – who can make their ice last the longest?

PSHE:

- Emergency search and rescue role play