

Maths

National Curriculum Links

Properties of Shape

- RtP (1G-1) Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another.
- RtP (1G-2) Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.
- 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 =.

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).

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.

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 =.

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

Measurement: Length and Height

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



Geometry: Position and Direction

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

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

English

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.

Possible Texts:

Non-fiction: Information books on castles; Information books on Northumberland

Fiction: Secret Tree Fort by Brianne Farley; 13 Storey Treehouse; Stories with a woodland theme; Stories about castles/knights

Poetry: Nature Trail by Benjamin Zephaniah; Poems inspired by animals and nature

History

Alnwick Castle and Harry Hotspur

National Curriculum Links

- Develop and awareness of the past, using common words and phrases relating to the passing of time.
- Know where people and events fit within a chronological framework.
- Identify similarities and differences between life in Alnwick in the past and now.
- Learn about changes within living memory.
- Learn about significant historical figures in the locality, like Harry Hotspur.

Learning Outcomes

Children will:

- Use timelines to understand the chronology of time. They can make a timeline of their own family events then extend this to show other historical happenings they know about, eg Grace Darling's rescue, Amelia Earhart's flight, then they can add when Alnwick Castle was built.
- Compare changes in castles by building models and drawing labelled pictures of old Motte and Bailey castles and Alnwick castle of today. List the similarities and differences.
- Find out about life in a castle from the past and compare to life today in their own homes.
- Find out about Alnwick Castle and other castles in Northumberland (Geography link).
- Research Harry Hotspur and find out why he is a significant figure in the area.

Science

National Curriculum Links

Living Things and their Habitats

Pupils should be taught to:

- 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:

- 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.
- 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 their 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.
- Construct simple food chains.
- Use scientific terminology (omnivore, herbivore, carnivore, producer, consumer, predator, prey).

Animals, including Humans

Children will:

- Learn about the basic needs of animals for survival.
- 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.

National Curriculum Links

Working Scientifically

Pupils should be taught to use the following practical scientific methods, processes and skills:

- Asking simple questions and recognising that they can be answered in different ways.
- Observing closely, using simple equipment.
- Performing simple tests.
- Identifying and classifying.
- Using their observations and ideas to suggest answers to questions.
- gathering and recording data to help in answering questions.

These opportunities for working scientifically are provided across years 1 and 2 so that the expectations in the National Curriculum programme of study can be met by the end of year 2. Pupils are not expected to cover each aspect for every area of study.

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?

Geography

Let's Explore Alnwick

National Curriculum Links

- Name, locate and identify characteristics of the four countries and capital cities of the United Kingdom and its surrounding area.
- Identify seasonal and daily weather patterns in the United Kingdom.
- 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 world maps, atlases and globes to identify the United Kingdom and its countries.
- Use simple compass directions (North, South, East, West) and locational and directional language to describe the location and features and routes on a map.
- 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 their school and its grounds and the key human and physical features of its surrounding environment.

Learning Outcomes

Children will:

- Use atlases and maps to locate Alnwick and the areas in which we live.
- Use atlases and maps to relate Alnwick to the location of countries and cities of the UK.
- Discuss well-known landmarks in Alnwick.
- Locate and find out about famous landmarks of each capital city.
- Use atlases, maps and aerial photographs to compare features of our area (beaches/coasts, towns/villages, farms/ports etc)
- Create a map of school grounds using observations and aerial photographs.
- Create a sketch map of their journey from home to school.

Design and Technology

Castles

National Curriculum Links

Pupils should be taught:

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 (cutting, shaping, joining and finishing).

Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

Evaluate

Explore and evaluate a range of existing products.

Evaluate their ideas and products against design criteria.

Technical Knowledge

Build structures, exploring how they can be made stronger, stiffer and more stable.

Explore and use mechanisms in their products.

Learning Outcomes

Children will:

- Investigate features of castles, including shape of the walls, functions of the rooms, drawbridges etc.
- Design their own castle incorporating some these features.
- Make their own model based on their design by cutting, shaping, joining and finishing.
- Evaluate their product and make improvements based on these evaluations.

Art & Design

Natural Sculptures

National Curriculum Links

Pupils should be taught:

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

Learning Outcomes

Children will:

- Observe patterns and shapes in our school outdoor environment.
- Use natural materials for different artistic purposes for eg. Sculptures, pictures, picture frames.
- Look at the work of sculptors, including Andy Goldsworthy, and recreate sculptures using similar techniques and patterns.

RE

Northumberland Agreed Syllabus

Theme: The Covenant.

Religion: Judaism

Key Question: How special is the relationship Jews have with God?

Learning Outcomes

Children will:

- Investigate promises and contracts; how do we seal agreements? How do we feel if they're broken? Find out about the story of Abraham and The Covenant.
- Find out about special Jews and ways Jews show their special relationship with God.

Theme: Rites of Passage and good works.

Religion: Judaism

Key Question: What is the best way for a Jew to show commitment to God?

Learning Outcomes

Children will:

- Draw a timeline of special events in their lives.
- Investigate special times in a Jew's life.

Computing

On-Screen Programming

National Curriculum Links

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.
- create and debug simple programs.
- use logical reasoning to predict the behaviour of simple programs.

Learning Outcomes

Children will:

- Shown how floor robots can be represented on digital devices.
- Begin to apply their knowledge of programming floor robots to controlling on-screen sprites.
- Create simple programs to control on-screen sprites.
- Find errors in their own and given programs.
- Predict the outcome of their own and given programs.

Possible Apps

Scratch Jr, BeeBot, BlueBot, Daisy, Lightbot, J2Code

Physical Education

Cricket (Summer 1)

Striking and Fielding (Summer 1)

Athletics and Fitness (Summer 2)

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

Striking and Fielding

Newcastle Foundation will lead PE sessions focussing on striking and fielding techniques whilst applying their fundamental movements and knowledge of simple tactics when participating in a range of team games.

Athletics and Fitness

Newcastle Foundation will lead PE sessions focussing on improving children's agility and speed when running, jumping and throwing, as well as teaching children how to compete against their peers in a competitive yet sporting way.

Cricket

Children will:

- Practise throwing and catching accurately.
- Apply their striking and fielding skills in cricket based games.
- Learn to follow rules which can be applied to cricket based games.

Music

Friendship Song

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

Learning Outcomes

Children will:

- Focus on keeping the beat/pulse.
- Listen to and appraise music.
- Accompany songs using tuned/untuned instruments.
- Compose music to accompany stories or poems.

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:

- *Describing different climate, landscape and landmarks (Geography).*
- *Explaining outcomes of investigations (Science).*

Mastering Maths

Opportunities for children to develop deep learning:

Geography

- Using positional and directional language during map work.

Computing

- Applying positional and directional knowledge and understanding when controlling on-screen sprites.

Science

- Making measurements of plants; recording and monitoring over time.
- Using thermometers in habitat investigations.

Design & Technology

- Making careful measurements with an element of precision when cutting and shaping.

Opportunities for Outdoor Learning

Geography:

- Make observations of Alnwick and compare land use in and around the town.
- Make castles using natural materials.

Maths:

- Make 2D and 3D shapes using natural materials.
- Measure length/height of objects in the outdoor environment.
- Timed races.

Art:

- Create art and sculptures using natural materials

Philosophy for Children

History

- What makes someone a heroic figure?

P.S.H.E.

- What should we do if we don't agree with our friends?

PSHE

Relationships (Building positive, healthy relationships)

Pupils should be taught:

- To identify their relationship with each member of their family
- Why it is important to share and cooperate.
- That there are lots of forms of physical contact and that some of this is acceptable and some is not.
- To identify some of the things that cause conflict with my friends.
- That sometimes it is good to keep a secret and sometimes it is not good to keep a secret.
- To recognise and appreciate people who can help me in my family, my school and my community.
- How to express appreciation for people.

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.
- About the natural process of growing from young to old and understand that this is not in their control.
- To recognise how their body has changed since they were a baby.
- To recognise the physical differences between boys and girls, use the correct names for parts of the body and appreciate that some parts of my body are private.
- That there are different types of touch.
- To identify what they are looking forward to when I move to my 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 3.

