Cumwhinton School Curriculum – Science Y1 SPR		
Year 1	NC Content	**Plants** Pupils should be taught to: -identify and name a variety of common wild and garden plants, including deciduous and evergreen trees -identify and describe the basic structure of a variety of common flowering plants, including trees **Animals Including humans** Pupils should be taught to: -identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals -identify and name a variety of common animals that are carnivores, herbivores and omnivores describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets) -identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. **Everyday materials** Pupils should be taught to: -distinguish between an object and the material from which it is made -identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock -describe the simple physical properties of a variety of everyday materials -compare and group together a variety of everyday materials on the basis of their simple physical properties **Seasonal Changes** Pupils should be taught to: -observe changes across the four seasons -observe and describe weather associated with the seasons and how day length varies.

Scientific Knowledge & Understanding Science Enquiry & Working Scientifically Uses & Implications of Science today and for the future

Mapping across the Year

	AUTUMN	SPRING	SUMMMER
Scientific Knowledge & Understanding	Seasonal Change x 2 sessions Seasonal Change Observe changes across the 4 seasons Observe and describe weather associated with the seasons and how day length varies Observations of the seasons and the weather will take place across the whole year, but the specific content & vocabulary teaching around day length, naming seasons etc. will take place here.	Seasonal Change x 2 sessions Seasonal Change Observe changes across the 4 seasons Observe and describe weather associated with the seasons and how day length varies Seasonal change - new season & how seasons affect plants	Seasonal Change x 2 sessions Seasonal Change Observe changes across the 4 seasons Observe and describe weather associated with the seasons and how day length varies Seasonal change - new season & how seasons affect animals' behaviour
	Everyday materials Distinguish between an object and the material from which it is made Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock Describe the simple physical properties of a variety of everyday materials Compare and group together a variety of everyday materials on the basis of their simple physical properties	Plants Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees Identify and describe the basic structure of a variety of common flowering plants, including trees	Animals including Humans Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals Identify and name a variety of common animals that are carnivores, herbivores and omnivores Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets) Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense
Science Enquiry & Working Scientifically	Asking simple questions and recognising that they can be answered in different ways Observing closely, using simple equipment Performing simple tests Gathering and recording data to help in answering questions	Identifying and classifying Observing closely, using simple equipment Asking simple questions and recognising that they can be answered in different ways Gathering and recording data to help in answering questions	Identifying and classifying Observing closely, using simple equipment Asking simple questions and recognising that they can be answered in different ways Gathering and recording data to help in answering questions
Uses & Implications of Science today and for the future	Demonstrate their knowledge in different ways e.g. making a weather forecast video, writing seasonal poetry, creating seasonal artwork Test the properties of objects e.g. absorbency of cloths, strength of party hats made of different papers, stiffness of paper plates, and waterproofness of shelters. They should work scientifically to explore the answers to questions such as: What is the best material for an umbrella? For lining a dog basket? For curtains? For a gymnast's leotard?	Demonstrate their knowledge in different ways e.g. making a weather forecast video, writing seasonal poetry, creating seasonal artwork Where possible, children should observe the growth of flowers and vegetables they have planted themselves.	Demonstrate their knowledge in different ways e.g. making a weather forecast video, writing seasonal poetry, creating seasonal artwork Look for patterns between people e.g. Do people with big hands have big feet? Investigate human senses e.g. Which part of my body is good for feeling, which is not? Which food/flavours can I identify by taste? Which smells can I match?

CONCEPTUAL SCHOOL AMBITION DRIVERS			
	EYFS & KS1	**LKS2**	**UKS2**
AUT	Diversity	Fairness	Individuality
SPR	Truth	Change	Resilience
SUM	Responsibility	Equality	Sustainability

Science – SEASONAL CHANGE – Throughout the whole year.
YEAR 1
HUMANITY – Diversity

Scientific Knowledge & Understanding Science Enquiry & Working Scientifically Uses & Implications of Science today and for the future

	NC	**CUMWHINTON CURRICULUM**
Finding out (Facts & knowledge)	Seasonal Change Observe changes across the 4 seasons Observe and describe weather associated with the seasons and how day length varies Observations of the seasons and the weather will take place across the whole year, but the specific content & vocabulary teaching around day length, naming seasons etc. will take place here. Seasonal change - new season & how seasons affect plants Seasonal change - new season & how seasons affect animals' behaviour	Teach the 12 months of the year are January, February, March, April, May, June, July, August, September, October, November and December. These 12 months fit into four seasons are spring, summer, autumn and winter. The months of the year repeat in a predictable cycle. The seasons repeat in a predictable cycle. The four seasons are spring, summer, autumn and winter. Different events take place in different seasons. The weather changes from season to season. We wear different clothes in different seasons as the weather changes. Plants change in different ways as the seasons change. There are different types of weather. Types of weather include cloudy and overcast, snow, sunny, sunny with few clouds, thunder and lightning, and rain. As the seasons change, so do the number of hours of daylight, the Sun rises and sets at different times. Days in spring and autumn receive similar amounts of daylight.
Using (Applying & analysing)	Identifying and classifying Observing closely, using simple equipment Asking simple questions and recognising that they can be answered in different ways Gathering and recording data to help in answering questions	Throughout the year as the seasons change. What is the weather like in … ? What clothes would be best for this season? What do the trees and plants look like in this season? What happens to wildlife/ animals? How long are the days? Measure temperature/ rainfall/ wind gauge Create a weather diary and compare weather in different seasons. Seasonal walk around school grounds/ village to observe changes.
Concluding (Evaluating & summarising)	Demonstrate their knowledge in different ways e.g. making a weather forecast video, writing seasonal poetry, creating seasonal artwork	Observe and describe weather associated with the seasons and how day length varies. Weather diary/forecast video Seasonal poetry, Observe closely using simple equipment, Thermometer, Rain gauge

Science – SPRING YEAR 1 – Plants

INNOVATION – Truth Scientific Knowledge & Understanding Science Enquiry & Working Scientifically Uses & Implications of Science today and for the future		
	NC	**CUMWHINTON CURRICULUM**
Finding out (Facts & knowledge)	Plants Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees Identify and describe the basic structure of a variety of common flowering plants, including trees	Chn learn that bulbs and seeds can grow into mature plants. They identify whether they are looking at a bulb or a seed. Observe, describe and compare a variety of seeds and bulbs. Chn to explore ways of grouping garden & wild plants and think about whether or not they have seen them before. Common garden plants in the United Kingdom include daffodil, rose, lavender, ivy, tulip, poppy, bluebell, strawberry and crocus. Common wild plants in the United Kingdom include dandelion, daisy, nettle, dock, thistle, buttercup, bramble, fern and St. John's wort. Trees can be identified from their shapes, leaves, fruit and seeds. Introduce language deciduous and evergreen Deciduous – a tree that sheds its leaves annually. Evergreen – retains its green leaves throughout the whole year. Some trees lose their leaves in the autumn, while some keep their leaves all year round. Chn to think about whether the trees lose their leaves or not in the autumn and whether or not the trees are familiar. Common trees in the United Kingdom include horse chestnut, oak, sycamore, willow, apple, chestnut, beech and fir. Chn learn the four main parts of a flowering plant - flower, stem, leaf and roots. They discuss the function of each of the four parts. The main parts of a plant include flower, stem, leaves and roots. The parts of a plant have different functions. The flower allows the plant to reproduce. The stem allows the plant to stand upright and transport water from the roots. The leaves help the plant to make its own food using sunlight. The roots absorb water and nutrients from the soil and anchor the plant in the ground.
Using (Applying & analysing)	Identifying and classifying Observing closely, using simple equipment Asking simple questions and recognising that they can be answered in different ways Gathering and recording data to help in answering questions	Some common plants in the UK include dandelion, fern, sycamore, oak, and horse chestnut. Children to use a tally chart to investigate the local area and find out how many of 5 different plants there are. They can show their results on a simple pictogram. Then perform some data handling and analysis, considering which plant was the most common in our area.
Concluding (Evaluating & summarising)	Where possible, children should observe the growth of flowers and vegetables they have planted themselves.	What are the names of trees that grow in our school grounds? What flowers grow on our school field/park? What is the most common plant around our school? What do I know about plants? What are the 4 main parts of a plant? Non Statutory Pupils might work scientifically by: observing closely, perhaps using magnifying glasses, and comparing and contrasting familiar plants; describing how they were able to identify and group them, and drawing diagrams showing the parts of different plants including trees. Pupils might keep records of how plants have changed over time, for example, the leaves falling off trees and buds opening; and compare and contrast what they have found out about different plants.