



St Charles' Catholic Primary School Early Years Understanding the World The Natural World Curriculum Nursery

St Charles' Catholic Primary School Nursery Understanding the World Curriculum Overview

Our Understanding the World curriculum has been developed to compliment our Literacy curriculum to create over arching themes that engage and embed learning.

The curriculum builds on prior knowledge so that children remember more.

Through our RE curriculum -Come and See children explore the Catholic and other faiths complementing the learning in our curriculum.

Understanding the World curriculum is greatly enhanced though our school forest school provision.

Children are exposed to real-life experience for example when learning about lifecycles we enage the children with living eggs (chicks) and butterfly gardens.

Progressive continous provision curriculum planning that builds on children's interest.

Reflective planning following children's interests and using minute by minute formative ongoing assessments to plan opportunities for children to achieve their next steps in learning.

Termly summative assessments that inform planning.

Technology is used to engage and support children's learning in all areas of the curriculum

Whole school events such as STEM week. Involvement in our Parish community and school trips linked to our themes to engage the children in their learning and increase cultural capital.

Characteristics of Learning

Our provision promotes engagement, motivation and thinking.

Parents as Partners

We include parents in their child's The World learning through including them when learning about families and inviting them in to school to share their experiences as well as online learning journals.

Enabling Environments

Carefully planned organised and engaging environments to support independent learning through play.



Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them – from visiting parks, libraries and museums to meeting important members of society such as police officers, nurses and firefighters. In addition, listening to a broad selection of stories, nonfiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children's vocabulary will support later reading comprehension.

Statutory Framework

	Understanding the World The Natural World		
Long Term Plan	Nursery	Reception	
Autumn 1	Autumn and Plants	Change	
	How do trees change in autumn?	Why is it cold outside?	
	Science	Science	
	Plants and Seasons	Plants and Seasons	
Autumn 2	Textures	Materials	
	What can my hands feel?	What's the problem with a chocolate spoon?	
	Science	Science	
	Materials	Materials	
Spring 1	Winter Bears	Winter Cave	
	What do bears do in winter?	Where have all the bats gone?	
	Science	Science	
	Seasons and Animals Including Humans	Seasons and Animals Including Humans	
Spring 2	Growing	Spring and Plants	
	How does a chicken change?	How do butterflies change?	
	Science	Science	
	Animals Including Humans, Seasons and Plants	Animals Including Humans, Seasons and Plants	
Summer 1	How Things Work	Patterns	
	Which objects make noise?	How does the moon make a pattern?	
	Science	Science	
	Materials and Working Scientifically	Materials and Working Scientifically	
Summer 2	Potions and Motions	I am a scientist!	
	How can you make rice dance?	Can a car float?	
	Science	Science	
	Working Scientifically	Working Scientifically	

The Natural World Curriculum

This document lists typical development at each stage in order for practitioners to judge if children are on track for expected development. It is not used to limit our curriculum to specific objectives.

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Prior Learning	Nursery Birth to 5 Matters	Reception Birth to 5 and ELG					
The Natural World Repeat actions that have an effect. Explore materials with different properties. Explore natural materials, indoors and outside. Explore and respond to different natural phenomena in their setting and on trips.	The Natural World Use all their senses in hands on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Explore how things work. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice	Children in Reception: The Natural World Explore the natural world around them. Describe what they see, hear and feel whilst outside. Recognise some environments that are different to the one in which they live. Understand the effect of changing seasons on the natural world around them. ELG: The Natural World Children at the expected level of development will: - Explore the natural world around them, making observations and drawing pictures of animals and plants; - Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class; - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.					

	Autumn 1 Nursery – How do trees cha			
Prior Learning Nurs Birth to 5			Future learning - Reception Birth to 5 and ELG	
Range 1-4 The Natural World Explore and respond to different natural phenomena in their setting and on trips.	Range 4-5 The World Use all their senses in hands on exploration of natural materials. Plant seeds and care for growing plants. Begin to understand the need to respect and care for the natural environment and all living things. Talk about the differences between materials and changes they notice		Range 6 The Natural World Explore the natural world around them. Describe what they see, hear and feel whilst outside. Understand the effect of changing seasons on the natural world around them. ELG: The Natural World Children at the expected level of development will: - Explore the natural world around them, making observations and drawing pictures of animals and plants; - Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class; - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	
Key Knowledge		Wha	at would this knowledge look like?	
Autumn is a time of change in the natural environment. The weather becomes colder and there is more chance of rain and wind. Clothing has to be changed so that we can stay warm. Trees change as leaves change colours and fall off.		Can talk about clotheCan describe the char	fferent types of weather s that keep them warm	

Key Skills	What will these skills look like?	
Make observations of leaves, plants and trees Make observations and talk about the weather Investigate colour changes in leaves	 Can talk about what trees and plants look like when playing of the can talk about different types of weather that they observe a songs, role-play and matching activities Can talk about and use art to explore the changes in leaves Can colour match leaves 	
Vocahulawi	Decourses / Faulinment Suggested Visite / Visit	

Vocabulary	Resources/Equipment	Suggested Visits / Visitors
	Magnifying glasses	Forest School Nature Walk
Colours Leaf Leaves Green Brown Orange Red Wind	Leaves	
Rain Hat Gloves Umbrella Coat Warm Cold	Autumn clothing and accessories	
	Autumn small world	

		sery – Textures by hands to feel?	
Prior Learning Nur Birth to 5			Range6 The Natural World Explore the natural world around them. Describe what they see, hear and feel whilst outside. Understand the effect of changing seasons on the natural world around them. ELG: The Natural World Children at the expected level of development will: - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.
Range 1-4 The Natural World Repeat actions that have an effect. Explore materials with different properties. Explore natural materials, indoors and outside. Explore and respond to different natural phenomena in their setting and on trips.	Range 4-5 The Natural World Use all their senses in hands on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Explore how things work. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice.		
Key Knowledge			at would this knowledge look like?
The sense of touch allows us to feel different textures. We use our hands to feel different textures. Materials can for example feel hard, soft, furry, bumpy, sticky, lumpy and smooth. There are different types of materials such as wood, plastic and metal. Some materials can be changed e.g. stretched and bent whilst others cannot.			

 Key Skills To use the sense of touch to feel different materials and objects To investigate how different materials feel To investigate and sort objects into textures To investigate and sort objects into simple materials 		 What will these skills look like? Can notice and talk about differences in the objects that they touch in practical experiences Can talk about what different materials feel like e.g. material squares Can sort and match objects into different textures for example hard and soft Can sort and match objects into the materials that they are made from e.g. sorting objects into wood and plastic groups 		
Vocabulary Feel Hands Sense Object Material Wood Plastic Metal Touch Hard Soft Furry Spiky Sticky Smooth Rough Bumpy Lumpy Resources/ Range of household objects Material squares Objects that can be sorted wood, plastic and metal.				Suggested Visits / Visitors

Prior Learning Birt		rsery 5 Matters	Future learning - Reception Birth to 5 and ELG
Range 1-4 The Natural World Explore natural materials, indoors and outside. Explore and respond to different natural phenomena in their setting and on trips.	Use all their senses in hands on exploration of natural materials. Talk about what they see, using a wide vocabulary. Begin to understand the need to respect and care for the natural environment and all living things. Talk about the differences between materials and changes they notice.		Range 6 The Natural World Explore the natural world around them. Recognise some environments that are different to the one in which they live. Understand the effect of changing seasons on the natural world around them. ELG: The Natural World Children at the expected level of development will: - Explore the natural world around them, making observations and drawing pictures of animals and plants; - Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class; - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.
Key Knowledge		W	nat would this knowledge look like?
Winter is a time of change in the natural environment. Trees and plants are bare. The weather becomes colder and there is more chance of snow. Clothing has to be changed so that we can stay warm. Cold weather changes natural properties e.g. water into ice Animals change their behaviour in winters to survive the cold conditions. Bears collect food and hibernate so that they can survive the winter.		Can talk about clothCan describe the chaCan talk about how	n as winter anges in weather in winter es that keep them warm anges in the natural environment animals change their behaviour in the winter ears hibernate for the winter

Key Skills	What will these skills look like?
 Make observations of leaves, plants and trees Make observations of how animals adapt to the winter through the use of photos and the natural world. Make observations and talk about the weather Investigate water and ice 	 Can talk about and use art to share what trees and plants look like in winter Can talk about different types of weather that they experience through discussions, songs, art and role-play Can talk about different animals behaviours in the winter whist using small world resources Can describe changes in water and ice when exploring practically

Vocabulary	Resources/Equipment	Suggested Visits / Visitors
Weather Season Autumn Summer Winter Tree	Magnifying glasses	Forest School Nature Walk
Wind Rain Snow Ice Hat Gloves Coat Warm Cold	Fake Snow	
Freezing Melting Hibernate Bear	Animal figures	
	Ice	
	Winter clothing and accessories	
	Winter small world	

How does a chi Prior Learning Nurs Rirth to 5		sery	Future learning - Reception Birth to 5 and ELG Range 6 ELG: The Natural World Children at the expected level of development will: - Explore the natural world around them, making observations and drawing pictures of animals and plants; - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.
Range 1-4 The Natural World Explore natural materials, indoors and outside. Explore and respond to different natural phenomena in their setting and on trips.	Range 4-5 The Natural World Use all their senses in hands on exploration of natural materials. Talk about what they see, using a wide vocabulary. Explore how things work. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Talk about the differences between materials and changes they notice.		
Key Knowledge		Wha	t would this knowledge look like?
Spring is a time of change in the natural environment. Trees plants and flowers change and start to grow and bloom. The weather becomes warmer. Animals change and grow just like humans. The lifecycle of chicks from egg, to hatching, to chick and adult chicken.		Can describe the chanCan talk about how trospring	as spring Iges in weather in spring Iges in the natural environment Iges, plants and flowers start to change and grow in Iges in the natural environment Iges

 Key Skills Make observations of trees, plants and flowers Make observations and talk about the weather Make observations of the lifecycle of a chicken through Living Eggs in class 		 What will these skills look like? Can talk about and use art to share what trees and plants look like in spring Can talk about the changes and different types of weather in spring that they experience and notice in books and pictures Can describe the changes in a chicken's lifecycle through real life experience of living eggs and small world activities 	
Vocabulary	Resources/	Equipment	Suggested Visits / Visitors
Weather Season Autumn Summer Winter Spring Tree Plant Flower Change Grow Growing Different Wind Rain Snow Sun Sunny Warm Cold Heat Chicken Chick Egg Hatch Hatching	Magnifying glasses Plants/flowers to observe Animal figures/Small world Seeds Living Eggs Flower Shop role play		Living Eggs Summer Farm Visit

		- How Things Work s make noise?	
Prior Learning	Nursery Birth to 5 Matters		Future learning - Reception Birth to 5 and ELG
Range 1-4 The Natural World Repeat actions that have an effect. Explore materials with different properties.	Range 4-5 The Natural World Use all their senses in hand materials. Explore collections of mate different properties. Talk about what they see, use Explore how things work. Explore and talk about different about the differences in the changes they notice.	rials with similar and/or asing a wide vocabulary.	Range 6 ELG: The Natural World Children at the expected level of development will: - Understand some important processes and changes i the natural world around them, including the seasons and changing states of matter.
Key Knowledg	е	Wha	at would this knowledge look like?
People use objects for different purposes for example a fork is used to pick up food Objects are made from different materials and may have many parts Some objects make noise when they are touched or moved Some objects use electricity We hear noise with our sense of hearing through our ears Instruments can be made to create noise There are a range of different instruments some of which use electricity		 Can talk about difference such as wood Can describe what material was a constant that if To understand that the To be able to use and 	ojects and what they are used for ent parts of object and name some simple materials aterials feel like such as soft or hard they move or touch some objects thy make noises arey use their ears to hear noises name some musical instruments ome objects use batteries and electricity to work

 Key Skills To investigate how a range of objects are used To observe the parts that objects are made from To investigate how objects, make sounds To create their own instruments that make sounds 		What will these skills look like? Can match objects to their purpose Can talk about parts of objects and what the texture feels like in practical experiences Can move and touch objects to create sounds Can experiment to create their own instruments	
Vocabulary	Resources/	Equipment	Suggested Visits / Visitors
	Range of household objects Mystery unusual objects Loose parts of old technolog		Musician

Range of musical instruments Musical/Band/Stage Role-play

	Summer 2 Nursery – How can you m			
Prior Learning	Prior Learning Nursery Birth to 5 Matters Range 4-5 Natural World eat actions that have an effect. Nursery Birth to 5 Matters Range 4-5 The Natural World Use all their senses in hands on exploration of natural		Range 6 The Natural World Explore the natural World Children at the expected level of development will: - Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	
Range 1-4 The Natural World Repeat actions that have an effect. Explore materials with different properties.				
Key Knowledge		What would this knowledge look like?		
Experiments are carried out in science by scientist. Predictions are clever guesses about what you think might happen. Materials and ingredients can be combined to create reactions in experiments: https://www.funathomewithkids.com/2014/08/how-to-get-best-baking-soda-and-vinegar.html		 To understand wh 	experiment appropriately	

 Key Skills To make their own predictions To carry out experiments with the support of an adult To observe changes when ingredients or materials are combined To consider why changes are occurring 		 What will these skills look like? Can talk about what they think might happen (make a prediction) Engage and participate in different experiments Can talk about the changes that they observe in practical experiments Can start to ask why questions with the support of an adult 	
Vocabulary	Resources/Equipment		Suggested Visits / Visitors
Science Scientist Experiment Prediction Change Ingredients Materials Why	Resources needed for individual experiments Rice Experiment linked to Big Question — Container, rice, baking soda and vinegar Lab coats and googles Scientist role-play resources		Parent visit - Scientist

Nursery – Understanding the World Continuous Provision Curriculum Planning

Resources/Area	How is it organised and why	Intended Learning Outcomes	Link to EYFS / Research / C of EL	Adult Role
Magnifying glasses Tweezers Magnets Torches A tray/container that items can be added to regularly for children to explore e.g. flowers, magnetic/non- magnetic objects Sectioned containers Real plants Natural objects Smell boxes Science Books Feathers Oasis Feely bags Pictures showing how to use tools Watering cans Spray bottles Light table Dominos Ice Objects frozen in ice Filled bottles with various substances and colours	Curiosity cube area —linked to current theme. Clearly labelled resources. Resources available in outdoor area to encourage learning about nature	Use all their senses in hands on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Explore how things work. Plant seeds and care for growing plants. Understand the key features of the life cycle of a plant and an animal. Begin to understand the need to respect and care for the natural environment and all living things. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice. Play with others co-operatively. Develop fine and gross motor skills. Develop communication and language skills.	Investigating chain reactions (balls/ dominoes, cylinders) linked to MATHS Responding to the environment using different senses, linked to PD, UW Exploring light as a tool for investigation by using the light and reflective mobiles, linked to UW Explore concrete objects and the descriptive words that represent them: soft, hard, rough, smooth, silky and so on Examining items closely, linked to UW Weighing and measuring natural objects, linked to MATHS Testing out simple machines (ramps and pulleys), linked to MATHS Experimenting with colour and change linked to EAD Investigating how materials can transform linked to UW Making choices, accepting challenges and being open to change linked to PSED Discovering that information can be retrieved from books to discover and explore, linked to Literacy Using tools to support experiments (magnifiers and tweezers), linked to PD Caring for living things (i.e. plants), linked to PSED & UW Classifying objects according to attributes of size, species, colour and so on, linked to UW Talking about the (here and now) investigative process, linked to CL Be willing to have a go Cof EL because its irresistible Children have and develop their own ideas, are able to make links between ideas and develop a range of strategies for doing things Cof EL Children concentrate and keep on trying when they encounter difficulties and enjoy their achievements Cof EL Supports schemas	Adult to observe children exploring scientific equipment, if appropriate model ways how to use the equipment, question children and support their learning. encourage children to look at non-fiction books, questioning them. Adult to read books to children when requested. Adult to observe children exploring the different items, if appropriate question children and support their learning. Model using resources Model and show passion for investigating Model thinking out loud to encourage children to talk about the "here and now" Develop communication and language vocabulary Questions to stimulate ideas and add challenge What might happen if/when? Tell me how? Can you? I wonder what would happen if?

Nursery – Water and Sand Continuous Provision Curriculum Planning

Resources/Area	How is it organised and why	Intended Learning	Link to EYFS / Research / C of EL	Adult Role
	and willy	Outcomes		
A range of tools such as spades, rakes etc. Containers, jugs, cups, buckets, sieves, colanders, watering cans, bottles, tea pots, funnels etc. Sand and water toys e.g. water wheels, sand moulds, boats Dustpan and brush Pipits Aprons Shaving foam, hair gel, soap flakes, food colouring, jelly powder etc. Shells, tree cookies, corks and other natural materials Nets Other items such as plastic animals, coins, letters etc. Utensils e.g. balloon whisks, pipettes etc. Tubing Sponges Babies, baby clothes, clothes line, pegs etc.	In a dedicated labelled space, ideally with a photo, so that children can access it to clean up and place back in the correct space. Aprons for children at the water/sand area, hung up at a child accessible height. Resources used to link to size. Shadowing used to support children in putting resources away. Additional resources planned to support theme and overarching principles.	Use all their senses in hands on exploration of natural materials. Explore collections of materials with similar and/or different properties. Talk about what they see, using a wide vocabulary. Explore how things work. Explore and talk about different forces they can feel. Talk about the differences between materials and changes they notice. Explore core maths concepts related to size and shape. Play with others cooperatively. Develop fine and gross motor skills. Develop communication and language skills.	Having clearly labelled places for resources encourages respect for resources and the environment (PSED) Selecting resources enables children to express their preferences, likes and dislikes (PSED) A variety of authentic familiar resources that reflect their everyday life allows children to process, practice and make sense of their world UW Children learn about responsibility and self-efficacy through washing dolls clothes/drying them for dolls (UW) Children learn about keeping the environment and themselves safe through cleaning up spillages with buckets and sponges provided (PD) Magnifying glasses allow children to explore and investigate objects close up (UW) Using everyday resources in different ways and for different purposes (UW) Cylinders invite pouring, scooping, aligning with children's natural curiosity with holes (PD) Children have and develop their own ideas, are able to make links between ideas and develop a range of strategies for doing things Cof EL Supports schemas	Adult to encourage the children to carefully pour water/sand, questioning them about capacity. Adult to observe children using the tools appropriately, questioning them when necessary. Adult to initially model brushing up, and then remind children to brush up after themselves if necessary. Adult to remind children to wear aprons and to help if needed to put them on/take them off. Adult to remind children to hang them back up once finished. Adult to add different items to the sand/water tray occasionally. Question the children about the new materials. How does it feel/what does it look like etc. Adult to question children when using these materials, how does it feel, how many corks do you have etc. Adult to observe the children using the different tubes, questioning their learning, e.g. which tube is longer etc. Adult to observe the children using the sponges and questioning their learning, which sponge holds more water etc. Adult to model how to wash the babies/baby clothes, questioning the children throughout. Teach children the skill of using resources Questions to stimulate ideas and add challenge What might happen if/when? Tell me how? Can you? I wonder what would happen if? Language linked to key learning Size (large/medium/small/smaller) Capacity (full/empty) Direction (up/down) Forces (fast/slow) Order (first/next/last) Comparatives (more/less, faster/slower, bigger/ smaller)