

Science

Educational Programme - Understanding the World

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, non-fiction, 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.

	Development Matters		Development Matters		Statutory Framework
	3 & 4-year-olds will be learning to:		Children in Reception will be learning to:		Early Learning Goals
Understanding the 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. Begin to make sense of their own life-story and family's history. 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. 	•	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.	• • • • • • • • • • • • • • • • • • •	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.
180	Understand 'why' questions, like: "Why do you think the caterpillar got so fat?"		Learn new vocabulary. Ask questions to find out more and to check what has been said to them. Use talk to work out problems and organise thinking and activities. Explain how things work and why they might happen. Use new vocabulary in different contexts.	Lis	stening Attention & Understanding Make comments about what they have heard and ask questions to clarify their understanding.
PSED	Make healthy choices about food, drink, activity and toothbrushing.	•	Know and talk about the different factors that support their overall health and wellbeing: regular physical activity, healthy eating, toothbrushing, sensible amounts of 'screen time', having a good sleep routine, being a safe pedestrian	PS •	ED - Managing Self Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.



***	E	NURSERY	LONG TERM	PLAN 21-22		
	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
GENERAL THEMES	ALL ABOUT ME!	LET'S CELEBRATE!	TAKE ONE PICTURE!	GROWING!	AMAZING ANIMALS!	OUR WONDERFUL WORLD!
UNDERSTANDING THE WORLD	- from visiting parks, libraries and muse	eums to meeting important members of	f society such as police officers, nur erse world. As well as building impo	e frequency and range of children's person ses and firefighters. In addition, listening t ortant knowledge, this extends their familia Ill support later reading comprehension.	o a broad selection of stories, non-fiction,	rhymes and poems will foster their
RE/FESTIVALS Our Curriculum enables children to develop a positive sense of themselves and others and learn how to form positive and respectful relationships. They will begin to understand and value the differences of	I enjoy joining in with family customs and routines Which people are special and why? Being special: where do we belong? Belonging to their family Being part of the Chapel End family Which stories are special and why? Diwali	I can remember and talk about significant events in my own experience What times are special and why? Which stories are special and why? Christmas	In pretend play I can imitate everyday actions and events from my own family and cultural background What times are special and why? Chinese new year	I can recognise similarities and differences What times are special and why? Which stories are special and why? Easter What places are special and why? Church at Easter	I know that I have similarities and differences that connect me to an distinguish me from others What is special about our world? Awe and wonder: growth and chang of animals	responsibility and membership of a community What is special about our
individuals and groups within their own community. Children will have opportunity to develop their emerging moral and cultural awareness.	I am interested in photographs of myself and familiar people and objects I am curious about people and show interest in stories about myself and my family I can talk about what I was like when I was a baby	- I show interest in different occupations (Eg: fire fighters/nurse/police officers) - I enjoy celebrating my birthday and that of others - I can make observations about my immediate environment - I can, in pretend play, imitate everyday actions and events from own famlly and cultural background, e.g. making and drinking tea.	I can begin to make sense of my own life-story and family's history I can identify where things belong in my environment Eg: where my bottle/coat/painting goes	I can talk about environments in stories I can talk about places I have visited (e.g.: the park/ASDA) I can follow positional language instructions I am beginning to notice changes in my environment	I can see my new friends have similarities and differences that connect them to, and distinguis them from, others I can talk about places in an around school -	t positional language h - I am beginning to talk about and



3Mc		NURSERY	LONG TERM PL	an 21-22			
10 AAA /m	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2	
GENERAL THEMES	ALL ABOUT ME!	LET'S CELEBRATE!	TAKE ONE PICTURE!	GROWING!	AMAZING ANIMALS!	OUR WONDERFUL World!	
COMMUNICATION AND LANGUAGE Talk to parents about what language they speak at home, try and learn a few key words and celebrate multilingualism in your setting.	The development of children's spoken language underpins all seven areas of learning and development. Children's back-and-forth interactions from an early age form the foundations for language and cognitive development. The number and quality of the conversations they have with adults and peers throughout the day in a language-rich environment is crucial. By commenting on what children are interested in or doing, and echoing back what they say with new vocabulary added, practitioners will build children's language effectively. Reading frequently to children, and engaging them actively in stories, non-fiction, rhymes and poems, and then providing them with extensive opportunities to use and embed new words in a range of contexts, will give children the opportunity to thrive. Through conversation, story-telling and role play, where children share their ideas with support and modelling from their teacher, and sensitive questioning that invites them to elaborate, children become comfortable using a rich range of vocabulary and language structures.						
Whole EYFS Focus – C&L is developed throughout the year through high quality interactions, daily group discussions, sharing circles, PSHE times, stories, singing, speech and language interventions, EYFS productions, DAILY STORY TIME USING HIGH QUALITY TEXTS (FROM THE EYFS BRILLIANT READS LIST)	Rhymes of the week Signs of the week Settling in activities Making friends Show an interest in the lives of other people - I can respond to my name and change my activity when encouraged - I can use everyday words to talk about people I know - I can follow simple instructions with visuals - I can listen and respond to adults and peers Key vocab: colours, nursery areas, adult names, rules & routines	Rhymes of the week Signs of the week I can follow two-step simple instructions with visuals I can concentrate for slightly longer periods I can join in with a small group I can remember and join in with stories and rhymes Key vocab: celebrations, describing words, food/ingredients	Rhymes of the week Signs of the week Settling in activities (Rising Threes) - I can speak in 2/3/4 word sentences - I can understand more simple questions and answer appropriately - I can express desires, feelings and needs - I can begin to hold two- way conversations with adults and peers Key vocab: seasonal language, revisit colour, light & dark	Rhymes of the week Signs of the week - I can begin to understand and ask why and how questions - I can remember and use new words - I can engage in imaginary role-play sometimes building stories around objects and toys Key vocab: Chick life cycle, planting/growing, recycling	Rhymes of the week Signs of the week Settling in activities (Rising Threes) - I can explain my own thinking/ideas - I can describe the story settings and characters - I can join in with the repeated lines and refrains - I can use language as a powerful means of widening contacts and sharing feelings Key vocab: Frog life cycle, seasonal changes, animals and habitats	Rhymes of the week Signs of the week Signs of the week - I can communicate effectively with my peers and adults - I can follow three-step simple instructions, sometimes without visuals - I can anticipate key events in stories - I can take turns in small groups - I can ask simple questions and wait for a response Key vocab: emotions, positional language/prepositions. revisit colour.	



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	AUTUMN 1	Autumn 2	SPRING 1	Spring 2	SUMMER 1	SUMMER 2		
GENERAL THEMES	ALL ABOUT ME!	LET'S CELEBRATE!	TAKE ONE PICTURE!	GROWING!	AMAZING ANIMALS!	OUR WONDERFUL WORLD!		
PERSONAL, SOCIAL AND EMOTIONAL DEVELOPMENT	the important attachments that shape their social world. Strong, warm and supportive relationships with adults enable children to learn now to understand their own feelings and those of others. Children should be supported to manage emotions, develop a positive sense of self, set themselves simple goals, have confidence in their own abilities, to persist and wait for what they want and direct attention as necessary. Through							
MANAGING SELF SELF REGULATION MAKING RELATIONSHIPS	SCARF: Me and My Relationships Marvellous me I'm special People who are special to me Naming different feelings, thinking about how to feel with 'not so good feelings', know some self-care techniques) Know that some actions and words can hurt others feelings. Handwashing Class rules: Behavioural expectations in the class/boundaries set Class rules I can separate from my main carer with support I can distract myself when I am upset I know about oral hygiene	SCARF: Valuing Difference Me and my friends Friends and family Including everyone Independence: selecting and putting back own and school belongings - I can express my own feelings - I am aware of mu own feelings and am beginning to understand that some actions and words can hurt other's feelings - I can demonstrate friendly behaviour and form good relationships with adults and peers	SCARF: Keeping myself safe People who help me keep safe Safety indoors and outdoors What's safe to go in my body? Class rules: Behavioural expectations in the class/boundaries set - I can separate from my main carer with support (Rising Threes) - I can distract myself when I am upset (Rising Threes) - I can use an adult as a secure base - I can begin to accept the needs of others and can take turns and share resources - I can show confidence in asking adults for help	SCARF: Rights and responsibilities Looking after myself Look after others Look after my environment Healthy eating: Fruit kebabs/making a fruit smoothie - I am beginning to understand about foods that are healthy and unhealthy - I can express my own preferences and interests - I can respond to a few appropriate boundaries	SCARF: Being my best What does my body need? I can keep trying I can do it Importance of exercise Being kind to living creatures Taking care of animals (frogs/butterflies) - I can separate from my main carer with support (Rising Threes) - I can distract myself when I am upset (Rising Threes) - I can use an adult as a secure base (Rising Threes) - I am confident to talk to other children hen playing - I can usually tolerate delay when my needs are not immediately met - I can seek out others to share experiences - I welcome value and praise for what I have done	SCARF: Growing and changing Growing and changing in nature When I was a baby Girls, boys and families Transition into Reception School readiness I enjoy the responsibility of carrying out small tasks I can select and use activities and resources independently I can follow rules and understand why they are important I understand that my wishes my not always be met I am confident and outgoing with familiar people in the safe context of my setting		



**	RECEPTION LONG TERM PLAN 21-22							
	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2		
GENERAL THEMES	ALL ABOUT ME!	LET'S CELEBRATE!	TAKE ONE PICTURE!	GROWING!	AMAZING ANIMALS!	OUR WONDERFUL WORLD!		
UNDERSTANDING THE WORLD	Understanding the world involves guiding child visiting parks, libraries and museums to meetin, our culturally, socially, technologically and eco	g important members of society such as ogically diverse world. As well as buildin	police officers, nurses and firefight g important knowledge, this exten will support later read	ers. In addition, listening to a broad selecti ds their familiarity with words that support ing comprehension.	ion of stories, non-fiction, rhymes and poor t understanding across domains. Enriching	ems will foster their understanding of g and widening children's vocabulary		
Our RE Curriculum enables children to develop a positive sense of themselves and others and learn how to form positive and respectful relationships. They will begin to understand and value the differences of individuals and groups within their own community. Children will have opportunity to develop their emerging moral and cultural awareness.	Identifying their family. Commenting on photos of their family; naming who they can see and of what relation they are to them. I can describe people who are familiar to me Show interest in the lives of other people who are familiar to me I can recognise that people have different beliefs and celebrate special times in different ways Can talk about what they do with their family and places they have been with their family. Can draw similarities and make comparisons between other families. Name and describe people who are familiar to them. I can show an interest in different occupations and ways of life I can draw a simple map I can talk about things I have observed such as animals I show care for living things (pets) I can ask questions about aspects of my familiar world such as the place where I live or the natural world	O Guy Fawkes: compare and contrast character from stories, including figures from the past: looking at clothes I can talk about significant events in my own experience I can talk about why things happen: making bread I can recognise and describe special times or events for family or friends REFELCTION TIME DAILY	Use images, video clips, shared texts and other resources to bring the wider world into the classroom. Listen to what children say about what they see Listen to children describing and commenting on things they have seen whilst outside, including plants and animals. Celebrate Chinese New year Recognising that people have different beliefs Respecting difference Talk about lives of people around us Talk about experiences at different points in the year (class calendar for each month) Changing seasons: winter Ice experiments Knowing there are different countries in the world (China) I have explorSed google earth I understand the effects of changing seasons on the world around me REFELCTION TIME DAILY	Similarities and differences between countries/environments/Africa/Anima Is using Handa's Hen Maps of our Journey to school/looking on Google Earth: features of local environment, maps of local area comparing places on Google Earth: how are they similar/different? I can describe special events (Easter) Growth & Change: Chick life cycle Environment: care can concern: chicks I can tell you what a plant needs to grow (growing the beanstalk) I can understand the key features of the life cycle of a plant and animal REFELCTION TIME DAILY	Growth & Change: frog life cycle I can show care and concern for living things in the environment I can start to develop an understanding of growth, decay and changes over time I can talk about some of the things I have observed such as plants, animals, natural and found objects REFELCTION TIME DAILY	Materials: Floating / Sinking – boat building Metallic / non-metallic objects Billinge long ago Share non-fiction texts that offer an insight into contrasting environments. Listen to how children communicate their understanding of their own environment and contrasting environments through conversation and in play. I can draw information from a simple map I can talk about ways in which I can look after the environment Pirate maps (maps of school to find treasure) REFELCTION TIME DAILY		
	Which people are special and why? Being special: where do we belong? Belonging to their family Being part of the Chapel End family and their house (colour) Which stories are special and why? Diwali	What times are special and why? Which stories are special and why? Christmas	What times are special and why? Chinese new year	What times are special and why? Which stories are special and why? Easter What places are special and why? Church at Easter	What is special about our world? Awe and wonder: growth and change of animals	What is special about our world? Summer Solstice		





RECEPTION LONG TERM PLAN 21-22

AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
ALL ABOUT ME!	LETS CELEBRATE!	TAKE ONE PICTURE!	GROWING!	AMAZING ANIMALS!	OUR WONDERFUL WORLD!

The development of children's spoken language underpins all seven areas of learning and development. Children's back-and-forth interactions from an early age

form the foundations for language and cognitive development. The number and quality of the conversations they have with adults and peers throughout the day in a language-rich environment is crucial. By commenting on what children are interested in or doing, and echoing back what they say with new vocabulary

added, practitioners will build children's language effectively. Reading frequently to children, and engaging them actively in stories, non-fiction, rhymes and

poems, and then providing them with extensive opportunities to use and embed new words in a range of contexts, will give children the opportunity to thrive.

COMMUNICATION AND LANGUAGE

GENERAL THEMES

Talk to parents about what language they speak at home, try and learn a few key words and celebrate multilingualism in your setting.

Whole EYFS Focus - C&L is developed throughout the year through high quality interactions, daily group discussions, sharing circles, PSHE times, stories, singing, speech and language interventions, EYFS productions, Nuffield Early Language Intervention

DAILY STORY TIME USING HIGH QUALITY TEXTS (FROM THE EYFS BRILLIANT BOOKS LIST)

Welcome to EYFS Settling in activities Making friends Children talking about experiences that are familiar to them What are your passions / goals / dreams? About family routines and special occasions Show an interest in the lives of other people Follow instructions (settling in, putting my things away) Develop vocabulary: Word aware Model talk routines through the day. For

example, arriving in school:

"Good morning, how are

you?")

Tell me a story!

Develop vocabulary: Word aware **Discovering Passions** Tell me a story - retelling stories: talk for writing Story language Listening and responding to stories Following instructions Takes part in discussion Understand how to listen carefully and why listening is important. Choose books that will develop their vocabulary.

Tell me why!

invites them to elaborate, children become comfortable using a rich range of vocabulary and language structures.

Develop vocabulary: Word aware NELI interventions Using language well Ask's how and why auestions... Retell a story with story language Remember key points from a story Story invention - talk it! Ask questions to find out more and to check they understand what has been said to them. I can describe events (Chinese New Year) Listen to and talk about stories to build familiarity and understanding. Learn rhymes, poems and

songs.

Through conversation, story-telling and role play, where children share their ideas with support and modelling from their teacher, and sensitive questioning that

NELI Word Aware: explore vocab Reciting poems and songs I can learn and recite, poems and songs: Rhyme of the week Tell me a story - retelling stories: talk for writing Articulate a life cycle I can listen to and engage in and talk about selected non-fiction I can articulate my ideas and thoughts into wellformed sentences I ask questions to find out more

Explain to me!

Can you recount an event? NELI

Word Aware: Explore Vocab I can learn and recite, poems and songs: Rhyme of the week I can listen to, engage in and talk about non-fiction Using the iPad to take a photograph I can describe events in some detail: farm trip, frog life cycle

Tell me about differences?

NELI Word Aware: Explore Vocab I can learn and recite, poems and songs: Rhyme of the week I can talk about similarities and differences between things in the past and now (seasides) I can talk about the experiences I have had at different points in the school year (end of year video)



	RECEPTION LONG TERM PLAN 21-22								
	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2			
GENERAL THEMES	ALL ABOUT ME!	LETS CELEBRATE!	TAKE ONE PICTURE!	GROWING!	AMAZING ANIMALS!	OUR WONDERFUL World!			
PERSONAL, SOCIAL AND EMOTIONAL DEVELOPMENT	Children's personal, social and emotional development (PSED) is crucial for children to lead healthy and happy lives, and is fundamental to their cognitive development. Underpinning their personal development are the important attachments that shape their social world. Strong, warm and supportive relationships with adults enable children to learn how to understand their own feelings and those of others. Children should be supported to manage emotions, develop a positive sense of self, set themselves simple goals, have confidence in their own abilities, to persist and wait for what they want and direct attention as necessary. Through adult modelling and guidance, they will learn how to look after their bodies, including healthy eating, and manage personal needs independently. Through supported interaction with other children, they learn how to make good friendships, co-operate and resolve conflicts peaceably. These attributes will provide a secure platform from which children can achieve at school and in later life.								
MANAGING SELF SELF REGULATION MAKING RELATIONSHIPS					SCARF: Being my best Bouncing back when things go wring: resilience Yes I can: confidence and resilience Healthy eating (2 weeks) Move your body A good nights sleep Importance of exercise Being kind to living creatures Taking care of animals (frogs/butterflies)				
	able to wait for what they want and control their immediate impulses when appropriate. Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions.								

* Controlling own feelings and behaviours *Applying personalised strategies to return to a state of calm *Being able to curb impulsive behaviours *Being able to concentrate on a task

*Being able to ignore distractions *Behaving in ways that are pro-social *Planning *Thinking before acting *Delaying gratification * Persisting in the face of difficulty.



Science Curriculum Overview

Term	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1	Animals Including Humans Seasonal Changes	Uses of everyday materials.	Animals and Humans – digestive system & teeth	Electricity	Properties and Changes of Materials.	Changing Circuits. (Electricity)
Autumn 2	Animals Including Humans with David Attenborough study Seasonal Changes	Uses of everyday materials with Macintosh and Dunlop study	Sound With Alexander Graham Bell study	Rocks and Soils	Forces.	Micro- organisms/keys (Living things & their Habitats)
Spring 1	Uses of everyday materials Seasonal Changes	living things and their habitat	Light and Shadows	Animals and Humans- skeleton & nutrition Food Chains	Earth and space	Interdependence and Adaptation (Evolution and Inheritance) with Darwin study
Spring 2	Uses of everyday materials Seasonal Changes	Animals Including Humans	Forces and Magnets.	States of matter. Solids, Liquids and Gases	Earth and space with Copernicus study	Animals including Humans-diet, exercise, circulatory system
Summer 1	Plants Seasonal Changes.	Animals Including Humans	Plants	Living Things and Habitats.	Life Cycles plants/animals (Living things and their habitats)	How We See Things.(Light)
Summer 2	Plants Seasonal Changes.	Plants	Plants	Thomas Edison study	Animals Inc Humans	Transition for high school. – safety in the lab