EYFS Overview COMPUTING 2023-24

NURSERY						
TERM	**Autumn 1**	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
NURSERY (3-4 YEAR OLDS) CURRICULUM OBJECTIVES	<u>Understanding the world</u> Begin to understand the need to respect and care for the natural environment and all living things. <u>Mathematics</u> Discuss routes and locations, using words like 'in front of' and 'behind'. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...' <u>Playing and exploring</u> Make independent choices. Do things independently that they have been previously taught. Respond to new experiences that you bring to their attention.	<u>Understanding the world</u> Plant seeds and care for growing plants. Begin to understand the need to respect and care for the natural environment and all living things.	<u>Active Learning</u> Respond to new experiences that you bring to their attention <u>Creating and thinking critically</u> Review their progress as they try to achieve a goal. Check how well they are doing. <u>Mathematics</u> Discuss routes and locations, using words like 'in front of' and 'behind'. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'	<u>Understanding the World</u> Continue developing positive attitudes about the differences between people. Begin to make sense of their own life-story and family's history. Talk about members of their immediate family and community. <u>Literacy</u> Understand that print has meaning Engage in extended conversations about stories, learning new vocabulary.	<u>Understanding the world</u> Begin to understand the need to respect and care for the natural environment and all living things. <u>Expressive arts and design</u> Join different materials and explore different textures.	<u>Mathematics</u> Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...' <u>Understanding the World</u> Continue developing positive attitudes about the differences between people.
ELG	<u>Building Relationships</u> Work and play cooperatively and take turns with others; <u>Gross Motor Skills</u> Negotiate space and obstacles safely, with consideration for themselves and others;	<u>Building Relationships</u> Work and play cooperatively and take turns with others; <u>The Natural World</u> Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	<u>Building Relationships</u> Work and play cooperatively and take turns with others;	<u>Literacy</u> Children use and understand recently introduced vocabulary during discussions about stories, nonfiction, rhymes and poems and during role-play. <u>Expressive Arts and Design</u> Children safely use and explore a variety of materials, tools and techniques. They share their creations, explaining the process they have used.	<u>Building Relationships</u> Work and play cooperatively and take turns with others; <u>Fine Motor Skills</u> Use a range of small tools, including scissors, paint brushes and cutlery; <u>The Natural World</u> Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	<u>The Natural World</u> Children explore the natural world around them, making observations and drawing pictures of animals and plants. They 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

Computational thinking	Logic Algorithms Decomposition Creating	Algorithms Decomposition Collaborating	Algorithms Perseverance Collaborating	Logic Pattern Abstraction Decomposition	Algorithms Decomposition Creating	Pattern Algorithms
Task	BAREFOOT COMPUTING - Awesome Autumn: Leaf Labyrinth	BAREFOOT COMPUTING – Springtime: Seed sequencing	BAREFOOT COMPUTING – Springtime: Rabbit Run	BAREFOOT COMPUTING – Busy bodies: Parts of our body / Make a body	BAREFOOT COMPUTING – Winter Warmers: Feed the birds	BAREFOOT COMPUTING – Busy bodies: Look how we grow
Across the terms / continuous provision	- remote control cars - ipads (where appropriate) - talking tins - sensory room					
Key Vocabulary	Maze Route / path Directions Start / stop First, next Forward, backward, turn (left/right)	First / next Order Instructions	Route Directions / instructions Start / stop First, next Before/after Forward, backward, turn (left/right) change	Same / different Important Body parts – see flash cards Picture / model Label First / next Add / correct	First / next Change Test Work	Same / different First / before / after Change / changed

RECEPTION						
TERM	**Autumn 1**	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Online safety – Project Evolve	*Online reputation *Copyright & Ownership	*Online Bullying	*Privacy and Security	*Managing online information	*Health & Wellbeing *Self-image & Identity	*Online relationships
RECEPTION CURRICULUM OBJECTIVES	<u>Active Learning</u> Respond to new experiences that you bring to their attention <u>Creating and thinking critically</u> Review their progress as they try to achieve a goal. Check how well they are doing. <u>Mathematics</u> Continue, copy and create repeating patterns. Make patterns with varying rules (including AB, ABB and ABBC) and objects and invite children to continue the pattern. <u>Understanding the world</u> Explore the natural world around them.	<u>Understanding the world</u> Understand the effect of changing seasons on the natural world around them. Explore the natural world around them. <u>Expressive arts and design</u> Create collaboratively, sharing ideas, resources and skills.	<u>Expressive Arts and Design</u> Explore and engage in music making and dance, performing solo or in groups. <u>Active Learning</u> Begin to correct their mistakes themselves.	<u>Playing and Exploring</u> Bring their own interests and fascinations into early years settings. Respond to new experiences that you bring to their attention. <u>Communication and Language</u> Describe events in some detail. Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. <u>Expressive Arts and Design</u> Provide opportunities to work together to develop and realise creative ideas.	<u>Active Learning</u> Bring their own interests and fascinations into early years settings. Respond to new experiences that you bring to their attention. <u>Creating and thinking critically</u> Help children to extend their ideas through sustained discussion that goes beyond what they, and you, have noticed. <u>Communication and Language</u> Reception: Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. <u>Mathematics</u> Count objects, actions and sounds / Compare numbers.	<u>Active Learning</u> Begin to correct mistakes themselves. <u>Creating and thinking critically</u> Help children to extend their ideas through sustained discussion that goes beyond what they, and you, have noticed. <u>Understanding the World</u> Explore the natural world around them. <u>Communication and Language</u> Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. <u>Mathematics</u> Select, rotate and manipulate shapes to develop spatial reasoning skills
ELG	<u>Creating with Materials</u> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; <u>Fine Motor Skills</u> Use a range of small tools, including scissors, paint brushes and cutlery;	<u>The Natural World</u> Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter. <u>Creating with Materials</u> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; Share their creations, explaining the process they have used;	<u>Gross Motor</u> Move energetically, such as running, jumping, dancing, hopping, skipping and climbing. <u>Managing Self</u> Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.	<u>Speaking</u> Children express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and support from their teacher	<u>The Natural world</u> Explore the natural world around them, making observations and drawing pictures of animals and plants.	

Computational Thinking	Creating Pattern Logic	Abstraction Tinkering Creating Collaborating	Algorithms Decomposition Debugging	Logic Algorithms Creating Collaborating Tinkering	Creating Pattern Persevering	Tinkering Creating Debugging Persevering
Task	BAREFOOT COMPUTING - Awesome Autumn: Garlands Galore	BAREFOOT COMPUTING – Springtime: Junk Scarecrows	BAREFOOT COMPUTING – Busy bodies: Movement algorithms	BAREFOOT COMPUTING – Summer Fun - Journeys	BAREFOOT COMPUTING - Summer Fun: Colour Collections	BAREFOOT COMPUTING - Summer Fun: Seaside Tangrams
	Sheffield ILS Computing toolkit 2021 A1 - What is a Computer? - *Explore technology.* - *Use different digital devices.* - *Recognise that you can access content on a digital device.* - *Use a mouse, touchscreen or appropriate access device to target and select options on screen.* - *Recognise a selection of digital devices.* - *Recognise the basic parts of a computer, e.g. mouse, screen, keyboard.* - *Select a digital device to fulfil a specific task, e.g. to take a photo.*		Sheffield ILS Computing toolkit 2021 A2 - We Control Technology - *Explore technology.* - *Use different digital devices.* - *Repeat an action with technology to trigger a specific outcome.* - *Recognise the success or failure of an action.* - *Follow simple instructions to control a digital device.* - *Recognise that we control computers.*		Sheffield ILS Computing toolkit 2021 A3 - Tinkering: Bee-Bots - *Explore technology.* - *Repeat an action with technology to trigger a specific outcome.* - *Recognise the success or failure of an action.* - *Follow simple instructions to control a digital device.* - *Recognise that we control computers.* - *Input a short sequence of instructions to control a device.*	
Continuous provision	- Beebots - Chromeboxes – Mini-mash / BusyThings - Coding critters					
Key Vocabulary	Pattern / sequence Change / fix Check Same/different Repeat First/next	Same / different Important Label Predict Test Improve Change	First / next/ before /after/ last Test Instruction Follow Improve / change	Position First/next/last Before/after Design Change Debugging Improve	Collect / group / organise Pictogram Change/fix Pattern Same/different Repeat	Tangram Combine / turn / place Flip / rotate / move Organise / overlap Picture Test Fix / debug