COMPUTING CURRICULUM OVERVIEW

YEAR NURSERY

PRIME AREAS – (The Prime Areas overarch all learning)

COMMUNICATION AND LANGUAGE	PHYSICAL DEVELOPMENT	PERSONAL, SOCIAL AND EMOTIONAL DEVELOPMENT
22-36 - Listening and attention Listens with interest to the noises adults make when they read stories. Recognises and responds to many familiar sounds e.g. turning to a knock on the door, looking at or going to the door Shows interest in play with sounds, songs and rhymes. Single channelled attention. Can shift to a different task if attention fully obtained-using child's name helps focus. **22-36 - Understanding** Identifies action words by pointing to the right picture e.g. 'Who's jumping?' Understands more complex sentences, e.g. 'Put your toys away then we'll read a book.' Understands 'who', 'what', 'where' in simple questions (e.g. who's that? What's that? Where is?). Developing understanding of simple concepts (e.g. big/little). **22-36 - Speaking** Uses language as a powerful means of widening contacts, sharing feelings, experiences and thoughts. Holds a conversation jumping from topic to topic. Learns new words very rapidly and is able to use them in communicating. Uses gestures, sometimes with limited talk, e.g. reaches towards toy, saying 'I have it'. Uses a variety of questions (eg: what, where, who). Uses simple sentences (e.g. Mummy gonna work). Beginning to use word endings (e.g. going, cats).	**22-36 - Moving and handling** Runs safely on whole foot. Squats with steadiness to rest or play with object on the ground, and rises to feet without using hands. Climbs confidently and is beginning to pull themselves up on nursery play climbing equipment. Can kick a large ball. Turns pages in a book, sometimes several at once. Shows control in holding and using jugs to pour, hammers, books and mark-making tools. Beginning to use three fingers (tripod grip) to hold writing tools. Imitates drawing simple shapes such as circles and lines. Walks upstairs or downstairs holding onto a rail two feet to a step. May be beginning to show preference for dominant hand. **22- 26 - Health and self-care** Feeds self competently with spoon. Drinks well without spilling. Clearly communicates their need for potty or toilet. Beginning to recognise danger and seeks support of significant adults for help. Helps with clothing, e.g. puts on hat, unzips zipper on jacket takes off unbuttoned shirt. Beginning to be independent in self-care, but still often needs adult support.	**22-26 - Self-confidence and self-awareness** Separates from main carer with support and encouragement from a familiar adult. Expresses own preferences and interests. **22-36 - Managing feelings and behaviour** Seeks comfort from familiar adults when needed. Can express their own feelings such as sad, happy, cross, scared, and worried. Responds to the feelings and wishes of others. Aware that some actions can hurt or harm others. Tries to help or give comfort when others are distressed. Shows understanding and cooperates with some boundaries and routines. Can inhibit own actions/behaviours, e.g. stop themselves from doing something they shouldn't do. Growing ability to distract self when upset, e.g. by engaging in a new play activity. **22-36 - Making Relationships** Interested in others' play and starting to join in. Seeks out others to share experiences. Shows affection and concern for people who are special to them. May form a special friendship with another child.
30-50 - Listening and attention Listens to others one to one or in small groups, when conversation interests them. Listens to stories with increasing attention and recall. Joins in with repeated refrains and anticipates key events and phrases in rhymes and stories. Focusing attention – still listen or do, but can shift own attention. Is able to follow directions (if not intently focused on own choice of activity). **30-50 - Understanding** Understands use of objects (e.g. "What do we use to cut things?") Shows understanding of prepositions such as 'under', 'on top', 'behind' by carrying out an action or selecting correct picture. Responds to simple instructions, e.g. to get or put away an object. Beginning to understand 'why' and 'how' questions. **30-50 - Speaking** Beginning to use more complex sentences to link thoughts (e.g. using and, because). Can retell a simple past event in correct order (e.g. went down slide, hurt finger). Uses talk to connect ideas, explain what is happening and anticipate what might happen next, recall and relive past experiences. Questions why things happen and gives explanations. Asks e.g. who, what, when, how. Uses a range of tenses (e.g. play, playing, will play, played). Uses intonation, rhythm and phrasing to make the meaning clear to others. Uses vocabulary focused on objects and people that are of particular importance to them. Builds up vocabulary that reflects the breadth of their experiences. Uses talk in pretending that objects stand for something else in play, e.g. 'This box is my castle.'	**30-50 - Moving and handling** Moves freely and with pleasure and confidence in a range of ways, such as slithering, shuffling, rolling, crawling, walking, running, jumping, skipping, sliding and hopping. Mounts stairs, steps or climbing equipment using alternate feet. Walks downstairs, two feet to each step while carrying a small object. Runs skilfully and negotiates space successfully, adjusting speed or direction to avoid obstacles. Can stand momentarily on one foot when shown. Can catch a large ball. Draws lines and circles using gross motor movements. Uses one-handed tools and equipment, e.g. makes snips in paper with child scissors. Holds pencil between thumb and two fingers, no longer using whole-hand grasp. Holds pencil near point between first two fingers and thumb and uses it with good control. Can copy some letters, e.g. letters from their name. **30-50 - Health and self-care** Can tell adults when hungry or tired or when they want to rest or play. Observes the effects of activity on their bodies. Understands that equipment and tools have to be used safely. Gains more bowel and bladder control and can attend to toileting needs most of the time themselves. Can usually manage washing and drying hands. Dresses with help, e.g. puts arms into open-fronted coat or shirt when held up, pulls up own trousers, and pulls up zipper once it is fastened at the bottom.	**30-50 - Self-confidence and self-awareness** Can select and use activities and resources with help. Welcomes and values praise for what they have done. Enjoys responsibility of carrying out small tasks. Is more outgoing towards unfamiliar people and more confident in new social situations. Confident to talk to other children when playing, and will communicate freely about own home and community. Shows confidence in asking adults for help. **30-50 - Managing feelings and behaviour** Aware of own feelings, and knows that some actions and words can hurt others' feelings. Begins to accept the needs of others and can take turns and share resources, sometimes with support from others. Can usually tolerate delay when needs are not immediately met, and understands wishes may not always be met. Can usually adapt behaviour to different events, social situations and changes in routine. **30-50 - Making Relationships** Can play in a group, extending and elaborating play ideas, e.g. building up a role-play activity with other children. Initiates play, offering cues to peers to join them. Keeps play going by responding to what others are saying or doing. Demonstrates friendly behaviour, initiating conversations and forming good relationships with peers and familiar adults.

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IN EYFS WE HAVE SPECIFIED ACTIVITIES WE PLAN FOR, BUT SOME ACTIVITIES WILL BE UNIQUE TO EACH COHORT AND WILL COME FROM THEIR EXPERIENCES.							
Topics	All about me	Festivals	Animals (bears)	Story building (Traditional tales)	Growth	Our World/ Changes	EARLY LEARNING GOALS – EXPECTED FOR THE END OF RECEPTION
COMPUTING Understanding of the World STRAND Technology	Using the whiteboard to play maths and phonics games Bee-bots – directions Accessing games on the ipad	Using the whiteboard to play maths and phonics games Bee-bots – directions Accessing games on the ipad	Using the whiteboard to play maths and phonics games Bee-bots – directions Accessing games on the ipad	Using the whiteboard to play maths and phonics games Bee-bots – directions Accessing games on the ipad	Using the whiteboard to play maths and phonics games Bee-bots – directions Accessing games on the ipad	Using the whiteboard to play maths and phonics games Bee-bots – directions Accessing games on the ipad	**Technology** Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

COMPUTING CURRICULUM OVERVIEW
YEAR RECEPTION

PRIME AREAS – (The Prime Areas overarch all learning)		
COMMUNICATION AND LANGUAGE	**PHYSICAL DEVELOPMENT**	**PERSONAL, SOCIAL AND EMOTIONAL DEVELOPMENT**
40-60 - Listening and attention Maintains attention, concentrates and sits quietly during appropriate activity. Two-channelled attention – can listen and do for short span. **40-60 - Understanding** Responds to instructions involving a two-part sequence. Understands humour, e.g. nonsense rhymes, jokes. Able to follow a story without pictures or props. Listens and responds to ideas expressed by others in conversation or discussion. **40-60 - Speaking** Extends vocabulary, especially by grouping and naming, exploring the meaning and sounds of new words. Uses language to imagine and recreate roles and experiences in play situations. Links statements and sticks to a main theme or intention. Uses talk to organise, sequence and clarify thinking, ideas, feelings and events. Introduces a storyline or narrative into their play.	**40-60 - Moving and Handling** Experiments with different ways of moving. Jumps off an object and lands appropriately. Negotiates space successfully when playing racing and chasing games with other children, adjusting speed or changing direction to avoid obstacles. Travels with confidence and skill around, under, over and through balancing and climbing equipment. Shows increasing control over an object in pushing, patting, throwing, catching or kicking it. Uses simple tools to effect changes to materials. Handles tools, objects, construction and malleable materials safely and with increasing control. Shows a preference for a dominant hand. Begins to use anticlockwise movement and retrace vertical lines. • Begins to form recognisable letters. Uses a pencil and holds it effectively to form recognisable letters, most of which are correctly formed. **40-60 - Health and self-care** Eats a healthy range of foodstuffs and understands need for variety in food. Usually dry and clean during the day. Shows some understanding that good practices with regard to exercise, eating, sleeping and hygiene can contribute to good health. Shows understanding of the need for safety when tackling new challenges, and considers and manages some risks. Shows understanding of how to transport and store equipment safely.	**40-60 - Self-confidence and self-awareness** Confident to speak to others about own needs, wants, interests and opinions. Can describe self in positive terms and talk about abilities. 40-60 - Managing feelings and behaviour Understands that own actions affect other people, for example, becomes upset or tries to comfort another child when they realise they have upset them. Aware of the boundaries set, and of behavioural expectations in the setting. Beginning to be able to negotiate and solve problems without aggression, e.g. when someone has taken their toy. **40-60 -Making relationships** Initiates conversations, attends to and takes account of what others say. Explains own knowledge and understanding, and asks appropriate questions of others. Takes steps to resolve conflicts with other children, e.g. finding a compromise.

				Practices some appropriate safety measures without direct supervision.				

ELG - Listening and attention
Children listen attentively in a range of situations. They listen to stories, accurately anticipating key events and respond to what they hear with relevant comments, questions or actions. They give their attention to what others say and respond appropriately, while engaged in another activity.
ELG - Understanding
Children follow instructions involving several ideas or actions. They answer 'how' and 'why' questions about their experiences and in response to stories or events.
ELG - Speaking
Children express themselves effectively, showing awareness of listeners' needs. They use past, present and future forms accurately when talking about events that have happened or are to happen in the future. They develop their own narratives and explanations by connecting ideas or events.

ELG - Moving and handling
Children show good control and co-ordination in large and small movements. They move confidently in a range of ways, safely negotiating space. They handle equipment and tools effectively, including pencils for writing.
ELG - Health and self-care
Children know the importance for good health of physical exercise, and a healthy diet, and talk about ways to keep healthy and safe. They manage their own basic hygiene and personal needs successfully, including dressing and going to the toilet independently.

ELG - Self-confidence and self-awareness
Children are confident to try new activities, and say why they like some activities more than others. They are confident to speak in a familiar group, will talk about their ideas, and will choose the resources they need for their chosen activities. They say when they do or don't need help.
ELG - Managing feelings and behaviour
Children talk about how they and others show feelings, talk about their own and others' behaviour, and its consequences, and know that some behaviour is unacceptable. They work as part of a group or class, and understand and follow the rules. They adjust their behaviour to different situations, and take changes of routine in their stride.
ELG - Making relationships
Children play co-operatively, taking turns with others. They take account of one another's ideas about how to organise their activity. They show sensitivity to others' needs and feelings, and form positive relationships with adults and other children.

IN EYFS WE HAVE SPECIFIED ACTIVITIES WE PLAN FOR, BUT SOME ACTIVITIES WILL BE UNIQUE TO EACH COHORT AND WILL COME FROM THEIR EXPERIENCES.

Topics	Me, Myself and I	Lights, Camera, Action	Where the land meets the sea	5, 4, 3, 2, 1, Blast Off	Heads, Shoulders, knees and toes	Journeys	40-50	EARLY LEARNING GOALS – EXPECTED FOR THE END OF THE YEAR
COMPUTING Understanding of the World STRAND Technology	Using the whiteboard to play maths and phonics games Bee-bots – directions Tape recorder – listening to stories Recording clips Accessing games on the ipad	Using the whiteboard to play maths and phonics games Bee-bots – directions Tape recorder – listening to stories Recording clips Accessing games on the ipad	Using the whiteboard to play maths and phonics games Bee-bots – directions Tape recorder – listening to stories Recording clips Accessing games on the ipad	Using the whiteboard to play maths and phonics games Bee-bots – directions Tape recorder – listening to stories Recording clips Accessing games on the ipad	Using the whiteboard to play maths and phonics games Bee-bots – directions Tape recorder – listening to stories Recording clips Accessing games on the ipad	Using the whiteboard to play maths and phonics games Bee-bots – directions Tape recorder – listening to stories Recording clips Accessing games on the ipad	**Technology** Completes a simple program on a computer. Interacts with age-appropriate computer software	**Technology** Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

KEY STAGE 1 - SUBJECT CONTENT Scheme of Work – Switched on Computing National Curriculum	Year 1					Year 2					
	We are celebrating	We are treasure hunters	We are storytellers	We are personal trainers	We are painters	We are detectives	We are astronauts	We are researchers	We are games testers	We are photographers	We are zoologists
Principles and concepts of computer science - understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions		✓					✓		✓		
Analyse and solve problems by writing programs - create and debug simple programs		✓					✓		✓		
Analyse and solve problems by writing programs - use logical reasoning to predict the behaviour of simple programs		✓					✓		✓		
Responsible, competent and confident users of ICT use technology purposefully to create, organise, store, manipulate and retrieve digital content	✓		✓	✓	✓	✓		✓		✓	✓
Responsible, competent and confident users of ICT - recognise common uses of information technology beyond school	✓	✓	✓	✓	✓	✓		✓		✓	✓
Responsible, competent and confident users of ICT - use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.						✓		✓		✓	

COMPUTING CURRICULUM OVERVIEW

KEY STAGE 1 - SUBJECT CONTENT Scheme of Work – Switched on Computing / National Curriculum	Year 3					Year 4					
	We are programmers	We are bug fixers	We are presenters	We are opinion pollsters	We are network engineers and internet aware	We are co-authors	We are meteorologists/ we are presenters	We are software developers	We are HTML editors	We are toy designers	We are musicians
Analyse and solve problems by writing programs - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	✓	✓						✓		✓	✓
Analyse and solve problems by writing programs - design use sequence, selection, and repetition in programs; work with variables and various forms of input and output	✓	✓						✓		✓	✓
Principles and concepts of computer science - use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	✓	✓						✓		✓	
Responsible, competent and confident users of ICT - understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration					✓	✓			✓		
Responsible, competent and confident users of ICT - use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content			✓		✓	✓	✓				
Responsible, competent and confident users of ICT / Analyse and solve problems by writing programs select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information			✓	✓		✓	✓	✓	✓		✓
Responsible, competent and confident users of ICT use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.			✓	✓	✓	✓	✓		✓		

COMPUTING CURRICULUM OVERVIEW

KEY STAGE 1 - SUBJECT CONTENT Scheme of Work – Switched on Computing National curriculum	Year 5					Year 6 – i-compute SoW			
	We are game developers	We are architects	We are bloggers	We are web developers	We are cryptographers	iProgram	iSafe	iWeb / iNetwork	iApp
Analyse and solve problems by writing programs - design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	✓	✓			✓	✓			✓
Analyse and solve problems by writing programs - design use sequence, selection, and repetition in programs; work with variables and various forms of input and output	✓	✓			✓	✓			✓
Principles and concepts of computer science - use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	✓	✓			✓	✓			✓
Responsible, competent and confident users of ICT understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration			✓					✓	✓
Responsible, competent and confident users of ICT use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content			✓	✓			✓	✓	
Responsible, competent and confident users of ICT / Analyse and solve problems by writing programs - select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	✓	✓	✓	✓			✓	✓	✓
Responsible, competent and confident users of ICT - use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.			✓	✓			✓	✓	✓

Curriculum Drivers

Subject: Computing

Challenge	Opportunities to develop the talents/skills of those pupils who have a particular interest in computing/coding/technology. Challenge pupils to think about online safety and the appropriate use of technology – encouraging pupils to apply their knowledge to real life situations, giving them strategies to deal with situations as they arise and encouraging them to question the impact of what they are doing. Challenge pupils to evaluate and improve their work e.g debug their programme Provide challenging tasks for all pupil that have a clear purpose/outcome for their learning and develop their understanding of real life uses of technology. Challenge all pupils to develop their digital literacy skills, despite their individual starting points.
Inclusion	Individual starting points are assessed so that all pupils are included in computing lessons and given the opportunity to develop their digital literacy skills Online safety – inappropriate behaviour Technology as a learning tool Support needs of individual pupils through use of ICT
Positive Minds	**Resilient tortoise** Pupils encouraged to persevere with difficult tasks, especially when debugging and improving algorithms and programming. **Independent rhino** Pupils to develop confidence to tackle computing tasks independently without always having to ask an adult. Encourage pupils to manage distractions which can be provided by using computers. **Risk-taking penguin** Pupils step up to the challenge of programming, especially with more complex tasks. Pupils to be aware of risks that shouldn't be taken when working online and know what to do if they find something that makes them uncomfortable. **Reflective owl** Pupils make links between the computing skills that they develop both at school and at home. Pupils evaluate their learning and debug their program to continuously make improvements. Pupils are encouraged to develop links to the outside world and future technologies. Encourage pupils to reflect on what they post online and who may see this and admit when they have made a mistake or behaved inappropriately. **Team Bee** Pupils work collaboratively in pairs or teams, communicating well and showing respect towards others both on and off line. Pupils who are confident in computing are given opportunities to share their knowledge and support each other. **Curious and creative chameleon** Pupils use their computing skills and knowledge to analyse problems and form strategies to solve them. Encourage pupils to develop their curiosity but ensuring the questions are appropriate. Pupils use and combine a variety of software and computing elements, often in creative ways, to create digital content.