



Learning in EYFS:

What Computing Subject Leaders Need to Know

The EYFS framework is structured very differently to the national curriculum as it is organised across seven areas of learning rather than subject areas. The aim of this document is to help subject leaders to understand how the skills taught across EYFS feed into national curriculum subjects.

This document demonstrates which statements from the 2020 Development Matters are prerequisite skills for Computing within the national curriculum. The table below outlines the most relevant statements taken from the Early Learning Goals in the EYFS statutory framework and the Development Matters age ranges for Three and Four-Year-Olds and Reception to match the programme of study for Computing.

The most relevant statements for Computing are taken from the following area of learning:

- Personal, Social and Emotional Development
- Physical Development
- Mathematics
- Understanding the World
- Expressive Arts and Design

In planning and guiding what children learn, practitioners must reflect on the different rates at which children are developing and adjust their practice appropriately, referring to the Characteristics of Effective Teaching and Learning. These are: **playing and exploring** – children investigate and experience things, and 'have a go'; **active learning** – children concentrate and keep on trying if they encounter difficulties, and enjoy their achievements for their own sake; **creating and thinking critically** – children have and develop their own ideas, make links between ideas, and develop strategies for doing things. In addition, the Prime Areas of Learning (Personal, Social and Emotional Development, Communication and Language and Physical Development) underpin and are an integral part of children's learning in all areas.

Computing			
Nursery	Personal, Social and Emotional Development		<ul style="list-style-type: none">Remember rules without needing an adult to remind them.
	Physical Development		<ul style="list-style-type: none">Match their developing physical skills to tasks and activities in the setting.
	Mathematics		<ul style="list-style-type: none">Solve real world mathematical problems with numbers up to 5.Discuss routes and locations, using words like 'in front of' and 'behind'.Notice and correct an error in a repeating pattern.Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then'.
	Understanding the World		<ul style="list-style-type: none">Explore how things work.
Reception	Personal, Social and Emotional Development		<ul style="list-style-type: none">Show resilience and perseverance in the face of a challenge.Know and talk about the different factors that support their overall health and wellbeing: -sensible amounts of 'screen time'.
	Physical Development		<ul style="list-style-type: none">Develop their small motor skills so that they can use a range of tools competently, safely and confidently.
	Mathematics		<ul style="list-style-type: none">Count objects, actions and sounds.Link the number symbol (numeral) with its cardinal number value.Select, rotate and manipulate shapes to develop spatial reasoning skills.Continue, copy and create repeating patterns.
	Expressive Arts and Design		<ul style="list-style-type: none">Explore, use and refine a variety of artistic effects to express their ideas and feelings.
ELG	Personal, Social and Emotional Development	Managing Self	<ul style="list-style-type: none">Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.Explain the reasons for rules, know right from wrong and try to behave accordingly.
	Expressive Arts and Design	Creating with Materials	<ul style="list-style-type: none">Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Online Safety

Throughout the early years, children will be taught about how to stay safe online.

They will explore:

- What is the internet?
- What do you use the internet for?
- Positives and negatives of the internet.
- How to stay safe online (SMART)

Autumn

Nursery possible lines of enquiry:

- To listen to and identify sounds.
- To use an iPad with an adult to record sounds.
- To use a simple online paint program to create a picture.

Possible Resources:

- 'Peace at Last' book- creating and recording sounds for the story.

Reception possible lines of enquiry:

- To explore and tinker with different hardware.
- To identify where technology is used in places they are familiar with e.g. home and school.
- To operate an iPad to take a photograph.

Possible Resources:

- Computing systems and networks 2 (Kapow EYFS)

Although these learning intentions are planned, we believe that children learn best when they are interested in their learning. Therefore, we follow the children's lead and use their interests to direct the learning and curriculum. In the EYFS, areas are described separately in order to break down the complexity of development and learning, but it is important to keep the whole child in mind as children learn holistically. "Every child is a unique child who is constantly learning." says the EYFS principle.

Computing Skills- Digital Literacy

Using Software

Using a simple online paint tool to create digital art.
Using an iPad to take a photograph.

Digital Literacy

Recognising that a range of technology is used for different purposes.

Spring

Nursery possible lines of enquiry:

- To follow instructions as part of practical activities and games.
- To give simple instructions.
- To understand why instructions need to be followed in a given order.

Possible Resources:

- Programming 1: All about Instructions (Kapow)

Reception possible lines of enquiry:

- To learn the meaning of directional arrows.
- To follow a simple sequence of instructions.
- To experiment with programming a BeeBot.
- To understand how to debug instructions with the help of an adult when things go wrong.

Possible Resources:

- Programming 2: Programming BeeBots

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Computing Skills- Computer Science		
Hardware Learning how to operate a camera to take photographs of meaningful creations or moments. Learning how to explore and tinker with hardware to develop familiarity and introduce relevant vocabulary. Recognising and identifying familiar letters and numbers on a keyboard. Developing basic mouse skills such as moving and clicking.	Computational Thinking Using logical reasoning to understand simple instructions and predict the outcome.	Programming Following instructions as part of practical activities and games. Learning to give simple instructions. Experimenting with programming a Bee-bot/Blue- bot and learning how to give simple commands. Learning to debug instructions, with the help of an adult, when things go wrong.
Summer		
Nursery possible lines of enquiry: <ul style="list-style-type: none"> To sort and categorise objects. To work with an adult to create a basic pictogram. To begin to interpret a basic pictogram 		Reception possible lines of enquiry: <ul style="list-style-type: none"> To sort and categorise objects independently. To respond to yes/ no questions as an introduction to branching databases. To learn branching databases through physical sorting and categorising.
Possible Resources: <ul style="list-style-type: none"> Twinkl- Making a pictogram. 		Possible Resources: <ul style="list-style-type: none"> Data handling: Introduction to data (Kapow)
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Computing Skills- Information Technology		
Using data Representing data through sorting and categorising objects in unplugged scenarios. Representing data through physical pictograms. Exploring branch databases through physical games.		
Areas of Continuous Provision Examples <u>Construction Area</u> - Using blocks to build a path for the BeeBot. <u>Creative</u> - painting for a digital book. <u>Role Play</u> - technology in the role play area. <u>Small World</u> - books and stories in small world on iPad. <u>Reading</u> - range of fiction and non-fiction books about technology		
Vocabulary Instructions, follow, first, next, last, order, iPad, technology, computer, tinker, battery, BeeBot, direction, forward, backwards, turn, altogether, bigger than, smaller than, pictogram, database, sort, data.		
Assessment I can talk about how to stay safe (including online). I understand that photographs can be captured using iPads and I can take a photo. I can follow instructions for a simple task. I am beginning to understand how data can be used. <i>Assessment will also be completed during continuous provision where children have the opportunity to practise the different skills.</i>		