

Progression in Computing EYFS & Key Stage 1

Programming

Key Stage 1 National Curriculum Expectations

Pupils should be taught to:

- *understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions*
- *create and debug simple programs*
- *use logical reasoning to predict the behaviour of simple programs*

EYFS	Year 1	Year 2
<p>Make a floor robot move.</p> <p>Use simple software to make something happen.</p> <p>Make choices about the buttons and icons they press, touch or click on.</p> <p>Talk about different kinds of information such as pictures, video, text and sound.</p>	<p>Give instructions to their friend and follow their instructions to move around.</p> <p>Describe what happens when they press buttons on a robot.</p> <p>Press the buttons in the correct order to make their robot do what they want.</p> <p>Describe what actions they will need to do to make something happen and begin to use the word algorithm.</p> <p>Begin to predict what will happen for a short sequence of instructions.</p> <p>Begin to use software/apps to create movement and patterns on a screen.</p> <p>Use the word debug when they correct mistakes when they program.</p>	<p>Give instructions to a friend (using forward, backward and turn) and physically follow their instructions.</p> <p>Tell others the order they need to do things to make something happen and talk about this as an algorithm.</p> <p>Program a robot or software to do a particular task.</p> <p>Look at their friend's program and talk about what will happen.</p> <p>Use programming software to make objects move.</p> <p>Watch a program execute and spot where it goes wrong so that they can debug it.</p>

Multi Media and Handling Data

Key Stage 1 National Curriculum Expectations

Pupils should be taught to:

- *use technology purposefully to create, organise, store, manipulate and retrieve digital content*

EYFS	Year 1	Year 2
<p>Move objects on a screen.</p> <p>Create shapes and text on a screen.</p> <p>Use technology to show my learning.</p>	<p>Be creative with different technology tools.</p> <p>Use technology to create and present my ideas.</p> <p>Use the keyboard or a word bank on their device to enter text.</p> <p>Name and save information in a special place and retrieve it again.</p> <p>Talk about the different ways in which information can be shown.</p> <p>Use technology to collect information, including photos, video and sound.</p> <p>Sort different kinds of information and present it to others.</p> <p>Add information to a pictograph and talk about what they have found out.</p>	<p>Use technology to organise and present their ideas in different ways.</p> <p>Use the keyboard on their device to add, delete and space text for others to read.</p> <p>Tell you about an online tool that will help them to share their ideas with other people.</p> <p>Name, save and open files on the device they use.</p> <p>Talk about the different ways they use technology to collect information, including a camera, microscope or sound recorder.</p> <p>Make and save a chart or graph using the data they collect.</p> <p>Talk about the data that is shown in their chart or graph.</p> <p>Start to understand a branching database.</p> <p>Tell you what kind of information they could use to help them investigate a question.</p>

Technology in our Lives

Key Stage 1 National Curriculum Expectations: Pupils should be taught to:

- *recognise common uses of information technology beyond school*

EYFS	Year 1	Year 2
<p>Talk about technology that is used at home and in school.</p> <p>Operate simple equipment.</p> <p>Use a safe part of the Internet to play and learn.</p>	<p>Recognise the ways that technology is used in the classroom.</p> <p>Recognise ways that technology is used at home and in the community.</p> <p>Use links to websites to find information.</p> <p>Begin to identify some of the benefits of using technology.</p>	<p>Talk about how and why technology is used in the classroom.</p> <p>Talk about how and why technology is used in the home and community.</p> <p>Start to understand that other people have created the information they use.</p> <p>Identify benefits of using technology including finding information, creating and communicating.</p> <p>Talk about the differences between the Internet and things in the physical world.</p>

E-safety

Key Stage 1 National Curriculum Expectations: Pupils should be taught to:

- *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.*

EYFS	Year 1	Year 2
<p>Ask an adult when they want to use the Internet.</p> <p>Tell an adult when something is worrying them or unexpected happens while they are using the Internet.</p> <p>Be kind to their friends.</p> <p>Talk about the amount of time they spend using a computer / tablet / game device.</p> <p>Be careful with technology devices.</p>	<p>Keep their password private.</p> <p>Tell you what personal information is.</p> <p>Tell an adult when they see something unexpected or worrying online.</p> <p>Talk about why it's important to be kind and polite.</p> <p>Recognise an age-appropriate website.</p> <p>Agree and follow sensible e-Safety rules.</p>	<p>Explain why they need to keep their password and personal information private.</p> <p>Describe the things that happen online that they must tell an adult about.</p> <p>Talk about why they should go online for a short amount of time.</p> <p>Talk about why it is important to be kind and polite online and in real life.</p> <p>Know that not everyone is who they say they are on the Internet.</p>

