| Year Group | Learning Objectives |
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| FS1 & 2 | Knows how to operate simple equipment e.g. turns on CD player and uses remote control.<br>• Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones.<br>• Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images e.g. programmable toys and knowing 'forwards' and 'backwards'.<br>• Knows that information can be retrieved from computers<br>• Completes a simple program on a computer.<br>• Uses ICT hardware to interact with age-appropriate computer software.<br>• Log on to school system and be able to load programs.<br>• Sort and match objects on screen.<br>**Early learning goal:** Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. |
| Year 1 | <u>To code</u><br>To begin to control motion by specifying the number of steps to travel, direction and turn.<br>To begin to add text strings, show and hide objects.<br>To begin to select sounds and control when they are heard.<br>To begin to control when drawings appear and set the pen colour, size and shape.<br>To begin to specify user inputs (such as clicks) to control events.<br>To begin to specify the nature of events such as single event or loop.<br>To begin to create conditions for actions for waiting for a user input (such as a response to a question).<br><br><u>To connect</u><br>To begin to understand online risks and learn/follow online rules for safety.<br>To navigate simple webpages using forward, back and the home button.<br><br><u>To communicate</u><br>To begin to use a range of applications to communicate ideas, work and messages.<br>To begin to develop keyboard skills to be able to word process simple texts.<br>To recognise common uses of information technology beyond school.<br><br><u>To collect</u><br>To begin to capture and download images/video from devices such as a camera.<br>To begin to collect data and present using tools to make a pictogram. |

| Year 2 | To code |
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| | To control motion by specifying the number of steps to travel, direction and turn. |
| | To add text strings, show and hide objects and change the feature of an object. |
| | To select sounds and control when they are heard, their duration and volume. |
| | To control when drawings appear and set the pen colour, size and shape. |
| | To specify user inputs (such as clicks) to control events. |
| | To specify the nature of events such as single event or loop. |
| | To begin to create conditions for actions for waiting for a user input (such as a response to a question). |
| | To understand what an algorithm is. |
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| | To connect |
| | To understand online risks and the age rules for sites. |
| | To communicate safety and respectfully online, keeping personal information private. |
| | To use pre-saved selection of websites and resources to answer research questions. |
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| | To communicate |
| | To use a range of applications to communicate ideas, work and messages. |
| | To develop keyboard skills to be able to word process simple texts. |
| | To create pictures using a variety of digital tools and applications. |
| | To recognise common uses of information technology beyond school. |
| | |
| | To collect |
| | To capture and download images/video from devices such as a camera. |
| | To collect data and present using tools to make a pictogram. |
| Year 3 | To code |
| | To begin to use specified screen coordinates to control movement. |
| | To begin to set the appearance of objects and create a sequence of changes. |
| | To begin to create and edit sounds. Control when they are heard, their volume, duration and rests. |
| | To control the shade of pens. |
| | To begin to be able to specify conditions to trigger events. |
| | To begin to use IF and THEN conditions to control events or objects. |
| | To begin to use variables to store a value. |
| | |
| | To connect |
| | To understand the risks posed by online communications. |
| | To understand what cyber-bullying is. |
| | To begin to be able to perform effective web searches. |
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| | To communicate |
| | To begin to use some of the advanced features of applications and devices in order to communicate ideas, work or messages. |
| | To combine text, images and sounds. |
| | To begin to understand how to use email. |
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| | To collect |
| | To input data into data base; generate graphs and charts. |
| | To collect data and present as a graph. |

| Year 4 | To code |
|---|---|
| | To use specified screen coordinates to control movement. |
| | To set the appearance of objects and create a sequence of changes. |
| | To create and edit sounds. Control when they are heard, their volume, duration and rests. |
| | To the shade of pens. |
| | To be able to specify conditions to trigger events. |
| | To use IF and THEN conditions to control events or objects. |
| | To use variables to store a value. |
| | To use the functions – define, set, change, show and hide to control the variables. |
| | To use the reporter operators to perform calculations. |
| | |
| | To connect |
| | To understand the risks posed by online communications. |
| | To understand what cyber-bullying is. |
| | |
| | To communicate |
| | To use some of the advanced features of applications and devices in order to communicate ideas, work or messages professionally. |
| | To create text, images and sounds for specific audience (capturing images from range of sources). Use in presentation. |
| | To plan and create animation using a variety of medium (clay, toys, drawing) |
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| | To collect |
| | To use spreadsheets (linked to maths). |
| Year 5 | To code |
| | To begin to set IF conditions for movements. Specify types of rotation giving the number of degrees. |
| | To begin to change the position of objects between screen layers (send to back, bring to front). |
| | To begin to upload sounds from a file and edit them. |
| | To begin to combine the use of pens with movement to create interesting effects. |
| | To set events to control other events by 'broadcasting' information as a trigger. |
| | To begin to use IF THEN ELSE conditions to control events or objects. |
| | To begin to use a range of sensing tools to control events or actions. |
| | To begin to use lists to create a set of variables. |
| | To begin to use Boolean operators to define conditions. |
| | |
| | To connect |
| | To begin to collaborate with others online on sites approved and moderated by teachers. |
| | To begin to understand more of the dangers online, how to minimise risks and report problems. |
| | To begin to understand about legal and illegal downloads. |
| | To begin to understand how simple networks are setup and used. |
| | To understand the effects of cyber-bullying. |
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| | To communicate |
| | To begin to be able to choose the most suitable application or device for the purpose of communication. |
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| | To collect |
| | To create a formula in a spreadsheet. |

| Year 6 | <u>To code</u><br>To set IF conditions for movements. Specify types of rotation giving the number of degrees.<br>To change the position of objects between screen layers (send to back, bring to front).<br>To upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation.<br>To combine the use of pens with movement to create interesting effects.<br>To set events to control other events by 'broadcasting' information as a trigger.<br>To use IF THEN ELSE conditions to control events or objects.<br>To use a range of sensing tools to control events or actions.<br>To use lists to create a set of variables.<br>To use Boolean operators to define conditions.<br><br><u>To connect</u><br>To collaborate with others online on sites approved and moderated by teachers.<br>To understand more of the dangers online, how to minimise risks and report problems.<br>To understand about legal and illegal downloads.<br>To understand how simple networks are setup and used.<br>To understand the effects of cyber-bullying.<br>To compare bias and accuracy on web.<br><br><u>To communicate</u><br>To be able to choose the most suitable application or device for the purpose of communication.<br>To use many of the advanced features in order to create high quality, professional or efficient communications.<br>To create presentations with range of links, images and sounds.<br>To manipulate images.<br>To design own webpage.<br><br><u>To collect</u><br>To continue developing formula on a spreadsheet |
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