

| Computing | | Milestone 1 | Milestone 2 | Milestone 3 |
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| To code (using Scratch) | Motion | <ul style="list-style-type: none"> Control motion by specifying the number of steps to travel, direction and turn. | <ul style="list-style-type: none"> Use specified screen coordinates to control movement. | <ul style="list-style-type: none"> Set IF conditions for movements. Specify types of rotation giving the number of degrees. |
| | Looks | <ul style="list-style-type: none"> Add text strings, show and hide objects and change the features of an object. | <ul style="list-style-type: none"> Set the appearance of objects and create sequences of changes. | <ul style="list-style-type: none"> Change the position of objects between screen layers (send to back, bring to front). |
| | Sound | <ul style="list-style-type: none"> Select sounds and control when they are heard, their duration and volume. | <ul style="list-style-type: none"> Create and edit sounds. Control when they are heard, their volume, duration and rests. | <ul style="list-style-type: none"> Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation. |
| | Draw | <ul style="list-style-type: none"> Control when drawings appear and set the pen colour, size and shape. | <ul style="list-style-type: none"> Control the shade of pens. | <ul style="list-style-type: none"> Combine the use of pens with movement to create interesting effects. |
| | Events | <ul style="list-style-type: none"> Specify user inputs (such as clicks) to control events. | <ul style="list-style-type: none"> Specify conditions to trigger events. | <ul style="list-style-type: none"> Set events to control other events by 'broadcasting' information as a trigger. |
| | Control | <ul style="list-style-type: none"> Specify the nature of events (such as a single event or a loop). | <ul style="list-style-type: none"> Use IF THEN conditions to control events or objects. | <ul style="list-style-type: none"> Use IF THEN ELSE conditions to control events or objects. |
| | Sensing | <ul style="list-style-type: none"> Create conditions for actions by waiting for a user input (such as responses to questions like: What is your name?). | <ul style="list-style-type: none"> Create conditions for actions by sensing proximity or by waiting for a user input (such as proximity to a specified colour or a line or responses to questions). | <ul style="list-style-type: none"> Use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events or actions. |

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| | Variables and lists | <ul style="list-style-type: none"> From Year 3 onwards. | <ul style="list-style-type: none"> Use variables to store a value. Use the functions define, set, change, show and hide to control the variables. | <ul style="list-style-type: none"> Use lists to create a set of variables. |
| | Operators | <ul style="list-style-type: none"> From Year 3 onwards. | <ul style="list-style-type: none"> Use the Reporter operators <code>() + ()</code> <code>() - ()</code> <code>() * ()</code> <code>() / ()</code> to perform calculations. | <ul style="list-style-type: none"> Use the Boolean operators <code>() < ()</code> <code>() = ()</code> <code>() > ()</code> <code>()and()</code> <code>()or()</code> <code>Not()</code> to define conditions. Use the Reporter operators <code>() + ()</code> <code>() - ()</code> <code>() * ()</code> <code>() / ()</code> to perform calculations. Pick Random <code>() to ()</code> Join <code>() ()</code> Letter <code>() of ()</code> Length of <code>()</code> <code>() Mod ()</code> This reports the remainder after a division calculation Round <code>() of ()</code>. |

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| To connect | | <ul style="list-style-type: none"> • Participate in class social media accounts. • Understand online risks and the age rules for sites. | <ul style="list-style-type: none"> • Contribute to blogs that are moderated by teachers. • Give examples of the risks posed by online communications. • Understand the term 'copyright'. • Understand that comments made online that are hurtful or offensive are the same as bullying. • Understand how online services work. | <ul style="list-style-type: none"> • Collaborate with others online on sites approved and moderated by teachers. • Give examples of the risks of online communities and demonstrate knowledge of how to minimise risk and report problems. • Understand and demonstrate knowledge that it is illegal to download copyrighted material, including music or games, without express written permission, from the copyright holder. • Understand the effect of online comments and show responsibility and sensitivity when online. • Understand how simple networks are set up and used. |
| To communicate | | <ul style="list-style-type: none"> • Use a range of applications and devices in order to communicate ideas, work and messages. | <ul style="list-style-type: none"> • Use some of the advanced features of applications and devices in order to communicate ideas, work or messages professionally. | <ul style="list-style-type: none"> • Choose the most suitable applications and devices for the purposes of communication. • Use many of the advanced features in order to create high quality, professional or efficient communications. |
| To collect | | <ul style="list-style-type: none"> • Use simple databases to record information in areas across the curriculum. | <ul style="list-style-type: none"> • Devise and construct databases using applications designed for this purpose in areas across the curriculum. | <ul style="list-style-type: none"> • Select appropriate applications to devise, construct and manipulate data and present it in an effective and professional manner. |

