

Objectives

| Lesson | Title | National Curriculum | Objectives | Success Criteria | Vocabulary |
|--------|-----------|---|---|--|---|
| 5.2.1 | iMove | <ul style="list-style-type: none"> design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; | <ul style="list-style-type: none"> To understand that computer programs containing graphics use x y coordinates and turns are measured in degrees To use conditional (if) statements | <ul style="list-style-type: none"> The children program sprites to respond to movement using if..then statements | Sprite; up; down; left; right; xy coordinates; condition; if |
| 5.2.2 | iSense | <ul style="list-style-type: none"> solve problems by decomposing them into smaller parts | <ul style="list-style-type: none"> To understand that some variables can only be true or false (boolean) To understand that programs can do different things if the value of a boolean variable is true or false (conditional statements) | <ul style="list-style-type: none"> The children program something to happen when one sprite touches another | Condition; if; boolean; true; false; variable |
| 5.2.3 | iNavigate | <ul style="list-style-type: none"> use sequence, selection and repetition in programs; work with variables and various forms of input and output; | <ul style="list-style-type: none"> To create a game that senses events on screen To program statements that make something happen in response to events on screen | <ul style="list-style-type: none"> The children program a sprite to navigate a maze using sensing and motion blocks | Sense; boolean; true; false |
| 5.2.4 | iVary | <ul style="list-style-type: none"> use logical reasoning to explain how some simple algorithms work | <ul style="list-style-type: none"> To be able to understand what a variable is and why they are useful | <ul style="list-style-type: none"> The children can explain how variables have been used in a program | Vary; variable; value; change; data; type; string; number; boolean; store; memory |
| 5.2.5 | iScore | <ul style="list-style-type: none"> detect and correct errors in algorithms and programs | <ul style="list-style-type: none"> To understand that variables can be used in programming to keep track of values To program statements that make something happen in response to the value of a variable | <ul style="list-style-type: none"> The children program a game which uses a variable to track 'lives' | Vary; variable; value; change; data; type; string; boolean; number; store; memory |
| 5.2.6 | iDesign | | <ul style="list-style-type: none"> To identify an appropriately scoped project To develop an outline of tasks and activities required to develop a project | <ul style="list-style-type: none"> The children design a computer game | design; storyboard; sequence; input; output |

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| 5.2.7 | iCode | <ul style="list-style-type: none"> * design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; | <ul style="list-style-type: none"> * To use the computational concepts of sequence, selection, repetition and variables to program a computer game | <ul style="list-style-type: none"> * The children create a program according to a design | Condition; variable; boolean; true; false; repeat; loop; repetition; statement; algorithm; selection |
| 5.2.8 | iTest | <ul style="list-style-type: none"> * solve problems by decomposing them into smaller parts * use sequence, selection and repetition in programs; * work with variables and various forms of input and output; * use logical reasoning to explain how some simple algorithms work * detect and correct errors in algorithms and programs | <ul style="list-style-type: none"> * To develop strategies for testing and debugging computer programs | <ul style="list-style-type: none"> * The children detect and correct errors in their programs | test; bugs; debug; amend; systematically |