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| **Term Pentecost 2: Programming B- Programming Quizzes**  **Subject Computing Year 2 Medium Term Planning** | | | | | | |
| **National Curriculum Objectives**  ● 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  ● Use technology purposefully to create, organise, store, manipulate and retrieve digital content | | | | | | |
|  | Lesson 1 | Lesson 2 | Lesson 3 | Lesson 4 | Lesson 5 | Lesson 6 |
| **Learning intention for each lesson:** | I know how to explain that a sequence of commands has a start | To explain that a sequence of commands has an outcome | To create a program using a given design | To change a given design | To create a program using my own design | To decide how my project can be improved |
| **Recall and retrieval** | Sequence, command, program, run, start, predict, block, outcome, modify, change | How are programs started? | What will the program do as a result of my program? | Identify the different blocks function. | How do I select a background and character for my design? | What can my character do?  Chn to ask questions for the character. |
| **Sequence of knowledge throughout the lesson**  **:**  **Key skills within each lesson** | **Key knowledge**  To identify the start of a sequence  To identify that a program needs to be started  To show how to run my program  **To know how to operate and program scratch jnr** | **Key knowledge**  To know how to predict the outcome of a sequence of commands  To know how to match two sequences with the same outcome  To know how to change the outcome of a sequence of commands  **To know how to program, match and sequence commands** | **Key knowledge**  To know how to work out the actions of a sprite in an algorithm  To know how to decide which blocks to use to meet the design  To know how to sequences of blocks.  **To identify and sequence the correct blocks to meet a design.** | **Key knowledge**  To know how to choose backgrounds for the design  To know how to choose characters for the design  To know how to create a program based on the new design  **To choose a background and character then create a program using these.** | **Key knowledge**  I know how to choose the images for own design  I know how to create an algorithm  I know how to build sequences of blocks to match a design  **To select algorithms a**  **To write a series of questions that match or do not match the algorithm selected for the character.** | **Key knowledge**  I know how to compare my project to my design  I know how to improve my project by adding features  I know how to debug a my program    **To compare program with a partner.**  **To identify and improve program.**  **To use knowledge of programming to debug a program.** |
| **Scaffolding** | Simple program | Program simple 2 or step programs. | Support to identify less blocks needed and correct sequence. | Support to create a simple program. | Support “Who lives here?” sheet | Support for debugging. |
| **Challenge** | More complex set of instructions when programming. | More advanced programs of 3+ steps. | To add more blocks | More complex program. | more complex algorithm. | Encourage use of a variety of algorithms. |
|  | **Key Vocabulary**  Sequence, command, program, run, start | **Key Vocabulary**  Sequence, command, outcome, predict, program, blocks. | **Key Vocabulary**  Sprite, algorithm, blocks, design, sequence, predict | **Key Vocabulary**  Actions, sprite, project, blocks, design, sequence, modify, change**.** | **Key Vocabulary**  Design, algorithm, build, sequence, blocks, match | **Key Vocabulary**  Compare, design, debug, program, features, evaluate |