Year 5 – Programming

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| Prior Learning: instructions as algorithms, instructional language, understanding ‘debug’ as correcting mistakes in programing. |

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| Facts | Vocabulary |
| 1. **What is coding language?**     * A coding or programming language is a computer language programmers use to develop software programs, scripts of other sets of instructions for computers to follow. * There are lots of different coding languages to choose from but some popular choices for children are:    Scratch   Python   JavaScript   Blockly | 1. Translation– moving something from one place to another, moving something from one programming language to another.  2. Target audience—the group at which a product is aimed at. |
| 2. **Code within my computer**     * Computer code or program code is the set of instructions forming a [computer program](https://en.wikipedia.org/wiki/Computer_program) which is [executed](https://en.wikipedia.org/wiki/Execution_(computing)) by a [computer](https://en.wikipedia.org/wiki/Computer).      * It is one of two components of the [software](https://en.wikipedia.org/wiki/Software) which runs on [computer hardware](https://en.wikipedia.org/wiki/Computer_hardware), the other being the [data](https://en.wikipedia.org/wiki/Data_(computing)).        * Movements on your screen are translated into codes and algorithms that are written and in place to help control your computer.        * Everything you do on a computer will be translated into codes or algorithms. | 3. **Coding with different languages**  **Scratch**  **Blockly**  **Python**      Different languages have different advantages  Python is more customisable and is used on more devices – Raspberry Pi uses Python and is able to do a wide range of jobs, such as running tests, playing games, streaming TV etc.  Blue-bot_algorithms |
| 4. If…Then…. Statements  If…then… statements are parts of the code that are used to control variables and commands.  We pose a true or false statement (if)  An action happens if the statement is true (then) |
| Youtube:    <https://www.youtube.com/watch?v=Nc31NAujTkA> - Computer programming and coding/programming languages |  |