# Computing 22-23

## Year 2 – Programming (Scratch)

| Remember when:<br>beebots | Key vocabulary |
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| By the end of the unit children must be able to: | algorithm        project |
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| - to create a new character.<br><br>- to move the character.<br><br>- make the character bigger /smaller.<br><br>- make the character talk.<br><br>- create a link of 3 algorithms. | backwards<br>character<br>forwards<br>left<br>motion<br>right<br>sound |

**In Year 1:**

- move the beebot forwards, backwards and turn.

- be able to move a beebot to a given area.

**National curriculum:**
- 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.

### Software

Scratch Jnr



| Title / Focus | Lesson outline |
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| **Summer Term** | |
| **Lesson 1** Introduction to scratch<br><br>LO-to understand algorithms<br><br>SK- to create a new character. | Introduce children to scratch. Recap key principles of navigating an iPad & the home screen. Show pupils how to open the app and open a new document. Teach children how to add a background and how to create a new character. Discuss how to debug any issues that arise. |
| **Lesson 2** Adding characters<br><br>LO-to understand algorithms<br><br>SK- to move the character. | Recap last lesson. Children to independently open the app and add a background. Add a new character.<br>Teach children how to use an algorithm to make the character move. Discuss how to debug any issues that arise.<br>Teach children how to save their work. |
| **Lesson 3** 3 link algorithms<br><br>LO-to understand algorithms<br><br>SK- create a link of 3 algorithms. | Recap skills taught last lesson. Open saved work. Teach children how to create algorithms with 3 or more components. Discuss how to debug any issues that arise.<br>Children to experiment with creating 3-part algorithms with various characters. |
| **Lesson 4** Altering the size of the characters<br><br>LO-to understand algorithms<br><br>SK- make the character bigger /smaller. | Recap skills taught so far. Open saved work.<br>Teach children how to make characters bigger/smaller. Discuss how to debug any issues that arise.<br>Children given time to experiment with using algorithms to change the size of characters. |
| **Lesson 5** Make the characters talk<br><br>LO-to understand algorithms<br><br>SK- make the character talk. | Recap skills taught so far. Open saved work.<br>Teach children how to create an algorithm so the characters talk. Discuss how to debug any issues that arise. |
| **Lesson 6**<br><br>Final piece | Pupils to apply all the skills taught to create a final piece. They must include an under the sea backgrounds with appropriate moving sea characters. They need to type their name and use a 3 link algorithms to make the characters move. |

| Working towards | End of Unit Assessment<br>Working at Age related expectations | Working at a greater depth |
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