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| **Session One** | L.O | WAGOLL/ Success Criteria | Expectation | Lesson Plan | Groups/ TAs | Resources |
| To understand what algorithms are. |  | HAP: | **Input -** Children discuss what they need to make a sandwich, feedback and discuss as a class.  Lay all the ingredients out on a table at the front of the class.  Tell children that today they will be teaching me how to make a sandwich.  **Activity -** Split into groups and give time to write instructions.  Each group reads out their instructions and the teacher take them literally – children are not allowed to add any extra information during their instructions.  Discuss ‘what went well’ and ‘even better if’.  Rewrite a set of instructions as a class, combining all and debugging previous attempts.  **Plenary –** come up with a definition of debugging.  Explanation to clarify. |  | Bread.  Butter.  Jam.  Knife  Plate. |
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| **Session Two** | L.O | WAGOLL/ Success Criteria | Expectation | Lesson Plan | Groups/ TAs | Resources |
| To know how algorithms are implemented as programmes on digital devices. |  | HAP: | **Input -** Ask for a volunteer to take instructions (be the Beebot), introduce key vocabulary – move forward, turn left etc.  Introduce Beebots and model how to use the Beebot to make it move in simple directions – recapping key vocabulary.  **Activity -** Give the children time to experiment with the Beebots and establish how they work.  Give them a list of instructions to programme into the Beebot. In pairs have a go each, did they end on the same place? If no, why?  **Plenary –** Discussion of what worked and what didn’t work? Can children explain the language they used today? |  | Beebots. |
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| **Session Three** | L.O | WAGOLL/ Success Criteria | Expectation | Lesson Plan | Groups/ TAs | Resources |
| To create and debug simple programmes. |  | HAP: | **Input –** recap key vocabulary.  Pose the children with a challenge, I want to get from the school to the house, how could I do this?  Discuss and try people’s ideas, debugging where it goes wrong and editing this in the next version.  TA to scribe as you go throughout the process so children can see the process of writing written instructions.  **Activity –** Set the children a similar challenge, to get the bot from one place to another. They need to write down their instructions as clearly as possible.  Swap with another pupil, they try the instructions and evaluate what was good and what could be improved. The child then ‘debugs’ and edits their instructions in another pen colour.  **Plenary –** a set of instruction which don’t work, can they work together to debug it. |  | Beebot.  Beebot mat.  Paper. Pencils. |
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| **Session Four** | L.O | WAGOLL/ Success Criteria | Expectation | Lesson Plan | Groups/ TAs | Resources |
| To apply knowledge of programming and debugging to solve a problem. |  | HAP: | **Input –** Explain that they are going to use all the knowledge they have gained over the last three lessons to solve a task – competition style, winner gets a prize.  Discuss vocabulary used etc.  **Activity –**  Challlenge one – get from one place to another in the least amount of moves.  Extension – can you get all the way through a maze in less than X amount of moves.  **Plenary –** recap learning, what do they want to learn next? What would improve their learning?  Reveal winner, hand out prize. |  | Beebots.  Maze.  Prize. |
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