# Grade 1

# Robotics and Coding CAPS Week by Week Planning Term 3

| | Term 1 | | Date Completed |
|---|---|---|---|
| | **Week 1** | | |
| **C.6** | **Recognise and interpret patterns in symbolic sets of data or visualisations.** | Complete a pattern.<br>Number patterns.<br>Use pictures to demonstrate a sequence of events. | M<br>T<br>W<br>T<br>F |
| | **Week 2** | | |
| **C.1** | **Apply computational thinking skills to develop a set of logical instructions to solve a problem.** | Computational thinking.<br>Develop a solution to complete 2 actions using directional cards and avoiding obstacles. | M<br>T<br>W<br>T<br>F |
| | **Week 3** | | |
| **C.2**<br>**R.7**<br>**C.7** | **Present a simple coding solution using symbolic or written statements that represent sequences of commands, single commands and conditional constraints. Create, test and execute a set of robotic instructions. Create a pattern to represent a data set.** | Act out a code made with arrow cards to see if it's correct. See how many different routes you can find using the same cards.<br>Sequencing an event - first, next, then last. Sequencing an event leaving out an important step.<br>Make a basket using coloured squares of paper to make patterns. Cut out the final product.<br>Create a code using letters for a colour pattern. Debug the code. | M<br>T<br>W<br>T<br>F |

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| | **Week 4** | DBE Math English Grade 1 workbook pg. 69. This can be used as a sequencing exercise.<br>Create a code to identify the days of the week in order.<br>A grid on which items have to be counted. Select the correct algorithm to complete a task. | |
| **C.3**<br>**C.4** | **Interpret and execute a given symbolic or written command. Debug a symbolic or written set of instructions.** | | M<br>T<br>W<br>T<br>F |
| | **Week 5** | Distinguish between robots and non - robots. Identify the components of the robots. Learners explain their concept of what a robot is. | |
| **R.1**<br>**R.2**<br>**R.3** | **Explain what a robot is in simple terms. Identify different types of robots. Outline the different components of a robot.** | | M<br>T<br>W<br>T<br>F |
| | **Week 6** | Design a robot with shape blocks. Trace the blocks. Cut out and assemble. Add strings. | |
| **R.5** | **Design a simple product (artefact) based on a set of design specifications.** | | M<br>T<br>W<br>T<br>F |
| | **Week 7** | Learners pretend that they have been programmed to pick up objects and sort them into different colours. They should begin by turning on the power and end by turning off the power. | |
| **R.6** | **Mimic the operations of a robot.** | | M<br>T<br>W<br>T<br>F |

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| | **Week 8** | What does it mean to interact online? Use role play to simulate online interactions. Emphasise online ettiquete and kindness. | |
| **D.1** **D.2** | **Outline the concept of technology and the purpose of information technology (IT). Recognise that they are living as citizens in a digital world.** | | M<br>T<br>W<br>T<br>F |
| | **Week 9** | A computing device is something you use to do things like play games, watch videos or talk to people far away. They have screens for input and output and a processor, the three basic components of computing. ITC refers to the tools that help us process, share and communicate information. Decoding a simple word image or sentence. | |
| **D.3** **D.4** **D.7** **D.8** | **Demonstrate an understanding of a computing device. Identify the common uses of ITC in the real world. Present a basic understanding of input processing and output. Interpret a pattern to represent or communicate a message or image.** | | M<br>T<br>W<br>T<br>F |
| | **Week 10** | Continuous Assessment (refer to Section 4). | |
| | **Term 3 Assessment** | | M<br>T<br>W<br>T<br>F |