

Computing- Year 1- Summer Term- Moving a Robot

- Prior Learning: I can make a floor robot move.

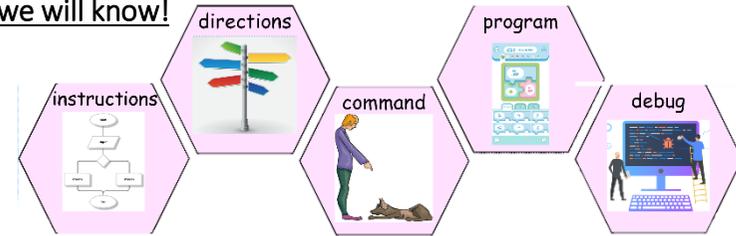
Theme: Moving A Robot

Concept: Programming

Hardware: Sphero Indi

Software:

Words we will know!



1. Buttons or immerse experience

We will be introduced to floor robots. We will talk about what features the robots show. We will spend time linking an outcome to an action. We will consider the directions the robot goes and how to change the way it moves.



4. Four Directions

We will use 'left turn' and 'right turn' commands along with 'forwards' and 'backwards' commands. Doing this will allow us to develop more complex programs. We will create our programs in this lesson through trial and error. We will predict where given programs will move the robot to and make predictions by looking at the commands and matching the program steps to movements.



We will know the directions the robot will move to.

2. Directions

We will think about the language used to give directions and how precise it needs to be. We will also work with a partner to give and follow instructions.



Commands are being told to do something

5. Getting there

We will decide what our program will do. We will then create their program and test it on the robot. Where needed, we will also debug their program.



A program is a set of instructions for a computer to follow

3. Forwards and Backwards

We will focus on programming the floor robot to move forwards and backwards. We will see that the robot moves forwards and backwards a fixed distance. This highlights the idea that robots follow a clear, fixed command in a precise and repeatable way. We will think about starting the robot from the same place each time. Using the same starting position with fixed commands will allow learners to predict what a program will



We will know how to make the robot move forwards and backwards

6. Routes

We will plan routes around a mat before we start to write programs for those routes.

