Progression in Computer Science

	Year 1	Year 2
Term 1	Code Studio Course A - I can use linear sequencing to control an on screen sprite. I can use instructions to control an on screen robot or remote control toy.	Code Studio Course B- I can create linear sequences and debug to fix errors. I can use instructional language in a range of situations e,g, recipes. I can apply my debugging skills to solve puzzles in different contexts.
Term 2	Code studio Course A - I can use simple loops to repeat actions on screen. I can create algorithms (step by step instructions) to achieve a goal. I can convert these instructions by using a series of buttons to program on a robot.	Code Studio Course B- I can use numerical loops to solve puzzles and create effects on screen. I can make predictions using logical reasoning. I can begin to understand how a computer processes instructions and commands (computational thinking)
Term 3	Code studio Course A - I can use events when coding. I can plan a set of clear instructions to control a floor robot to reach a goal and can begin to correct any errors I can use a range of symbols to record my algorithm.	Code Studio Course B- I can use an increasing range of events to control my sprites on screen. I can apply my knowledge of block coding in different apps and programs. I can make predictions and test them. I can create and edit code to complete goals.

Hand held resources for programming

EYFS Focus:
- Select and use technology for particular purposes
- Develop basic understanding of action and reaction.

Clever Cats

Remote controlled cats that meow when stroked and are controlled by one button. The control enables the cats to spin and go forwards. They develop awareness of cause and effect.

Easi Cars
Rugged Racers

Remote controlled cars with a two button handset. The cars go forwards, reverse and reverse to change direction. They allow children to explore cause and effect and to control technology independently. The cars can be used to develop simple programs.

KS1 Focus:
- Understand what algorithms are.
- Create and debug simple programs
- Use logical reasoning to predict the behaviour of simple programs.

BeeBots

Beebots allow the teaching of control, directional language and programming. Beebots move in steps of 15cm and turn through 90 degrees.

Pro-Bot- Floor Robot

Used for teaching more advanced control techniques. Accepts programming arrows or write more complex commands. Routes can be drawn using our simple pen mechanism and a felt tip pen

.