Programming a Floor Robot

## Computing

First we recapped output and input and thought about devices that were one or both of these.
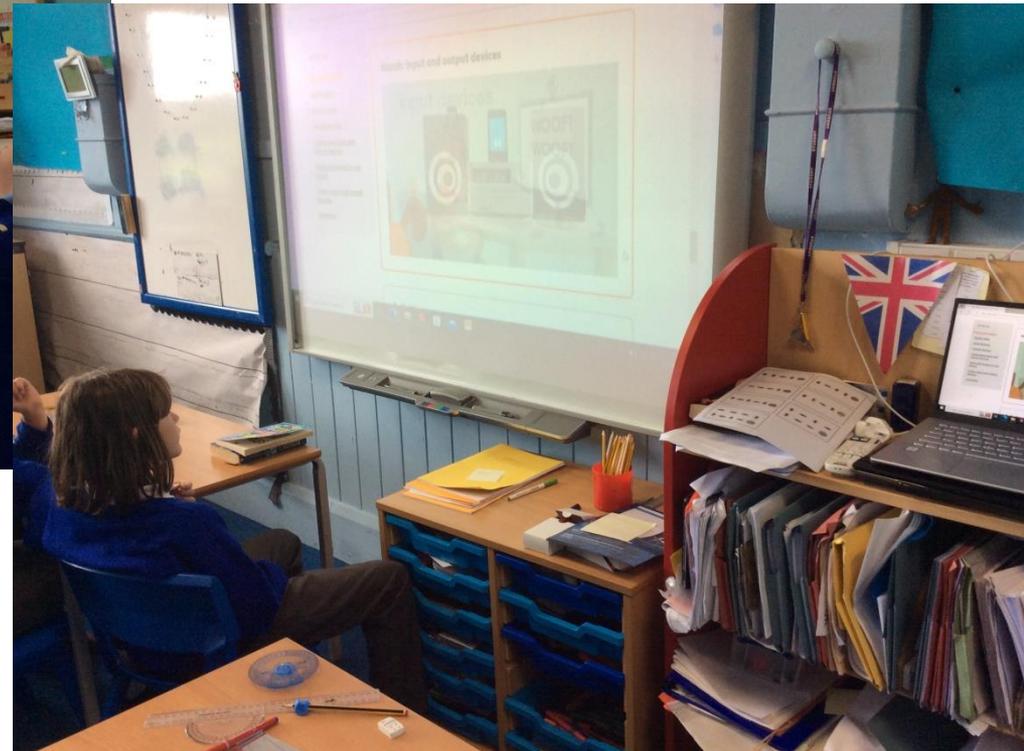
We found out that the B-Bots were input and output because they had buttons and would move and make lights and noises.

Then we thought about a floor robot in terms of input and out put and then did an activity to see of we could predict the output based on a written version of the input and then try it out.
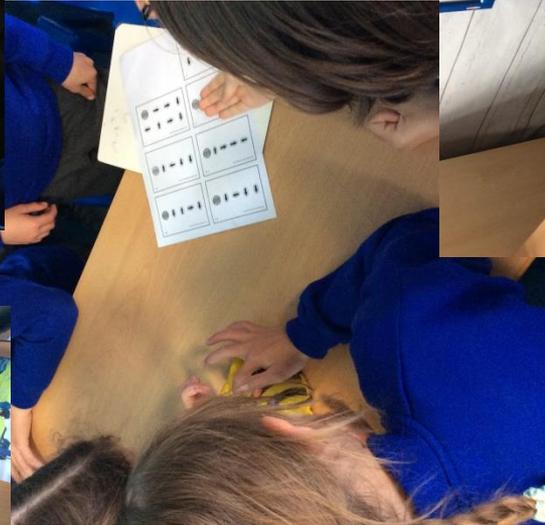
It was hard not to confuse turning right with moving right.

We had to debug a set of instructions for a route to make sure we didn't go off of the table.

We learnt from our mistakes. We found out which instruction it went wrong at and then tried again.

Finally we taught some younger children how to programme the B-Bot and debug when needed to navigate the adventure mats we made in DT.

We had to use R&R to help them understand what to do.

What I have learnt before:

- Debugging skills
- How to use Blockly
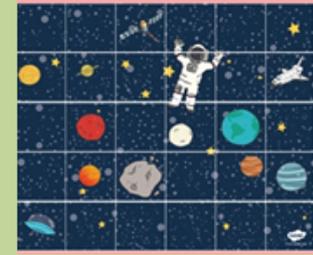
Knowledge

Floor robots are controlled and programmed through the buttons on the top.

Floor robots turn by degrees.

Devices can be input or output or both.

Skills

I can check if a program works

I can work with different forms of input and output

I can write a program to perform a task

I can use sequence, selection and repetition in control

Personal development

Children are prepared to live in a technologically enriched world

Exciting Books

Our Endpoint

To program a floor robot through an adventure map

Subject Specific Vocabulary

Input	A method of computers receiving data
Output	A response made by computers to the user
Input device	something you connect to a computer that **sends information into** the computer
Output device	something you connect to a computer that **has information sent to it**
Program	A computer program is a collection of instructions or algorithms designed to simplify processes
Sequence	A set of instructions that are followed in order
Selection	A way in computer programs to make choices
Repetition	when part of a program repeats itself