# DT and Computing

## Adventure Maps

We learnt about inputs and outputs and then programmed the Beebot to follow instructions.
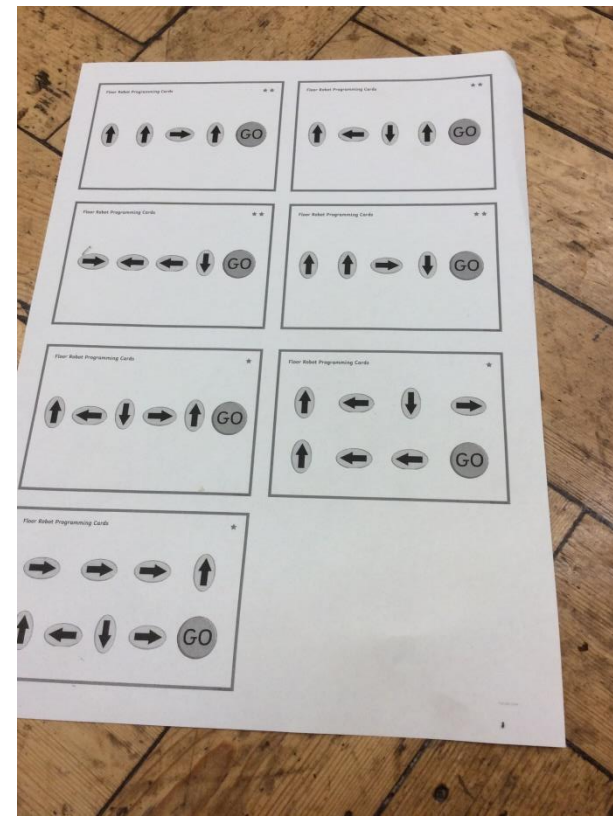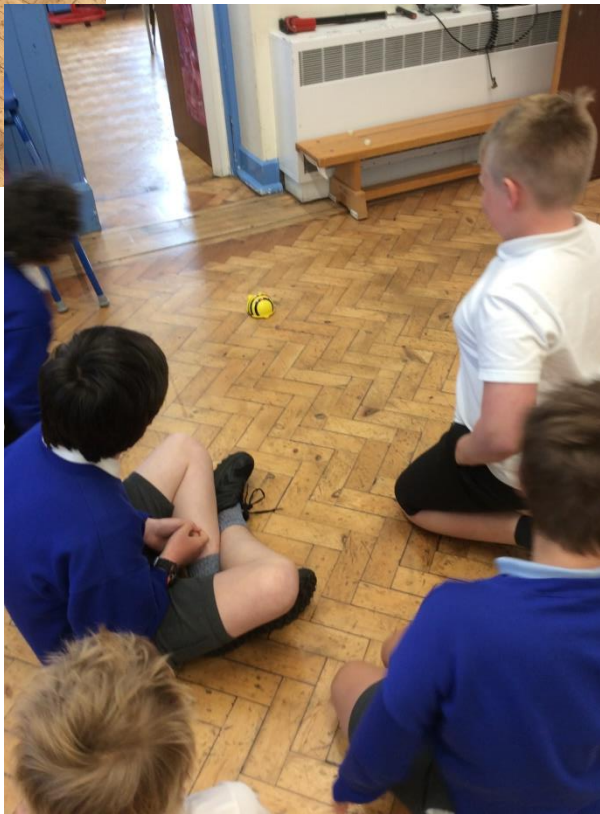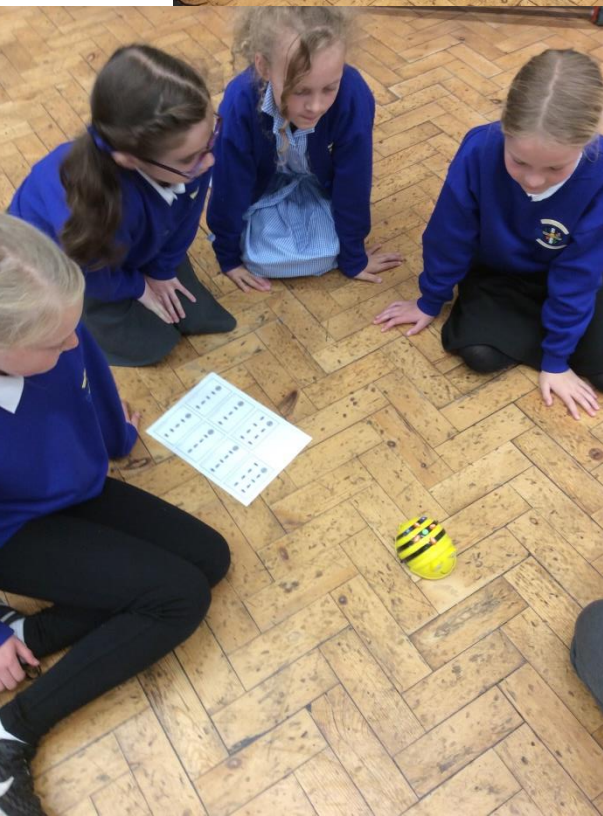
First we looked at ready made adventure maps. We found the key features and thought about what worked well.
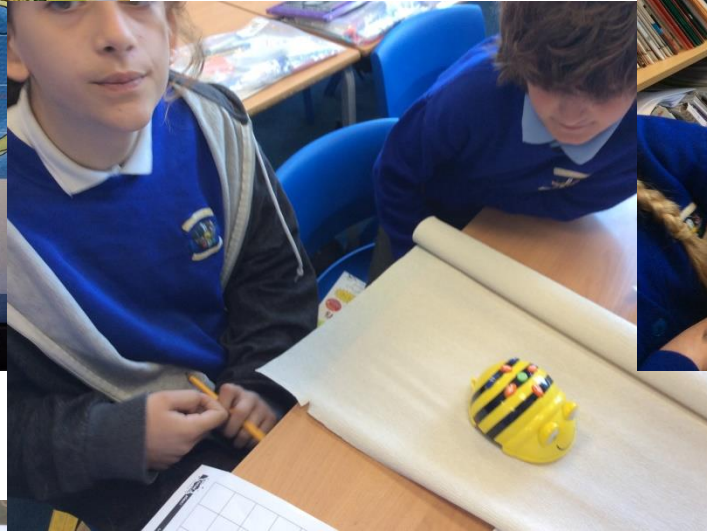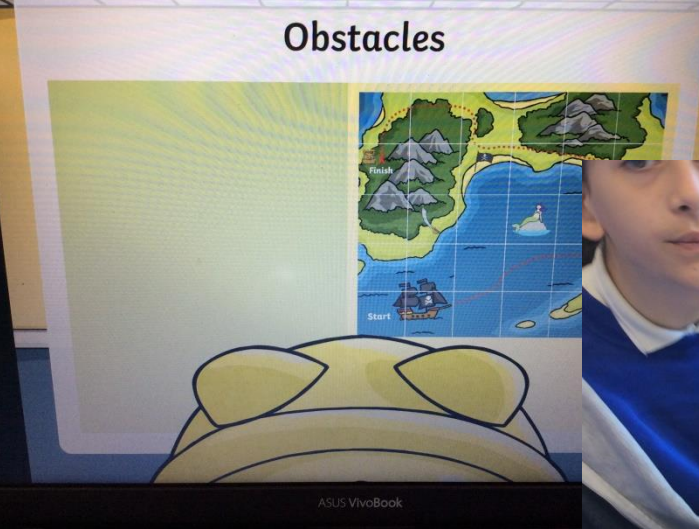
This is what we decided that all of our maps would need.

Design Specification

The map must:

- have landmarks
- a start and finish point
- a theme
- a path
- squares
- a challenge
- obstacles

# Obstacles

We tested different materials to see which would work well as obstacles for our maps. We found out that to be most effective we needed to bunch them up.
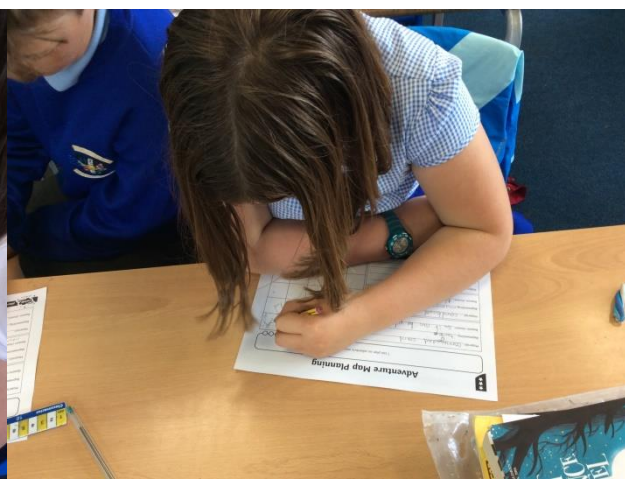
We used what we had learnt to make our own designs for a map based on a theme.

Then we decided which to use as a group.

We made our adventure maps. We had to measure and cut accurately and change some of our obstacles to make sure they stood up.

We went around to each group to see how their adventure map worked. We told them what worked well and what could be improved.
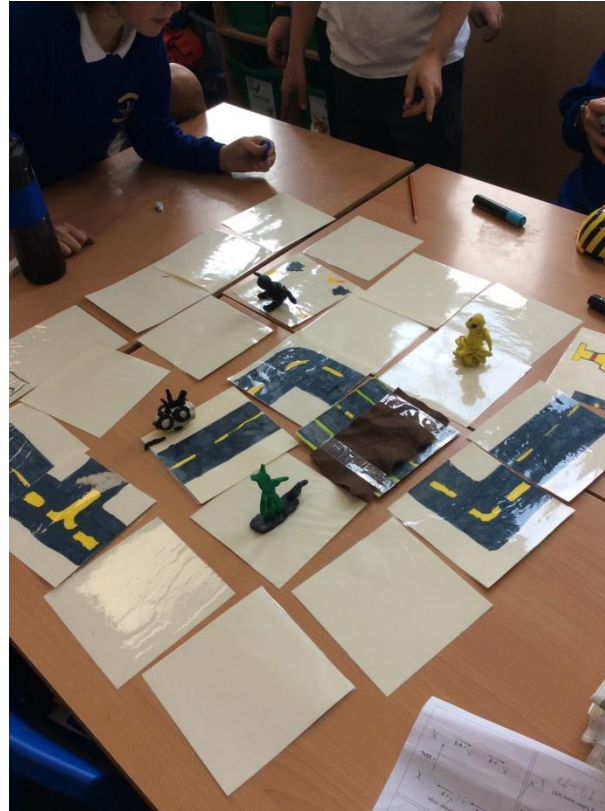
Our finished maps!

Class Cremyl will be using these when they do direction in maths in the summer.

## 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

## SMSC

Social and Moral – prepare children 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 |

# Design and Technology    FLE Y5/6    Adventure Map





## Forever facts

I know which materials best suit a task

I know the design and make process

## Skills

I can select appropriate materials

I can make improvements from suggestions

I can clarify ideas through drawing

I can use knowledge of science when designing

## Exciting Books



## Our Endpoint

I can make an adventure map for a floor robot

## Subject Specific Vocabulary

| | |
|---|---|
| Materials | things needed for an activity |
| Properties | the characteristics of a material or ingredient |
| Obstacles | a thing that blocks one's way or prevents or hinders progress |
| Design criteria | requirements which must be met |
| Evaluate | to compare with the specification |
| Revise | to look over again in order to correct or improve |

| SMSC |
|---|
| Social – children will develop working as a team |