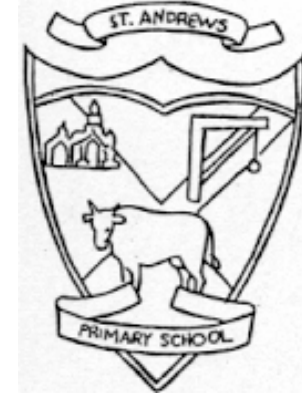St Andrews Primary School

Early Fun with Control

e Confident Guernsey

Conference Friday 21ˢᵗ October 2005

St James

As we live in a world where information and communication technology is playing an increasingly significant role it is our belief that even the very youngest children need to find out about and identify the uses of technology that they encounter in the world around them.

Our exhibition contribution is a practical

display showing the use if ICT
  peripherals

and control equipment.

On show are a variety of devices that
  have

a simple and child friendly layout for

teaching control, directional language
  and

programming and an explanation of the

It demonstrates the control equipment

and activities experienced by Reception

eg, using remote control cars and bugs,

metal detectors and programmable toys

and goes on to show the progression into

Key Stage 1 using more advanced

This equipment is used to deliver a range of creative activities that support and enhance a wide variety of learning intentions enriching the curriculum and making it fun.

St Andrews Primary School

Reception - Metal Detectors

Learning Intentions

Knowledge and Understanding of the World

- I am learning to examine objects and find out more about them
- I am asking questions about why things happen and how things work
- I am learning to switch the metal detectors on and off

Physical Development

- I am practising holding and moving the detector over objects

St Andrews Primary School

Reception - Metal Detectors

Success Criteria

Knowledge and Understanding of the World

- I can switch the metal detector on and off
- I know that when I beeps I have found something made of metal

Physical Development

- I can hold the metal detector and move it over

  objects

We can name lots of different objects.

I can switch the metal detector on.

I can hold the metal detector and move it slowly over objects.

We can use the metal detectors to find out about materials outside.

We can talk about what we think different things are made of.

We know the gate is made of metal because the metal detector is beeping.

Curriculum Guidance for the Foundation Stage suggests that before children complete their reception year they should

'find out about and identify the uses of technology in their everyday lives and use computers and programmed toys to support their learning'

(QCA/DfEE 2000)

St Andrews Primary School
Reception - Remote Control Bugs

Learning Intentions

Knowledge and Understanding of the World

- I am learning to examine objects and find out more about them

- I am asking questions about why things happen and how things work

Physical Development

- I am practising holding the remote control and using my thumbs to press the buttons

St Andrews Primary School

Reception - Remote Control Bugs

Success Criteria

Knowledge and Understanding of the World

- I can use the remote control to make the cars and bugs move forwards, backwards and turn

- I know that if I press the forwards button the car or bug will move forwards

Physical Development

- I can press the buttons on the remote

I can use the remote control to make the car move forwards.

I know that the bug will only move if I press the buttons on the remote control.

I can hold the remote control and press the buttons with my thumbs.

I know I can make the bug stop by taking my thumbs off the buttons on the remote control.

St Andrews Primary School

Year 1- Bee Bots

Learning Intentions

ICT

- I am learning that I control Bee-Bot
- I am learning that I can give Bee-Bot instructions to control what direction he goes in and how far he travels

Numeracy

- I am learning to count on and back using a numberline
- I am learning to add two numbers using a numberline

St Andrews Primary School

Year 1- Bee Bots

Success Criteria

ICT

- I know that Bee-Bot will not move without instructions from me
- I can get Bee-Bot to move forwards and backwards along the numberline the correct number of spaces

Numeracy

- I can start at any number between1-20 and count on and back
- I can use the numberline to add two numbers together by starting at a

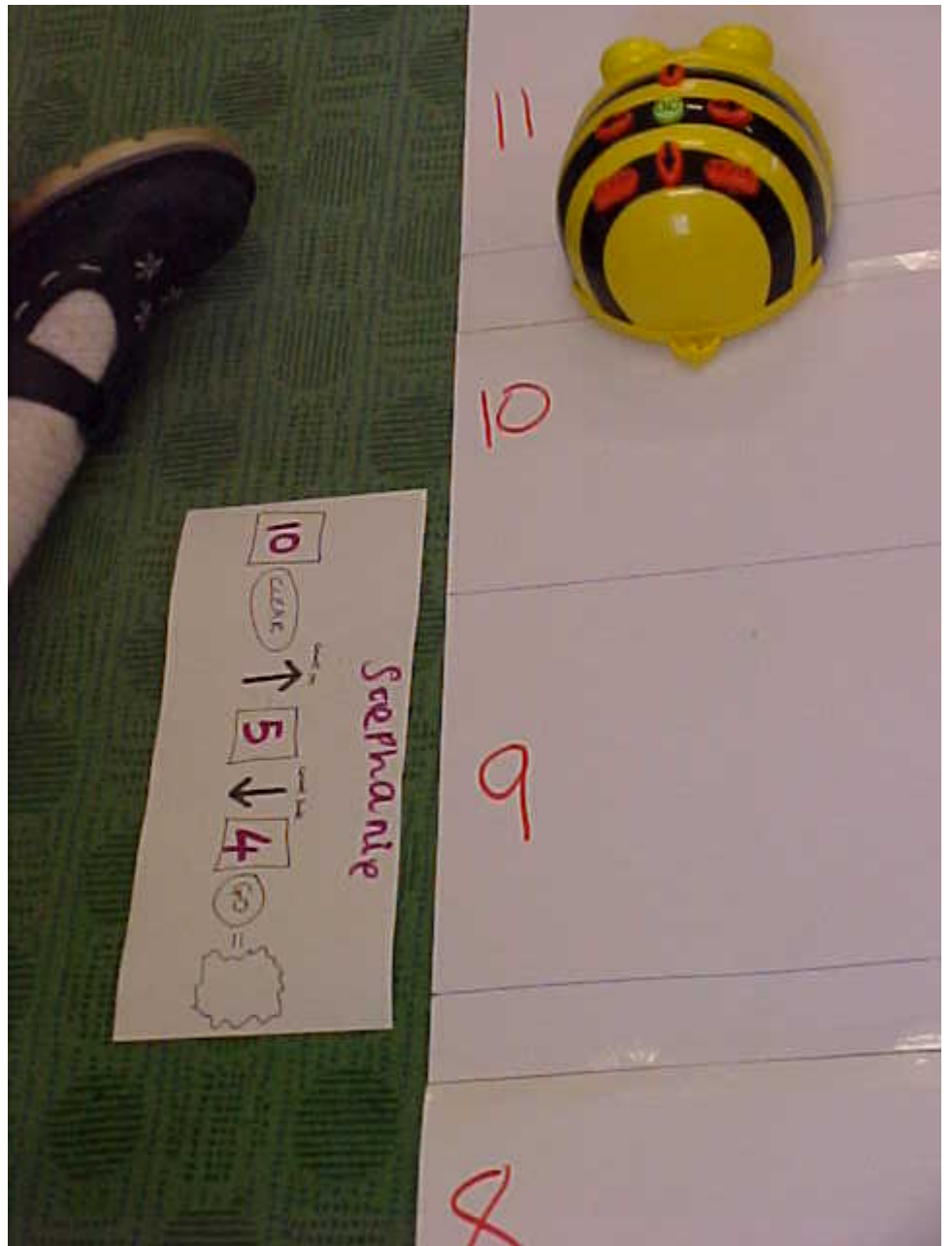 number and counting on to find the answer
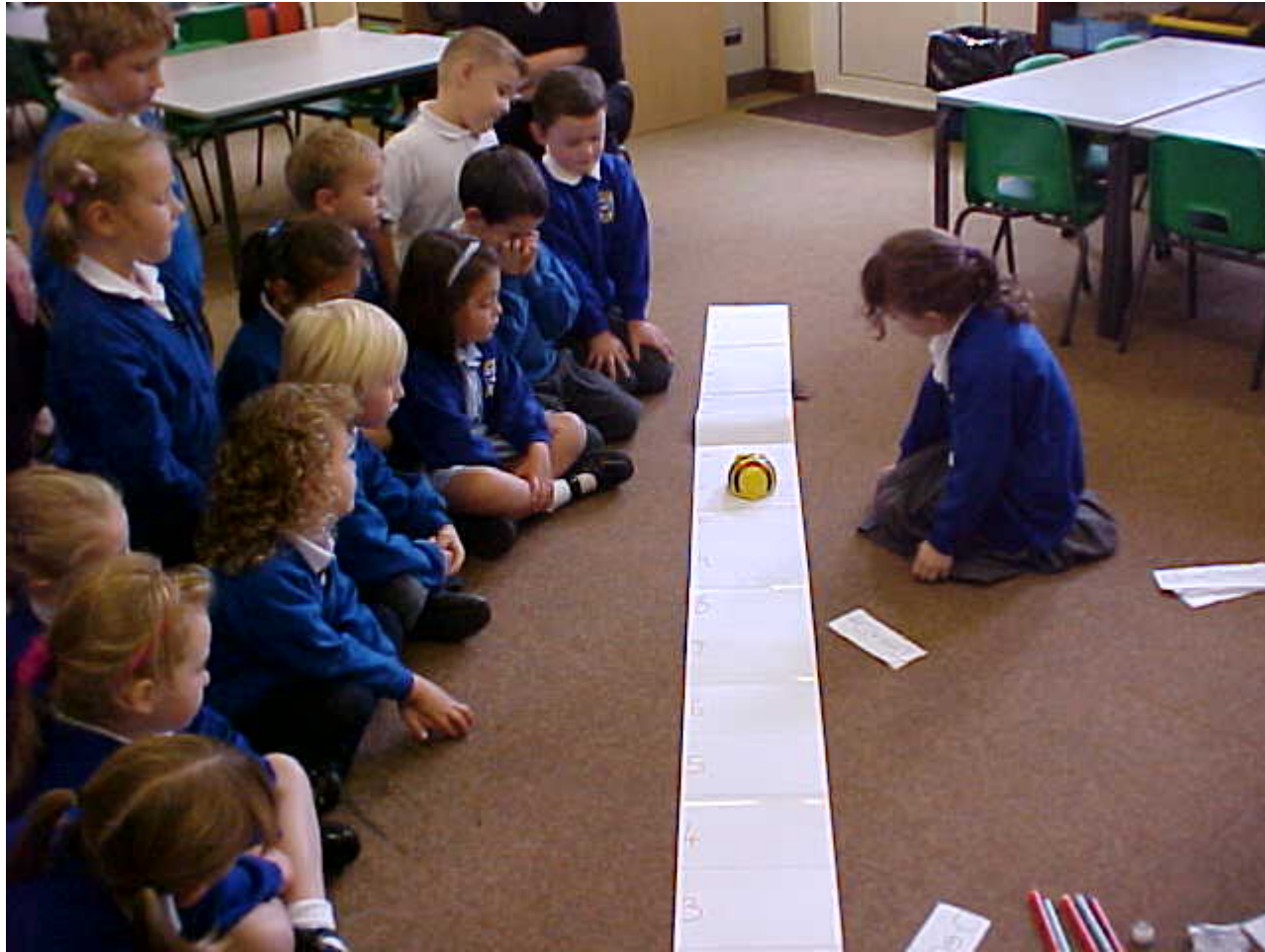
We can make Bee-Bot move forwards along the numberline.
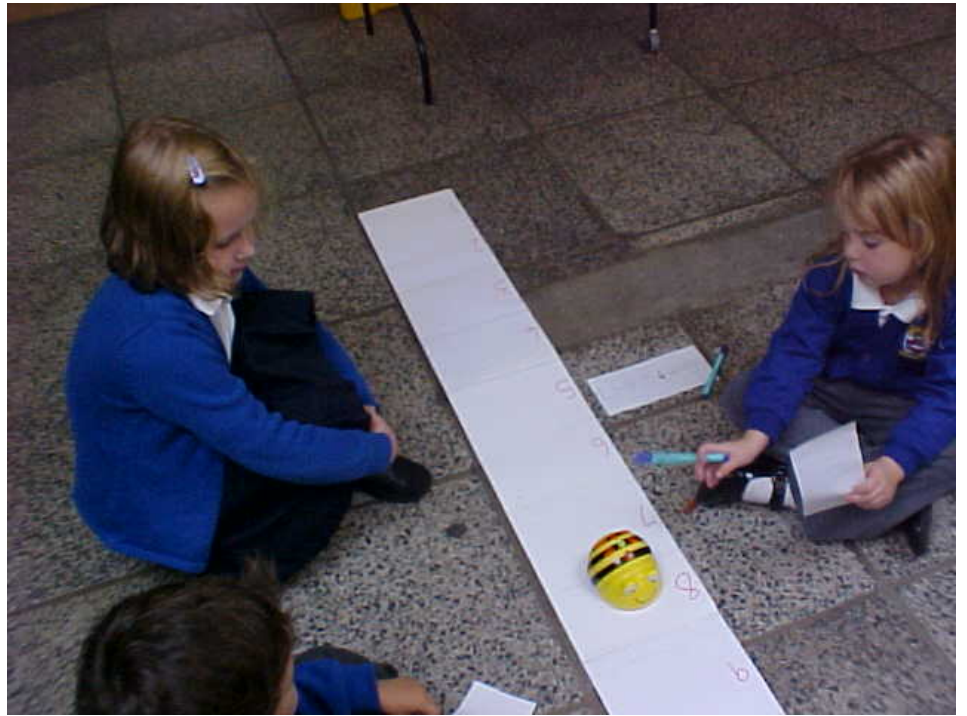
We can give Bee-
Bot instructions.

I can use Bee-Bot to help me count on and add numbers.

I can use Bee-Bot to solve number problems.

I can read instructions and program Bee-Bot to move along the numberline

We can add two numbers together using the numberline.

The use of ICT *'can encourage discussion, creativity, problem-solving, risk-taking and flexible thinking'.*

Iram Siraj-Blatchford (2003) **More Than Computers**
The British Association for Early Childhood
Education

St Andrews Primary School

Year 2 - Bee Bots

Learning Intentions

ICT

- I am learning that I can give Bee-Bot instructions to control what direction he

  goes in and how far he travels

Numeracy

- I am learning to describe positions, directions and movements using everyday words

Geography

- I am learning to use a map

St Andrews Primary School

Year 2 - Bee Bots

Success Criteria

ICT

- I know that Bee-Bot will not move without instructions from me
- I can get Bee-Bot to move from one place on the map to another

Numeracy

- I can correctly describe the route that Bee-Bot should take to get from one

  place on the map to another

Geography

- I can use a map to plan a route

We can program the Bee-Bots to move forwards, backwards, left and right.

We can program Bee-Bot to move from the volcano to the dark cave.

I can use the map and the grid to plan and write instructions for Bee-Bot.

I can write some instructions for Bee-Bot to move from the swamp to the bridge.

St Andrews Primary School

Year 2 - Roamer

Learning Intentions

ICT

- I am learning to use the correct keys to make Roamer go forward backward, left and right
- I am learning to program Roamer with a sequence of instructions

Numeracy

- I am learning to recognise a quarter turn

Literacy

- I am learning to write simple instructions

St Andrews Primary School

Year 2 - Roamer

Success Criteria

ICT

- I can program Roamer with at least 2 instruction that let him follow a route

- I can plan a set of instructions that solve problems

Numeracy

- I can program Roamer to make a left or right turn

Literacy

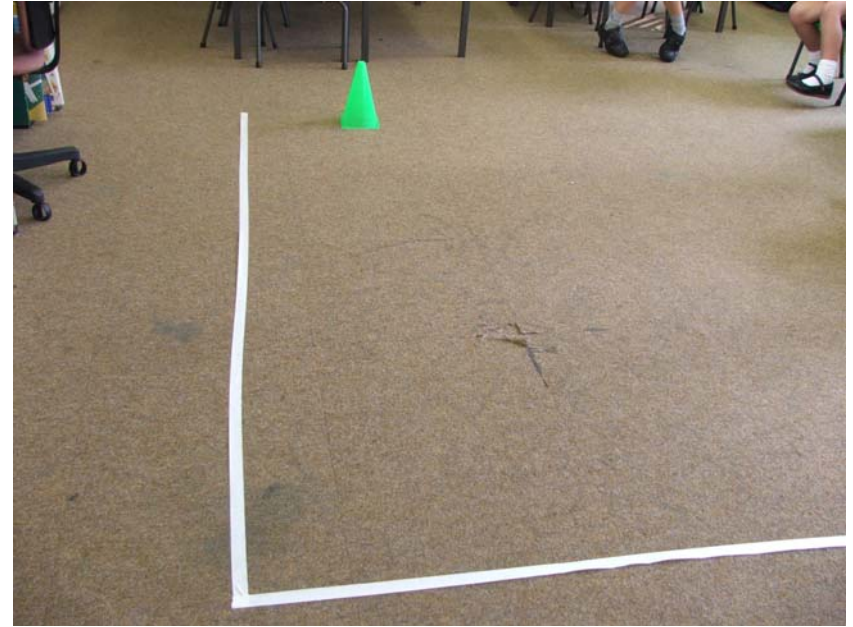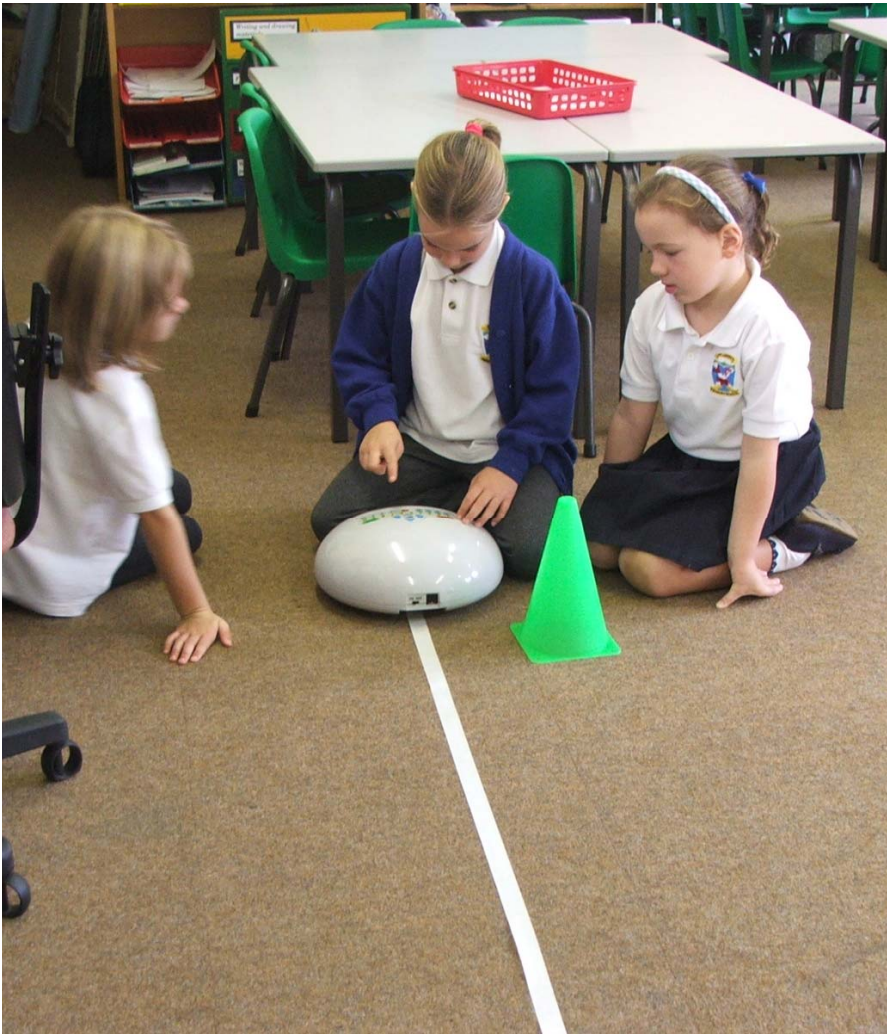- I can write instructions for Roamer using agreed symbols, words and phrases

We can walk the route we want Roamer to take to help us to plan the instructions.

We can work together to mark out the route.
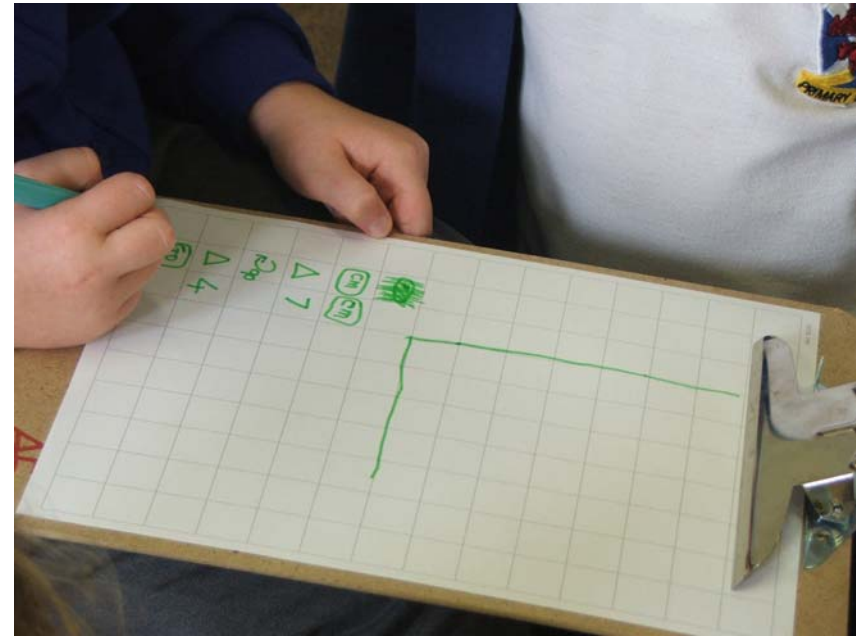
We can write instructions for Roamer using the symbols we have agreed together as a whole class.

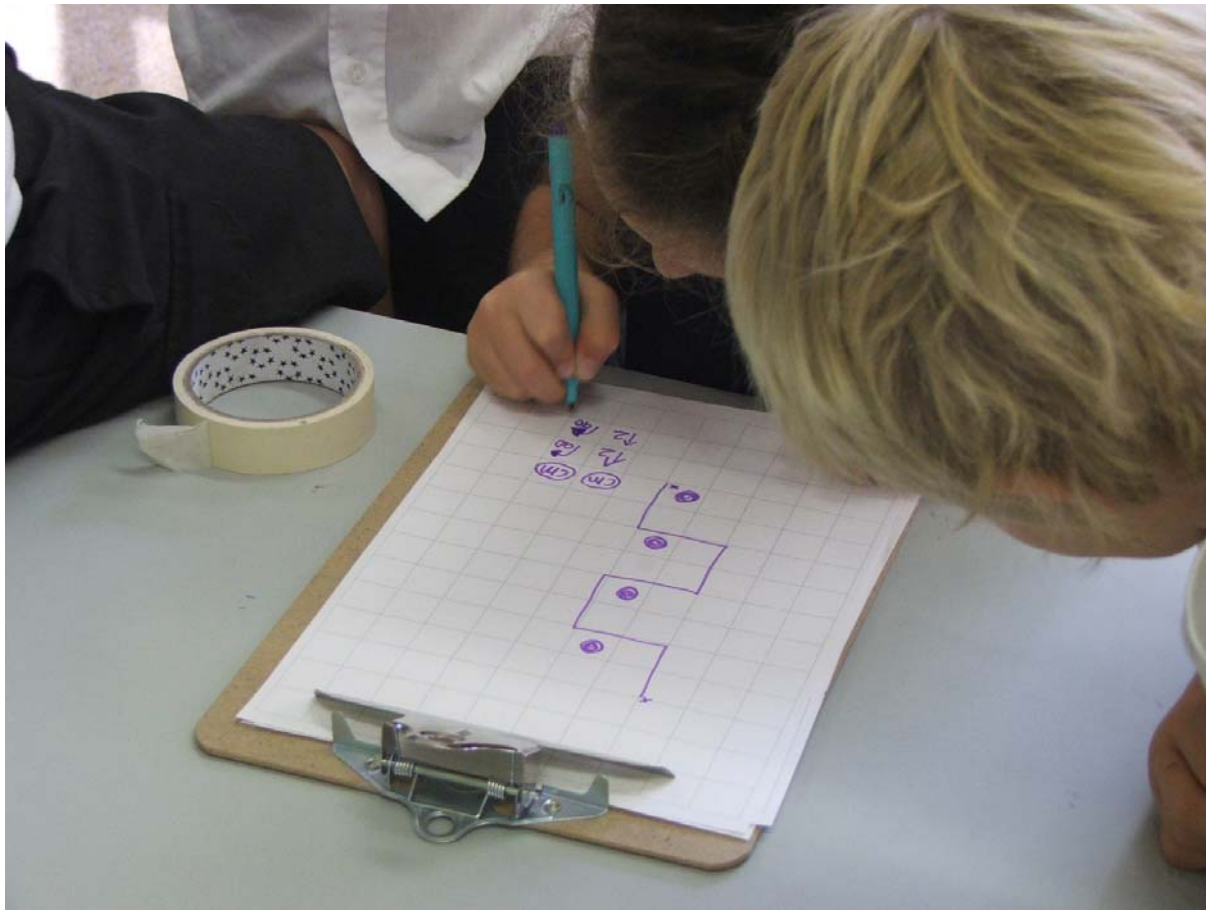We can program Roamer to make a capital L shape.

We can plan a route for Roamer to make him move around some obstacles
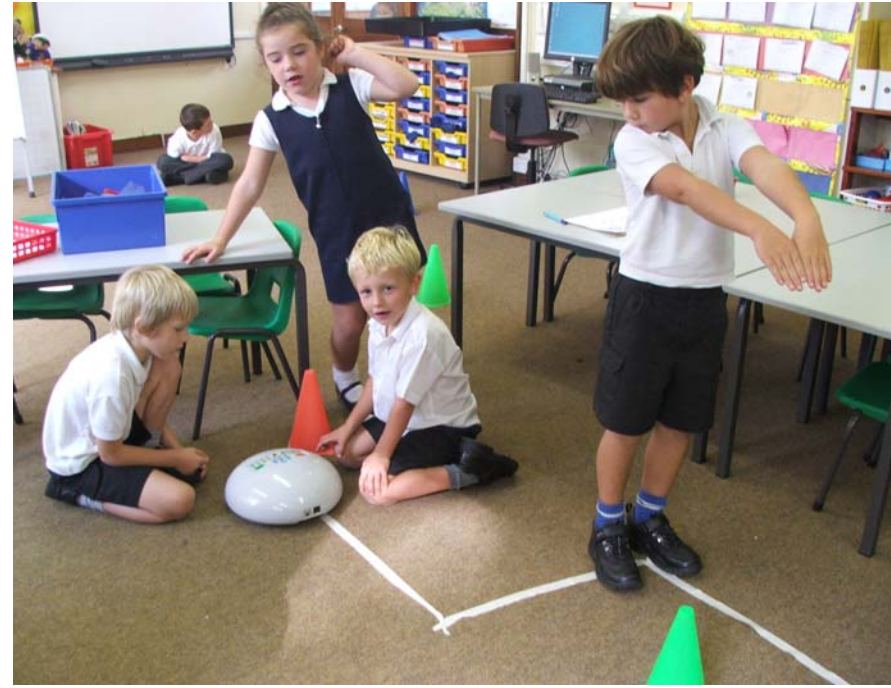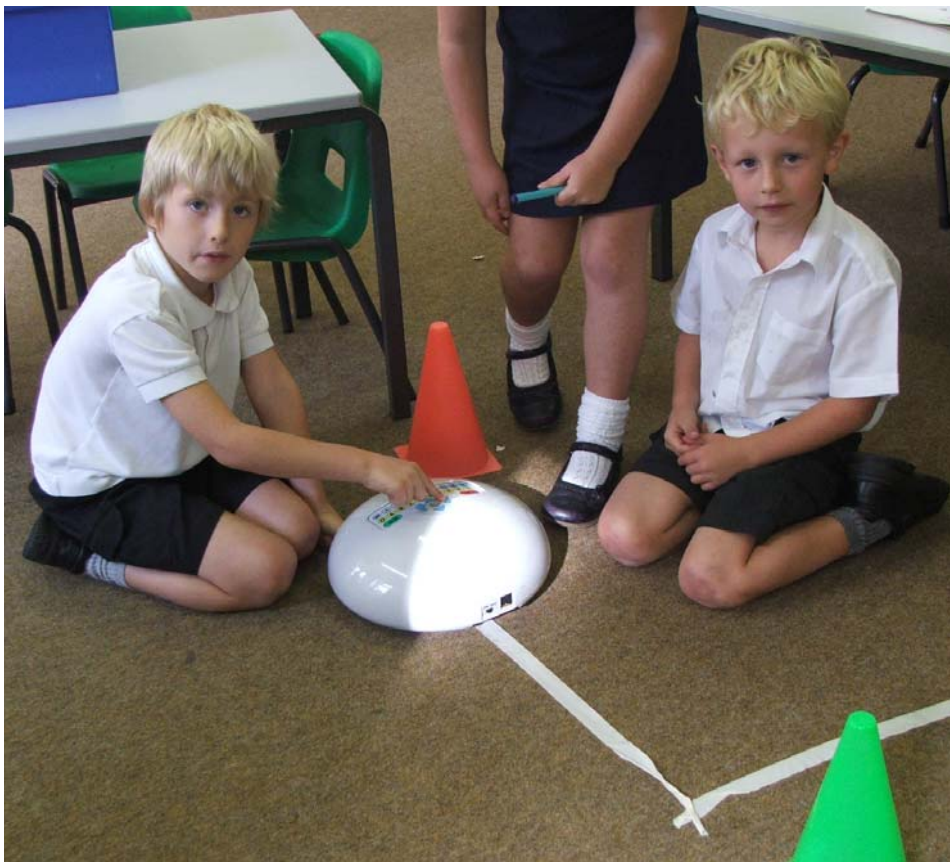
We can mark out the route to help us work out the instructions for Roamer.

We can help each other to write instructions for Roamer.

We can program Roamer to move around the obstacles. Sometimes we have to try again and alter an instruction that we haven't got right.