

Week Beg	Objectives	Activities	Differentiation	Assessment	Resources
Week 1	To understand that control technology is all around us and to evaluate the advantages and disadvantages of this technology	Carousel discussion: Look at p42 and p43 of Smart Learning activity book and discuss how they are controlled and what instructions make them work. What are the advantages and disadvantages of automatic and manual operation	By outcome Encourage more able to think of other examples of control technology	Do the children appreciate the advantages and disadvantages of control technology	P42 and p43 of Smart Learning activity book (Year 5) Unit 5:1 Teachers Notes (1 st Part)
Week 2	To introduce Roamer's control box features to the children To understand that that devices can be controlled through direct commands	(NB because of resources this may need to be done with ½ or 1/3 a class at a time) Demonstrate to the class how to input the instructions to Roamer to switch a bulb on and how to get it to stay on (See sheet) Record how they did it. Build up sequence of instructions to get multiple flashes	Encourage more able to explore other Roamer instructions alongside the light (e.g. moving forward.) Support for less able children	Can the children enter instructions to get Roamer to turn a light on and off	"Controlling Roamer's Outputs" (teacher Guide Roamer Control Interface Lights Children;s help sheet:
Week 3	To control more than one output	Demonstrate how to attach more than one light to Roamer, and how to make it work. Children then to work out how to get the 2 lights to flash alternatively	L/a repeat last weeks' activity independently.	Can the children apply the knowledge learnt last week	Roamer Control Interface
Week 4	To write a procedure that will combine movement and lights	Children to write a procedure that will get Roamer to enter a tunnel and switch lights on when he enters the tunnel and switch them off when he leaves. Test and modify procedures	Make the route to the tunnel more complicated for m/a and increase no of lights Peer or adult support for l/a when writing procedure.	Can the children write a proceedure	Roamer Control Interface
Week 5	Continue with last weeks work	Continue with last weeks work. Final test Ammend procedure for e.g different length of tunnel	↓	Does the procedure successful.	Roamer Control Interface
Week 6	Apply knowledge of control to another situation	Use crystal maze activities (on CD ROM) to control outputs for machines. Science Lab expt	Ability groupings M/A to write procedures. L/a to do one step at a time possibly with support.	Fill in Assessments for term based on work done over the course of the term	Crystal Rain forest CD ROM