

Reception/Y1 Plan Session 1 - Roamer's Turn Keys

Class Activities

ICT – To understand and be able to use directional vocabulary and instructions to program Roamer

Numeracy - To use mathematical vocabulary to describe position, direction and movement

Resources: Roamer with Left and Right marked at each side.

Foot/handprints on the board (as **Year 1 Plan Session 1 - Investigating Left and Right**)

PowerPoint Presentation B - labelling Roamer's Control Panel (left and right turns)

Little Left Right Man - made from Year 1 Sheet 1 Make a Little Left Right Man

Roamer key cards (made using graphics downloaded from

<http://www.valiant-technology.com/freebies/free8.htm>)



Children's copies of the Control Panel (downloaded from above site and laminated)

PowerPoint Slide Show B (labelling the Control Panel (left and right turns)

Large Left and Right Turn Keys (laminated cards) see resources

Four large toys that will sit on the floor and not fall over

Turning Card Pack (Roamer playing cards) see resources

Recap Give out laminated copies of Roamer's Control Panel for children to refer to.

- What does Roamer already know how to do? (go forwards, backwards, wait, play a tune) relate these actions to the keys they need to press by using children's laminated Control Panels and PowerPoint B.
- Can they find the keys?
- What do they have to remember to do to stop Roamer showing off when it's first switched on?
- Where should they stand when pressing **all** Roamer's keys except **GO**? Why? (stand behind Roamer so the keys on the control panel are seen the right way round)

Remind the children which is their left and which is their right. Refer to the Left/Right Man and/or the foot/hand prints on the board.

Turning Left and Right: Being Roamer (children standing in a space of their own)

Tell the children that they are going to learn about two more keys - the turning keys. These keys tell Roamer to turn left or right. Show the children where the turn keys are (on Roamer's Control Panel) using PowerPoint B. Let them find them on their copies of the Control Panel. Explain that these keys tell Roamer which way to turn - either left or right.

Show them the **large turn key cards** and ask them to stand in a space facing you. They are going to pretend to be Roamer. Their "Roamer" is going to stay in the same place but is going to turn on the spot, all the way round so they return to facing front looking at you. (Play Simon Says - turn left **GO** / Simon Says Turn right **GO**) As you hold up either a right or a left turn key card the children practise turning (clockwise/anticlockwise).

Roamer's Left and Right Keys (children sitting in a circle)

Tell the children that Roamer can copy what they were doing when they pretended to be Roamer. You are going to give Roamer some "secret instructions" so that it will know how to turn. Turn Roamer on and secretly key in the following:

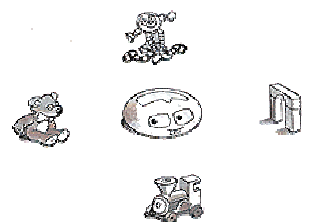
When you press **GO** Roamer will turn 360 degrees to the left.



Playing a Turning Game: Tell the children that they are going to help Roamer play a game.

The children remain in their circle with Roamer in the middle.

Place four toys to the front/back/left/right of Roamer and explain that you want Roamer to stop at each toy in turn. Roamer must not turn all the way round without stopping and Roamer mustn't miss any toy out, so you (teacher) have to give Roamer some new instructions to help it to learn how to do this.



Before starting, give Roamer its new "secret instructions" (see opposite).

These instructions change the unit of turn to 90 degrees for as long as Roamer is turned on.



(Do not clear memory (CM X2) (immediately after keying in these instructions) until the first set of children's instructions have been carried out otherwise it will clear your secret instructions)

Visiting each toy in turn - There are four toys so Roamer will have to do four turns to visit each one and get back to the beginning.

Roamer's Turn Card Pack - Place the (left and right) turn cards face down in one pile and the number cards (1 to 4) face down in another pile. As they go round the circle, **child one** takes a turn card (is it left or right? Refer to "little Left/Right man" if child needs to) and presses the corresponding turn key on Roamer's control panel. **Child two** takes a number card and presses the corresponding key on Roamer.

What number did (X) have? How many turns do you think Roamer will make? Which toy will Roamer go to first? **Child 3** presses GO.

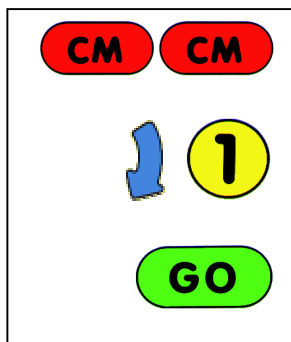
Repeat - **Child 4** presses clear memory twice, **Child 5** takes a turn card and presses a turn key, **Child 6** takes a number card and presses a number, **Child 7** presses GO (after children have predicted which toy Roamer will move to)

Ending the session: recording the sequence for right one

Tell the children that they are going to help you to record the instructions that will make Roamer do one turn to the right. Relate to turning from one toy to the next toy.

Explain to the children that we use special language to describe this turn.

We say that Roamer has turned "right 1"




If Roamer has been turned off you will need to reprogram it to turn in units of 90 degrees - CM CM; left; brackets; 90; brackets; GO. In this case do not let children clear memory otherwise they will clear your instruction!

Children take it in turns as in previous sessions to complete the sequence for turning right. Prompt the children by asking Which way? How much?

(If Roamer has remained switched on, the children should make this sequence of instructions on the easel)

Read/chant the instructions as before. What would they change to make Roamer turn left? Repeat moving Roamer left one.

Extension Activities:

- Remind children about the 'wait' key. Can they program Roamer to move from toy to toy (as before) but this time start at **toy A**, turn to face **toy B**, wait 6 seconds and then turn to **toy C**.
(right 1, W, 6, right 1, GO)
- Repeat the above activity but add in the music keys. (right, 1, W, 6,  8 5 right 1, GO) Roamer should turn right one, wait 6 seconds and beep (a note) before turning right one again and stopping.

To carry out either of these activities the children will need lots of prompting through questioning and discussion.

By turning right (or left) one, Roamer is making "a quarter turn". Do the children know what "a quarter" is? This can be discussed in Numeracy and related to:

- PE - children stand facing the teacher and jump left (or right) one
- A quarter of a cake and a quarter of a circle (folded circle)
- A clock face where the 'big hand' moves a quarter of the way round to show a quarter past.

Worksheets: Reception/Y1 Session 1 Sheet 1 - Naming the keys (CM, Back, Forward, Left, Right) (Cloze)
Year 1 or 2 Label the Keys on the Control Panel (cut & stick includes turn keys)