



DAYS OF WONDER

Robot Days – Teacher Assessment Sheet - Introduction

The pupils will undertake about four activities (this may vary depending on the progress made by the group).

There are number of opportunities for assessment of your class.

The assessment criteria are based on the national curriculum and beyond as you will find that your pupils rapidly advance up to and even beyond the requirements of the key stage 2 national curriculum.

Feel free to copy these as you require – obviously exactly how you use them, if you use them, is entirely up to you. You may wish to report in a detailed way or by exception.

We will of course run the sessions which hopefully will free you to be able to assess your class in a way you seldom get the opportunity to do. We hope that you find the experience both enjoyable and useful.

It is quite possible that a Year 3 or 4 group will not reach the end of the sessions as the final session is at least working at level 5 or to some extent beyond, the progression will be tailored to the group on the day.

We have also supplied a child's self-assessment sheet which you can use to gauge the reaction of your class to their experiences and learning.



DAYS OF WONDER

Robot Days – Assessment Sheet - 1

Class/Group/Name

Date

Team work (think about roles played, leadership, co-operation, level of input)

Approach to tasks (did they work as a team, did they plan first then try or simply start, were they confident, were they engaged, did they expect success or failure)

Attainment

Session 1 (did they listen to instructions, did they follow carefully, were they successful). This session will check the children's ability to follow basic instructions and then use a range of short focussed tasks to use the instructions they learn. By the end of this session they will be able to move their robot in any direction.



DAYS OF WONDER

Robot Days – Assessment Sheet - 2

Session 2 – An integrated task (have they listened to the instructions, have they planned what they will need to do, have they split up roles, do they test, modify and retest their ideas). This session will require the children to use their newly gained knowledge to control the robot and then modify and retest their programs. Success will vary from group to group. NC Level 3 – they use sequences of instructions to control devices and achieve specific outcomes. Make appropriate choices when using ICT based models to solve problems. Modification and refinement moves them beyond Level 3.

Session 3 – An integrated task adding in conditional movement or actions based on feedback from a sensor – move up to an object, turn based on distance, reverse until sensor triggered (have they listened to the instructions, have they planned what they will need to do, have they split up roles, do they test, modify and retest their ideas). NC Level 4 – they use ICT to control events in a predetermined manner and to sense physical data. Make predictions about the consequences of their decisions. NC Level 5 – they understand how ICT devices with sensors can be used to monitor and measure external events.



DAYS OF WONDER

Robot Days – Assessment Sheet - 3

Session 4 – An integrated task using feedback from a sensor, and adding a loop to the program. The children will be asked to create a parking robot that will respond to distance then add a loop and a series of displays in the correct place in the program. (have they listened to the instructions, have they planned what they will need to do, have they split up roles, do they test, modify and retest their ideas). NC Level 4 – they use ICT to control events in a predetermined manner and to sense physical data. Make predictions about the consequences of their decisions. NC Level 5 – they understand how ICT devices with sensors can be used to monitor and measure external events.

Session 5– An integrated task adding in additional movement based on feedback from two sensors – to move towards a ball, check its colour and strike it if it is the right colour (have they listened to the instructions, have they planned what they will need to do, have they split up roles, do they test, modify and retest their ideas). NC Level 4 – they use ICT to control events in a predetermined manner and to sense physical data. NC Level 5 – they understand how ICT devices with sensors can be used to monitor and measure external events. Create sequences of instructions to control events, understand need to be precise. Beyond level 5 – they are developing conditional coding so that the robot responds differently depending on what it encounters.



DAYS OF WONDER

Session 6 – An introductory unit building towards session 6 – can the pupils use a sensor to test whether the robot is approaching a black line? In order to do this they will need to use the sensors in a live mode in order to set their threshold. NC Level 5 – they understand how ICT devices with sensors can be used to monitor and measure external events.

Session 7 – A final integrated task in which they combine all that they have worked on to produce a simple level of AI (artificial intelligence) so that the robot follows a black line. They will use what they have tested in session 5 but then extend it to use conditional programming and processing. They will also reflect on the extent to which the robot did what they wanted and what would need to be done to make a complete solution to the problem. NC Level 5 – they understand how ICT devices with sensors can be used to monitor and measure external events. Create sequences of instructions to control events. Beyond level 5 – they are developing conditional coding so that the robot responds differently depending on what it encounters.