

Exploring a Maze



Assessment Focus

Interactive Design

- Explore (2)*
- Evaluate
- Exhibit

Pupil Notes

Level 2
Level 3

Part 1
Part 2

* Explore (2) refers to the second bullet point of Explore in the Levels of Progression.

Task Description

In this task pupils should use Black Cat Logo to select 'The Maze' background and choose an appropriate 'turtle'. In order to place the 'turtle' at the entrance to the Maze, the pupils will need to change to the Green Level to drag the 'turtle' into position and then return to the Blue level to complete the task. The teacher may need to provide assistance. The pupils should then use their knowledge of the logo commands and tools to accurately make decisions and direct the 'turtle' from the start to the end of the maze (Part 1). Pupils working at Level 2 should enter commands to move through the maze. Pupils working at Level 3 should plan their journey and then enter **one sequence** of commands to move through the maze (Part 2). Pupils will need to know that to make a right or left turn, they will need to enter rt90 or lt90.

When making a judgement of the pupil's level of Using ICT competence within this task, teachers should use the Assessment Criteria Grid.

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Prior Knowledge/Experience

Depending on the level at which they are working, pupils should have some experience in some of the following:

- using Black Cat Logo
- using simple commands to generate step by step movement;
- selecting logo backgrounds and 'turtles';
- altering pen style, width, colour and pen up/down; and
- saving, using a file name and printing work.

Resources

Black Cat Logo software.

Managing the Task

Pupils should be given opportunities to:

Plan

Pupils should discuss how they can direct the 'turtle' through the maze.

Do

Pupils should work individually to direct their 'turtle' through the Maze. They should make use of the pen style, width, colour and pen up/down icons where necessary. Depending on the level at which they are working, they should save their work appropriately.

Review

Pupils should be given the opportunity to reflect on the process and discuss what they would have done differently.

Evidence for External Moderation

As well as submitting the final product, please include;

- evidence of planning
- a brief pupil evaluation at level 3

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Assessing Pupils' Responses to the Task

The first column of the Assessment Criteria Grid sets out the Requirements for Using ICT that are covered in this task. Alongside this are the Levels of Progression and the Using ICT Desirable Features for Interactive Design at Levels 2 and 3. These Desirable Features have been produced as guidance for teachers to consider when observing a pupil and

assigning a level to a piece of work. When coming to a holistic judgement of the pupil's level of Using ICT competence, teachers should ensure that these Desirable Features are used in conjunction with the Using ICT Levels of Progression. Where possible teachers should incorporate elements of Exchange and Exhibit as set out in the Desirable Features.

Assessment Criteria Grid		
Using ICT Requirements	Level 2	Level 3
Explore <ul style="list-style-type: none"> investigate, make predictions and solve problems through interaction with digital tools. 	Pupils can: <ul style="list-style-type: none"> carry out a series of instructions using a digital device or environment; 	Pupils can: <ul style="list-style-type: none"> carry out and edit a series of instructions, make predictions and solve problems using a digital device or environment;
Evaluate <ul style="list-style-type: none"> talk about, review and make improvements to work, reflecting on the process and outcome and consider the sources and resources used, including safety, reliability and acceptability. 	<ul style="list-style-type: none"> talk about how to improve their work; and 	<ul style="list-style-type: none"> make modifications to improve their work; and
Exhibit <ul style="list-style-type: none"> manage and present their stored work and showcase their learning across the curriculum, using ICT safely and responsibly. 	<ul style="list-style-type: none"> save their work. 	<ul style="list-style-type: none"> save using file names and select work to showcase learning digitally.

Pupils should demonstrate, when and where appropriate, knowledge and understanding of e-safety including acceptable online behaviour.

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Assessment Criteria Grid

Desirable Features – Level 2 (Interactive Design)	Desirable Features – Level 3 (Interactive Design)
<p>Pupils can:</p> <ul style="list-style-type: none">• enter commands to create movement or change, <i>for example enter commands to make an onscreen turtle move to a specific location</i>; and• talk about how to improve their work.	<p>Pupils can:</p> <ul style="list-style-type: none">• solve problems using a digital device or environment, <i>for example use the 'repeat' command to create patterns or shapes using Logo</i>;• input sequences of commands; and• make modifications to improve their work.

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Part 1

Open Black Cat Logo at the blue level.

Choose **The Maze** background.

Change the turtle to a better one for this background.

Change to the *Green* level and drag your 'turtle' to the entrance of the maze before you begin your journey.

Change back to the blue level.

Your task is to direct the 'turtle' through the maze to the finish without touching the walls of the maze.

Please select a suitable pen colour, pen width and pen style for this task.

Use the logo commands to move the 'turtle' through the maze.

Save your work.

Show it to a friend.



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Part 2

Open Black Cat Logo at the blue level.

Choose **The Maze** background.

Change the turtle to a better one for this background.

Change to the *Green* level and drag your 'turtle' to the entrance of the maze before you begin your journey.

Change back to the blue level.

Your task is to direct the 'turtle' through the maze to the finish without touching the walls of the maze.

Please select a suitable pen colour, pen width and pen style for this task.

Plan and record your journey through the maze.

Then enter all your commands before pressing 'enter'.

Make changes to your commands if you need to and try again until you get it right.



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Hide your 'turtle' and save your work using a suitable name.

Show it to a friend and talk about how you improved your work.

