

Starting to Scratch

Desirable Features: Exploring Programming

Task Description

This is a generic ICT task on Exploring Programming at Levels 1 and 2. In this task, pupils are required to use Scratch to make a sprite move in different directions and add a background, sound and text.

The Pupil Notes are set out in two parts.

Part 1 of the task has been designed for pupils working at Level 1 and Part 2 has been designed for pupils working at Level 2.

This task also provides teachers with the opportunity to develop pupils' skills in Using Maths and Communication.

Requirements for UICT

This task focuses on the following aspects of UICT across the curriculum which have been highlighted in **bold**.

Explore

- access, select, interpret and research information from safe and reliable sources;
- **investigate, make predictions and solve problems through interaction with digital tools.**

Express

- **create, develop, present and publish ideas and information responsibly using a range of digital media and manipulate a range of assets to produce multimedia products.**

Exchange

- communicate safely and responsibly using a range of contemporary digital methods and tools, exchanging, sharing, collaborating and developing ideas digitally.

Evaluate

- **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.**

Exhibit

- **manage and present their stored work and showcase their learning across the curriculum, using ICT safely and responsibly.**

Please Note: For assessment purposes, only the 'E's that are covered at the level(s) stated on the task have been bolded.

Depending on how the task is approached, it may touch on elements of the unbolded 'E's, although not necessarily at the level(s) stated.

Task Code: 0070

Areas of Learning

Depending on the context chosen by the teacher, this task has the potential to support one or more of the following Areas of Learning:

The Arts	✓
Language and Literacy	✓
Mathematics and Numeracy	✓
Personal Development and Mutual Understanding	✓
Physical Education	
The World Around Us	✓

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Thinking Skills and Personal Capabilities

This assessment task also provides pupils with the opportunity to demonstrate one or more of the following aspects of Thinking Skills and Personal Capabilities:

Managing Information

Thinking, Problem-Solving and Decision-Making

Being Creative

Working with Others

Self-Management

Prior Knowledge/Experience

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

- taking an existing sprite or drawing their own sprite and using simple commands to make it move; (Level 1)
- adding sound or text; (Level 1)
- changing the appearance of a sprite and using commands to make it move in more than one direction; (Level 2)
- adding sound and text; (Level 2) and
- choosing a suitable background; (Level 2).

Resources

CCEA 'How to' .. Guide on Scratch

CCEA Case Studies available on the CCEA ICT Accreditation website

Access to Internet.

Scratch software downloaded

The Scratch Resource Cards A, B, C and D are very useful for teaching pupils about Scratch. These are available for downloading on the <http://clounagh.org/>

Managing the Task

Pupils should be given opportunities to:

Plan

Pupils explore with making a given sprite move in different directions. They discuss with the teacher what they want their sprite to do.

Do

Pupils work individually or in pairs. They choose a sprite and change the appearance, if appropriate, add sound and text and choose a suitable background.

Review

Pupils talk about what they have done, and how they might make changes.

Assessing Pupils' Responses to the Task

The first column of the Assessment Criteria Grid sets, in bold, the Requirements for UICT that are covered in this task. Alongside this are the Levels of Progression (those related to the task are in bold) and the UICT Desirable Features for Exploring Programming and Progression in Scratch. 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 UICT competence, teachers should ensure that these Desirable Features are used in conjunction with the UICT Levels of Progression.

Assessment Criteria Grid		
UICT Requirements	Level 1	Level 2
Explore <ul style="list-style-type: none"> access, select, interpret and research information from safe and reliable sources; investigate, make predictions and solve problems through interaction with digital tools. 	Pupils can: <ul style="list-style-type: none"> find and select information from a given digital source (explore); explore and interact with a digital device or environment (explore); 	Pupils can: <ul style="list-style-type: none"> find, select and use information from a given digital source (explore); carry out a series of instructions using a digital device or environment (explore);
Express <ul style="list-style-type: none"> create, develop, present and publish ideas and information responsibly using a range of digital media and manipulate a range of assets to produce multimedia products. 	<ul style="list-style-type: none"> express ideas by creating pictures and composing text and/or graphs or adding own voiceover (express); 	<ul style="list-style-type: none"> create and edit text and/or data onscreen, combining images and/or sound (express);
Exchange <ul style="list-style-type: none"> communicate safely and responsibly using a range of contemporary digital methods and tools, exchanging, sharing, collaborating and developing ideas digitally; 		
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 their work; and 	<ul style="list-style-type: none"> talk about how to improve their work (evaluate); 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"> print their work (exhibit). 	<ul style="list-style-type: none"> save their work (exhibit).

Assessment Criteria Grid

UICT Requirements	Desirable Features - Level 1 (Exploring Programming)	Desirable Features - Level 2 (Exploring Programming)
<p>Explore</p> <ul style="list-style-type: none"> access, select, interpret and research information from safe and reliable sources; investigate, make predictions and solve problems through interaction with digital tools. 	<p>Typically the pupil can:</p> <ul style="list-style-type: none"> use simple commands to investigate how, for example, a Bee-Bot or onscreen sprite moves (explore); and talk about what they did (evaluate). 	<p>Typically the pupil can:</p> <ul style="list-style-type: none"> enter commands to move or change, for example, a Bee-Bot or onscreen sprite (explore); understand the outcome of a command and select and use commands to generate a change in movement or value (explore); talk about how they caused movement and how they might do it again with different commands (evaluate); and save work (exhibit).
<p>Express</p> <ul style="list-style-type: none"> create, develop, present and publish ideas and information responsibly using a range of digital media and manipulate a range of assets to produce multimedia products. 	<p>Progression in Scratch</p> <p>Typically the pupil can:</p>	<p>Progression in Scratch</p> <p>Typically the pupil can:</p>
<p>Exchange</p> <ul style="list-style-type: none"> communicate safely and responsibly using a range of contemporary digital methods and tools, exchanging, sharing, collaborating and developing ideas digitally; 	<ul style="list-style-type: none"> take an existing sprite or draw their own sprite and use simple commands to make it move; add sound or text; and talk about their work. 	<ul style="list-style-type: none"> change the appearance of a sprite, for example colour, resize; use commands to make sprite move in more than one direction; add sound and text; choose a suitable background; talk about how to improve their work; and save their work.
<p>Evaluate</p> <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. 		
<p>Exhibit</p> <ul style="list-style-type: none"> manage and present their stored work and showcase their learning across the curriculum, using ICT safely and responsibly. 		

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

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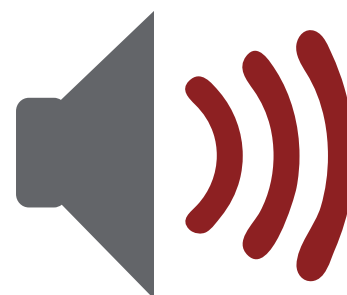
Part 1

Choose a sprite or draw your own sprite.

Use the Motion function to make your sprite move.

Use the Sounds function to add sound or the Looks function to add words.

Talk about your work.



Part 2

Now change the colour of your sprite. make it bigger or smaller.

Make your sprite move in different directions.

Add sounds and words.

Choose a suitable background for your sprite.

Save your work.

Show it to someone from your class and talk about how you could improve it.

