



Digi-Explorers

Sample

Marking Scheme

This marking scheme has been prepared as a **guide only** to markers. This is not a set of model answers, or the exclusive answers to the questions, and there will frequently be alternative responses which will provide a valid answer. Markers are advised that, unless a question specifies that an answer be provided in a particular form, then an answer that is correct (factually or in practical terms) **must** be given the available marks.

If there is doubt as to the correctness of an answer, the relevant NCC Education materials should be the first authority.

Please note that marks should not be deducted for poor spelling and grammar unless this presents a significant barrier to comprehension and therefore the assessment of the quality of knowledge and thought.

Throughout the marking, please credit any valid alternative point.

Where markers award half marks in any part of a question, they should ensure that the total mark recorded for the question is rounded up to a whole mark.

Part A: Understanding Computing (50 marks)

Circle ONE (1) correct answer from A, B, C or D for each question

Question 1

Which of the following is an example of personal data?

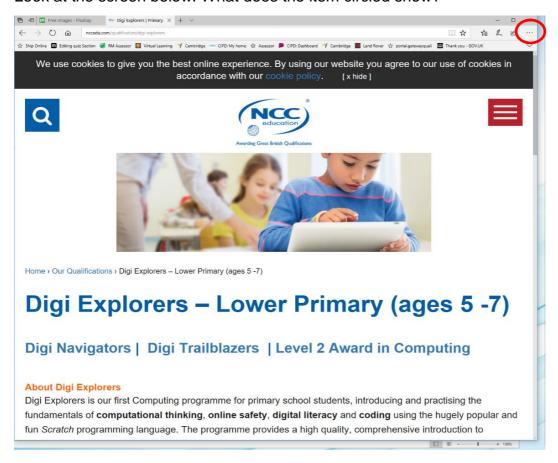
A Home address B Country

C Car D Continent

4 marks

Answer: A Home address

Look at the screen below. What does the item circled show?



A The home button

B To add the page as a bookmark

C The address bar

D Customize and control

Answer:

D Customize and control

Award 4 marks for the correct answer.

4 marks

Which of the following technologies	would be most	suitable to be	used by a	car
manufacturer to paint the cars?				

A Minesweeper robot B Assembly robot

C Welding robot D Painting robot

4 marks

Answer:

D Painting robot

Award 4 marks for the correct answer.

Question 4

Which of the following Options is an example of WordArt?

A Text

в Text

C Text

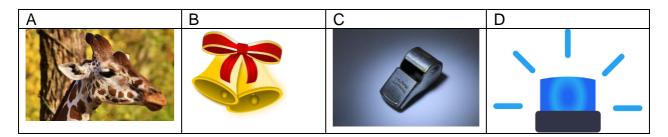
D Text

4 marks

Answer:

A Option A

Which of the following is not an example of soundscape sound?



A Animal

B Bells

C Whistle

D Sirens

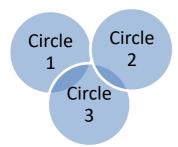
4 marks

Answer:

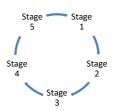
A Animal

Which one of the following is a flow chart?

A



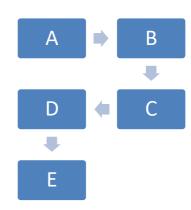
В



C



D



4 marks

Answer:

D Flow chart

Which tool would you use to reduce the sound towards the end of an audio file?					
Α	Reverb	В	Echo		
С	Cut	D	Fade		
An	swer:			4 marks	
D	Fade				
Aw	Award 4 marks for the correct answer.				
Question 8					
Which of the following are examples of animation effects? Choose one:					
A	Appear	В	Countdown		
С	Mute	D	Веер		
Answer:					
A	Appear				
Δw	Award 4 marks for the correct answer.				

You have been asked to total the figures from the chart below. Which would be the best function to use?

Big Ben	3,245,671
Tower of London	2,579,564
London Bridge	1,389,074
Buckingham Palace	1,256,000
Victoria Station	1,136,561
Total	

Α	Average	В	IF
С	Sum	D	Count numbers

4 marks

Answer:

C Sum

Award 4 marks for the correct answer.

Question 10

Which of the following is an example of technology used at home?

A Turning on heating
 B Modelling design
 C Ship simulator
 D Language simulator

4 marks

Answer:

A Turning on heating

The algorithm shows the first 2 steps for creating a computer character. Choose the correct Step 3.

Step 1 Turn on the computer Step 2 Open the software

Step 3 ???

A Turn off the computer
 B Draw the character
 C Edit the character
 D Colour the character

4 marks

Answer:

B Draw the character

Award 4 marks for the correct answer.

Question 12

The example below shows an algorithm. What does the full algorithm show?

- Go to high street
- Find grocery store
- Choose apple

Option A going to the high street Option B going to a grocery store

Option C going to the high street and choose an apple

Option D Going to the high street store and choosing an apple

A Option AB Option BC Option CD Option D

4 marks

Answer:

D Option D

Which tool would mute the sound on your computer?





Answer: B Mute





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Set E

Examination Paper

Part B (Practical)

Candidate name:		
Centre name:		

Candidate instructions

- Write your name and the name of your centre above.
- The total examination time is 60 minutes:
 - 30 minutes for Part A (Theoretical)
 - 30 minutes for Part B (Practical)
- Your teacher will tell you if you are completing the Theoretical and Practical questions at this time (Part A and B), just the Theoretical questions (Part A) or just the Practical questions (Part B).
- Complete all of the questions you are given.
- Part B will be completed using a computer.
- Any computer-based work must be saved following your teacher's instructions.

Ask your teacher if you are not sure what to do.

For teacher's use or

NCC Education Student ID:	

Part B: Using Computers (50 marks)

Question 14

Share your favourite lesson using presentation software. You should make **THREE (3)** slides. You should use **text**, **images** and **sound** in your presentation to introduce your favourite lesson.

Award up to 10 marks for the use of text, images and sound in the student's presentation:

- 10 marks the student has used text, images and sound
- 7 marks the student has used two of the three features
- 3 marks the student has used only one of the three features
- 1 mark the student has made very limited use of one feature only

Award up to 20 marks for the effective use of the text, images and sound:

- 20 marks all features contribute well to produce a cohesive presentation.
- 15 marks all features contribute fairly well with one or two minor improvements required.
- 10 marks not all features are relevant but it is still possible to follow the presentation
- 5 marks only a limited number of features are relevant and it is difficult to follow the presentation
- 1 mark the presentation is very difficult to follow and the student has made very limited or no use of the features

30 marks

Write a program using Scratch. Add the sprite and backdrop as shown in Sample A. When clicked, the dinosaur starts moving its head backwards and forwards as shown in Samples B, C, and D.The dinosaur will stop moving after 5 rounds of the backward and forward moving.



Sample A



Sample C



Sample B



Sample D

20 marks

Award 5 marks for adding the correct backdrop.

Award 1 mark for adding when clicked.

Award 5 marks for adding the correct sprite (dinosaur-a) after when click line.

Award 1 mark for adding repeat loop block with the value of 5.

Award 1 marks for switching costume to dinosaur-b.

Award 1 marks for waiting for 1 seconds (it can be any value)

Award 1 marks for switching dinosaur-c.

Award 1 marks for waiting for 1 seconds (it can be any value)

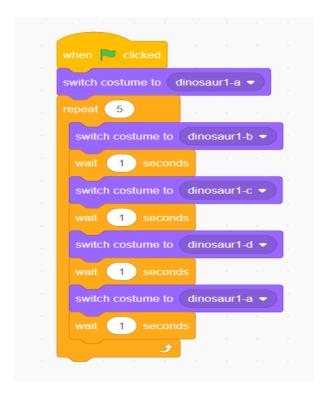
Award 1 marks for switching costume to dinosaur-d.

Award 1 marks for waiting for 1 seconds (it can be any value)

Award 1 marks for switching dinosaur-a.

Award 1 marks for waiting for 1 seconds (it can be any value)

The lines are:



Learning Outcomes matrix

Part A: Und	Part A: Understanding Computing		
Question	Learning Outcomes assessed		
1	Understand how to be safe and respectful online.		
2	Use a web browser to view and navigate web pages.		
3	Technology beyond school.		
4	Working with text.		
5	Working with sound.		
6	Working with digital images.		
7	Working with sound.		
8	Working with video animation.		
9	Working with data		
10	Technology beyond school		
11	Working with algorithms		
12	Working with algorithms		
13	Working with sound		

Part C: Using Computers		
Question	Learning Outcomes assessed	
14	Use text, images and sound to create simple linear presentations for a purpose. Present information clearly and appropriately using a range of tools. Capture still and moving images. Use recorded sound files to communicate meaning.	
15	Devise simple programs. Predict what will happen if changes are made. Use captured images to make an animation. Understand the need for precise instructions to implement an algorithm.	