



Digi-Navigators

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.

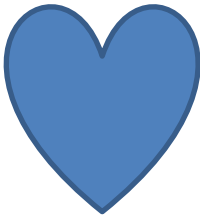
Part A: Understanding Computing (50 marks)

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

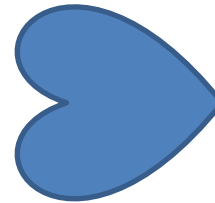
Question 1

Look at the image below, what tool has been used to change the direction from example 1 to example 2?

Example 1



Example 2



- A Rotate Left 90° B Flip Horizontal
C Flip Vertical D Send Backward

4 marks

Answer:

A Rotate Left 90°

Award 4 marks for the correct answer.

Question 2

Which of the following method would you use first when creating a 3D model animation?

- A Layout B Animation
C Modelling D Rendering

4 marks

Answer:

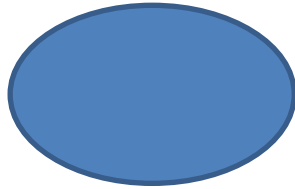
C Modelling

Award 4 marks for the correct answer.

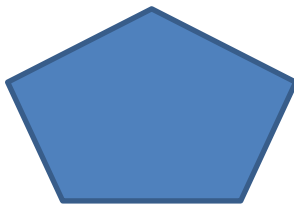
Question 3

Which of these shapes is an example of a triangle?

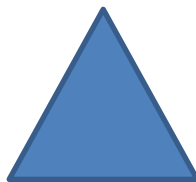
A



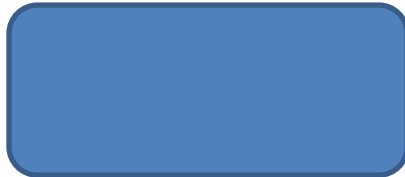
B



C



D



4 marks

Answer:

C Triangle

Award 4 marks for the correct answer.

Question 7

You have been asked to help plan a network. Which speed cable would be the best?

- A gigabit
- B 500MHz
- C 600MHz
- D megabit

4 marks

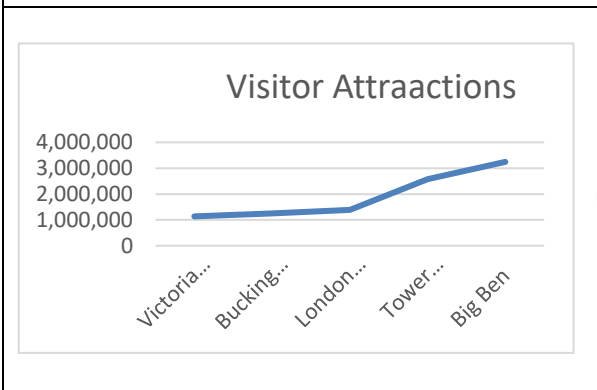
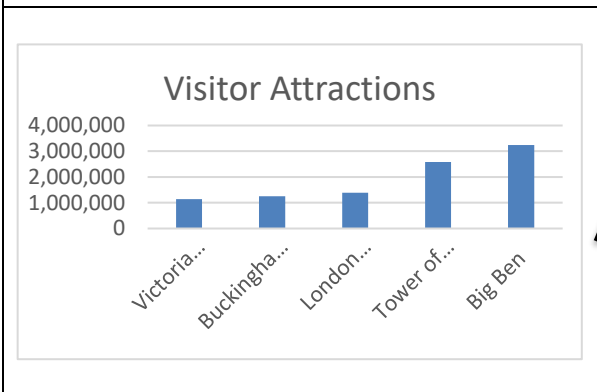
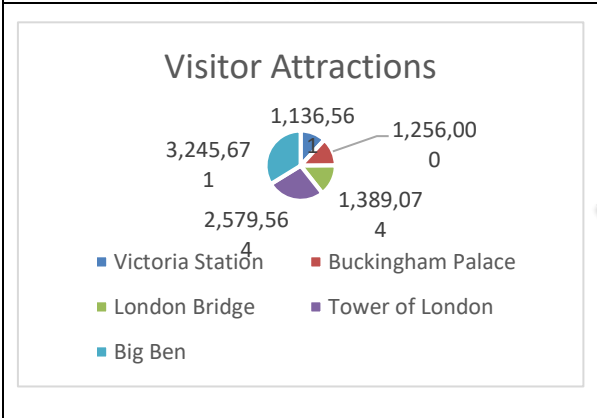
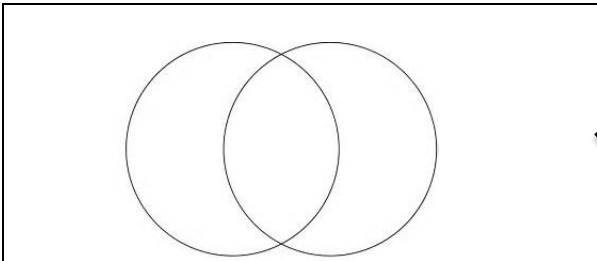
Answer:

A gigabit

Award 4 marks for the correct answer.

Question 8

Match the name of the chart to the image.



A Bar Chart

B Venn Diagram

C Pie Chart

D Line Graph

4 marks

Award 4 marks for the correct answer.

Question 9

The main technology used in home remote controls is which one of the following?

- A ultrasonic
- B infrared
- C x-rays
- D radio waves

4 marks

Answer:

B infrared

Award 4 marks for the correct answer.

Question 10

A company wish to consolidate and manage customer information, which of the following software should be used?

- A MS Paint
- B DBMS
- C Power Point
- D uTorrent

4 marks

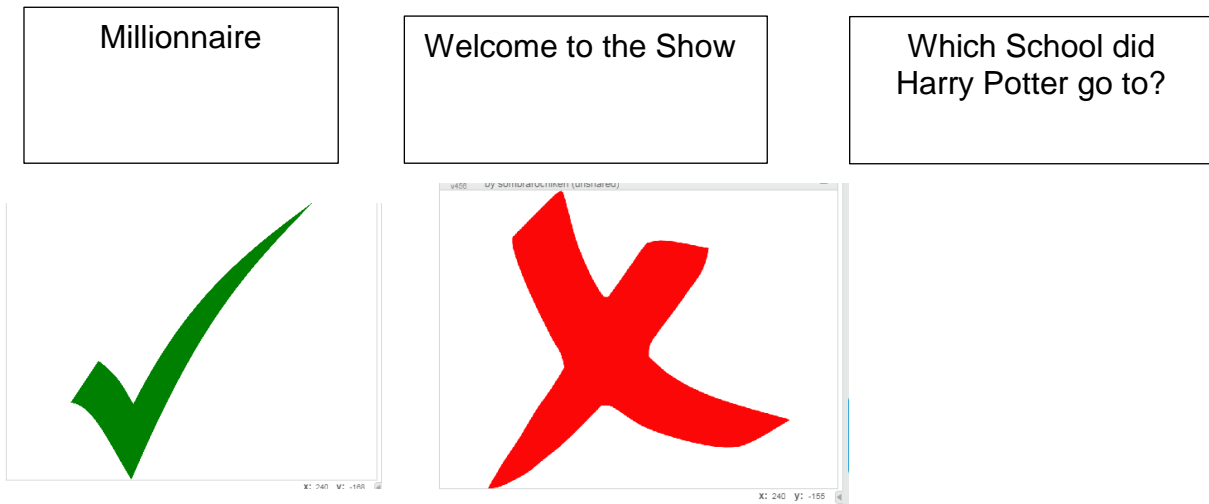
Answer:

C DBMS

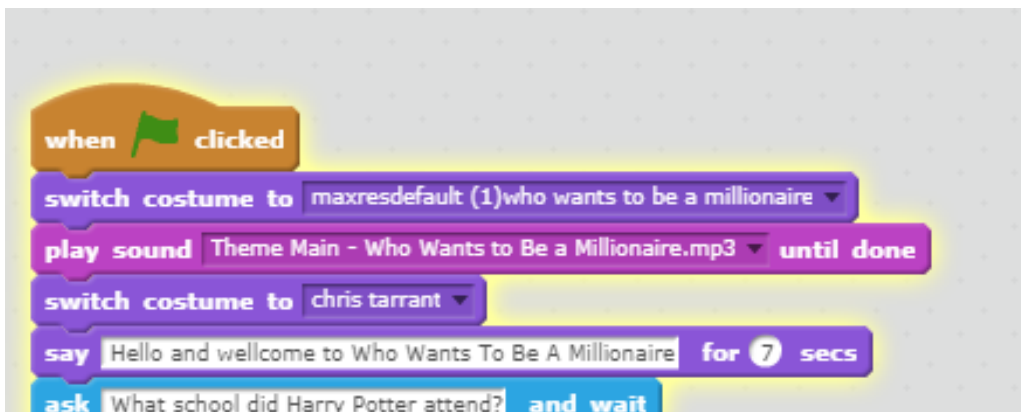
Award 4 marks for the correct answer.

Question 11

A student writes a program using Scratch to ask questions similar to “Who wants to be a Millionaire” quiz. They have provided the following screens.



They have also provided you with some of the code. What is the most appropriate next step in the code?



- A switch costume to tick
- B switch costume to cross
- C wait for 7 secs
- D if answer = Hogwarts then

4 marks

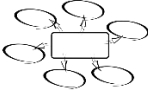

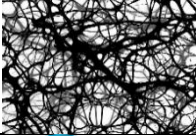

Answer:

D is answer = Howarts then

Award 4 marks for the correct answer.

Question 12

Which of the following is an example of a mesh network?

A	 A diagram showing a central square node connected to six surrounding circular nodes in a star configuration.
B	 A diagram showing a central blue node connected to five surrounding laptop icons in a hub-and-spoke configuration.
C	 A complex, dense network diagram with many interconnected nodes and lines, representing a mesh network.
D	 A blue circular icon with a white Wi-Fi signal symbol (three curved lines above a vertical line).

4 marks



Answer:

C Mesh

Award 4 marks for the correct answer.

Question 13

To send a message quickly, which of the following software would you use?

A.  A collection of six social media icons: YouTube, Twitter, Instagram, LinkedIn, Snapchat, and Facebook.	B.  The Microsoft Excel application icon, featuring a green 'X' on a white background with a grid pattern.
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2 marks

Answer:

A Social Media Tools

Award 2 marks for the correct answer.



Digi-Navigators

Summer 2019

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 90 minutes:
 - 45 minutes for Part A (Theoretical)
 - **45 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 C), 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 only

NCC Education Student ID:	
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Part B: Using Computers (50 marks)

Question 12

Use presentation software for this question

Create a short presentation about 3D Printing. The presentation should have THREE (3) pages with each having a different coloured background. The text on each page must be written using the font style “**Comic Sans MS**” with a colour which is distinctive from that of the page background.

- The first page should have a picture of a 3D printer and the title “3D printing”. When you click on the picture of the 3D Printer, it should go to a website which gives details of what 3D printing is: https://en.wikipedia.org/wiki/3D_printing
- The presentation should move to a second page automatically after 5 seconds. This page should have a short video of the history of 3D Printing (no more than 2 minutes). When you click on this picture, it should play the video.
- The third page should contain TWO (2) key points about 3D printing.
- Save and show your work to your teacher when you have finished the presentation.

50 marks

2 marks for completing of each slide (maximum 6 marks)

2 marks for applying an appropriate coloured theme and 1 mark for using the specified font style on each page (maximum 9 marks)

3 marks for showing the correct title on page 1

3 marks for showing a picture of 3D printer on page 1

8 marks if a correct hyperlink is loaded when the picture of the 3D printer on page 1 is clicked

6 marks if the presentation correctly transits from page 1 to page 2 after 5 seconds

3 marks for showing a short video of the history of 3D printing on page 2

8 marks for playing the video for 8 seconds

2 marks for each relevant introductory key point 3D printing on page 3 (maximum 4 marks)

Learning Outcomes matrix

Part A: Understanding Computing	
Question	Learning Outcomes assessed
1	Understand how digital images can be manipulated for a given outcome
2	Understand how to storyboard and capture video or a series of stills to make an animation
3	Know how to use an object-based graphics package to design and develop a plan to meet a specific brief
4	Understand how to storyboard and capture video or a series of stills to make an animation
5	Identify and understand how to use online tools that enable us to communicate and collaborate with others
6	Know how to develop spreadsheet models to investigate real-life problems
7	Recognise what computer networks (including the internet) are and how they function
8	Know how to develop spreadsheet models to investigate real-life problems
9	Recognise what computer networks (including the internet) are and how they function
10	Understand how programs that mimic the real world are developed
11	Understand how programming code can be used to create a program for a specific purpose
12	Recognise what computer networks (including the internet) are and how they function
13	Identify and understand how to use online tools that enable us to communicate and collaborate with others

Part B: Using Computers	
Question	Learning Outcomes assessed
114	Understand how digital images can be manipulated for a given outcome. Know how to edit sound files for a purpose. Use a range of skills to present text clearly, appropriately and for a specific purpose. Know how to combine a range of digital media to create a presentation for a specific audience. Understand how to use appropriate tools, such as hyperlinks, to enhance a presentation.