



# Cambridge IGCSE™

## INFORMATION AND COMMUNICATION TECHNOLOGY

0417/03

Paper 3 Data Analysis and Website Authoring

October/November 2022

2 hours 30 minutes

You will need: Candidate source files (listed on page 2)

### INSTRUCTIONS

- Carry out **all** instructions in each step.
- Enter your name, centre number and candidate number on every printout before it is sent to the printer.
- Printouts with handwritten candidate details will **not** be marked.
- At the end of the examination, put all your printouts into the Assessment Record Folder.
- If you have produced rough copies of printouts, put a cross through each one to indicate that it is not the copy to be marked.
- You must **not** have access to either the internet or any email system during this examination.

### INFORMATION

- The total mark for this paper is 80.
- The number of marks for each question or part question is shown in brackets [ ].

This document has 8 pages.



You have been supplied with the following source files:

n22contact.png  
n22currency.csv  
n22donate.csv  
n22home.png  
n22lion.mp4  
n22logo.jpg  
n22project.jpg  
n22style.css  
n22text.txt  
n22twl.htm  
n22twl.jpg  
n22week2.csv

### Task 1 – Evidence Document

Create a new word-processed document.

Make sure your name, centre number and candidate number will appear on every page of this document.

Save this Evidence Document in your work area as **n22evidence\_** followed by your centre number\_ candidate number, for example, n22evidence\_ZZ999\_9999

You will need your Evidence Document during the examination to place screenshots when required.

### Task 2 – Spreadsheet

*You are going to create a spreadsheet for the Tawara Wildlife Trust. This will display data about donations given by individuals and companies, in other countries, to their global conservation projects. These donations are made in the currency of that country. Tawara Wildlife Trust record their finances in Tawara dollars, so each donation must be converted into this currency. Display Tawara currency as \$ to 2 decimal places.*

Do **not** edit the data files provided unless instructed to do so.

- 1 Open and examine the files **n22donate.csv** and **n22currency.csv** in a spreadsheet package.

Place in the footer of the *n22donate* file:

- left aligned, the text **Edited by:** followed by a space, then your name, centre number and candidate number
- right aligned, the automated file name with no file path.

Save this as a spreadsheet with the file name **Donate\_** followed by your centre number\_candidate number, for example, Donate\_ZZ999\_9999

[3]

- 2 Enter a formula in cell E29 to display the ISO of the currency for the country displayed in cell B29 using the external file *n22currency.csv* for the array.

[8]

- 3 Enter a formula in cell F29 to look up the exchange rate for this country using the external file *n22currency.csv* for the array. [6]
- 4 Enter a formula in cell G29 to calculate the *Donation in Tawara dollars* by dividing the value in the *Donation in local currency* column by the *Exchange rate*, rounding this value down to 2 decimal places. [5]
- 5 Replicate the formulae entered in steps 2, 3 and 4 for all donations. [1]
- 6 Use cells C29 to C115 to create a named range called **To**  
Use cells G29 to G115 to create a named range called **Amount**  
Take screenshot evidence of the creation of these named ranges and place these in your Evidence Document.

**EVIDENCE 1**

Screenshot of the creation of these named ranges.

[2]

- 7 Enter a formula in cell C7 to calculate the total of the donations to this project using the project code and the named ranges created in step 6.  
Replicate this formula for all projects. [5]
- 8 Merge cells A1 to C1, A3 to C3, A5 to C5 and A27 to G27. [1]
- 9 Format the top of the spreadsheet to look like this:

	A	B	C
1	<b>Tawara Wildlife Trust Donations</b>		
2			
3	Week 1 - 2022		
4			
5	<b>Projects table</b>		
6	<b>Code</b>	<b>Project name</b>	<b>Total donation</b>
7	T0	General - no specified project	68571.2

Format the merged cells in rows 1 and 5 to have a blue background with white text.

Format the text in row 1 to be 20 points high.

Format the merged cell in row 27 so it matches row 5.

[6]

- 10 Apply appropriate formatting to the values stored in column C in the *Projects* table and column G in the *Donations* table. [1]
- 11 Save your spreadsheet. Print your spreadsheet showing the formulae. Make sure:
- it is in landscape orientation
  - the row and column headings are displayed
  - the contents of all cells are fully visible.
- [2]

**PRINTOUT 1**

Make sure that you have entered your **name**, **centre number** and **candidate number** on the spreadsheet showing the formulae.

- 12 Set the page orientation to portrait.

Format the text in row 28 so that it is centre aligned both vertically and horizontally. Format the text in D28 to G28 so that it is wrapped. Make sure that the cell contents are fully visible and fit on a single page wide without changing the font size.

[3]

- 13 Print the spreadsheet showing the values. Make sure:
- the orientation is portrait
  - it fits on a single page wide
  - the contents of all cells are fully visible
  - the row and column headings are not displayed.

[1]

**PRINTOUT 2**

Make sure that you have entered your **name**, **centre number** and **candidate number** on the spreadsheet showing the values.

*You will extract the projects with the highest donations in week 2.*

- 14 Open and examine the file **n22week2.csv** in a spreadsheet package.

Place your name, centre number and candidate number left aligned in the header.

Extract only the projects with donations of at least \$15 000

[2]

- 15 Sort the data into descending order of *Project name*

[1]

- 16 Print the spreadsheet extract showing the values. Make sure the:
- printout fits on a single page
  - row and column headings are visible
  - contents of all cells are fully visible.

[1]

**PRINTOUT 3**

Make sure that you have entered your **name**, **centre number** and **candidate number** on the spreadsheet extract showing the values.

[Total: 48]

**Task 3 – File Management**

- 17 Create a new folder called **n22**

Locate the following files and store them in your *n22* folder.

**n22contact.png**  
**n22home.png**  
**n22lion.mp4**  
**n22logo.jpg**  
**n22project.jpg**  
**n22style.css**  
**n22text.txt**  
**n22twf.htm**  
**n22twf.jpg**

Display the contents of your *n22* folder showing the folder name, all file names, file extensions, file sizes, image dimensions and, for the video, the frame height and frame width. Take a screenshot of this folder and place this in your Evidence Document.

[1]

**EVIDENCE 2**

A screenshot of your *n22* folder with the required information clearly visible.

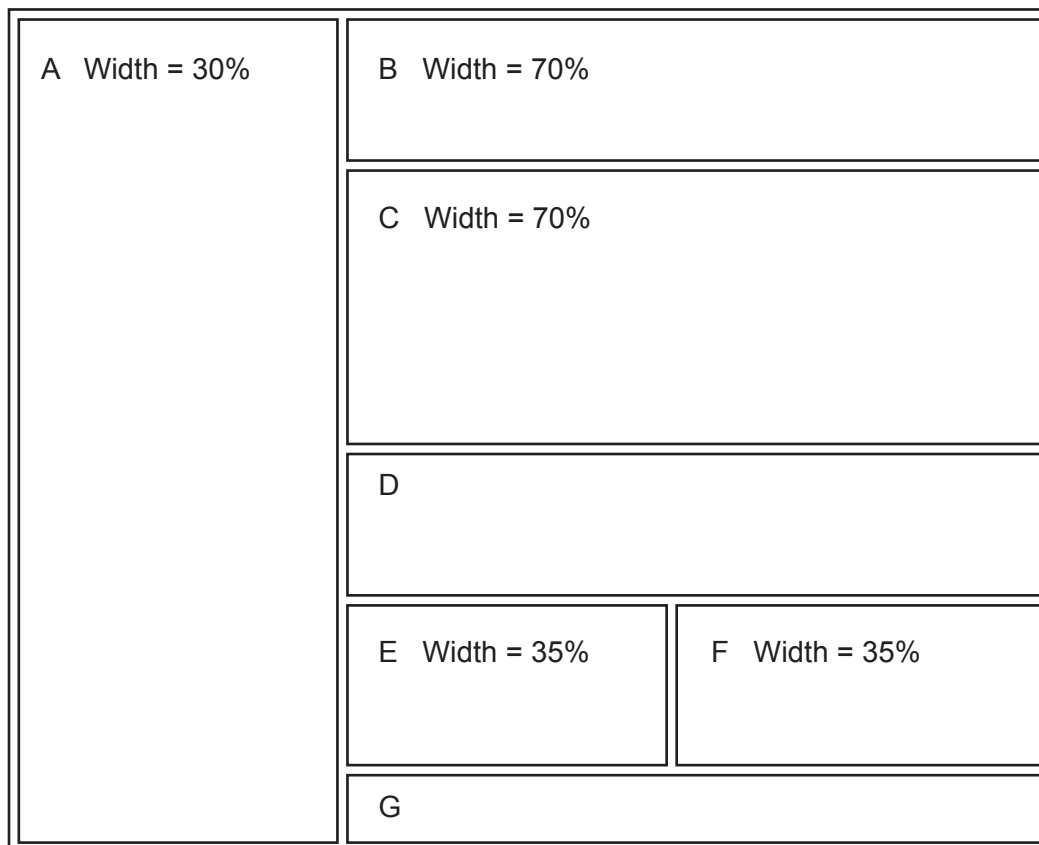
[Total: 1]

**Task 4 – Web Page**

You will create a web page for the Tawara Wildlife Trust.

**18** Create, in your *n22* folder, a web page called **lion.htm**

This web page must be created using a single table and must work in all browsers. The table must fit 100% of the browser window and have a structure as shown in this diagram:



Each table cell is identified with a letter. Some dimensions are shown. These must be set as percentage values. Do **not** set the height of any cells.

The cell contents shown in the diagram must **not** appear on your final web page.

Table borders must appear on your final web page.

[9]

**19** Place in cell:

- A the image **n22logo.jpg**
- B the image **n22project.jpg**
- C a video tag to display **n22lion.mp4** so that it fits the width of this cell. Display an automated text-based error message if the browser does **not** support this video type
- E the image **n22home.png**
- F the image **n22contact.png**

[8]

- 20 Place inline style attributes into the HTML, so that each image fits the width of the table cell, with its aspect ratio maintained. [1]
- 21 Add appropriate alternate text to all still images. [1]
- 22 Place in cell D the text from the file **n22text.txt**  
Set this text as style h2 [2]
- 23 Enter in cell G the text:  
**Edited by:** followed by your name, centre number and candidate number.  
Set this text as style h3 [2]
- 24 Create a hyperlink from the image *n22home.png* to open the web page **n22tw.t.htm** [2]
- 25 Create a hyperlink from the image *n22contact.png* to open an email editor ready to send a message to **tw.t@cambridgeinternational.org** with a subject line **Project Lion** [4]
- 26 Attach the stylesheet **n22style.css** to your web page. [1]
- 27 Save your web page.

Take a copy of your HTML source and place this in your Evidence Document.

**EVIDENCE 3**

A copy of your HTML source.

Display your web page in a browser. If necessary resize it so that:

- all the page can be seen
- all text can be easily read
- the address bar is visible.

Take screenshot evidence showing your web page in the browser. Place this in your Evidence Document.

[1]

[Total: 31]

**EVIDENCE 4**

Screenshot evidence of your web page in the browser with the table contents clearly visible.

**Task 5 – Printing the Evidence Document**

Save and print your Evidence Document.

**PRINTOUT 4**

Make sure your **name**, **centre number** and **candidate number** appear on every page of your Evidence Document.

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