

Cambridge IGCSE™

INFORMATION AND COMMUNICATION TECHNOLOGY**0417/31**

Paper 3 Spreadsheets and Website Authoring

May/June 2024

MARK SCHEME

Maximum Mark: 70

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the May/June 2024 series for most Cambridge IGCSE, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

This document consists of **15** printed pages.

Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptions for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Task 2 – Spreadsheet

Question	Answer	Marks
For Question 1 see below for example of spreadsheet.		
1		2
	Name, centre and candidate number left aligned in footer	1
	File name with no file path on the right in the footer	1
For Question 2 see below for example of spreadsheet formulae.		
2		7
	=VLOOKUP (...)	1
	... B35, ...	1
	... j2431divers.csv! ...	1
	... \$A\$2:\$C\$51 ...	1
	... ,3	1
	... ,0	1
	Replicated to row 75.	1
For Question 3 see below for example of spreadsheet formulae.		
3		2
	=COUNTA (...)	1
	... B35:B75	1
For Question 4 see below for example of spreadsheet formulae.		
4		3
	=COUNTIF (...)	1
	... E35:E75 ...	1
	... ,"Yes")	1
For Question 5 see below for example of spreadsheet formulae.		
5		3
	=COUNTIFS (...)	1
	... E35:E75,"Yes" ...	1
	... , F35:F75,"Yes")	1

Question	Answer	Marks
For Question 6 see below for example of spreadsheet formulae.		
6		7
	=COUNTIFS (...)	1
	... D35:D75 ...	1
	... as an absolute reference...	1
	... ,A9 ...	1
	... as a relative reference ...	1
	... ,\$E\$35:\$E\$75,"Yes" ...	1
	... ,\$F\$35:\$F\$75,"Yes" ...	1
For Question 7 see below for example of spreadsheet.		
7		5
	Cells A1:C1 and B7:B8 merged	1
	Row 1 – 22-point black	1
	Rows 1 to 10 sans-serif	1
	Text in B7:B8 wrapped as shown	1
	A3:A5 & A9:A10 right aligned, B1:B10 centre aligned	1
For Question 8 see below for example of formulae spreadsheet.		
8		2
	Formulae printout – Only cells A1 to C75 fully visible	1
	Formulae printout – Landscape orientation with row and column headings	1
For Question 9 see below for example of values spreadsheet and selection method.		
9		4
	Values printout – Rows 1 to 8 and selected rows from 9 to 32 fully visible	1
	Values printout – filter used to remove reefs with 0	1
	Values printout – Portrait orientation with row and column headings	1
	Screen shot evidence of selection method	1
Total		35

Task 3 – File management

Question	Answer	Marks
For Question 10 see below for example of folder screen shot.		
10	Screen shot includes folder name, file names, file sizes, image dimensions, file extensions/type	1
Total		1

Task 4 – Web Page

Question	Answer	Marks
For Question 11 see below for examples of html and browser view.		
11		8
	No letters or dimensions visible	1
	Table style="width:85%;" of browser window	1
	Single table used	1
	Borders not visible	1
	Row 1 – colspan="2"	1
	Row 1 – style="height:20%;"	1
	Row 2 & row 4 left – rowspan="2"	1
	Row 2 / row 4 left – style="width:60%;"	1
For Question 12 see below for example of HTML.		
12	Title accurate and in head section	1
For Question 13 see below for example of HTML.		
13		3
	Top row – Conserve our endangered species	1
	Row 2 right cell – Splendid toadfish	1
	... both set in style h1	1

Question	Answer	Marks
For Question 14 see below for example of HTML.		
14		2
	Row 5 right cell – Created by: followed by name, centre number and candidate number	1
	... all set in style h2	1
For Question 15 see below for example of browser view.		
15	Row 2 left – the image j2431splendid.jpg Row 3 right – the image j2431contact.jpg Row 4 right – the image j2431location.jpg	1
For Question 16 see below for example of HTML.		
16	Appropriate alternate text to all 3 still images	1
For Question 17 see below for example of HTML and browser view.		
17		2
	Bottom left cell – text from source file 100% accurate ...	1
	... in 3 paragraphs set in style p	1
For Question 18 see below for example of HTML.		
18	Stylesheet j2431style.css attached in head section	1

Question	Answer	Marks
For Question 19 see below for example of CSS.		
19		14
	Correct file name and type	1
	Comments /* A Candidate zz999 9999 */ at top of stylesheet	1
	Body {} with background-image: url("j2431logo.png");	1
	Body {} with background-repeat: no-repeat;	1
	Body {} with background-position: top left;	1
	Table {} with margin-right:0;	1
	Table {} with margin-left:auto;	1
	h1, h2 and p {} font-family: Times ...	1
	... , "Times New Roman" in speech marks ...	1
	... , serif	1
	h1, h2 and p {} font-weight: bold;	1
	h1, h2 and p elements in a single selector	1
	p {text-align: justify; }	1
	Stylesheet j2431css2_ZZ999_9999.css attached below j2431style.css	1
For Question 20 see below for example of browser view.		
20	In browser, address visible	1
Total		34

Footer	Name, centre, candidate no left aligned	1 mark
	File name with no file path on the right	1 mark

B3	=COUNTA (...)	1 mark
	... B35:B75	1 mark
B4	=COUNTIF (...)	1 mark
	... E35:E75	1 mark
	... , "Yes"	1 mark
B5	=COUNTIFS (...)	1 mark
	... E35:E75,"Yes" ...	1 mark
	... F35:F75,"Yes"	1 mark

Splendid toadfish sightings		
1		
2	Number of sightings in 7-day period	=COUNTIFS(D2:D75,"yes")
3	Number of sightings with photograph	=COUNTIFS(D2:D75,"yes")
4	Number of sightings with photo and GPS	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
5		
6	Location with phone and GPS	
7		
8	Diver's name	Number of sightings
9	Maria Gato	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
10	Shen Kian Wei	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
11	Karla Lee	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
12	Channing Phoenix	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
13	Chia Hui Ling	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
14	Marlene Chan	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
15	Palmer Kaitiaki	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
16	Pauline Brooks	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
17	Rafaela Barrios	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
18	Ja Pymore	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
19	Sara	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
20	Paco del Valle	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
21	Carrie Wall	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
22	Santa Rosa Shallow	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
23	Santa Rosa Wall	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
24	Tahiti Wall	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
25	Yusef	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
26	Tamara	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
27	Chen Huihui	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
28	Leo Parnell	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
29	Paradise Reef	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
30	Vila Rica Wall	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
31	Santa Rosa Reef	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
32	Barro Colorado	=COUNTIFS(D2:D75,"yes",F2:F75,"yes")
33		
34	Date	Name
35	4/10/18	John
36	4/10/18	Shaham
37	4/10/18	Ruby
38	4/10/18	Sam Patel
39	4/10/18	Guilherme
40	4/10/18	John
41	4/10/18	Thany
42	4/10/18	Steve
43	4/10/18	John
44	4/10/18	Guilherme
45	4/10/18	Guilherme
46	4/10/18	Guilherme
47	4/10/18	Guilherme
48	4/10/18	Guilherme

B9	=COUNTIFS (...)	1 mark
	... D35:D75 ...	1 mark
	... as an absolute reference	1 mark
	... ,A9 ...	1 mark
	... as a relative reference	1 mark
	... \$E\$35:\$E\$75,"Yes" ...	1 mark
	... \$F\$35:\$F\$75,"Yes" ...	1 mark

C35	=VLOOKUP (...)	1 mark
	... B35, ...	1 mark
	... j2431divers.csv! ...	1 mark
	... \$A\$2:\$C\$51 ...	1 mark
	... ,3	1 mark
	... ,0	1 mark
	Replicated to row 75	1 mark
Formulae	Only cells A1 to C75 fully visible	1 mark
	Landscape with row & column headings	1 mark

	A	B	C
49 45030	Elvira	WLOKUPB48, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
50 45030	Serge	WLOKUPB49, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
51 45030	Gene	WLOKUPB50, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
52 45030	Zuen	WLOKUPB51, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
53 45030	Guthrie	WLOKUPB52, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
54 45030	Guthrie	WLOKUPB53, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
55 45030	Gene	WLOKUPB54, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
56 45030	Gene	WLOKUPB55, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
57 45030	Marlene	WLOKUPB56, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
58 45030	Don Root	WLOKUPB57, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
59 45030	Don Root	WLOKUPB58, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
60 45030	Guthrie	WLOKUPB59, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
61 45030	Gene	WLOKUPB60, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
62 45030	Guthrie	WLOKUPB61, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
63 45030	Gene	WLOKUPB62, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
64 45030	Gene	WLOKUPB63, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
65 45030	Elvira	WLOKUPB64, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
66 45030	Gene	WLOKUPB65, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
67 45030	Guthrie	WLOKUPB66, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
68 45030	Guthrie	WLOKUPB67, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
69 45030	Marlene	WLOKUPB68, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
70 45030	Guthrie	WLOKUPB69, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
71 45030	Serge	WLOKUPB70, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
72 45030	Edwin	WLOKUPB71, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
73 45030	Guthrie	WLOKUPB72, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
74 45030	Don Root	WLOKUPB73, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
75 45030	Gene	WLOKUPB74, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	
76 45030	Gene	WLOKUPB75, D\1010417\1004\June 5 1\1043 10\vers.cxx\14010\vers\SAS2 SC 595, 5,0	

a Лондон 22000-0000

spread_22000_0000

	A	B
1	Splendid toadfish sightings	
2		
3	Number of sightings in 7 day period	41
4	Number of sightings with photograph	34
5	Number of sightings with photo and GPS	30
7	Location with photo and GPS	Number of sightings
8	Reef name	
9	Maracaibo	1
11	Punta Sur	1
12	Columbia Shallows	4
13	Columbia Deep	1
15	Palancar Horseshoe	1
16	Palancar Bricks	1
17	Palancar Gardens	1
18	La Francesca	3
19	Dalila	6
20	Paso del Cedral	3
22	Santa Rosa Shallows	3
24	Tunich Wall	1
25	Yucab	2

	Cells A1:B1 and B7:B8 merged	1 mark
	Row 1 – 22-point black	1 mark
	Rows 1 to 10 sans-serif	1 mark
	Text in B7:B8 wrapped as shown	1 mark
	A3:A5 & A9:A10 right and B1:B10 centre aligned	1 mark
Printout	Rows 1 to 8 and selected rows from 9 to 32 fully visible	1 mark
	Filter used to remove reefs with 0	1 mark
	Portrait, single page with row and column headings	1 mark

A Candidate ZZ999 9999

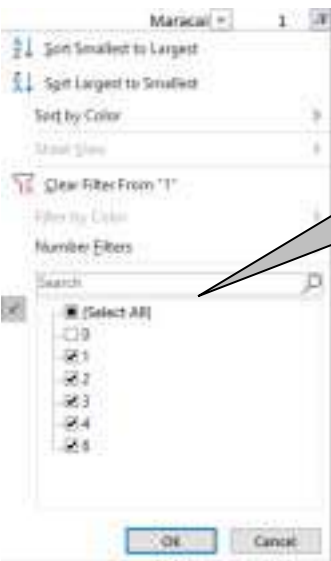
Splendid_ZZ9999_9999.xlsx

Evidence Document

Filter

Evidence of selection method

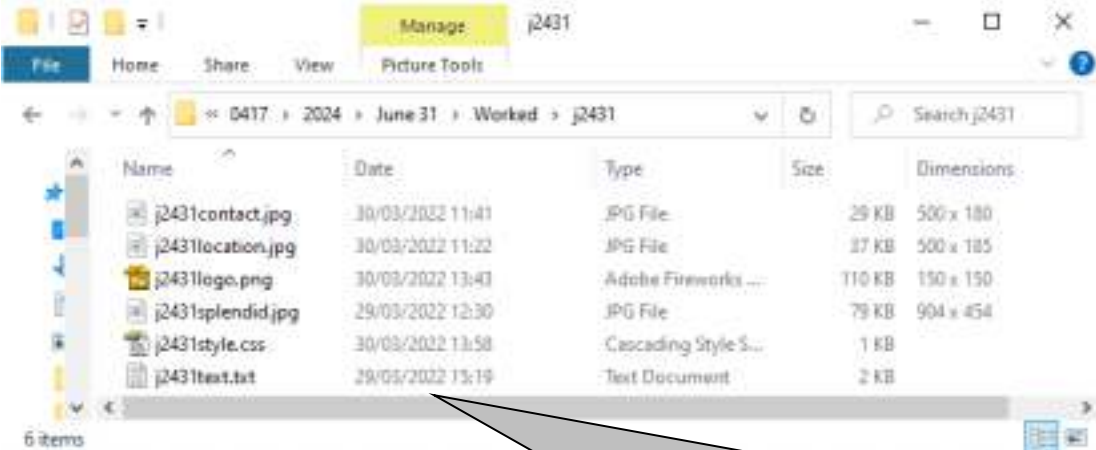
1 mark



The screenshot shows a file selection dialog box with a filter applied. The filter is set to 'Filter by Color' and 'Number Filters'. The search results show a list of files with checkboxes next to them, indicating they are selected. The files are: (Select All), 0, 1, 2, 3, 4, and 5. The 'OK' button is highlighted.

Screen shot includes folder name, file names, file sizes, image dimensions, file extensions/type

1 mark



The screenshot shows a Windows File Explorer window with the address bar set to '0417 > 2024 > June 31 > Worked > j2431'. The window displays a list of files with columns for Name, Date, Type, Size, and Dimensions. The files listed are: j2431contact.jpg (29 KB, 500 x 180), j2431location.jpg (37 KB, 500 x 185), j2431logo.png (110 KB, 150 x 150), j2431splendid.jpg (79 KB, 904 x 454), j2431style.css (1 KB), and j2431text.txt (2 KB). The 'Manage' button is highlighted in the top right corner.

Stylesheet	j2431css2_zz999_9999.css	
	Correct file name & type	1 mark
Comments	/* Candidate details */ at start	1 mark
body	{ background-image: url("j2431logo.png");	1 mark
	background-repeat: no-repeat;	1 mark
	background-position: top left; }	1 mark
table	{ margin-right: 0;	1 mark
	margin-left: auto }	1 mark
h1,h2,p	{ font-family: Times ...	1 mark
	... , "Times New Roman" in speech marks ...	1 mark
	... , serif;	1 mark
	font-weight: bold; }	1 mark
h1, h2, p	h1,h2 and p included in a single selector	1 mark
p	{ text-align: justify; }	1 mark

j2431css2_ZZ999_9999

File Edit View

```
/* A Candidate ZZ999 9999 */

body { background-image: url("j2431logo.png");
      background-repeat: no-repeat;
      background-position: top left; }

table { margin-right: 0;
        margin-left: auto; }

h1,h2,p { font-family: Times,"Times New Roman", serif;
          font-weight: bold; }

p { text-align: justify; }
```

```

<!DOCTYPE html>
<html>
  <head>
    <title>Splendid toadfish</title>
    <link rel="stylesheet" type="text/css" href="j2431style.css" style="width:85%;" border="1" />
    <link rel="stylesheet" type="text/css" href="j2431css2_ZZ999_9999.css" style="height:20%;" />
  </head>
  <body>
    <table style="width:85%;" border="1">
      <tr>
        <td colspan="2" style="height:20%; text-align: center;>
          <h1>Conserve our endangered species</h1>
        </td>
      </tr>
      <tr>
        <td rowspan="2" style="width:60%; text-align: center;>
          
        </td>
        <td style="height:20%; text-align: center;>
          <h1>Splendid toadfish</h1>
        </td>
      </tr>
      <tr>
        <td style="height:20%; text-align: center;>
          
        </td>
      </tr>
      <tr>
        <td rowspan="2" style="width:60%; text-align: center;>
          <p>The splendid toadfish is sometimes called the coral toadfish. Its
Latin name is Sanopus splendidus and it is primarily found in the waters
around the island of Cozumel in Mexico. In recent years some have been
spotted in Belize and on the mainland coast of the Yucatan near Cancun.
Whether these isolated viewings are due to natural influences or the
influence of man is unknown. These are very difficult to spot as their dens
tend to be below small coral outcrops, usually with a sand patch in the lee
of the predominantly South to North current. They are rarely seen during
the day outside their den.</p>
          <p>Like all toadfish it has a flat, broad head and barbells. Its
eyes are located on the top of its head and it has small sharp teeth. It is
a predator eating smaller fish and crustaceans. Unlike other toadfish it
has vibrant colours which range from blue-grey to purple, with black, blue
or grey stripes. Its fins are rimmed with bands of bright yellow.</p>
          <p>Although this species is not critically endangered it is listed
as being extremely vulnerable and is often very difficult to locate.</p>
        </td>
        <td style="height:20%; text-align: center;>
          
        </td>
      </tr>
    </table>
  </body>
</html>

```

Title accurate and in head section 1 mark
j2431style.css attached in head section 1 mark
j2431css2_ZZ999_9999.css below j2431style 1 mark

Table style="width:85%;" 1 mark
Single table used 1 mark

Row 1 colspan="2" style="height:20%;" 1 mark
style="height:20%;" 1 mark

Row 2 & 4 rowspan="2" style="width:60%;" 1 mark
style="width:60%;" 1 mark

Appropriate alternate text to all 3 still images 1 mark

```
<td style="height:20%">  
  <h2>Created by: A Candidate ZZ999 9999</h2>  
</td>  
</tr>  
</table>  
</body>  
</html>
```

Browser	In browser, address visible	1 mark
	Borders not visible	1 mark
	No letters or dimensions visible	1 mark
Row 1	Conserve our endangered species	1 mark
Row 2	Splendid toadfish	1 mark
	Both set into style h1	1 mark
Images	All 3 in correct cells	1 mark
Bottom left	text from source file 100% accurate	1 mark
	3 paragraphs set in style p	1 mark
Bottom right	Created by: name & numbers	1 mark
	Set in style h2	1 mark