

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.

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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	=COUNTA(B35:B75)
3	Number of sightings with photograph	=COUNTIF(E35:E75,"Yes")
4	Number of sightings with photo and GPS	=COUNTIFS(E35:E75,"Yes",F35:F75,"Yes")
5		
6	Location with phone and GPS	
7	Reef name	Number of sightings
8	Maria Gallo	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
9	Shen Chuan	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
10	Punta Sur	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
11	Columbie Shallows	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
12	Calymnia Deep	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
13	Palancar Cove	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
14	Palancar Hermosa	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
15	Palancar Bunka	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
16	Palancar Barrens	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
17	La Paredes	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
18	Santa Rosa	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
19	Paso del Centro	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
20	Central Wall	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
21	Santa Rosa Shallows	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
22	Santa Rosa Wall	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
23	Turkish Wall	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
24	Yule	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
25	Tormenta	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
26	Chetumal	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
27	La Paredes	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
28	Palancar Reef	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
29	Vila Blanca Wall	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
30	Santa Rosa Reef	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
31	Barro Colorado	=COUNTIFS(D35:D75,A35:A75,"Yes",E35:E75,"Yes")
32		
33	Date	Name
34	4/15/18	John
35	4/15/18	Graham
36	4/15/18	Edy
37	4/15/18	Carl Reed
38	4/15/18	Carl Reed
39	4/15/18	Carl Reed
40	4/15/18	Carl Reed
41	4/15/18	Carl Reed
42	4/15/18	Carl Reed
43	4/15/18	Carl Reed
44	4/15/18	Carl Reed
45	4/15/18	Carl Reed
46	4/15/18	Carl Reed
47	4/15/18	Carl Reed
48	4/15/18	Carl Reed

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 45039	Elvire	www.igcse.com/49/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
50 45039	Jorge	www.igcse.com/50/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
51 45039	Dave	www.igcse.com/51/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
52 45039	Duan	www.igcse.com/52/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
53 45039	Guthrie	www.igcse.com/53/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
54 45039	Guthrie	www.igcse.com/54/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
55 45039	Dave	www.igcse.com/55/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
56 45039	Dave	www.igcse.com/56/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
57 45039	Marcelle	www.igcse.com/57/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
58 45039	Costi Poot	www.igcse.com/58/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
59 45039	Costi Poot	www.igcse.com/59/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
60 45039	Guthrie	www.igcse.com/60/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
61 45039	Dario	www.igcse.com/61/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
62 45039	Guthrie	www.igcse.com/62/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
63 45039	Fraser	www.igcse.com/63/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
64 45039	Dave	www.igcse.com/64/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
65 45039	Elvire	www.igcse.com/65/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
66 45039	Caroline	www.igcse.com/66/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
67 45039	Guthrie	www.igcse.com/67/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
68 45039	Guthrie	www.igcse.com/68/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
69 45039	Marcelle	www.igcse.com/69/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
70 45039	Guthrie	www.igcse.com/70/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
71 45039	Jorge	www.igcse.com/71/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
72 45039	Edwin	www.igcse.com/72/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
73 45039	Guthrie	www.igcse.com/73/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
74 45039	Costi Poot	www.igcse.com/74/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	
75 45039	Dave	www.igcse.com/75/45039/June 9 11/243 18/ver/104318/ver/SAG2-SC 595, 5,0	

	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

Printout	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
	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

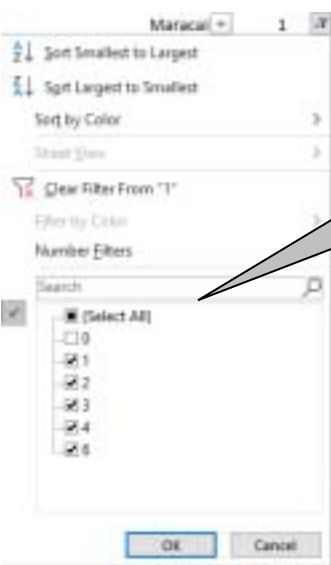
Splendid_ZZ9999_9999.xlsx

Evidence Document

Filter

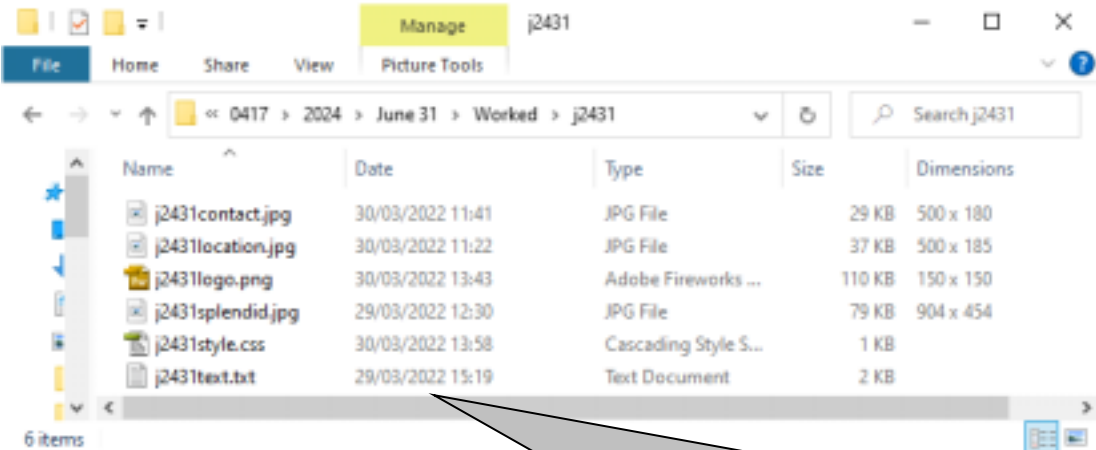
Evidence of selection method

1 mark



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

1 mark



Name	Date	Type	Size	Dimensions
j2431contact.jpg	30/03/2022 11:41	JPG File	29 KB	500 x 180
j2431location.jpg	30/03/2022 11:22	JPG File	37 KB	500 x 185
j2431logo.png	30/03/2022 13:43	Adobe Fireworks ...	110 KB	150 x 150
j2431splendid.jpg	29/03/2022 12:30	JPG File	79 KB	904 x 454
j2431style.css	30/03/2022 13:58	Cascading Style S...	1 KB	
j2431text.txt	29/03/2022 15:19	Text Document	2 KB	

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

