



# **Cambridge International AS & A Level**

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**INFORMATION TECHNOLOGY**

**9626/04**

Paper 4 Advanced Practical

**February/March 2025**

**2 hours 30 minutes**

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

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**INSTRUCTIONS**

- Carry out every instruction in each task.
- Save your work using the file names given in the task as and when instructed.
- You must **not** have access to either the internet or any email system during this examination.
- You must save your work in the correct file format as stated in the tasks. If work is saved in an incorrect file format, you will **not** receive marks for that task.

**INFORMATION**

- The total mark for this paper is 90.
- The number of marks for each question or part question is shown in brackets [ ].

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This document has **12** pages. Any blank pages are indicated.

You have been supplied with the following source files:

**1.svg  
2.svg  
3.svg  
4.svg  
5.svg  
6.svg  
7.svg  
8.svg  
9.svg  
Colleges.csv  
Tier.png**

Create a folder called **Examination**

You must save all your work in this folder.

Copy the source files into this folder.

Do **not** delete these files when submitting your work.

Do **not** tidy the folder by deleting files created at any stage of attempting the tasks.

You must use the most efficient methods to solve each task. All work produced must be of a professional standard and contain your candidate details.

### Task 1

You have been supplied with a file that contains details of scores for a common grading test used in three colleges.

Open **Colleges.csv** in a spreadsheet software.

Rename the worksheet as **2025Data**

Format the cells as shown.

	A	B	C
1	Colleges		
2	1	2	3
3	Tawara Elementary	Tawara Technical	Tawara Modern
4	53	58	60
5	61	66	41
6	61	66	80
7	62	72	54

Save the workbook in spreadsheet format as **TestAnalysis\_** followed by your centre number\_candidate number. For example, **TestAnalysis\_ZZ999\_9999**

Add a new worksheet to the workbook. Name the worksheet **2025Analysis**

Create a drop-down list in cell B2 so users can select a college from the **2025Data** sheet.

A	B
1	College
2	Tawara Technical
3	Tawara Elementary
4	Tawara Technical
	Tawara Modern

When a college is selected, all the data for the college must be displayed under the selection.

B	
College	
Tawara Elementary	53
	61
	61
	62

B	
College	
Tawara Technical	58
	66
	66
	72

The data must be used to create charts with different marks intervals.

Label and format the cells as shown.

	D	E	F
1			
2	<b>Maximum test score</b>		
3			
4	<b>Marks interval</b>		
5			
6			
7	<b>Lower Limit</b>	<b>Upper Limit</b>	<b>Range</b>
8			
9			
10			

You will enter a *Maximum test score* in E2.

The *Marks interval* values must be restricted to only 5 or 10 and be selected from a drop-down list.

	D	E	F
1			
2	<b>Maximum test score</b>	90	
3			
4	<b>Marks interval</b>	5	▼
5		5	
6		10	
7	<b>Lower Limit</b>	<b>Upper Limit</b>	<b>Range</b>

The *Lower Limit* must always start at zero. The *Upper Limit* must always start with the *Marks interval*.

Add replicable formulae to display the *Lower Limit*, *Upper Limit* and *Range* as shown in these examples.

Example 1 with a <i>Maximum test score</i> of 90 and a <i>Marks interval</i> of 10	Example 2 with a <i>Maximum test score</i> of 100 and a <i>Marks interval</i> of 5																																																																																																															
<table border="1"> <tr> <td><b>Maximum test score</b></td><td>90</td><td></td></tr> <tr> <td><b>Marks interval</b></td><td>10</td><td></td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr> <th>Lower Limit</th><th>Upper Limit</th><th>Range</th></tr> <tr> <td>0</td><td>10</td><td>0-10</td></tr> <tr> <td>11</td><td>20</td><td>11-20</td></tr> <tr> <td>21</td><td>30</td><td>21-30</td></tr> <tr> <td>31</td><td>40</td><td>31-40</td></tr> <tr> <td>41</td><td>50</td><td>41-50</td></tr> <tr> <td>51</td><td>60</td><td>51-60</td></tr> <tr> <td>61</td><td>70</td><td>61-70</td></tr> <tr> <td>71</td><td>80</td><td>71-80</td></tr> <tr> <td>81</td><td>90</td><td>81-90</td></tr> </table>	<b>Maximum test score</b>	90		<b>Marks interval</b>	10					Lower Limit	Upper Limit	Range	0	10	0-10	11	20	11-20	21	30	21-30	31	40	31-40	41	50	41-50	51	60	51-60	61	70	61-70	71	80	71-80	81	90	81-90	<table border="1"> <tr> <td><b>Maximum test score</b></td><td>100</td><td></td></tr> <tr> <td><b>Marks interval</b></td><td>5</td><td></td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr> <th>Lower Limit</th><th>Upper Limit</th><th>Range</th></tr> <tr> <td>0</td><td>5</td><td>0-5</td></tr> <tr> <td>6</td><td>10</td><td>6-10</td></tr> <tr> <td>11</td><td>15</td><td>11-15</td></tr> <tr> <td>16</td><td>20</td><td>16-20</td></tr> <tr> <td>21</td><td>25</td><td>21-25</td></tr> <tr> <td>26</td><td>30</td><td>26-30</td></tr> <tr> <td>31</td><td>35</td><td>31-35</td></tr> <tr> <td>36</td><td>40</td><td>36-40</td></tr> <tr> <td>41</td><td>45</td><td>41-45</td></tr> <tr> <td>46</td><td>50</td><td>46-50</td></tr> <tr> <td>51</td><td>55</td><td>51-55</td></tr> <tr> <td>56</td><td>60</td><td>56-60</td></tr> <tr> <td>61</td><td>65</td><td>61-65</td></tr> <tr> <td>66</td><td>70</td><td>66-70</td></tr> <tr> <td>71</td><td>75</td><td>71-75</td></tr> <tr> <td>76</td><td>80</td><td>76-80</td></tr> <tr> <td>81</td><td>85</td><td>81-85</td></tr> <tr> <td>86</td><td>90</td><td>86-90</td></tr> <tr> <td>91</td><td>95</td><td>91-95</td></tr> <tr> <td>96</td><td>100</td><td>96-100</td></tr> </table>	<b>Maximum test score</b>	100		<b>Marks interval</b>	5					Lower Limit	Upper Limit	Range	0	5	0-5	6	10	6-10	11	15	11-15	16	20	16-20	21	25	21-25	26	30	26-30	31	35	31-35	36	40	36-40	41	45	41-45	46	50	46-50	51	55	51-55	56	60	56-60	61	65	61-65	66	70	66-70	71	75	71-75	76	80	76-80	81	85	81-85	86	90	86-90	91	95	91-95	96	100	96-100
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Add a *Frequency* column as shown:

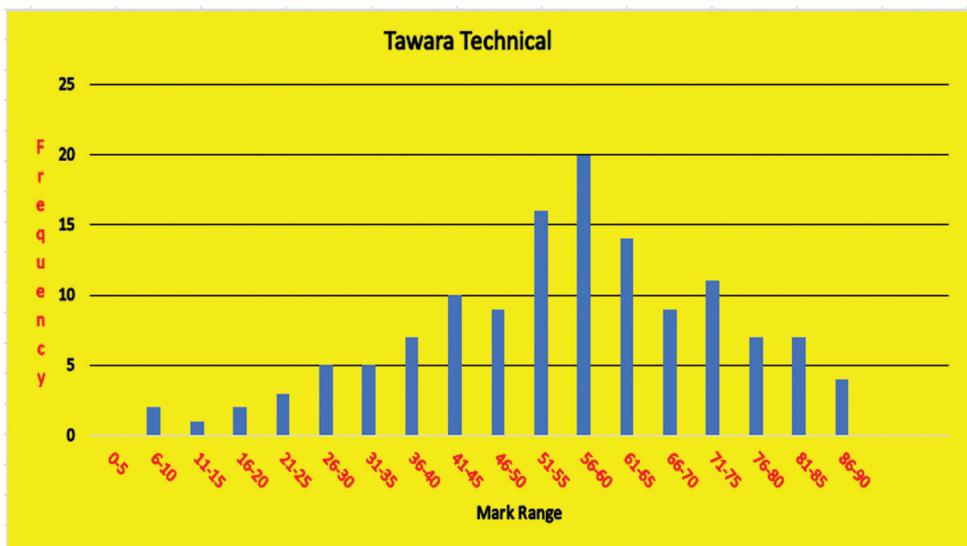
	D	E	F	G
1				
2	<b>Maximum test score</b>	90		
3	<b>Marks interval</b>	5		
4				
5				
6				
7	Lower Limit	Upper Limit	Range	Frequency
8	0	5	0-5	
9	6	10	6-10	

Insert a replicable formula to count the number of marks that are in each *Range* for the college selected.

B	C	D	E	F	G
College					
Tawara Technical		Maximum test score	90		
58		Marks interval	5		
66					
66					
73					
61	Lower Limit	Upper Limit	Range	Frequency	
76	0	5	0-5	0	
60	6	10	6-10	2	
39	11	15	11-15	1	
49	16	20	16-20	2	
66	21	25	21-25	3	
85	26	30	26-30	5	
59	31	35	31-35	5	
58	36	40	36-40	7	
86	41	45	41-45	10	
88	46	50	46-50	9	
83	51	55	51-55	16	
32	56	60	56-60	20	
64	61	65	61-65	14	
55	66	70	66-70	9	
56	71	75	71-75	11	
52	76	80	76-80	7	
10	81	85	81-85	7	
20	86	90	86-90	4	

Use this data to create a chart to display the frequency of each range.

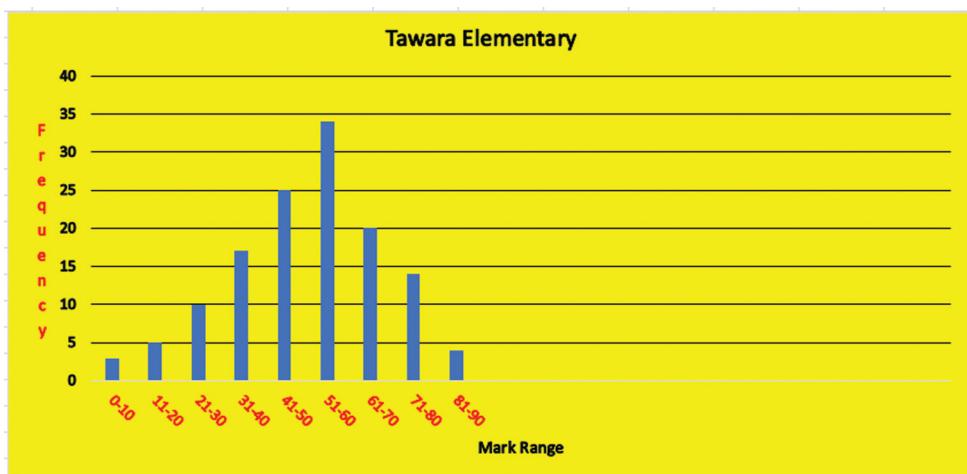
A	B	C	D	E
1	<b>College</b>			
2	<b>Tawara Technical</b>		<b>Maximum test score</b>	
3	53		90	
4	66		<b>Marks interval</b>	5



Label the chart with a dynamic title.

The chart must be formatted exactly as shown.

A	B	C	D	E
1	<b>College</b>			
2	<b>Tawara Elementary</b>		<b>Maximum test score</b>	90
3	53		<b>Marks interval</b>	
4	61			10
5	61			

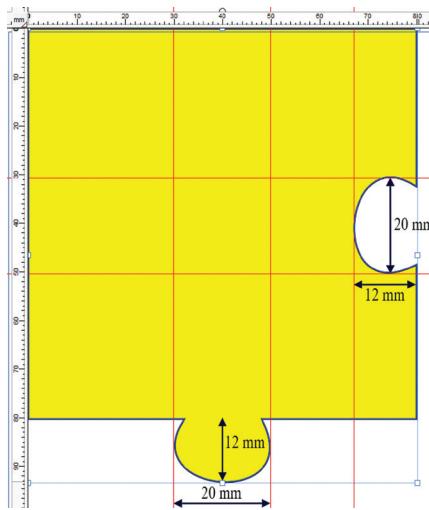


[35]

[Turn over]

**Task 2**

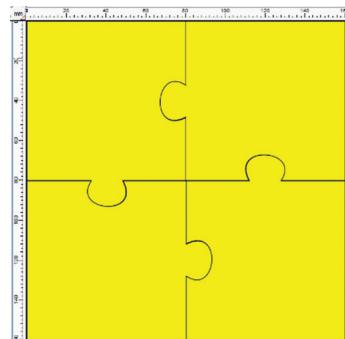
- (a) Create a jigsaw piece template as shown here:



The piece must be based upon an 80 mm square.

Save the piece as a **.svg** file named **JigTemplate\_** followed by your centre number\_candidate number. For example, JigTemplate\_ZZ999\_9999

Fit four copies of the **JigTemplate\_** image together as shown.

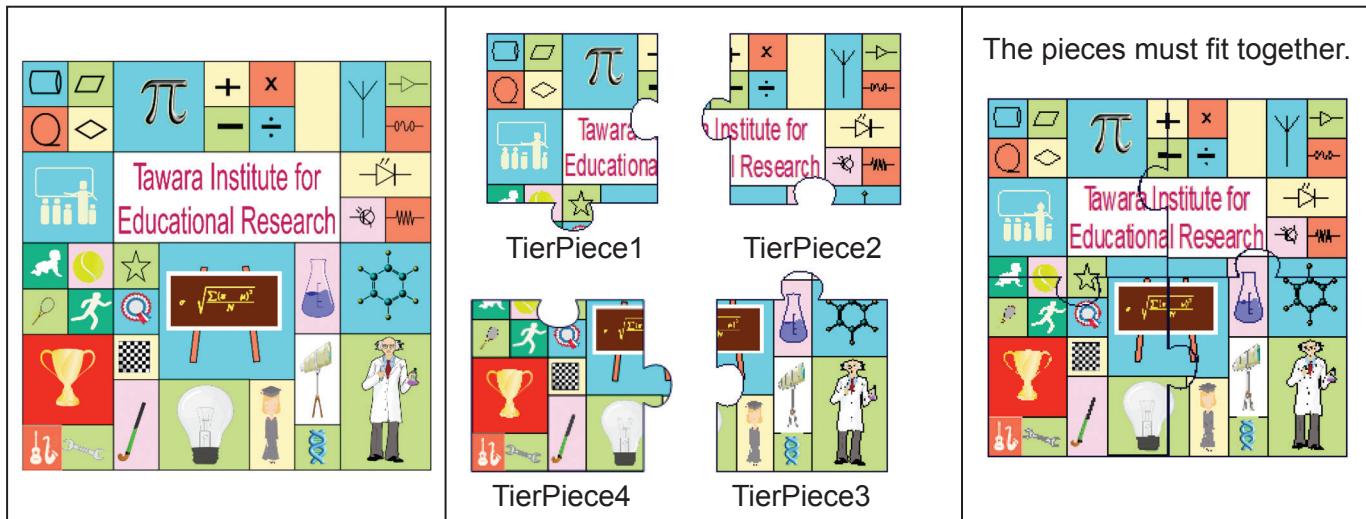


Save the image as a **.png** file named **4Pieces\_** followed by your centre number\_candidate number. For example, 4Pieces\_ZZ999\_9999

[13]

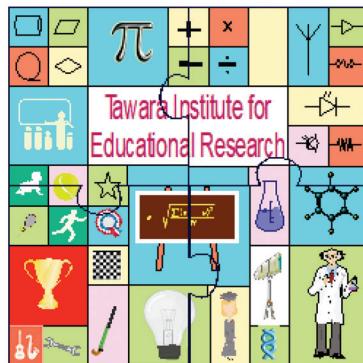
(b) Open **Tier.png** in a graphics application software.

Use your **JigTemplate\_** image to cut the **Tier.png** image into four pieces.



Save each piece as a .png file named **TierPiece1** to **TierPiece4** as shown.

Fit the four pieces together and save the complete image as a .png file named **4Pngs\_** followed by your centre number\_candidate number. For example, **4Pngs\_ZZ999\_9999**



[20]

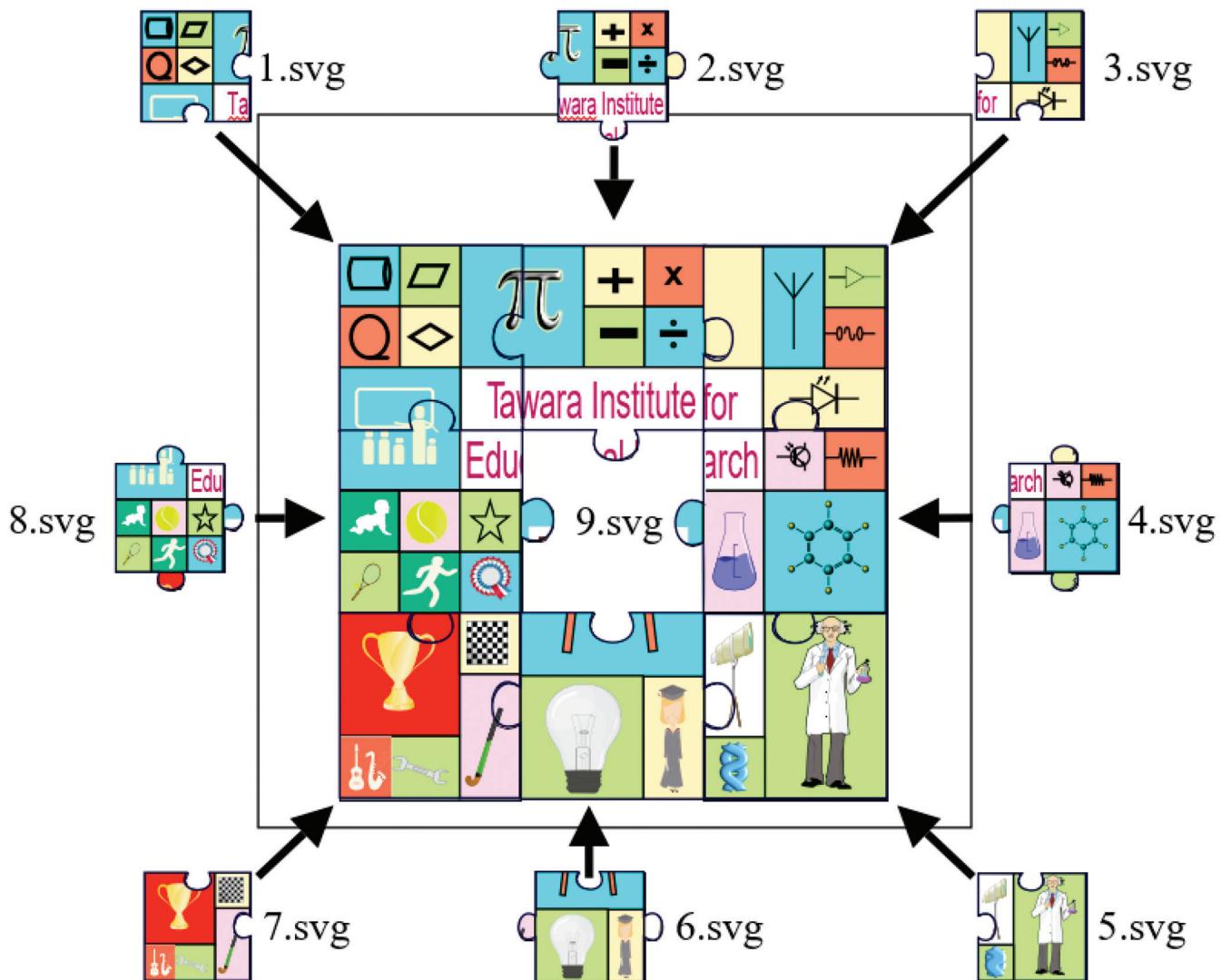
**Task 3**

In an animation application software set a frame size of 600 pixels wide and 600 pixels high.

Each numbered .svg file, found in the source files, must be animated and should take 1 second to move into position.

The pieces should move in order and towards the direction shown.

Note that some pieces may need to be rotated during the animation to fit properly.



The ninth piece should take 1 second to fade into view at the correct position.

Add the text **Putting it all together** above the image at the start of the animation.

The text must grow from 12pt to the width of the image as all the pieces are moving into position.

## Putting it all together



Save the animation in **.gif** format with the file name **TierLogoAnimation\_** followed by your centre number\_candidate number. For example, TierLogoAnimation\_ZZ999\_9999

[22]

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