

National Assessment Program – ICT Literacy Years 6 & 10

Scoring Guide: Computer Game



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Introduction

This scoring guide contains a brief description of each of the items in the NAP – ICT Literacy school assessment exemplar module *Computer Game*, together with details of the scoring system used for each item that was scored by trained scorers. The scoring guide is best read together with the downloadable PowerPoint presentation of the *Computer Game* module.

The table below contains a summary of the items in the *Computer Game* module together with the percentage of students who achieved maximum credit on each item.

Following the table are details of the scoring system for each of the manually scored items.

Item	Item descriptor	Scoring method	Max score	% Students achieving max score year 10
1	Evaluate search results to choose the most appropriate one for a specified topic	Automated	1	43
2	Interpret an error message to identify the probable cause of access being denied to a website	Automated	1	95
3	Name and save a file in an online survey builder	Automated	1	72
4	Choose an appropriate format for a survey question	Automated	1	21
5	Use the Cc email convention appropriately	Automated	2	31
6	Explain why an online survey might be password-protected	Manual	1	59
7	Describe a potential problem associated with sending an email to a group user list	Manual	2	2
8	Locate and select the graphing tool on a web page	Automated	1	28
9	Understand digital information viewing conventions	Automated	1	61
10	Explain why a graphical information display best suits a specified data format	Manual	1	49
11a	Include a clear and relevant heading on a newly created level of a game	Manual	2	17
11b	Add screen elements to a game with evidence of control and planning	Manual	2	31
11c	Demonstrate the importance of text contrast in an information product	Manual	1	47
11d	Add two new levels to an online game that show evidence of careful planning regarding the use of colour	Manual	2	9
11f	Add levels to a learning game with content appropriate to the difficulty of each level	Manual	2	30
11g	Create realistic rules to progress between levels of a game	Manual	2	17

Item 6: Password

Your teacher sends you an email.

Why would a password be needed to edit the survey?

SCORING**Full credit**

Code 1: Gives a reason relating to security or integrity

Example responses:

- To stop random people going in and deleting things
- So that only authorised people can change it

No credit

Code 0: Other responses

Example responses:

- To let you log in

Item 7: Distribution lists

Your survey is ready. You want to send the link to your class using a distribution list [DL – 10C](#).

By mistake you use a different distribution list, as shown.

Give **two** reasons why using [DL_All School](#) might be a problem.

SCORING**Full credit**

Code 2: Explains both that sending an email to the whole school is essentially spamming (sending unsolicited bulk electronic messages) (i)
AND
that if people outside the class do the survey it will distort the results (ii).

Example responses:

- It's spam (i) and I want to know what my class thinks, not others (ii).
- You might annoy people with email they don't want (i); the survey is meant to get my class's opinions (ii)

Partial credit

Code 1: Gives one valid reason from Code 2.

- It's spam and it might annoy people [*This is only one distinct reason*]

No credit**Code 0:** Other responses.

Example responses:

- It will cause people problems and it's a mistake. [*Too vague*]
- Students in the other classes won't know what to do [*True, but not serious enough a problem*]
- It is not intended for other classes. [*True, but doesn't get to the point of how it affects the results for 10C*]

Item 10: Charts – Justifying

You chose this graph.

Explain briefly why it is the best for showing that Maths is the most popular choice.

SCORING**Full credit**

Code 1: Chooses any of the four chart types with a relevant explanation as to how or why that chart type clearly shows that Maths Game has the greatest number of 1 votes (and, optionally, the greatest number of 2 votes OR the greatest number of combined 1st and 2nd votes).

Example responses:

- [Pie] The green sector is clearly larger than the others, and this pie chart is easier to understand than the others. [*Main point is that it is the easiest to read*]
- [Pie] This one is the easiest to read. [*Just enough for credit*]
- [Line] The blue line with the 1 votes is highest for Maths Game and the red line with the 2 votes is also highest for Maths Game.
- [Stacked Bar] For Maths game the blue 1st vote bar is the longest at 12.
- [Stacked Bar] It's easy to see that blue and red combined is the longest for maths game. This shows it's the winner.
- [Column] Because you can see from the blue bars that Maths Game was voted 1 the most. [*OK – implicit comparison with the "1" votes across the three subjects*]
- [Column] Because Maths Game clearly has a much lower green bar/3 vote than the others.

No credit

Code 0: Other responses, including reference to the green 3 vote line/bar OR an irrelevant or incoherent response.

Example responses:

- [Column] The green column is the highest [*True, but irrelevant*]
- [Column] It shows how many people voted for each subject [*True, but all the graphs do that*]
- [Line] It shows Maths Game is the winner [*It is not sufficient to simply mention that the graph shows that Maths is the winner, since all graphs do*]
- [Pie] Maths is the most important subject. [*Irrelevant*]
- [Stacked Bar] You can tell by the relevant lengths [*Unclear what is meant*]

Create a Computer Game [large task]

Follow the instructions to create a maths game.

To see how your game will be assessed click on 'Quality'.

Click on 'I've finished' when you have completed this task.

Instructions

Design two levels in your game: Level 1 (easy) and Level 3 (hard).

Level 2 (medium) has been done for you.

Include:

- a Heading
- a Next Level button
- an Answer Box

Decide on the rule for when the next level is reached.

Choose the difficulty of the sums, their speed and the path they take.

Preview your game to make sure it works!

SCORING

Summary of Items 11a–11g

Item	Category	Max Score
11a	Heading	2
11b	Elements – Layout	2
11c	Text – Contrast	1
11d	Colour – Consistency	2
11e	Game – Functioning	1
11f	Levels – Difficulty	2
11g	Levels – Change rule	2

Item 11A: Heading

Category 0: No heading	Category 1: Unclear or irrelevant heading	Category 2: Clear and relevant heading
<p>There is no heading on the Level 1 page.</p>	<p>There is a heading on the Level 1 page but it is unclear or irrelevant:</p> <ul style="list-style-type: none"> The heading is not clearly distinguishable from the rest of the text or objects on the page, either because of poor positioning or lack of formatting of the text. <p>OR</p> <ul style="list-style-type: none"> The meaning of the heading is unclear or irrelevant to the Maths Game. <p>OR</p> <ul style="list-style-type: none"> The heading simply says “Level 1” (This is redundant because the level is already displayed in the Answer box.) 	<p>There is a clear and relevant heading on the Level 1 page:</p> <ul style="list-style-type: none"> The heading is prominent and its role clear; e.g. uses different text formatting (such as a larger text size, bolding or capital letters) to the main text body or is positioned prominently. It is OK if the contrast is poor – this will be assessed in 11C: Text – Contrast. <p>AND</p> <ul style="list-style-type: none"> The heading makes reference to maths or some feature of the game other than just the level number alone. e.g. “Level 1 – Easy” or “Maths Game” are both acceptable. <i>The heading can span more than one line.</i>

Item 11B: Elements – Layout

Category 0: Little or no control of layout	Category 1: Basic control of layout	Category 2: Clear control of layout
<p>There is little or no evidence of control and planning in the layout of the screen elements:</p> <ul style="list-style-type: none"> The Next Level, Exit and Start Buttons and Answer Box are haphazardly placed or overlap, inhibiting game play. <p>OR</p> <ul style="list-style-type: none"> There is only one of Next Level, Answer Box or Heading in Level 1. <p>OR</p> <ul style="list-style-type: none"> There is no Level 3. 	<p>There is some evidence of control and planning in the layout of the screen elements:</p> <ul style="list-style-type: none"> The Next Level, Exit and Start Buttons and Answer Box are mostly positioned thoughtfully in Levels 1 and 3, and are mostly well aligned. They do not overlap. There must be at least two of Next Level, Answer Box and Heading in Level 1. 	<p>There is clear evidence of control and planning in the layout of the screen elements:</p> <ul style="list-style-type: none"> The position and alignment of the Next Level, Exit, Start buttons and Answer Box is logical and consistent between Levels 1 and 3. <p><i>Note that it is not necessary to have a Next Level button in Level 3.</i></p>

Item 11C: Text – Contrast

Category 0: Text is difficult to read	Category 1: Text is easy to read
<p>The text on Level 1 is NOT easy to read:</p> <ul style="list-style-type: none"> The colours of the headings, text and background show poor contrast in Level 1 and inhibit visibility of text and objects. <p>OR</p> <ul style="list-style-type: none"> The default colour scheme has not been changed. 	<p>The text on Level 1 is easy to read:</p> <ul style="list-style-type: none"> The default colour scheme has been changed so that there is sufficient contrast to enable all text and objects to be seen and read easily.

Item 11D: Colour – Consistency

Category 0: Little or no planning	Category 1: Some planning	Category 2: Well-planned
<p>The Level 1 and Level 3 screens show no evidence of planning regarding the use of colour to support ease of viewing and usage:</p> <ul style="list-style-type: none"> The colours of the headings, text and the background seem to have been assigned randomly or decoratively without any clear connection to ease of viewing, usage and functionality. For example, the background colour has been changed in Level 1 but not in Level 3; or the background colour has been changed to the same colour in Level 1 as in Level 3. <p>OR</p> <ul style="list-style-type: none"> No colours have been changed from the default Black/White/Grey scheme. <p>OR</p> <ul style="list-style-type: none"> There is no Level 3. 	<p>The Level 1 and Level 3 screens show some evidence of planning regarding the use of colour to denote the role of the elements:</p> <ul style="list-style-type: none"> There is some use of colour to denote specific purposes of elements (such as to denote headings, levels or button function). For example, the background colours in Levels 1 and 3 have been changed, and are different from each other and from Level 2 (thus enabling levels to be distinguished easily). 	<p>Both the Level 1 and Level 3 screens show evidence of careful planning regarding the use of colour to denote the role of the elements:</p> <ul style="list-style-type: none"> There is consistent use of colour to denote specific purposes of repeated elements (such as headings, levels or buttons). <p>AND/OR</p> <ul style="list-style-type: none"> Colour has been used to encode metaphors or functionality (e.g. Next Level button is different from Start/Exit buttons; levels of difficulty are distinguished).

Item 11F: Levels – Difficulty

Category 0: Little or no functionality	Category 1: Partial functionality	Category 2: Full functionality
<p>Level 1 and/or Level 3 are missing AND/OR Level 1 and/or Level 3 are missing an Answer Box.</p>	<p>Level 1 and Level 3 are present and both have an Answer box BUT Level 3 is NOT clearly harder than Level 1. (The question difficulty, the path the question takes across the screen and its speed should all be considered.)</p>	<p>Level 1 and Level 3 are present and both have an Answer Box AND Level 3 is clearly harder than Level 1. (This may be due to an increase of difficulty of the question and/or the complexity of the path of the question and/or an increase in its speed.)</p>

Item 11G: Levels – Change rule

Category 0: No change rule has been set up	Category 1: An unrealistic change rule has been set up	Category 2: A realistic change rule has been set up
<p>There is little or no evidence of planning in the selection of a change rule:</p> <ul style="list-style-type: none"> The Next Level button for Level 1 is “Always enabled” or “Always disabled”. <p>OR</p> <ul style="list-style-type: none"> No Next Level button has been included in Level 1. 	<p>There is evidence of planning in the selection of a change rule, but unrealistic limits have been set:</p> <ul style="list-style-type: none"> The Level change rule for Level 1 has been set to either: <ul style="list-style-type: none"> Enabled when score > n <p>OR</p> <ul style="list-style-type: none"> Enabled when tries > n <p>In either case n is greater than 10.</p>	<p>There is clear evidence of thoughtful planning in the selection of a change rule:</p> <ul style="list-style-type: none"> The Level change rule for Level 1 has been set to either: <ul style="list-style-type: none"> Enabled when score > n <p>OR</p> <ul style="list-style-type: none"> Enabled when tries > n <p>In either case n is at most 10.</p>