Zig Zag Education

2022 specification
first assessment in 2024

Keyword Activities

Unit R050: IT in the Digital World

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Contents

Teacher's Introduction

Overview

This resource has been produced to support teaching and learning of the **Cambridge Nationals L1/2 2022** specification **J836 – R050: IT in the Digital World**. The learning content is covered by the following sets of keywords with matching descriptions, which cover all of the learning aims for the topic:

- *Design Tools*
- *Human Computer Interaction*
- *Data and Testing 1 (3.1–3.2)*
- *Data and Testing 2 (3.3–3.5)*
- *Cyber-security & Legislation 1 (4.1–4.2)*

- *Cyber-security & Legislation 2 (4.3–4.4)*
- *Digital Communications 1 (5.1–5.3)*
- *Digital Communications 2 (5.4–5.5)*
- *Internet of Everything*

For each set, there are a number of different keyword activities designed to give you a range of different options for classroom use, homework and revision. This variety enables you to take a different approach to different topics – such as using the Crosswords as homework for one topic, and the Match-up as a starter for another.

Alternatively, differentiate the activity for a given topic; for example, you might want to give your stronger students the **Crosswords** early on while you start weaker learners on the **Match-up** (where terms and definitions are both available). **Domino** and **Bingo** activities add an element of fun and reinforcement, as well as the potential for pair and group work. Finally, the **Flash Cards** come into their own for revision and the **Table-fill** and **Write Your Own Glossary** allow students to test their understanding by correctly filling in keywords or definitions.

For more information about the different activities included, see overleaf. ➔

Digital Format!

All of the activities are provided electronically on the ZigZag Education support files system, which can be accessed via **zzed.uk/productsupport** To use on a school network:
- Download the .zip folder
- Locate the .zip folder in your downloads folder
- Right-click on the .zip folder > click 'Extract all' > select a destination > click 'Extract'. **This step is essential as the files will not function properly without it.**

Providing easy access to the activities are two HTML menus:

1. *Access All* **Menu**   ➔

   Location: **index.html**

   This menu, designed primarily for teacher use, includes links to everything provided in the support files – allowing you to easily select what you need when preparing your lessons.

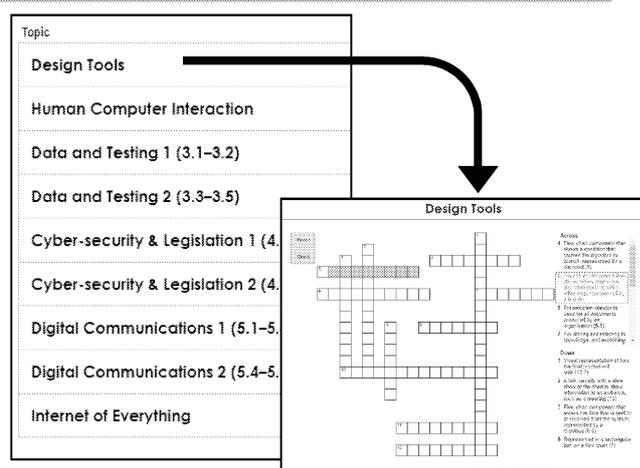   If you intend to give learners access to this menu, then be aware that it does include links to the solutions.
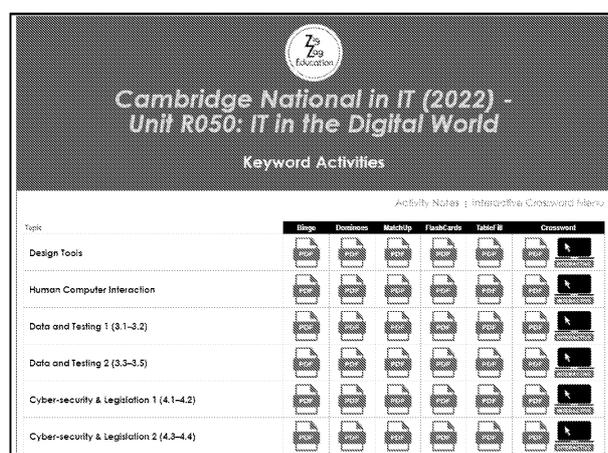
2. *Interactive Crossword* **Menu**   ➔

   Location: **interactive-crosswords/index.html**

   This menu, which can be accessed via the *Access All* Menu, is included to allow learner access to just the interactive crosswords (without the answers).

Activity Types

The activities included in this resource are as follows:

Bingo

Each student is given a different bingo card containing a selection of words from the set. The teacher reads the definitions using the Keyword Answers, and the student must match the definition to the words on their card to complete rows, columns, and the full bingo card. The bingo activity is available for sets with 12 or more words.

✓ PDF

Crosswords

These traditional keyword activities are equally effective as lesson or homework activities – and are also an excellent way of easing students into their revision programme.

✓ PDF ✓ PAPER

In addition to the photocopiable worksheets and PDF, the crosswords are provided in interactive format in the accompanying support files. These are web-based (HTML5) and will run straight from your Internet browser.

Dominoes / Loop Cards

This is essentially another match-up activity, but this one is designed to be used in a more active way to engage students. It is recommended that students work in pairs or small groups.

✓ PDF

Half of each card contains a keyword, and the other half contains a description. To complete the activity, students must align all the cards in the correct order. There is a 'Start' and a 'Finish', meaning that if any cards are left outside the chain, then students have gone wrong somewhere.

Match-up

Students match descriptions to their keywords by drawing lines between them. Because there are similar descriptions and keywords, students are likely to make the odd mistake while completing the activity, so it is recommended that they use a pencil to start with! By eliminating the keywords that they are familiar with, students can then think about and learn the ones that they are less confident with.

✓ PDF ✓ PAPER

Flash Cards

These are a helpful revision tool. To make the cards, fold the page in half, then cut out each card and stick them together so the keyword is on one side and the definition the other. In addition, students could use these to play a game of pairs. Cut each card in two and place them all face down on the table. Students will then take it in turns to turn over two cards with the aim of matching a keyword to its definition. Matched-up cards are removed, and the game is finished when all the cards have been matched.

✓ PDF

Glossary Builders

Table-fill

Nothing fancy – students simply write the keyword which is being described, without any other help. Because this activity tests the students' own knowledge, it is best used as a homework activity at the end of each topic or during revision. This then acts as a check that they have grasped the key terminology for each topic. Alternatively, the tables could be given to students at the beginning of the topic, to see what they already know.

✓ PDF ✓ PAPER

Write Your Own Glossary

Like the Table-fill, this activity can be used to test students before learning a topic, or as a revision tool after learning a topic. Students are given a list of the keywords and need to produce their own definitions. Using Table-fill and Write Your Own Glossary, lessons can be differentiated for all levels of learner.
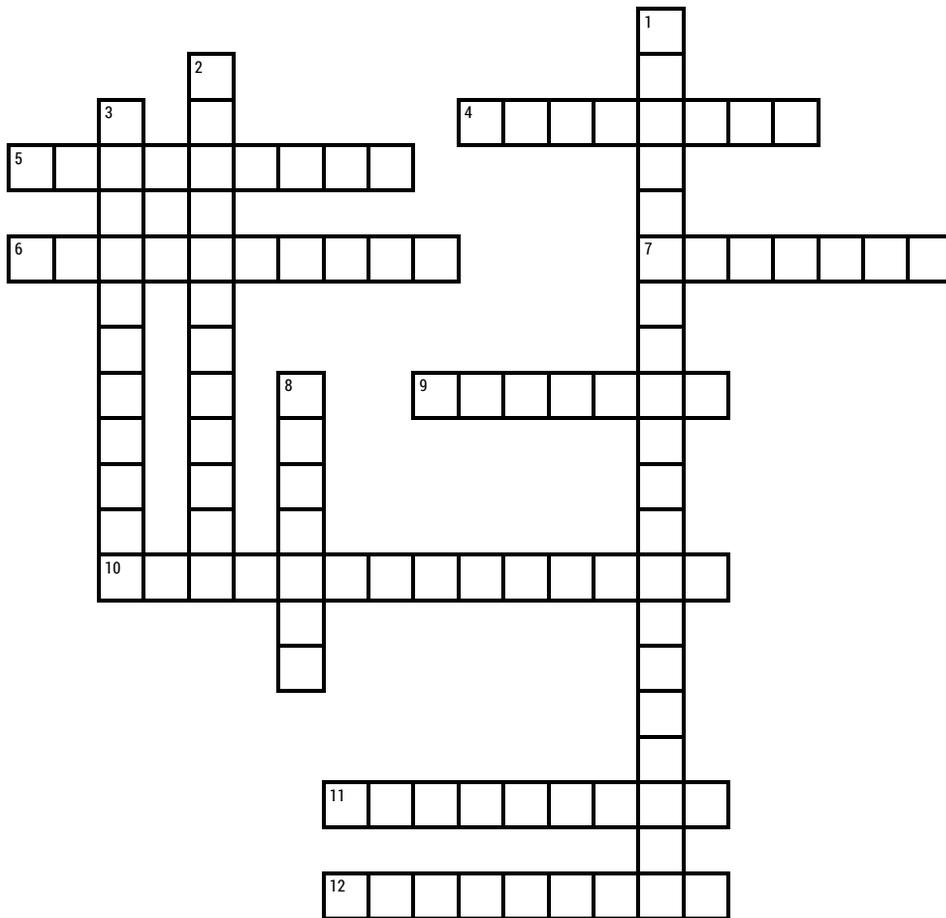
✓ PDF

Selected Activities and Completed Glossary Page

This sample shows <u>one</u> example of several activities.
The whole resource contains approximately 70 activities –
6 or 7 activities for each of the 9 topics.

The resource covers 176 key terms.

Design Tools

Across

4 Flow chart component that shows a condition that causes the algorithm to branch; represented by a diamond (8)

5 Flow chart component that shows which step of the algorithm leads to which other step; represented by a line (9)

6 Presentation standards used for all documents produced by an organisation (5,5)

7 For storing and referring to knowledge, and explaining a topic to someone else (7)

9 Diagram in which information is represented visually, typically with a central idea and associated ideas branching off it (4,3)

10 For achieving successful desired outcomes within a project – goals, milestones and problems to solve are included as next actions (6,8)

11 Diagram that shows the series of actions and decisions involved in a process (4,5)

12 Shows the intended layout of a screen, such as a web page, user interface, or document (9)

Down

1 Visual representation of how the final product will look (13,7)

2 A talk, usually with a slide show or flip chart to show information to an audience, such as a meeting (12)

3 Flow chart component that shows the data that is sent to or received from the system; represented by a rhombus (5,6)

8 Represented in a rectangular box on a flow chart (7)

Design Tools *(Table Fill)*

Flow chart component that shows which step of the algorithm leads to which other step; represented by a line	
Flow chart component that shows a condition that causes the algorithm to branch; represented by a diamond	
Diagram that shows the series of actions and decisions involved in a process	
Presentation standards used for all documents produced by an organisation	
Flow chart component that shows the data that is sent to or received from the system; represented by a rhombus	
For storing and referring to knowledge, and explaining a topic to someone else	
Diagram in which information is represented visually, typically with a central idea and associated ideas branching off it	
A talk, usually with a slide show or flip chart to show information to an audience, such as a meeting	
Represented in a rectangular box on a flow chart	
For achieving successful desired outcomes within a project – goals, milestones and problems to solve are included as next actions	
Visual representation of how the final product will look	
Shows the intended layout of a screen, such as a web page, user interface, or document	

Design Tools *(Match Up)*

#	Description		Term	
1	A talk, usually with a slide show or flip chart to show information to an audience, such as a meeting		*CONNECTOR*	
2	Diagram in which information is represented visually, typically with a central idea and associated ideas branching off it		*DECISION*	
3	Diagram that shows the series of actions and decisions involved in a process		*FLOW CHART*	
4	Flow chart component that shows a condition that causes the algorithm to branch; represented by a diamond		*HOUSE STYLE*	
5	Flow chart component that shows the data that is sent to or received from the system; represented by a rhombus		*INPUT/OUTPUT*	
6	Flow chart component that shows which step of the algorithm leads to which other step; represented by a line		*LIBRARY*	
7	For achieving successful desired outcomes within a project – goals, milestones and problems to solve are included as next actions		*MIND MAP*	
8	For storing and referring to knowledge, and explaining a topic to someone else		*PRESENTATION*	
9	Presentation standards used for all documents produced by an organisation		*PROCESS*	
10	Represented in a rectangular box on a flow chart		*TUNNEL TIMELINE*	
11	Shows the intended layout of a screen, such as a web page, user interface, or document		*VISUALISATION DIAGRAM*	
12	Visual representation of how the final product will look		*WIREFRAME*	

Design Tools

Across:

4. DECISION
5. CONNECTOR
6. HOUSESTYLE
7. LIBRARY
9. MINDMAP
10. TUNNELTIMELINE
11. FLOWCHART
12. WIREFRAME

Down:

1. VISUALISATION
2. PROTOTYPE
3. INPUTOUTPUT
8. PROCESS