2022 specification
first assessment in 2024

Keyword Activities

Unit R070: Augmented Reality

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POD 11653

Contents

Teacher's Introduction

Overview

This resource has been produced to support teaching and learning of the **Cambridge Nationals L1/2 2022** specification **J836 – R070: Augmented Reality**. The learning content is covered by the following sets of keywords with matching descriptions, which cover all of the learning aims for the topic:

- *Augmented Reality*
- *Designing an AR model prototype*
- *Creating an AR model prototype*
- *Testing and reviewing your AR prototype*

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.**

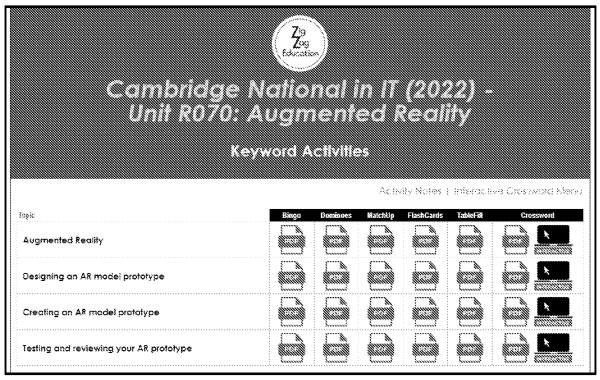
Providing easy access to the activities are two HTML menus:

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.

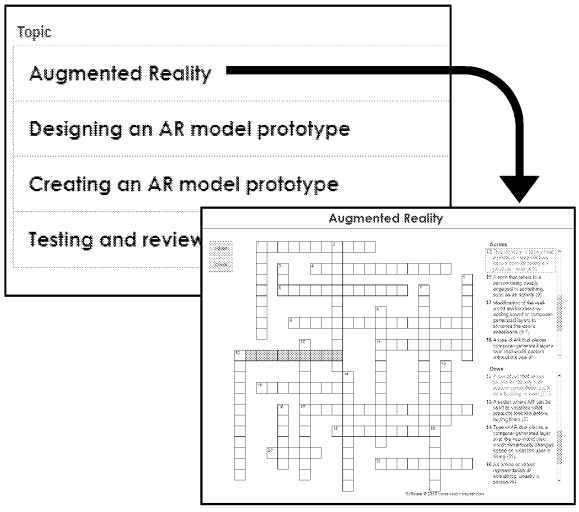
   If you intend to give learners access to this menu, then be aware that it does include links to the solutions.



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

All activities are provided as PDF files, allowing for easy printing and sharing on your school's internal network or VLE. In addition, each of the single-page activities (*Crosswords*, *Match-up* and *Table-fill*), as well as the solutions, are provided on paper too.

The activities included in this resource are as follows:

Bingo

✓ PDF

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.

Crosswords

✓ PDF ✓ PAPER

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.

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

✓ PDF

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.

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

✓ PDF ✓ PAPER

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.

Flash Cards

✓ PDF

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.

Glossary Builders

Table-fill

✓ PDF ✓ PAPER

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.

Write Your Own Glossary

✓ PDF

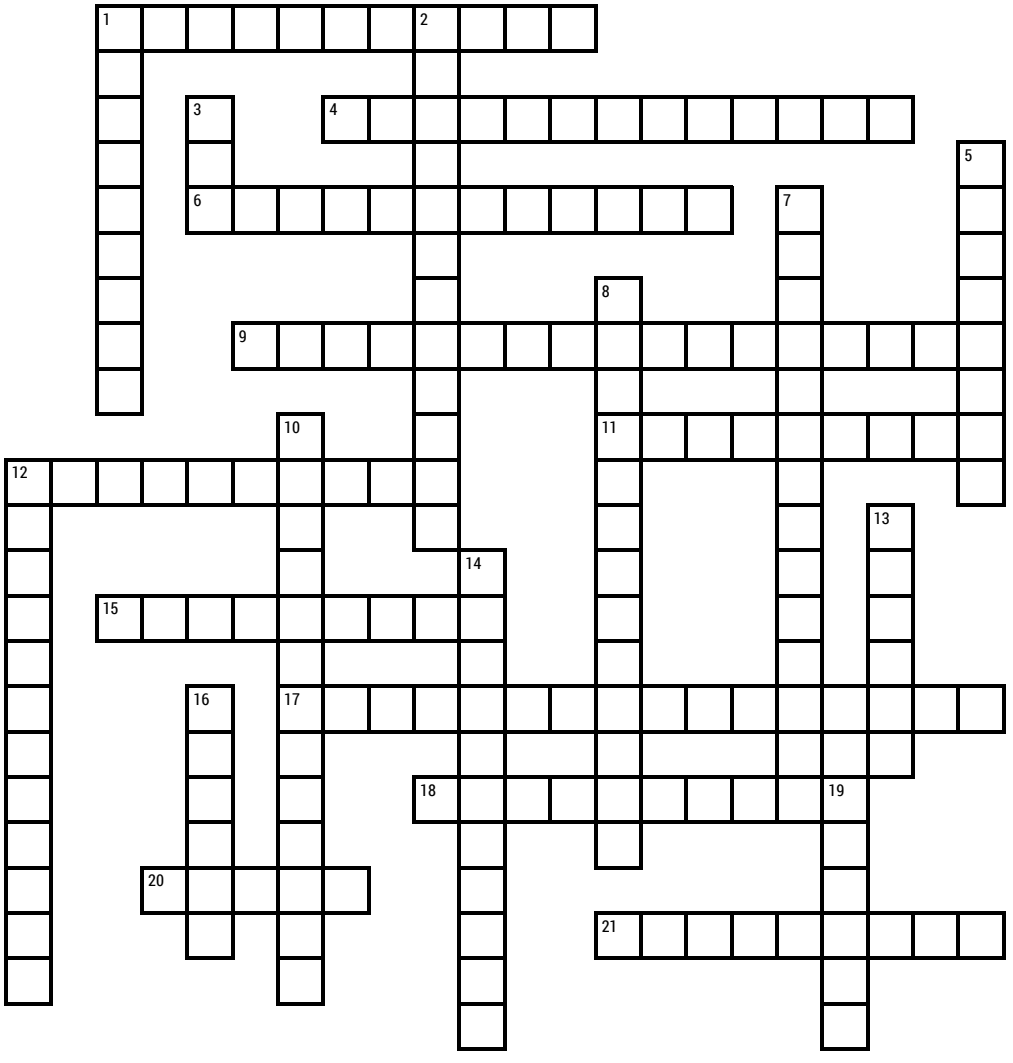
Like the Table-fill, this activity can be used to test students before learning a topic, or as a revision tool after learning a topic. Students are given a list of the keywords and need to produce their own definitions. Using Table-fill and Write Your Own Glossary, lessons can be differentiated for all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

Selected Activities and Completed Glossary Page

This sample shows one example of several activities.
The whole resource contains approximately 30 activities –
6 or 7 activities for each of the 4 topics.

The resource covers 73 key terms.

Augmented Reality



Across

1 A type of AR that will identify and place a computer-generated layer over visual reference points (6-5)

4 A type of AR that provides computer-generated layers that are specific to where a person currently is (8-5)

6 A type of AR that enhances part of the real-world content with an augmented view, such as the user's face (12)

9 A type of AR that is able to identify and track specific things in the real world (6,11)

11 A sector where AR can be used to teach children new skills and knowledge (9)

12 This allows you to see how a photo or video will look before actually taking the photo or video (4,6)

15 A term that refers to a person being deeply engaged in something, such as an activity (9)

17 Modification of the real-world environment by adding sound or computer-generated layers to enhance the user's experience (9,7)

18 A type of AR that places computer-generated layers over real-world content without the use of markers (10)

20 Virtual content such as animation or text that is placed over the real-time view of the physical world (5)

21 A sector where AR can be used to influence people's lives, such as their daily activities or their hobbies and interests (9)

Down

1 A use of AR that will allow customers to see product demonstrations or try out products virtually (9)

2 A sector where AR can be used to help design buildings and infrastructure (12)

3 This is used to determine your location in relation to Earth's orbit. It is commonly used in navigation systems. (3)

5 A use of AR that allows people to learn new skills for a job (8)

7 A device that can be used to collect information about the direction in which a device is pointing (7,7)

8 A sensor that is used to collect information about the movement of a device, such as its orientation (13)

10 A sector where AR can be used to delight someone (13)

12 A use of AR that allows people to virtually look around somewhere, such as a building or town (7,5)

13 A sector where AR can be used to visualise what products look like before buying them (6)

14 Type of AR that places a computer-generated layer over the real-world view, which dynamically changes based on what the user is doing (11)

16 An online or virtual representation of something, usually a person (6)

19 A type of AR that places a computer-generated layer over the real-world view that remains fixed and does not respond to changes in the real world (6)

Augmented Reality *(Table Fill)*

A sensor that is used to collect information about the movement of a device, such as its orientation	
A sector where AR can be used to help design buildings and infrastructure	
Modification of the real-world environment by adding sound or computer-generated layers to enhance the user's experience	
An online or virtual representation of something, usually a person	
A device that can be used to collect information about the direction in which a device is pointing	
A sector where AR can be used to teach children new skills and knowledge	
A sector where AR can be used to delight someone	
This is used to determine your location in relation to Earth's orbit. It is commonly used in navigation systems.	
A term that refers to a person being deeply engaged in something, such as an activity	
Type of AR that places a computer-generated layer over the real-world view, which dynamically changes based on what the user is doing	
Virtual content such as animation or text that is placed over the real-time view of the physical world	
A sector where AR can be used to influence people's lives, such as their daily activities or their hobbies and interests	
A type of AR that provides computer-generated layers that are specific to where a person currently is	
A type of AR that will identify and place a computer-generated layer over visual reference points	
A type of AR that places computer-generated layers over real-world content without the use of markers	
A use of AR that will allow customers to see product demonstrations or try out products virtually	
A type of AR that is able to identify and track specific things in the real world	
A sector where AR can be used to visualise what products look like before buying them	
A type of AR that places a computer-generated layer over the real-world view that remains fixed and does not respond to changes in the real world	
A type of AR that enhances part of the real-world content with an augmented view, such as the user's face	
A use of AR that allows people to learn new skills for a job	
This allows you to see how a photo or video will look before actually taking the photo or video	
A use of AR that allows people to virtually look around somewhere, such as a building or town	

Augmented Reality *(Match Up)*

1	A device that can be used to collect information about the direction in which a device is pointing
2	A sector where AR can be used to delight someone
3	A sector where AR can be used to help design buildings and infrastructure
4	A sector where AR can be used to influence people's lives, such as their daily activities or their hobbies and interests
5	A sector where AR can be used to teach children new skills and knowledge
6	A sector where AR can be used to visualise what products look like before buying them
7	A sensor that is used to collect information about the movement of a device, such as its orientation
8	A term that refers to a person being deeply engaged in something, such as an activity
9	A type of AR that enhances part of the real-world content with an augmented view, such as the user's face
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16	A use of AR that allows people to virtually look around somewhere, such as a building or town
17	A use of AR that will allow customers to see product demonstrations or try out products virtually
18	An online or virtual representation of something, usually a person
19	Modification of the real-world environment by adding sound or computer-generated layers to enhance the user's experience
20	This allows you to see how a photo or video will look before actually taking the photo or video
21	This is used to determine your location in relation to Earth's orbit. It is commonly used in navigation systems.
22	Type of AR that places a computer-generated layer over the real-world view, which dynamically changes based on what the user is doing
23	Virtual content such as animation or text that is placed over the real-time view of the physical world

ACCELEROMETER	
ARCHITECTURE	
AUGMENTED REALITY	
AVATAR	
DIGITAL COMPASS	
EDUCATION	
ENTERTAINMENT	
GPS	
IMMERSION	
INTERACTIVE	
LAYER	
LIFESTYLE	
LOCATION-BASED	
MARKER-BASED	
MARKERLESS	
MARKETING	
OBJECT RECOGNITION	
RETAIL	
STATIC	
SUPERIMPOSED	
TRAINING	
VIEW FINDER	
VIRTUAL TOURS	

Augmented Reality