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Teacher's Introduction

Overview

This resource has been produced to support teaching and learning of the **GCSE AQA Geography** specification **8035 – Resource Management: Energy**. The learning content is covered by the following sets of keywords with matching descriptions, which cover all of the Learning Aims for the topic:

UK Resources

Energy: General and Management

• Energy: Types of Energy and Fuel

• Energy: Issues

• Energy: Energy Management

For each set, there are a number of different keyword activities on CD designed to give you a range of different options for classroom, 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 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 accompanying CD. To use on a school network, the entire contents of the CD needs to be copied and pasted into an accessible location.



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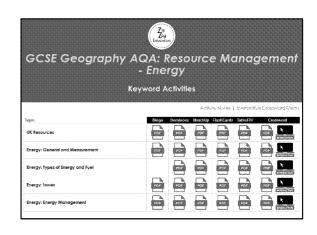
Providing easy access to the activities are two HTML menus:

1. Access All Menu

Location: index.html

This menu, designed primarily for teacher use, includes links to everything on provided on the CD – 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

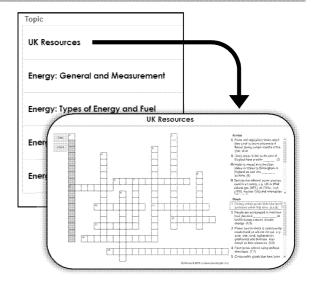
This menu, which can be accessed via the *Access All* Menu is included to allow learner access to just the interactive crosswords (without the answers).

Free Updates!

Register your email address to receive any future free updates* made to this resource or other Geography resources your school has purchased, and details of any promotions for your subject.

* resulting from minor specification changes, suggestions from teachers and peer reviews, or occasional errors reported by customers

Go to zzed.uk/freeupdates



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:

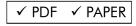
Bingo

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.



Crosswords

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





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

Dominoes

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 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 of the chain, then students have gone wrong somewhere.

Match Up

Students match descriptions to their keyword 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

These are a helpful revision tool. To make the cards, fold the page in half, then cut each card and stick 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 face down on the table.

Students will then take it in turns to turn over two cards with the aim of matching up a keyword to its definition. Matched up cards are removed and the game is finished when all the cards have been matched.

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, they could be given to students at the beginning of the topic, to see what they already know.

Write Your Own Glossary

Like the Table Fill, this activity can be used to test pupils 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

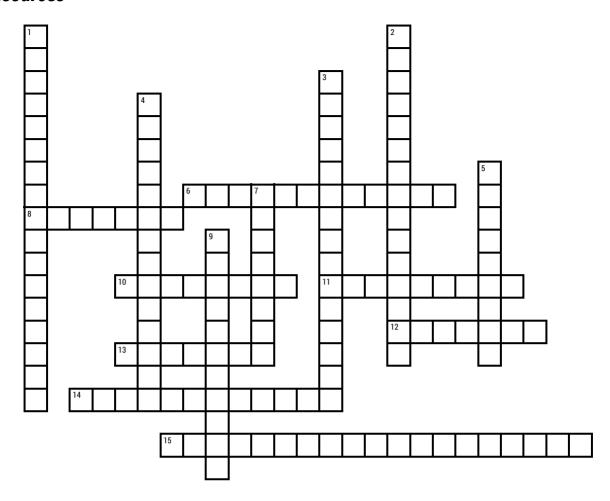
This sample shows <u>one</u> example of several activities.

The whole resource contains approximately 40 activities –

6 or 7 activities for each of the 5 topics.

The resource covers 68 key terms.

UK Resources



Across

- **6** Fruits and vegetables which reach their peak in terms of harvest of flavour during certain months of the year. (8,4)
- 8 Some areas in the south-east of England have a water _____. (7)
- 10 Water is moved from the Elan Valley in Wales to Birmingham in England as part of a _____ scheme.(8)
- 11 Term for the different power sources used in a country, e.g. UK in 2004: natural gas (38%), oil (35%), coal (16%), nuclear (9%) and renewables (2%). (6,3)
- **12** Hinkley Point, Sizewell and Hartlepool are all _____ power plants in the UK. (7)
- 13 Some areas in the west of Scotland have a water _____. (7)
- 14 An assessment of the other particles in water and whether they constitute possible damage to human health. (5,7)
- 15 Controlling, limiting and monitoring particles emitted/released by human activity that can damage natural environments and human health. (9,10)

Down

- 1 Finding edible goods that have been produced within that area. (5,4,8)
- 2 People are encouraged to minimise their personal _____ to tackle human-caused climate change. (6,9)
- **3** Power source which is continuously created and so will not run out, e.g. solar, tide, wind, hydroelectric, geothermal and biomass. Also known as flow resources. (9,6)
- **4** Food grown without using artificial chemicals. (7,7)
- **5** Consumable goods that have been sourced from the local area will have low ______ (4,5)
- 7 Natural fuel which is trapped in deep rock layers. (5,3)
- **9** Coal, oil and natural gas are all ______. (6,5)

UK Resources

Organic Produce Food grown without using artificial chemicals.

Food Miles The distance consumables have travelled from their place of production to

the consumer. Used in assessing environmental impact, particularly in terms

of global warming.

Local Food Sourcing Finding edible goods that have been produced within that area.

Seasonal Food Fruits and vegetables which reach their peak in terms of harvest of flavour

during certain months of the year.

Water Quality An assessment of the other particles in water and whether they constitute

possible damage to human health.

Pollution Controlling, limiting and monitoring particles emitted/released by human

Management activity that can damage natural environments and human health.

Water Transfer The movement of a particular liquid from one area to another to solve a

supply problem.

Water Deficit The lack of essential liquid resources.

Water Surplus More stock of a key liquid resource than the local population needs.

Energy Mix Term for the different power sources used in a country, e.g. UK in 2004:

natural gas (38%), oil (35%), coal (16%), nuclear (9%) and renewables (2%).

Fossil Fuel Non-renewable energy source made up of the remains of plant and animal

material formed during previous geological periods.

Shale Gas Natural fuel which is trapped in deep rock layers.

Carbon Footprint The total amount of greenhouse gases such as carbon dioxide or methane

(kg) resulting from the production, packaging and transportation of food

from its place of production to consumer.

Renewable Energy Power source which is continuously created and so will not run out, e.g. solar,

tide, wind, hydroelectric, geothermal and biomass. Also known as flow

resources.

Nuclear Power The use of uranium and sustained exothermic processes (fission) to generate

electricity and heat.

UK Resources (Table Complete)

An assessment of the other particles in water and whether they constitute possible damage to human health.	
Controlling, limiting and monitoring particles emitted/released by human activity that can damage natural environments and human health.	
Finding edible goods that have been produced within that area.	
Food grown without using artificial chemicals.	
Fruits and vegetables which reach their peak in terms of harvest of flavour during certain months of the year.	
More stock of a key liquid resource than the local population needs.	
Natural fuel which is trapped in deep rock layers.	
Non-renewable energy source made up of the remains of plant and animal material formed during previous geological periods.	
Power source which is continuously created and so will not run out, e.g. solar, tide, wind, hydroelectric, geothermal and biomass. Also known as flow resources.	
Term for the different power sources used in a country, e.g. UK in 2004: natural gas (38%), oil (35%), coal (16%), nuclear (9%) and renewables (2%).	
The distance consumables have travelled from their place of production to the consumer. Used in assessing environmental impact, particularly in terms of global warming.	
The lack of essential liquid resources.	
The movement of a particular liquid from one area to another to solve a supply problem.	
The total amount of greenhouse gases such as carbon dioxide or methane (kg) resulting from the production, packaging and transportation of food from its place of production to consumer.	
The use of uranium and sustained exothermic processes (fission) to generate electricity and heat.	

UK Resources (Match Up)

An assessment of the other particles in water and whether they constitute possible damage to human health.

Controlling, limiting and monitoring particles emitted/released by human activity that can damage natural environments and human health.

Finding edible goods that have been produced within that area.

Food grown without using artificial chemicals.

Fruits and vegetables which reach their peak in terms of harvest of flavour during certain months of the year.

More stock of a key liquid resource than the local population needs.

Natural fuel which is trapped in deep rock layers.

Non-renewable energy source made up of the remains of plant and animal material formed during previous geological periods.

Power source which is continuously created and so will not run out, e.g. solar, tide, wind, hydroelectric, geothermal and biomass. Also known as flow resources.

Term for the different power sources used in a country, e.g. UK in 2004: natural gas (38%), oil (35%), coal (16%), nuclear (9%) and renewables (2%).

The distance consumables have travelled from their place of production to the consumer. Used in assessing environmental impact, particularly in terms of global warming.

The lack of essential liquid resources.

The movement of a particular liquid from one area to another to solve a supply problem.

The total amount of greenhouse gases such as carbon dioxide or methane (kg) resulting from the production, packaging and transportation of food from its place of production to consumer.

The use of uranium and sustained exothermic processes (fission) to generate electricity and heat.

Organic Produce

Food Miles

Local Food Sourcing

Seasonal Food

Water Quality

Pollution Management

Water Transfer

Water Deficit

Water Surplus

Energy Mix

Fossil Fuel

Shale Gas

Carbon Footprint

Renewable Energy

Nuclear Power

UK Resources

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