Zig Zag Education

Geography

GCSE (9–1) | AQA | 8035

Learning Grids

for GCSE AQA Geography

Paper 2: Section C: The Challenge of Resource Management

3.2.2.1 Resource Management & 3.2.3.3 Water

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Contents

Teacher's Introduction

These learning grids are a tool designed to help you deliver the **GCSE AQA Geography specification (8035)** for **Paper 2, Section C: The Challenge of Resource Management (*3.2.3.1 Resource Management* and *3.2.3.3 Water*)**. This resource covers all of the content outlined in the specification for these sections, presented in specification order*. The concept is that your students are assigned a topic to learn about as part of your scheme of work (or by giving them a set of pages to read from a textbook), possibly for homework, and then asked to complete the learning grid which matches that section of the specification. These activities are particularly useful for your weaker students as they encourage students to *read* their notes or the textbook pages in order to find the required answers.

Each learning grid is cross-referenced against three popular AQA-endorsed textbooks (HOD, CAM and OXF – see details below).

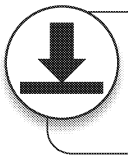
Completed grids are provided so that your students' answers can be self- or peer-marked or checked. The answers may also be useful to hand out to students during their revision to assist with any unanswered questions, or to ensure that students are revising from the correct answers.

Advantages of using these learning grids are:

- ✓ Some students will find this method of studying of great value, particularly if they find it difficult to absorb information in class – the learning grids are perfect for consolidation.
- ✓ Resulting grids contain a bullet-point summary that may be useful for revision.
- ✓ They are an easy-to-set, yet valuable, homework.
- ✓ They are a useful catch-up tool to help students who have missed a lesson.
- ✓ They can be used as a basis for cover lessons as they require minimal preparation and minimal interaction from the cover teacher.
- ✓ They are an independent learning resource.

Textbook abbreviations:
HOD refers to Widdowson et al., *AQA GCSE (9-1) Geography* (Hodder, ISBN 978-1471859922, 2016)
CAM refers to Kitchen et al., *Geography Student Book GCSE for AQA* (Cambridge University Press, ISBN 978-1316604632, 2016)
OXF refers to Ross et al., *GCSE Geography AQA* (Oxford University Press, ISBN 978-0198366614, 2016)

I Mahmood, September 2024



Where colour is essential, some of the images/maps in this resource have a digital PDF are provided on the ZigZag Education Support Files system, which can be accessed via **zzed.uk/productsupport**

*Students may study 3.2.3.1 Resource Management and must choose from 3.2.3.2 Food, 3.2.3.3 Water and 3.2.3.4 Energy.

Selected Question and Answer Pages

For demonstration only, the sample answer pages immediately follow their corresponding question pages

Resource management: Food, water and energy are fundamental to human development

HOD:	pp. 306–307
OUP:	pp. 256–257
CAM:	pp. 245–249

Question			Answer	
The significance of food, water and energy to economic and social well-being	1	**Define the word 'resource' by completing the gap-fill. Use the terms below to complete the sentences.** ***increasing, economic, growing, develop, reduced, valuable, distributed***	A resource is a _____ product that is essential for countries to _____ and for people to have a decent quality of life. The three main resources in the world are water, food and energy. They are vital for survival. Unfortunately, resources are not _____ evenly, which leads to problems such as _____ human well-being and _____ development. With a _____ world population, the demand for resources is _____.	
	2	**Food, water and energy are all important resources. Explain why.**	**Food**	
			Water	
			Energy	

Resource management: Food, water and energy are fundamental to human development

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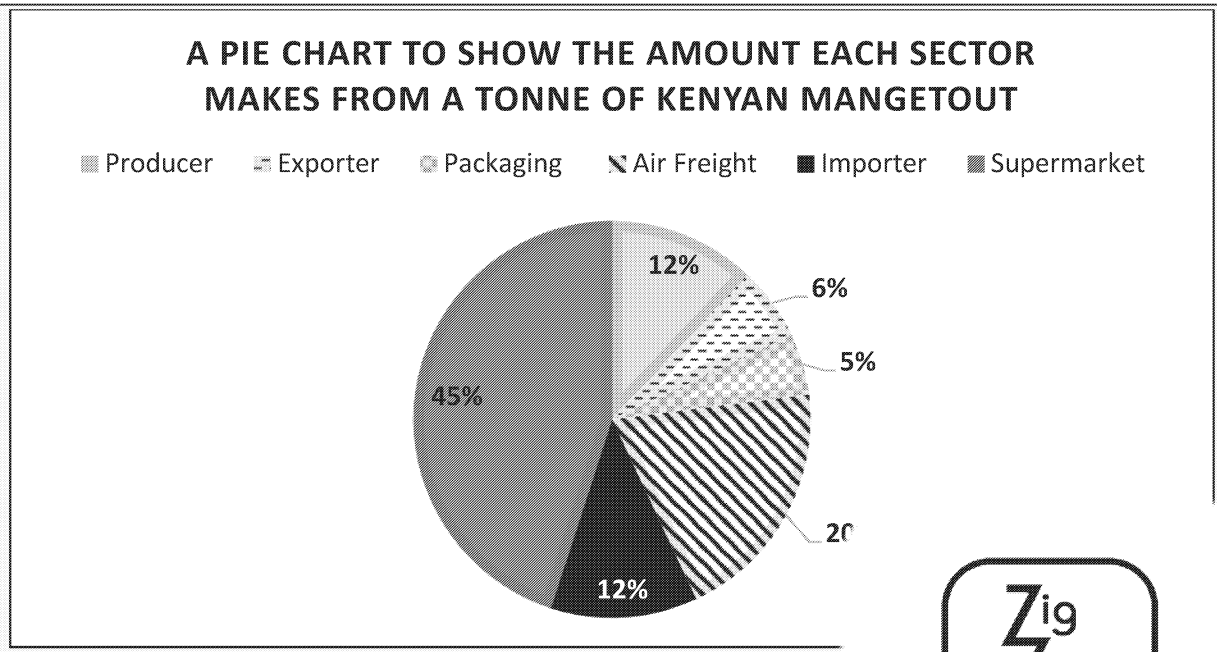
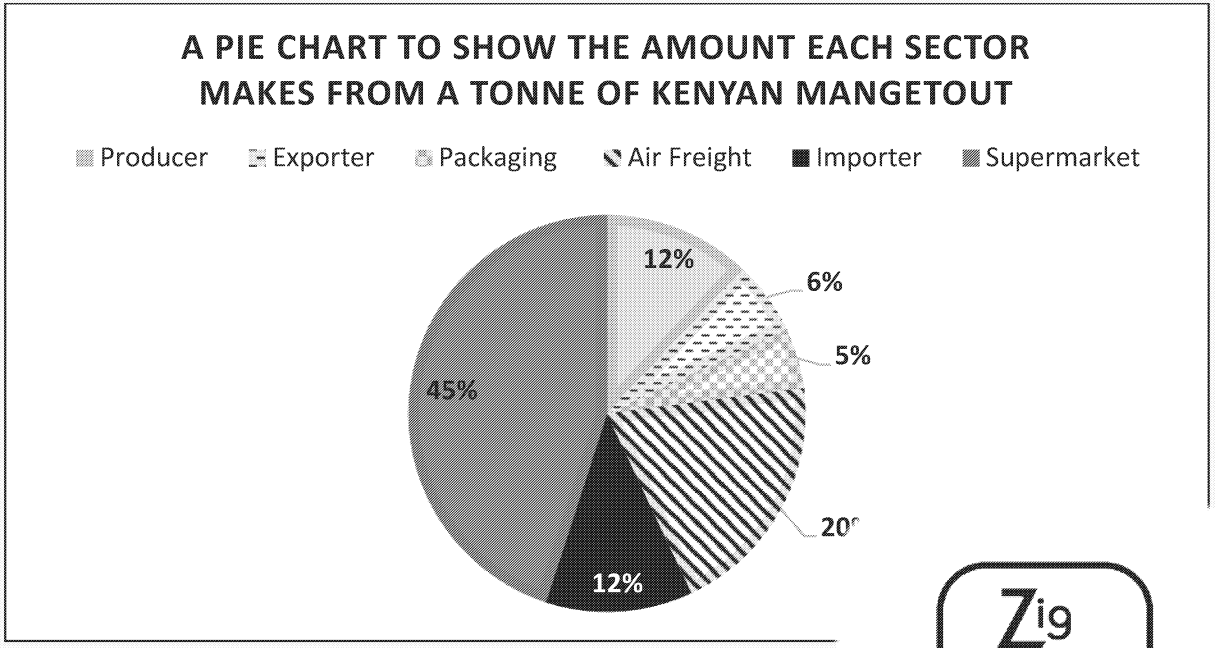
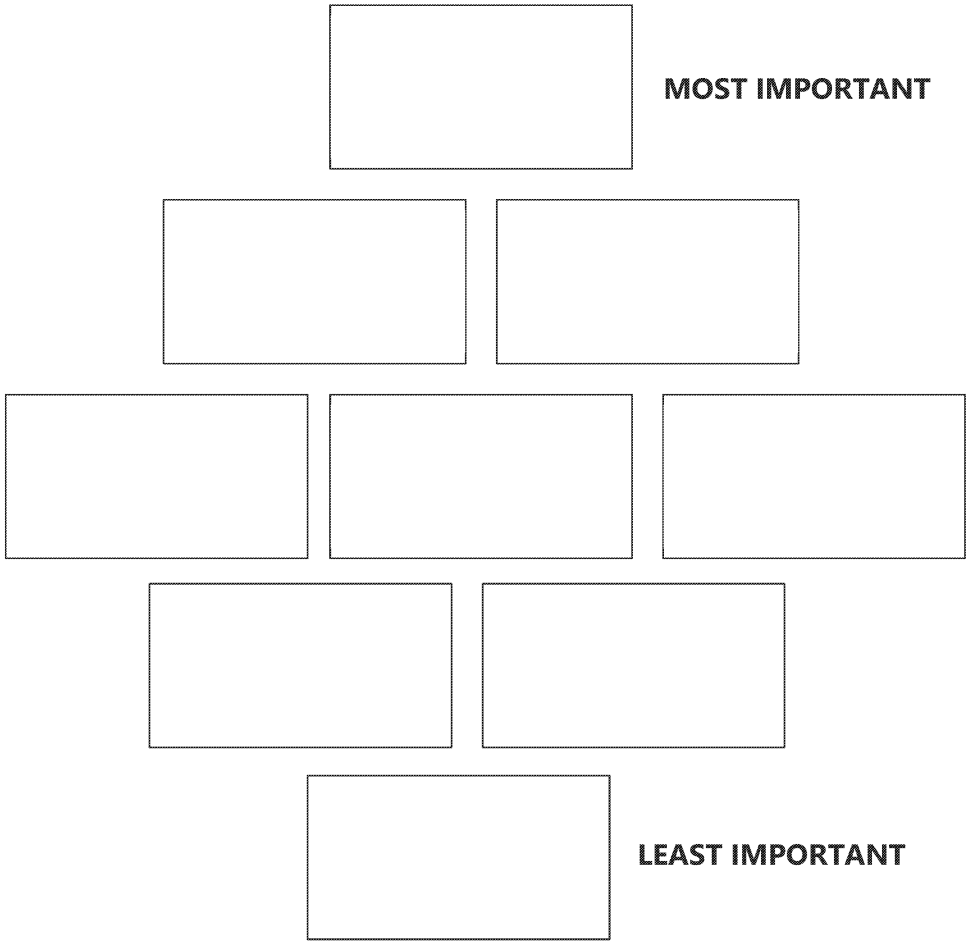
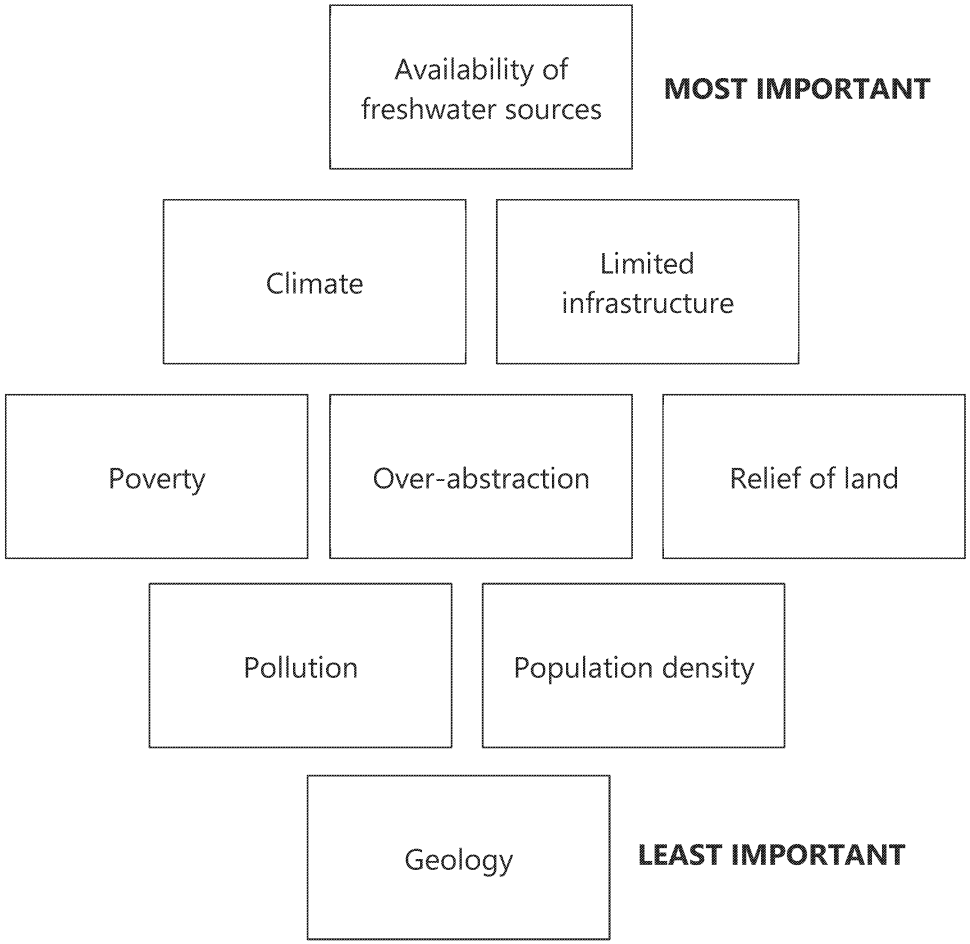
Question			Answer	
The significance of food, water and energy to economic and social well-being	1	**Define the word 'resource' by completing the gap-fill. Use the terms below to complete the sentences.** ***increasing, economic, growing, develop, reduced, valuable, distributed***	A resource is a **valuable** product that is essential for countries to **develop** and for people to have a decent quality of life. The three main resources in the world are water, food and energy. They are vital for survival. Unfortunately, resources are not **distributed** evenly, which leads to problems such as **reduced** human well-being and **economic** development. With a **growing** world population, the demand for resources is **increasing**.	
	2	**Food, water and energy are all important resources. Explain why.**	**Food**	Food influences the health of people. Without enough food (2,000–2,400 calories per day), people can become malnourished. Malnourished people can suffer from illnesses and diseases due to a lack of essential minerals and vitamins in their diet.
			Water	Water is vital for health, social and economic well-being. We need clean water and a sufficient supply to be able to grow food crops, feed animals and for domestic and industrial use.
			Energy	Energy is required for economic development and industrialisation. It is used for electrical goods at home, in factories for manufacturing of product

Question			Answer
The growing demand for high-value food exports from low-income countries and all-year demand for seasonal food and organic produce	9	**Explain two advantages of agribusinesses.**	**1.** **2**
	10	**The pie chart shows the percentage each sector makes from Kenyan mangetout. If one bag of mangetout is £2 in the supermarket, calculate the following:** **i. How much the producer makes** **ii. How much the supermarket makes**	 **i)** **ii)**

	Question		Answer
The growing demand for high-value food exports from low-income countries and all-year demand for seasonal food and organic produce	9	**Explain two advantages of agribusinesses.**	Accept any answer based on economic advantages, e.g. One advantage of agribusinesses is that food can be mass-produced in large-scale commercial farms. This means that the cost of food is lower, so consumers have to pay less as the costs of production are low. Another advantage of agribusinesses is that the quality of food and harvests can be controlled, as the latest technology, better seeds, chemical fertilisers and pesticides are used for production. This produces a higher yield meaning businesses can make more profit.
	10	**The pie chart shows the percentage each sector makes from Kenyan mangetout. If one bag of mangetout is £2 in the supermarket, calculate the following:** **i. How much the producer makes** **ii. How much the supermarket makes**	 **i)** 12% of £2= 24p **ii)** 45% of £2=

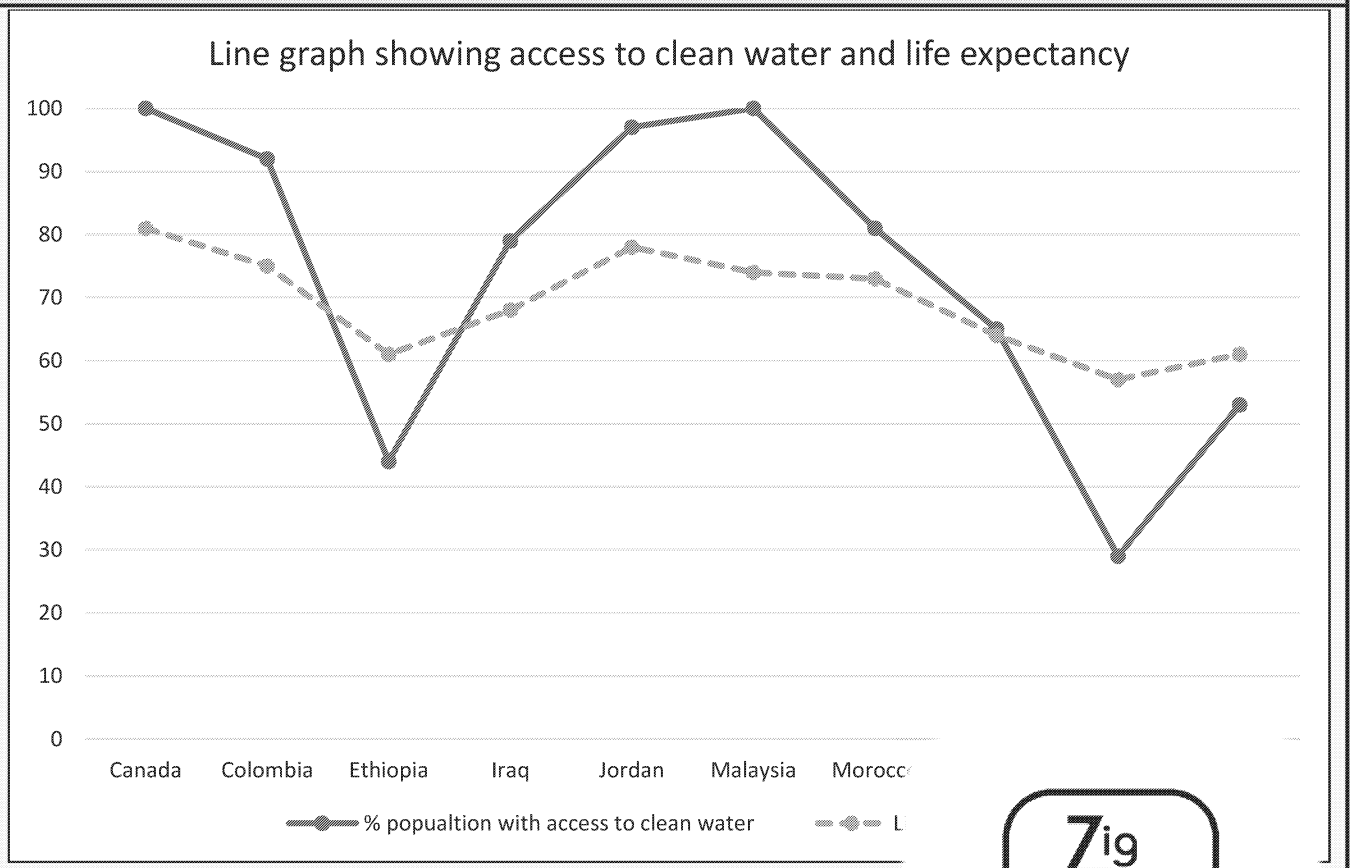
Question			Answer
Factors affecting water availability: Climate, geology, pollution of supply, over-abstraction, limited infrastructure, poverty	30	**Complete the diamond 9 with the following factors affecting water availability, from most to least important. Justify the factor you think is most important. Choose from the following:** • **Over-abstraction** • **Pollution** • **Geology** • **Climate** • **Poverty** • **Limited infrastructure** • **Availability of freshwater sources** • **Population density** • **Relief of land**	 **Justification**

Question			Answer
Factors affecting water availability: Climate, geology, pollution of supply, over-abstraction, limited infrastructure, poverty	30	**Complete the diamond 9 with the following factors affecting water availability, from most to least important. Justify the factor you think is most important. Choose from the following:** • **Over-abstraction** • **Pollution** • **Geology** • **Climate** • **Poverty** • **Limited infrastructure** • **Availability of freshwater sources** • **Population density** • **Relief of land**	 **Justification** *Any order is acceptable, with a justification.* The most important factor affecting water availability is the availabilit lakes, rivers and reservoirs. If a country does not have many of these, deficit. Having freshwater sources means water can be directed to ho agricultural land.

Additional Selected Question Pages

Demand for water resources is rising globally but supply can be insecure, which may lead to conflict (Part 4)

ZZTP:	Lesson 8
HOD:	pp. 346–347
OUP:	pp. 278–279
CAM:	pp. 290–291

Question			Answer
Impacts of water insecurity – waterborne disease and water pollution, food production, industrial output, potential for conflict where demand exceeds supply	31	**Using the line graph, describe the relationship between life expectancy and access to safe water.**	

Different strategies can be used to increase water supply (Part 2)

ZZTP: Lesson 10
HOD: pp. 350–351
OUP: pp. 280–281
CAM: pp. 292–293

Question			Answer	
An example of a large-scale water transfer scheme to show how its development has both advantages and disadvantages	35	Using the map of China, overleaf, explain why it is necessary to transfer water from the south to the north. The central and the eastern routes are marked on the map.		
	36	Look at the table of advantages and disadvantages of the South– North Transfer Scheme in China. From the list of these stakeholders, identify the winners and losers: • Government • Local residents • Taxpayers • Farmers • Business owners	**Advantages** • The north, which is deficient, will get a reliable water supply • Reduces health risks as more safe water will be available • Water is available for industrial use, helping the economy to flourish • More water is available for irrigation, increasing crop yields and food supply	**Disadvantages** • A large number of people will be displaced • Wildlife habitats and ecosystems will get damaged • A large capital investment is required which will be funded using taxpayers' money • The south might face water shortages if water is transferred to the north • There will be water lost through evaporation as it flows through the canals
			Government –	
			Local residents –	
			Taxpayers –	
			Farmers –	
			Business owners –	