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Teacher's Introduction

Overview

This resource has been produced to support teaching and learning of the **GCSE Edexcel B Geography** specification (1GBo), **Topics 7, 8 and 9: People and Environmental Issues**. The learning content is covered by the following sets of keywords with matching descriptions, which cover all of the Learning Aims for Topics 7, 8 and 9:

Topic 7

People and the Biosphere > Biomes
People and the Biosphere > Ecosystems
People and the Biosphere > Importance of the biosphere

People and the Biosphere > Uses and exploitation

Topic 8

Forests under threat > Ecosystems Forests under threat > Tropical rainforests (properties)

Topic 8 (continued)

Forests under threat > Tropical rainforests (human activities) Forests under threat > Taiga

Topic 9

Consuming energy resources > General Consuming energy resources > Types of energy and fuel Consuming energy resources > Energy issues Consuming energy resources > 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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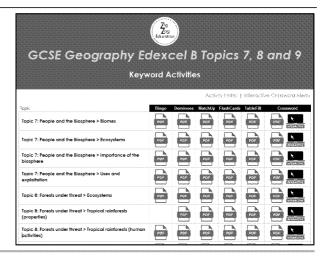
Providing easy access to the activities are two HTML menus:

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

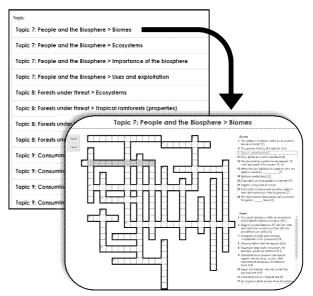
This menu, which can be accessed via the *Access All* Menu is included to allow learner access to just the interactive crosswords (without the answers).

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:

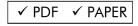
Bingo

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.

✓ PDF

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 90 activities –

6 or 7 activities for each of the 12 topics.

The resource covers 190 key terms.

Topic 8: Forests under threat > Tropical rainforests (human activities) (Table Complete)

A non-native organism which is introduced to an area either deliberately or accidentally
A short period when seasonal rains fail, leading to a climate that is drier than normal
A threat to an ecosystem which is a side effect of exploitation, such as the introduction of pests and diseases, or pollution
An area of land owned by the government where local people, not large corporations, can obtain resources, creating a commercial-activity-free zone.
Binding protocols and regulations between different countries, some of which focus on the protection of rainforests
Cultivation of land for the use of a single person, or exclusively for that person's family, with little surplus to sell
Deforestation of a few key species leaving unwanted species behind. Those left may be damaged, e.g. from falling timber and during timber removal.
Electricity generated by passing water stored in a reservoir through a turbine
Energy resource which is not reliant on oil, gas, etc. Formed from biomass, or the fermentation of biomass to produce ethanol, for example.
Factor which reduces the capacity of a habitat to function and recover from a disaster
Felling trees for timber
Land used for the production of beef
Large-scale cultivation of land for crops and animal rearing with the purpose of making profit and creating employment
Methods of stopping environmental degradation from taking place, e.g. creating reserves or reducing the impact of people
Mitigating the damage of deforestation by promoting the growth of new trees in a previously unforested area
Occurs when the exploitation of resources is above the sustainable yield of the ecosystem
Process by which an environment deteriorates, reducing the capacity for a species or ecosystem to thrive
Process by which harvestable trees or shrubs are planted on the same piece of land to protect, conserve and diversify important natural resources
The mining of stone and metals from the ground
The purposeful destruction or removal of forest
The use of natural remedies by local residents, such as those from native plants

Topic 8: Forests under threat > Tropical rainforests (human activities) (Match Up)

A non-native organism which is introduced to an area either deliberately or accidentally A short period when seasonal rains fail, leading to a climate that is drier than normal A threat to an ecosystem which is a side effect of exploitation, such as the introduction of pests and diseases, or pollution An area of land owned by the government where local people, not large corporations, can obtain resources, creating a commercial-activity-free zone. Binding protocols and regulations between different countries, some of which focus on the protection of rainforests Cultivation of land for the use of a single person, or exclusively for that person's family, with little surplus to sell Deforestation of a few key species leaving unwanted species behind. Those left may be damaged, e.g. from falling timber and during timber removal. Electricity generated by passing water stored in a reservoir through a turbine Energy resource which is not reliant on oil, gas, etc. Formed from biomass, or the fermentation of biomass to produce ethanol, for example. Factor which reduces the capacity of a habitat to function and recover from a disaster Felling trees for timber Land used for the production of beef Large-scale cultivation of land for crops and animal rearing with the purpose of making profit and creating employment Methods of stopping environmental degradation from taking place, e.g. creating reserves or reducing the impact of people Mitigating the damage of deforestation by promoting the growth of new trees in a previously unforested area Occurs when the exploitation of resources is above the sustainable yield of the ecosystem Process by which an environment deteriorates, reducing the capacity for a species or ecosystem to thrive Process by which harvestable trees or shrubs are planted on the same piece of land to protect, conserve and diversify important natural resources The mining of stone and metals from the ground The purposeful destruction or removal of forest The use of natural remedies by local residents, such as those from native plants

Commercial Farming

Deforestation

Logging

Mineral Extraction

Subsistence Farming

Selective Logging

Hydroelectric Power

Indirect Threat

Biofuels

Ecosystem Stress

Drought

Cattle Ranch

Overharvesting

Alien Species

Degradation

Protection

Afforestation

International Agreements

Extractive Reserve

Agroforestry

Green Medicine

GCSE Geography Edexcel B Topics 7, 8 and 9 Keyword Activities | © ZigZag Education 2016

Topic 8: Forests under threat > Tropical rainforests (human activities) (Flash Cards)

Large-scale cultivation of land for crops and animal rearing with the purpose of making profit and creating employment	Commercial Farming	The purposeful destruction or removal of forest	Deforestation
Felling trees for timber	Logging	The mining of stone and metals from the ground	Mineral Extraction
Cultivation of land for the use of a single person, or exclusively for that person's family, with little surplus to sell	Subsistence Farming Deforestation of a few key species leaving unwanted species behind. Those left may be damaged, e.g. from falling timber and during timber removal.		Selective Logging
Electricity generated by passing water stored in a reservoir through a turbine	Hydroelectric Power Energy resource which is not reliant on oil, gas etc. Formed from biomass, or the fermentation of biomass to produce ethanol, for example.		Biofuels
A threat to an ecosystem which is a side effect of exploitation, such as the introduction of pests and diseases, or pollution	Indirect Threat	Factor which reduces the capacity of a habitat to function and recover from a disaster	Ecosystem Stress

Topic 8: Forests under threat > Tropical rainforests (human activities) (Dominoes) Large-scale cultivation of land for crops and The purposeful Commercial animal rearing with the - START destruction or removal purpose of making **Farming** of forest profit and creating employment The mining of stone and Deforestation Logging Felling trees for timber metals from the ground Deforestation of a few Cultivation of land for key species leaving the use of a single unwanted species **Subsistence** Mineral Extraction person, or exclusively behind. Those left may Farming for that person's family, be damaged, e.g. from with little surplus to sell falling timber and during timber removal. Energy resource which is not reliant on oil, gas, Electricity generated by etc. Formed from Hydroelectric passing water stored in Selective Logging biomass, or the a reservoir through a **Power** fermentation of turbine biomass to produce ethanol, for example.

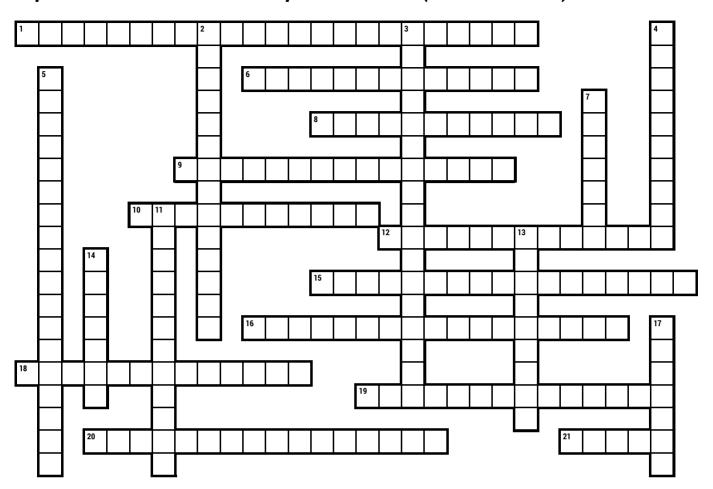
ecosystem side established side exploitate the intropests and

A threat to an ecosystem which is a side effect of exploitation, such as the introduction of pests and diseases, or pollution

Indirect Threat

Factor which reduces the capacity of a habitat to function and recover from a disaster

Topic 8: Forests under threat: Tropical rainforests (human activities)



Across

- 1 Binding protocols and regulations between different countries, some of which focus on the protection of rainforests (13,10)
- 6 Planting new trees in an unforested patch (13)
- 8 Deterioration of an environment (11)
- **9** Factor which reduces the capacity of a habitat to function and recover from a disaster (9,6)
- **10** Land used for the production of beef (6,5)
- 12 Cutting down swathes of trees (13)
- 15 Large-scale crop and animal production for profit (10,7)
- **16** The mining of stone and metals from the ground (7.10)
- **18** The use of natural remedies by local residents, such as those from native plants (5,8)
- 19 Overexploitation of resources (14)
- 20 Clean source of power generated by water (16)
- 21 Non-native dweller which can upset the equilibrium of an area: _____ species (5)

Down

- 2 A danger to an ecosystem which is a side effect of exploitation, such as the introduction of pests and diseases, or pollution (8,6)
- **3** An area of land owned by the government where local people, not large corporations, can obtain resources, creating a commercial-activity-free zone. (10,7)
- 4 Reserves, preserves, limits, quotas, etc. are all forms of _____ (10)
- 5 Living off the land and not for profit (11,7)
- 7 State when expected rainfall does not arrive (7)
- 11 Process by which harvestable trees or shrubs are planted on the same piece of land to protect, conserve and diversify important natural resources (12)
- 13 Cutting down a few key tree species: _____ logging (9)
- 14 Ethanol, for example (7)
- **17** Felling trees for timber (7)

Topic 8: Forests under threat > Tropical rainforests (human activities)

Biofuels	Extractive Reserve	Mineral Extraction	Additional Terms:
			1
			2
			3
			4
Indirect Threat	Subsistence Farming	Drought	5
			6
			7
			8
			9
Logging	Ecosystem Stress	Protection	10
			11
			12
			1

Topic 8: Forests under threat > Tropical rainforests (human activities)

Deforestation	Biofuels	Subsistence Farming	Additional Terms: 1
Drought	Logging	Indirect Threat	5
Selective Logging	Ecosystem Stress	International Agreements	9

Topic 7: People and the Biosphere > Biomes

Ecosystem Dynamic system in which organisms interact with each other and non-living

components of the surrounding environment

Nutrient Cycling Flow of minerals through an ecosystem between the living and non-living

elements

Biome Continental-sized ecosystem with vegetation characteristics and growth

influenced by the climate

Extinction The death of all individuals of a species, either locally, or on a global scale

Temperate Deciduous

Forest

A seasonal woodland biome where hardwood trees drop their leaves in the

autumn and regrow in the spring

Tropical Biome Large-scale ecosystem found close to the equator, where there is little

seasonality

Temperate Forest Woodland found between sub-tropical regions and the Arctic circles, often

consisting of deciduous, broadleaved trees

Boreal Forest Another name for the taiga biome, a swampy swathe of conifer forest only

found in the northern hemisphere, in North America and Eurasia

Temperate Grassland Savanna-type ecosystems further from the equator where climate is semi-

arid and there are marked seasons

Tundra Dry, high-latitude regions where the ground may be snow free, but is frozen

all year round. Northern Canada and Siberia are areas of this type.

Taiga Cold northern conifer forest spanning North America, northern Europe and

Russia, dominated by pines, spruces, larches and some birch in Europe

Tropical Rainforest A collection of dense, evergreen, multistorey trees which grow on and near

the equator where it is hot, moist and humid all year round

Hot Desert Regions located between 20° and 30° north and south that receive less than

250 mm precipitation per year

Biosphere The combination of every ecosystem on Earth

Savanna Ecosystem characterised by widely spaced trees and continuous cover of

grasses

Leaf Litter Surface layer of the soil comprised of dead material which has fallen from

trees and plants

Humus Organic component of soil

Biologically produced material from living, or recently living, animal or plant

life in a given area

Evapotranspiration Total amount of moisture removed from a vegetated land surface by the

combined action of evaporation and transpiration

Gene Pool The genetic diversity of a species

Ecological Niche The space and place within an ecosystem that a specific species occupies

Biodiversity Usually taken to be the number of species within a defined area but can also

be the number of ecosystems in an area

Consumer An organism which eats other organisms, such as herbivores, which eat

plants

Decomposer An organism which breaks down the remains of dead animals and plants, e.g.

fungi