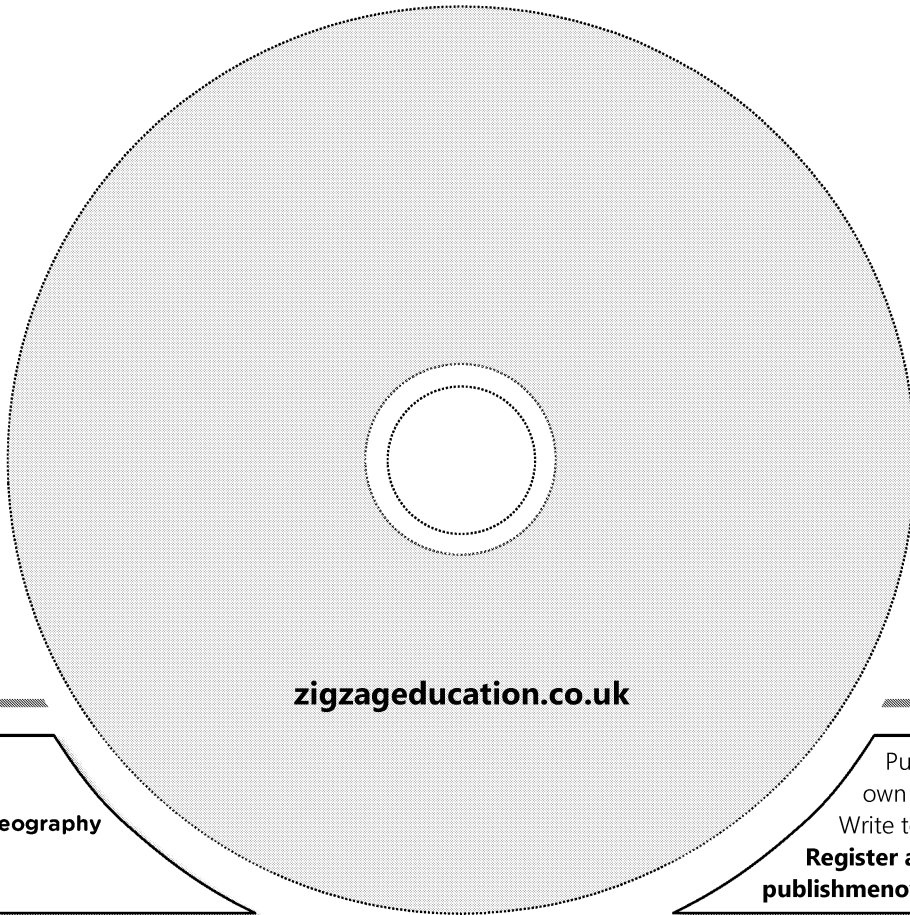




WJEC GCSE Geography Keyword Activities

Theme 4: Coastal Hazards and their Management



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Contents

Thank You for Choosing ZigZag Education.....	ii
Teacher Feedback Opportunity	iii
Terms and Conditions of Use.....	iv
Teacher’s Introduction.....	1
Topic 1: Physical and Human Factors that Increase Vulnerability to Coastal Erosion and Flooding.....	2
Crossword	2
Fill in the Keyword.....	3
Match Up.....	4
Dominoes.....	6
Bingo	10
Topic 2: Social and Economic Factors that Increase Vulnerability in Different Countries (Different Levels of Development)	16
Crossword	16
Fill in the Keyword.....	17
Match Up.....	18
Dominoes.....	19
Bingo	21
Topic 3: Hard Coastal Engineering	27
Crossword	27
Fill in the Keyword.....	29
Match Up.....	30
Dominoes.....	31
Bingo	34
Topic 4: Cost-benefit Analysis, Shoreline Management Plans and Hazard Mapping.....	39
Crossword	39
Fill in the Keyword.....	40
Match Up.....	41
Dominoes.....	42
Bingo	44
Topic 5: Sustainable Management and Soft Engineering.....	47
Crossword	47
Fill in the Keyword.....	49
Match Up.....	50
Dominoes.....	51
Bingo	54
Answers	59
Crosswords	59
Fill in the Keyword / Match Up / Dominoes.....	64
Appendices	67
Personal Revision Glossary	67
Dominoes / Revision Card Template	72
Jumbo Crossword.....	A3 pages

Teacher's Introduction

This resource has been produced to support the teaching of the **2016 WJEC specification for GCSE Geography: Theme 4: Coastal Hazards and their Management.**

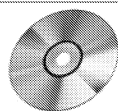
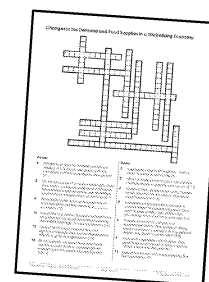
To help with the delivery of the specification all of our keyword activities are organised into topics linked to the key questions presented within each theme. A variety of engaging activities is included to help consolidate your students' understanding of key terminology and concepts. The range of activities enables you to use this resource **before, during** and **after** the teaching of each topic, helping your students to **prepare, recap** and **revise** each module.

The learning content for Coastal Hazards and their Management is covered by a total of five sets of keywords and matching descriptions. For each set, there are five different keyword activities designed to give you a range of different options for classroom, homework and revision. The answers for all the keywords can be found at the back of the resource, along with the crossword solutions.

The activities are as follows:

① Crosswords

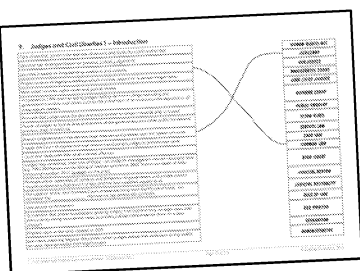
These traditional keyword activities are equally effective as lesson or homework activities – and are also an excellent way to ease students into their revision programme. There is also an A3 'jumbo' crossword with terms from across the whole unit. This could be used as class revision challenge at the end of the unit, perhaps dividing students into teams to see how far they can get.



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

② Fill in the Keyword

Nothing fancy – students simply write the keyword which is being described, without any other help. Because this activity tests the students' own knowledge, they are 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.



③ 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.

④ Dominoes

This is 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. The CD contains an editable Word version of the blank dominoes template, so you can make your own.

⑤ Bingo

Each student is given a different bingo card containing a selection of words from the set. The teacher reads the definitions and the student must match the definition to the words on their card to complete rows, columns, and the full bingo card.

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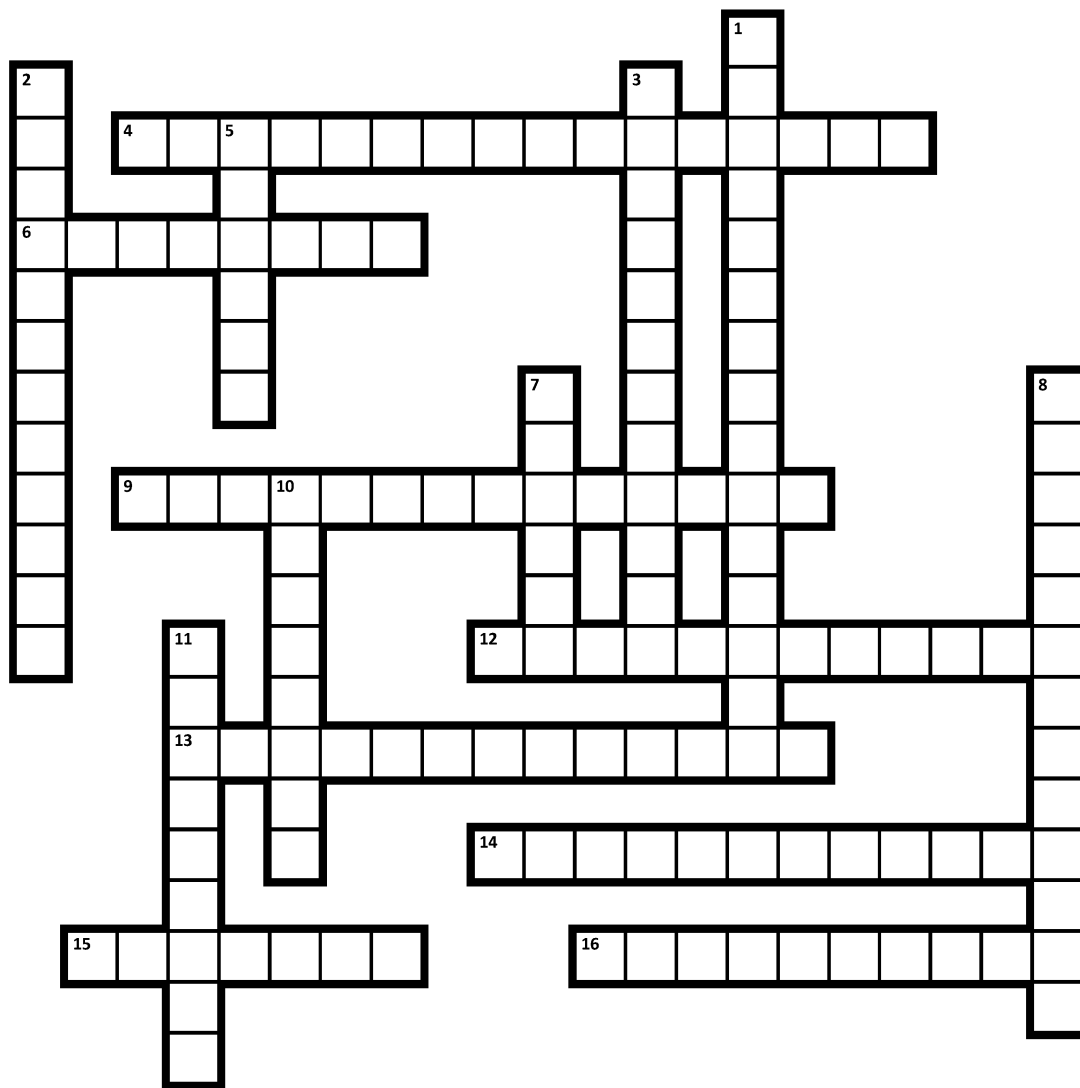
A Roberts, April 2016

Selected Activities and Completed Glossary Page

This sample shows one 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.

Topic 1: Physical and Human Factors that Increase Vulnerability to Coastal Erosion and Flooding: Crossword



Across

- 4** Steeper waves frequently associated with storm conditions that have short wavelengths and high frequencies (12–14 per min). A stronger backwash than wash encourages erosion of beach material. (11,5)
- 6** Stone that is eroded with ease (4,4)
- 9** Wearing away of the shore and its features (7,7)
- 12** High-energy erosive wave type, which thunders onto the beach (8,4)
- 13** Long-term changes to the climatic conditions such as global temperatures and weather conditions that will increase vulnerability to coastal erosion and coastal flooding (7,6)
- 14** Process by which storm-surge heights are increased, as water enters a shallow, narrow channel (6,6)
- 15** Downhill movement of material often caused by wet ground (7)
- 16** Flood of sea water onto the land, as low-pressure systems cause a rise in sea level (5,5)

Down

- 1** The sudden inundation of a coastline which occurs when sea level is elevated above normal high-tide water levels (7,8)
- 2** Range of ways in which material is transported down a slope (4,8)
- 3** The depletion sediment from the shore, which removes or diminishes the thickness of sediment (5,7)
- 5** The highest tides, which increase the effects of a storm surge, are called ____ tides (6)
- 7** Processes operating on the land which result in the breakdown of rocks: sub-_____ processes. (6)
- 8** Dangerous local and temporary climatic conditions that could be hazardous to human life (6,7)
- 10** Mass movement process which often leaves behind a curved rupture surface. (8)
- 11** A fracture within stone (4,5)

Topic 1: Physical and Human Factors that Increase Vulnerability to Coastal Erosion and Flooding: Fill in the Keyword

An offshore rise in sea level associated with low-pressure weather systems and strong winds	
The sudden inundation of a coastline which occurs when sea level is elevated above normal high-tide water levels	
Dangerous local and temporary climatic conditions that could be hazardous to human life	
Long-term changes to the climatic conditions such as global temperatures and weather conditions that will increase vulnerability to coastal erosion and coastal flooding	
The wearing away of cliffs and backwards retreat of the beach into the land	
Process by which storm-surge heights are increased, as water enters a shallow, narrow channel	
The depletion sediment from the shore, which removes or diminishes the thickness of sediment	
The highest water level, witnessed at full and new moons, when the Sun, Earth and Moon are in alignment	
Stone that is eroded with ease	
Steep, tall wave often formed where there is a significant or sudden gradient change of the beach. With significant downwards force, which causes a lot of erosion, these waves have a lot of energy and create a lot of noise.	
Processes operating on the land, such as mass movement and run-off, which result in the in situ breakdown of rocks	
Steeper waves frequently associated with storm conditions that have short wavelengths and high frequencies (12–14 per min). A stronger backwash than swash encourages erosion of beach material.	
The transport of soil, bedrock, rock debris or mud on steep coastlines usually via a rock fall, landslide, mudflow or slump	
A fracture within stone	
Sudden downhill movement of a large region of the cliff under the influence of gravity. This often leaves behind a curved rupture surface.	
Downhill movement of material often caused by wet ground	

Topic 1: Physical and Human Factors that Increase Vulnerability to Coastal Erosion and Flooding:

Match Up

A fracture within stone
An offshore rise in sea level associated with low-pressure weather systems and strong winds
Dangerous local and temporary climatic conditions that could be hazardous to human life
Downhill movement of material often caused by wet ground
Long-term changes to the climatic conditions such as global temperatures and weather conditions that will increase vulnerability to coastal erosion and coastal flooding
Process by which storm-surge heights are increased, as water enters a shallow, narrow channel
Processes operating on the land, such as mass movement and run-off, which result in the in situ breakdown of rocks
Steep, tall wave often formed where there is a significant or sudden gradient change of the beach. With significant downwards force, which causes a lot of erosion, these waves have a lot of energy and create a lot of noise.
Steeper waves frequently associated with storm conditions that have short wavelengths and high frequencies (12–14 per min). A stronger backwash than swash encourages erosion of beach material.
Stone that is eroded with ease
Sudden downhill movement of a large region of the cliff under the influence of gravity. This often leaves behind a curved rupture surface.
The depletion sediment from the shore, which removes or diminishes the thickness of sediment
The highest water level, witnessed at full and new moons, when the Sun, Earth and Moon are in alignment
The sudden inundation of a coastline which occurs when sea level is elevated above normal high-tide water levels
The transport of soil, bedrock, rock debris or mud on steep coastlines usually via a rock fall, landslide, mudflow or slump

BEACH EROSION
CLIMATE CHANGE
COASTAL EROSION
COASTAL FLOODING
DESTRUCTIVE WAVES
FUNNEL EFFECT
MASS MOVEMENT
PLUNGING WAVE
ROCK JOINT
SEVERE WEATHER
SLIDING
SLUMPING
SOFT ROCK
SPRING TIDE
STORM SURGE

Topic 1: Physical and Human Factors that Increase Vulnerability to Coastal Erosion and Flooding: Dominoes

START

An offshore rise in sea level associated with low-pressure weather systems and strong winds

Storm Surge

The sudden inundation of a coastline which occurs when sea level is elevated above normal high-tide water levels

Coastal Flooding

Dangerous local and temporary climatic conditions that could be hazardous to human life

Severe Weather

Long-term changes to the climatic conditions such as global temperatures and weather conditions that will increase vulnerability to coastal erosion and coastal flooding

Climate Change

The wearing away of cliffs and backwards retreat of the beach into the land

Coastal Erosion

Process by which storm-surge heights are increased, as water enters a shallow, narrow channel

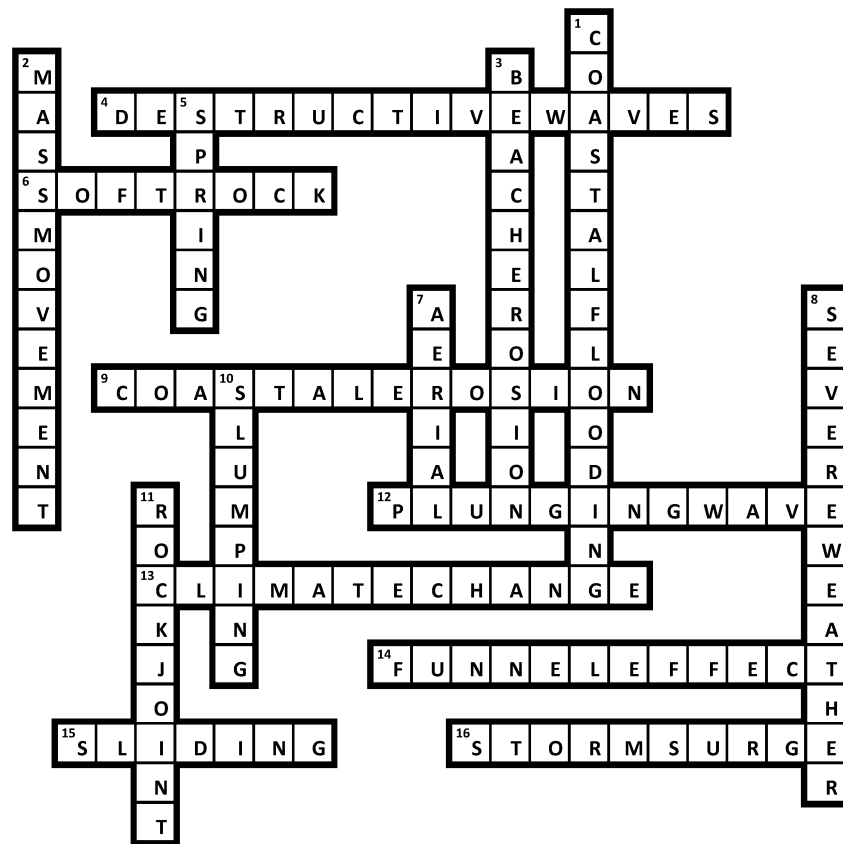
Topic 1: Physical and Human Factors that Increase Vulnerability to Coastal Erosion and Flooding: Bingo

Bingo			
Storm Surge	Coastal Flooding	Severe Weather	<i>Other Keywords</i> 1. 2. 3. 4. 5. 6. 7.
Climate Change	Coastal Erosion	Funnel Effect	
Beach Erosion	Spring Tide	Soft Rock	

Bingo			
Slumping	Rock Joint	Mass Movement	<i>Other Keywords</i> 1. 2. 3. 4. 5. 6. 7.
Destructive Waves	Sub-aerial Processes	Plunging Wave	
Sliding	Spring Tide	Beach Erosion	

Crosswords

Topic 1: Physical and Human Factors that Increase Vulnerability to Coastal Erosion and Flooding



Topic 2: Social and Economic Factors that Increase Vulnerability in Different Countries (Different Levels of Development)