

Name: \_\_\_\_\_ Form: \_\_\_\_\_

Geography Teacher: \_\_\_\_\_



# AQA(B) GCSE GEOGRAPHY

## REVISION BOOKLET

### UNIT 1 – THE COASTAL ENVIRONMENT



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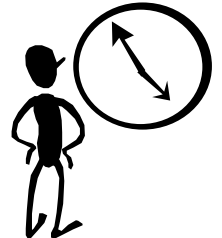
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# Exam technique - general hints and tips

You will take three exams in Geography. Each of them is worth 25% of your final mark. The final 25% is your controlled assessment.

Each exam will last 1 hour and will contain two questions. **YOU ONLY ANSWER ONE OF THESE QUESTIONS.** For Paper 1 'Managing Places in the 21st Century', you will only answer Section A on the coastal environment. You will leave section B blank as we haven't studied it.

Within each section of the exam paper there will be a series of smaller questions. These will range in marks from 1 to 9. You will write your answers into the exam booklet. The paper will be marked out of 50, so you have a little over 1 minute for each mark.



## ***Read the questions carefully***

Every year, lots of candidates lose lots of marks because they misread the question, or answered the question they hoped the examiner would ask rather than the one that has been set. *Don't let this be you!*

Try underlining the exam command words to remind yourself of exactly what the examiner wants you to do. The most frequently used command words, and what they mean, can be found on pages 5-6.

## ***Use the available resources***

It costs the exam board a lot of money to produce maps, photographs and diagrams for the exams. They do it for a reason! Make sure that you use them to help you show what a good geographer you are. Look at the resources carefully and use the information from them in your answers - for example, *Photograph A shows that a series of groynes have been built along the seafront at Sheringham where the building density is high.*

## ***Use your own background knowledge***

The examiner will often ask you to write about places you have studied. You must write about real places - make sure you name and locate them (say where they are). If you can't remember the examples we have studied in lessons, then use your common sense... somewhere you've seen on TV, read about, visited on holidays etc. ***Still no ideas? Then make it up!*** It's far better to write something than to leave a question blank. No answer definitely means no marks. A well-made-up answer could get some marks (if it is believable!) and mean the difference between a lower and a higher grade.

## ***If you are completely stuck...***

Leave the question blank and come back to it later. But make sure that you do come back to it! Still unsure? Check the keywords in the question and write everything you can remember about them - you might get some marks for it. No answer definitely means no marks, so never leave a question blank!



# How are the different types of question marked?

There are two different types of questions in terms of the way your exam is marked:

## Questions worth 1-4 marks

These are marked per correct point, so the more correct points you make the higher your mark will be.

## Questions worth 5-9 marks

Your answers to these questions will be longer! These answers are marked according to the '**level of response**' that you give to the question. The examiner must first decide which level your answer falls into and then award you a mark within this level. If you do not meet the requirements of the higher level, the examiner cannot award you those marks. The higher your level, the higher your mark will be. Questions worth 5-9 marks are treated differently at Foundation and Higher Tier. The maximum number of marks available for a single sub-question at Foundation Tier is 7.

## Foundation Tier - levels of response

### **Level 1: Basic**

Knowledge of basic information

Simple understanding

Few links; limited detail; uses a limited range of specialist terms

Limited evidence of sentence structure

Frequent spelling, punctuation and grammatical errors



### **Level 2: Clear**

Knowledge of accurate information

Clear understanding

Answers have some linkages; occasional detail/exemplar; uses some specialist terms where appropriate

Clear evidence of sentence structure

Some spelling, punctuation and grammatical errors

## Higher Tier - levels of response

Level 1 (Basic) and Level 2 (Clear) are marked in the same way as Foundation Tier answers.

### **Level 3: Detailed**

Knowledge of accurate information appropriately contextualised and/or at correct scale

Detailed understanding, supported by relevant evidence and exemplars

Well organised, demonstrating detailed linkages and the interrelationships between factors

Range of ideas in logical form; uses a range of specialist terms where appropriate

Well structured response with effective use of sentences

Few spelling, punctuation and grammatical errors



Note: Your answer does not have to be perfect to score full marks. In fact, the mark scheme says that '*a perfect answer is not usually expected, even for full marks*'.

# Try to think like the examiner!

**Question: Give two differences between destructive waves and constructive waves. (2 marks)**

**Student 1:**

Destructive waves are tall waves that crash onto the beach. Constructive waves are long gentle waves.

**Student 2:**

Destructive waves have a stronger backwash than swash compared to constructive waves which have a stronger swash. Constructive waves are less frequent than destructive waves.

**Mark scheme:**

Any 2 valid differences eg. frequency, steepness, height, relative importance of swash and backwash.

Which student scored the most marks? \_\_\_\_\_

Why did they achieve more marks? \_\_\_\_\_

**Question: Explain the formation of a sea stack. (6 marks – use the level-marking scheme from page 2)**

**Student 1:**

*To start with, there is a crack in the headland and it is eroded by the sea to form a cave. Hydraulic action (the force of the waves crashing against the rocks) and abrasion (where rocks are flung against the cliff by the waves) are responsible for making the cave bigger over time. Slowly the cave becomes bigger with continued erosion and eventually erodes right through the headland forming an arch. As further erosion takes place, the roof of the arch will eventually collapse, as it can no longer support its own weight. The seaward end of the arch will form a sea stack – an isolated piece of rock, separate from the headland. Old Harry in Dorset is a good example of a stack formed from chalk.*

Level: \_\_\_\_ Mark: \_\_\_\_

**Student 2:**

*Waves attack the cliff and erosion makes a cave. Over time continued erosion makes the cave get bigger until it eventually becomes an arch. The arch gets bigger until finally the top of the arch will collapse leaving a stack on its own in the sea.*

Level: \_\_\_\_ Mark: \_\_\_\_

Can you write three additional sentences to add to student 2s answer to help them achieve Level 3?

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# Use the SEE approach

The three SEE categories are the basis of geography, so don't forget to think about all three of them before you put pen to paper! The SEE approach is particularly useful in helping you to think through extended answers (remember, 5-9 mark questions will be level-marked).

Social = people

Economic = money and jobs

Environmental = the natural world

To succeed in geography you must



**S**ocial



**E**conomic



**E**nvironmental



the world!

## Calculating your grade

Each exam paper is marked out of 50. This mark is converted (by the exam board) into a 'Uniform Mark' which is then used to give your final grade. This means that people doing the papers in a different order still have to get to the same standard to be awarded each grade. Your uniform marks from each exam are added together with your controlled assessment mark to give your overall grade.

The uniform marks for each grade are shown in the table.

Unit Marks

A*	90-100
A	80-89
B	70-79
C	60-69
D	50-59
E	40-49
F	30-39
G	20-29
U	0-19

GCSE Grade Boundaries

A*	360-400
A	320-359
B	280-319
C	240-279
D	200-239
E	160-199
F	120-159
G	80-119
U	0-79

Your teacher will decide whether you will sit the Higher Tier paper (for A\*-C grades) or the Foundation Tier paper (for C-G grades). Your teacher may decide that you should sit the Foundation Tier paper in January and then, if your mark is very high on this paper, suggest you resit at Higher Tier in the summer.

You do not have to sit all exams at the same tier. A candidate with a high C on all three Foundation Tier papers can achieve a B grade overall if they have a very good piece of controlled assessment.

# Exam command words

The following command words were used in the Specimen Exam Papers that AQA have published for this course. Make sure that you know what they mean and what they require you to do!

**Study** = look very carefully at the resource - this is not a question that you have to answer but an instruction that needs to be followed before you answer the following questions

**Complete** = this might be filling in a table, finishing off a graph using data you have been given, choosing words from a list to fill in the missing gaps in a paragraph, circling the correct answer from a range of options etc. Make sure that you circle / tick the correct number of items! Many candidates lose marks because they only circle one answer when they should have chosen two!

**Name** = just give the name - there is no need to write anything else

eg. Name the Oceans marked on the map at A and B.

Just write '*Pacific Ocean and Atlantic Ocean*' (or whatever they are!) not 'The ocean named on the map at A is the Pacific Ocean and the ocean named on the map at B is the Atlantic Ocean'.

**Label** = this kind of question often asks you to add a name, description or explanation to a text-box on a photograph or diagram. You might also be asked to label a sea or ocean on a map, or to add city names.

eg. Label the following cities on Figure 1 - Chicago (the northern inland city), New Orleans (on the Mississippi delta as it enters the Gulf of Mexico) and San Francisco (the west coast city)

**Describe** = say what you see (without giving reasons) - are there any patterns, outliers, trends? If you are describing a graph, make sure that you include figures in your answer.

eg. Describe the changes to the average number of tropical storms in the Atlantic Ocean 1900-2005.

*Between 1900-1930 the average number of tropical storms was low (average of about 7 per year), dropping overall during the period. There was a sudden increase in 1930 and between 1930-1990 the average was approx 10 per year (although it fluctuated). The number of tropical storms per year since 1990 has risen considerably and by 2005 the average was 15 per year. This is double the 1900-1930 rate.*

**Describe the location** = say where something is - try to include distance and direction from other places

eg. Describe the location of Southampton.

*Southampton is a city in Hampshire, on the south-coast of England. It is 25km north-west of Portsmouth and 40 km north-east of Bournemouth.*

**Describe the distribution** = say how something is spread out over space

eg. Describe the distribution of tropical storms.

*Tropical storms occur in warm oceans between the Tropics of Cancer and Capricorn, for example in the Bay of Bengal, the Arafuna Sea the Arabian Sea and the Caribbean Sea.*

**Suggest the cause** = give reasons for why something happened

eg. Suggest the cause of the earthquake in California.

*The Pacific Plate and North American Plate are moving past each other at a conservative margin. As they move, they snag and tension builds. A sudden movement sends out shock waves, which causes an earthquake.*

**Explain / Give reasons / Suggest reasons** = give reasons for why something happens and include all the specific detail as to why they lead to it happening; useful words to use in an 'explain' question include: therefore, so, because, as a result of, consequently, this means that  
eg. Explain how Old Harry stack formed.

*The base of the chalk headland was attacked by abrasion (stones being hurled at the cliff). This marine process attacked weaknesses in the rocks, expanding them to produce cracks. Over time, these cracks were widened by hydraulic action, abrasion and solution and, as a result, they became caves. Erosion continued, forming an arch when the sea caves broke through the headland. Because the roof of the arch was unsupported, it collapsed. When the roof of an arch collapsed, it left behind a stack - Old Harry. Over time, the stack will be attacked by marine and sub-aerial processes, leaving a stump.*

**Give effects / Suggest impacts** = this type of question asks you to look into the future and write about the consequences of something happening

eg. Suggest some of the possible effects of pedestrianising the area shown in Figure 10.

*If the area was pedestrianised it could be landscaped and seating could be built. This would make areas which are safer and cleaner and more sociable. This would bring in more business. However, it would be expensive and may create traffic problems elsewhere.*

**Use examples** = you must use real-life examples to gain full marks! You have studied a wide variety of examples in lessons, and there are lots of detailed case studies on this website. You can use your own general knowledge too. Make sure you give specific detail and you include the name and location!

eg. Using an example, explain how conservation methods are protecting coastal environments.

*Some coastal areas like Hurst Castle Spit in Hampshire and parts of Norfolk have been made into Nature Reserves. In these areas, the wildlife is protected and building is not allowed. There are strict conservation rules and the area is managed by nature wardens.*

**Identify evidence / Use map evidence** = this means that you must include information taken from the resources that you have been provided with. Don't forget to interpret the evidence that you give!

eg. Use map evidence to suggest why the area is vulnerable to coastal flooding.

*The land is very flat and wet so if the sea broke through large areas would be flooded. I can tell that the land is flat because the only contour line shown on the map extract is at 10 metres. The land in squares 4126 and 4127 is 'Hempstead Marshes'. Great Moss Fen is in 4225 and 4226. Marshes and Fens are flat.*

**Compare** = describe the similarities and differences between things - words that will force you into a comparison are 'whereas' and 'in comparison to' 'alternatively' and 'on the other hand'; words ending in '-er' are also useful (eg. taller, richer, stronger); words such as 'less than' and 'more than' are also useful.

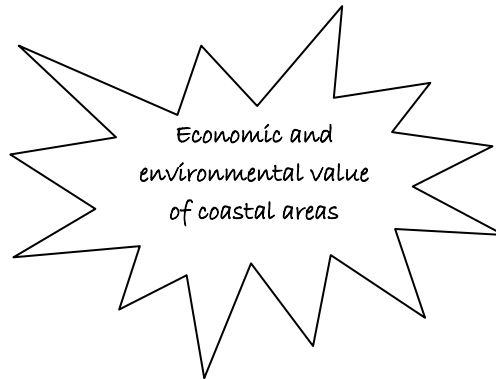
**Annotate** = this means add labels to a diagram, photograph or map. Annotate questions will also ask you to do something else eg. describe or explain. This additional command word tells you what type of statements to write in your annotations. When explaining, you will need to give detailed reasons.

eg. Annotate the photograph to explain some of the possible impacts on the natural environment of a large-scale tourist development in the area.

*New buildings may be on vegetation and destroy habitats meaning animal species may leave the area. Lots of sewage from new hotels may leak into the water, killing fish and coral reefs. Large buildings may be an eyesore destroying the beauty of the area permanently.*

# Revision of subject knowledge for Unit 1

1. Why has the population of coastal areas increased?



2. For a named example, describe the human activities found there.



3. For a named example, explain why the coast is an important area for economic development.





**4. Shade the characteristics of constructive waves in red and destructive waves in yellow.**

Cause a lot of erosion	Are about one metre high	Create a steep, narrow beach
Create a wide, gently sloping beach	The swash is stronger than the backwash	The backwash is stronger than the swash
Tend to be 5 or 6 metres high	Are tall, strong waves	Are long, gentle waves
These waves cause more deposition than erosion	Frequent waves (typically between 10-15 per min)	Less frequent (typically between 6-9 per minute)

**5. What is weathering?**

**6. Match up the weathering terms and their definitions.**

Freeze-thaw	Seeds that fall into cracks will start to grow if moisture is available. The roots force their way causing the break-up of the rock.
Thermal expansion	Burrowing animals can be responsible for breaking up rocks.
Crystal growth	Rainwater contains weak acid which react with certain rock. The carbonates in limestone are dissolved by these weak acids.
Vegetation	Rocks expand when heated and contract when cool. This forces rocks apart when heated.
Animals	Water gets into cracks. When the temperature falls below freezing the water freezes and expands by 9%, pushing the rocks apart.
Acid rain	Sea water contains salt. The water can evaporate leaving salts behind. Salt crystal grows and forces rocks apart.

**7. What is erosion? How is it different from weathering?**

8. Unscramble the four processes of marine erosion below. Explain how each one works:

CRUDYHILA NICOTA

NORATITTI

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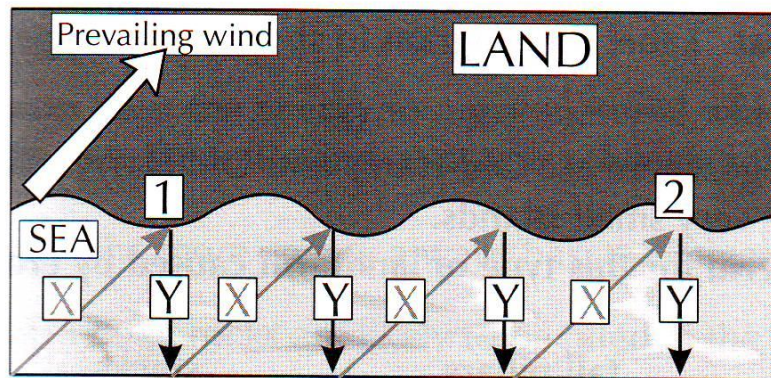
NORABISA (RRANSCOIO)

9. Explain how slumping happens. You should use a series of diagrams to illustrate your answer.

10. Why did Holbeck Hall collapse into the sea? Give as much detail as you can.



11. Look at the diagram below and answer the following questions:



What process does this diagram illustrate?

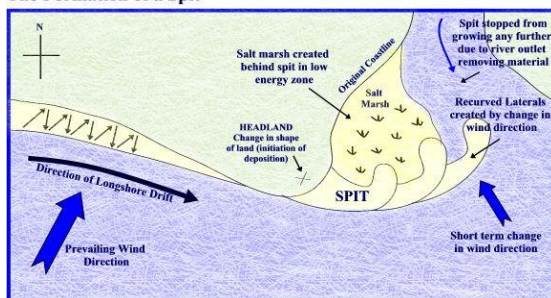
What do X and Y stand for?

X  
Y

Explain how a stone from point 1 gets to point 2.

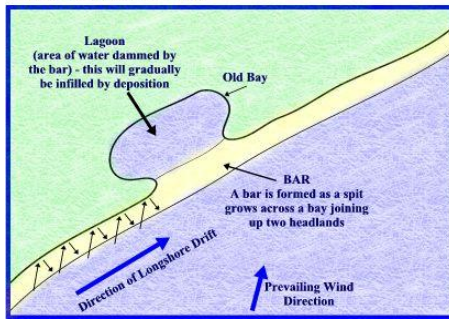
12. Blakeney Point is a spit. Use the diagram and satellite image to explain how spits are formed.

The Formation of a Spit



13. Slapton Sands is a bar. Use the diagram below to explain how a bar is formed.

Formation of a Bar



14. Draw a simple overhead (plan) diagram which demonstrates how hard and soft bands of rock can affect the shape of the coastline. You should add detailed labels to explain what happens.

15. Tell the story of Old Harry and his wife – include as many of the keywords as possible. You should draw and label a diagram as part of your story.

Dorset, Crack, Cave, Arch, Stack,  
Stump, Undercutting, Hydraulic  
Action, Attrition, Abrasion,  
Time, Weathering, Erosion



- 16. A Shoreline Management Plan is a document which sets out how an area of coastline should be managed. There are four possible SMP policies. Explain what each of them means and name a location that you have studied which has the policy in its SMP.**

Advance the line

Hold the line

Managed realignment / retreat

No active intervention

- 17. What is hard engineering? Give examples of the hard engineering techniques and places where each of them have been used.**

- 18. What is soft engineering? Give examples of the soft engineering techniques and places where each of them have been used.**

- 19. Why are Happisburgh and Sea Palling treated in different ways by the SMP? You should explain how and why each place is protected. Use the photographs below to help you.**

20. Why aren't all places along the Norfolk coast protected from coastal erosion and/or flooding?  
How has the decision to protect some places but not others caused conflict.

21. Match the images below to the types of coastal defences and their descriptions:

Gabions



A concrete wall often used in large towns to stop the impact of storm waves.

Beach replenishment



Concrete formations with a large surface area to reduce the energy of waves.

Sea wall



Steel cages which are placed in front of the cliff, they reduce the waves energy and can help stabilise the base of a cliff from slumping.

Rock armour



Large boulders which have a large surface area to reduce the waves energy.

Groynes



Pipes placed in the cliff to drain away excess water, this helps prevent slumping.

Tetrapods



The angle of the beach is changed to help reduce the impact of the waves.

Underwater reefs



Sand/pebbles dumped on the beach to help protect it from erosion.

Beach re-profiling



These can be made from a range of materials and help waves break earlier so that they come ashore with less energy.

Cliff drainage



Wooden fences placed along a beach to stop longshore drift.

22. Some coastal areas are protected by environmental management.



a. Why is it important to protect the Great Barrier Reef?



b. How is the fragile coastal environment of the Great Barrier Reef protected?

23. What does ICZM stand for?

24. What does the ICZM approach try to do?

25. The Mediterranean Sea is an example of ICZM. What pressures is the Mediterranean facing?



26. What does 'sustainable management' mean?
27. What strategies are being used to reduce the pressures on the Mediterranean coastal area and ensure the long term sustainability of the area?
29. Wallasea Island in Essex is managed environmentally (managed realignment) to help protect it from coastal and flooding. Explain what is being done and the advantages of this approach.



30. How can monitoring and planning be used to manage the threat of sea-level rise?