PiXL Gateway Masterclass: Making a Good Start to A Level Geography

Geographical Writing

Task 1: Identify the questions. Are they AO1, AO1 + 2 or AO3?

1.a. Tick which AO the question is testing.
1.b. Write two additional questions and tick which AO1s they would test.

Question	AO1	AO2	AO3
In the context of place, explain the influence changing flows can have on the demographics of a location.			
Using Fig. 1 graph showing changes of animal and plant population in the Arctic cycle, analyse the impacts climate change has had on the environment.			
Using your own knowledge, evaluate the impacts of a recent flooding event.			
Using Fig. 1, analyse the changes in demographics of Reading town between 1901 and 2011.			
Explain how TNCs can create positive change in a place.			

Task 2: Link up the command words to the correct definitions.

	Command word
A	analyse
B	annotate
C	assess
D	calculate
E	critically
F	define... what is meant by…
G	describe

	Meaning
	Add to a diagram, image or graphic a number of words that describe and/or explain features, rather than just identify them (which is labelling).
	Often occurs before 'assess' or 'evaluate', inviting an examination of an issue from the point of view of a critic with a particular focus on the strengths and weaknesses of the points of view being expressed.
	Break down the content of a topic, or issue, into its constituent elements in order to provide an in-depth account and convey an understanding of it.
	Work out the value of something.
	Consider several options or arguments and weigh them up so as to come to a conclusion about their effectiveness or validity.
	State the precise meaning of an idea or concept. There is usually a low tariff of marks for this.
	Give an account in words of a phenomenon which may be an

			entity, an event, a feature, a pattern, a distribution or a process. For example, if describing a landform say what it looks like, give some indication of size or scale, what it is made of, and where it is in relation to something else (field relationship).
H	discuss		Form and express a view as to the merit or validity of a view or statement after examining the evidence available and/or different sides of an argument.
I	evaluate		Consider several options, ideas or arguments and come to a conclusion about their importance/success/worth.
J	examine		Provide a brief account of relevant information.
K	explain... why... suggest reasons for...		Set out both sides of an argument (for and against), and come to a conclusion related to the content and emphasis of the discussion. There should be some evidence of balance, though not necessarily of equal weighting.
L	interpret		Ascribe meaning.
M	justify		Give reasons for the validity of a view or idea why some action should be undertaken. This might reasonably involve discussing and discounting alternative views or actions. Each of the views present or options available will have positives and negatives. For the outcome(s) chosen, the positives outweigh the negatives.
N	outline... summarise...		Set out the causes of a phenomenon and/or the factors that influence its form/nature. This usually requires an understanding of processes. Explanation is a higher-level skill than description and this is often reflected in its greater mark weighting.
O	to what extent...		Consider carefully and provide a detailed account of the indicated topic.

Task 3: BUG the questions.

Q1. *Assess the relationships between humans, the carbon cycle and climate change.*

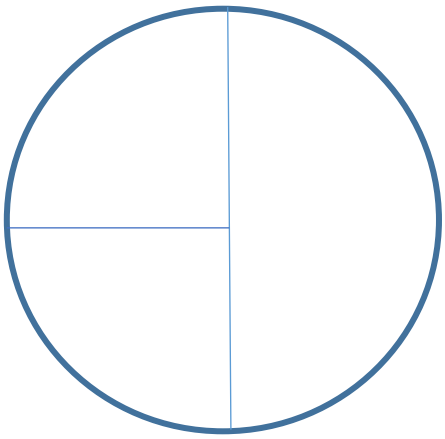
Q2. ***"****Exogenous factors have a greater influence to change a place character than endogenous factors." To what extent does this statement apply to one or more places that you have studied?*

Q3. *To what extent have governments and other organisations been successful in regenerating an area that you have studied?*

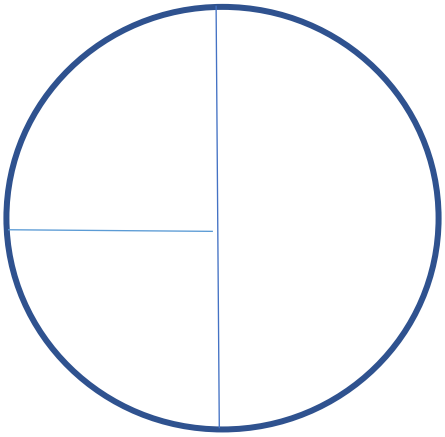
Q4*. Assess the importance of geology in the creation of coastal landscapes.*

Task 4: Plan the answer (using the circle format).

Q1. Assess the relationships between humans, the carbon cycle and climate change.



Q2. "Exogenous factors have a greater influence to change a place character than endogenous factors." To what extent does this statement apply to one or more places that you have studied?



Task 5: Write an introduction.

Q1. Assess the relationships between humans, the carbon cycle and climate change.
Q2. "Exogenous factors have a greater influence to change a place character than endogenous factors." To what extent does this statement apply to one or more places that you have studied?

Task 6: Highlight the different elements of the example answer.

Point = Make a POINT about the key concept and how it relates to the question.

- *"Humans have had a huge influence over climate change since the industrial revolution in the 1800s onwards, through the burning of fossil fuels (e.g. oil) which releases CO2 into the atmosphere."*

Explain = Explain this point you have made thoroughly and use geographical terms as much as you can.

- *"CO2 is a greenhouse gas which absorbs the infrared radiation (heat) which is converted into kinetic energy. These molecules will then emit heat back into the atmosphere as infrared radiation. This radiation is then absorbed by the atmosphere and the earth which, in doing,*

so, will heat up the atmosphere. As the concentration is now higher, this has led to warming beyond what is naturally occurring."

Evidence = Mention a case study/examples and how it reinforces your point. Make sure you put in some facts and figures from a case study.

- *"This warming linked to CO2 emissions can clearly be seen when comparing the Keeling curve and temperature records from the past 100 years. Here the amount of CO2 rises at the same time the global temperature has been rising, with CO2 levels rising from 302PPMV in 1917 to 406.7 PPMV in 2017."*

Link = This is a mini conclusion but make sure you use the terminology from the question to help you. It's very important as it tells the reader "HEY, LOOK! I have answered the question!"

- *"This clearly shows that humans have had a great influence on climate change in the past 100 years or so."*

Task 7: Write the main body of the essay you wrote the introduction to.

Q1. Assess the relationships between humans, the carbon cycle and climate change.

Q2. "Exogenous factors have a greater influence to change a place character than endogenous factors." To what extent does this statement apply to one or more places that you have studied?

Task 8: Write the conclusion of the essay you wrote the introduction and main body to.

Q1. Assess the relationships between humans, the carbon cycle and climate change.

Q2. "Exogenous factors have a greater influence to change a place character than endogenous factors." To what extent does this statement apply to one or more places that you have studied?

Check list of skills

Skill	R	A	G
I know the difference between an AO1, an AO3 and AO1 + 2 question.			
I know the key command words for my specification.			
I know how to BUG a question.			
I know how to plan a long answer.			
I know how to structure a long answer.			
I know what is needed in an introduction.			
I know how to P, E, E, L the main paragraphs.			
I know what elements are needed in each paragraph.			
I know how to write an effective conclusion.			

Word bank

This is a series of words and phrases you can use to help you write your answers.

Words linked to size/scale:

The largest	Larger than	The smallest	Large-scale	Local
The highest	Equal to	The lowest	Small-scale	National
The smallest	Smaller than	The largest		Global

Words linked to time:

In the past	By this time	At the same time	In the meantime	Later
In the future	Immediately	Afterwards	Presently	Recently

Words linked to importance:

The most important	The first	The most significant	The highest ranking	The worst
The least important	More important	The least significant	The greatest impact	The best

Words linked to describing trends or patterns:

Highest	Lowest	Steady	Fluctuating	Increasing
Decreasing	Range	Mid-point	Random	Bands
In belts	Sparsely	Densely	Evenly	Anomalies

Words for transitions:

On the one hand	On the other hand	One example of	For instance	Another example
In the first place	In the second place	Additionally	In contrast	Specifically
As a result	Even though	In contrast	However	In the same way

Words for 'to what extent':

Partially	completely	greatly	Significantly	Wholly
Partly	Somewhat	Not at all	Slightly	Totally

Words for conclusions:

To conclude	In summary	To sum up	As you can see	However
In conclusion	To summarize	As a result	Finally	Therefore

Geographical Skills and Numeracy

Geographical Skill:

Task 1: Read through the text below and highlight where the acronym IDEAMS has been used.

Using **Figure 1**, examine the impact on the soil water budget as a result of a warming climate in southern parts of the UK.

[6 marks]

figure 1 shows reduced discharge levels in the river in kent and a landscape that looks dry and barren. This can be attributed to the 2 dry winters. This is important to the soil water budget as winter rainfall is what recharges the budget in the UK. figure 1 states the area has suffered from drought meaning the soil could be baked and hard resulting in lower infiltration rates and increased runoff. This would cause a defecit in the budget which will be further compacted by high evapotranspiration rates. Continued reduction in the rainfall will mean further evocabation of the problem which will result in no surplus being generated and a failure to utilise any rain that does fall especially as the climate warms further.

Question 1 continues on the next page.

Task 2: Apply the acronym IDEAS to the following exam questions.

Identify – What is the resource telling you and what can you ascertain?

Describe – State any obvious relationships and/or patterns.

Explain – Use the resource to explain any patterns shown.

Analyse – Apply your own knowledge and understanding to the resource using geographical context, theory and language.

(Manipulate) – Manipulate the data in some way if applicable.

Synoptic – Consider the wider geographical context and what might happen in the future.

Figure 2 is a cartoon image showing the relationship between tourism and the environment in Antarctica.

Question: Using Figure 2 and your own knowledge, assess the significance of tourism as a threat to Antarctica. (9 marks)

Task 3: Peer Assessment.

What Went Well:

Next Steps:

Geographical Numeracy:

Task 4: Define the following terms:

mean:

mode:

median:

standard deviation:

Spearman's rank:

Task 5: Central tendencies

A student has collected data on pebble sizes from two sites along a beach. Fifteen pebbles were measured, at each site, along their axis in mm. The results are recorded in the table below in rank order:

Rank	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
North end	58	43	38	33	32	25	24	24	23	19	19	19	14	12	11
South end	81	76	67	67	67	66	63	60	58	47	38	33	25	8	6

Measures of central tendency:

Beach	mean	mode	median
North			
South			
Judgements			

Task 6: Standard deviation

A complex measure of dispersion: Standard deviation

North end of beach		
Pebble size (mm)	$x - \bar{x}$	$(x - \bar{x})^2$
58		
43		
38		
33		
32		
25		
24		
24		
23		
19		
19		
19		
14		

South end of beach		
Pebble size (mm)	$x - \bar{x}$	$(x - \bar{x})^2$
81		
76		
67		
67		
67		
66		
63		
60		
58		
47		
38		
33		
25		

12		
11		
$\sum x =$	$\bar{x}=$	$\sum(x - \bar{x})^2=$

$\sqrt{\frac{\Sigma(X-\bar{X})^2}{N}}$ =

8		
6		
$\sum x =$	$\bar{x}=$	$\sum(x - \bar{x})^2=$

$\sqrt{\frac{\Sigma(X-\bar{X})^2}{N}}$ =

Task 7: Spearman's rank.

Site	River channel width	Rank A	Velocity (ms-1)	Rank B	Rank difference (d)	d²
1	3.2	12	0.24	12	0	0
2	3.9		0.26	11	0	0
3	4.8	10	0.31	10	0	0
4	5.3	9	0.38		1.5	2.25
5	7.7		0.39	6	-1.5	2.25
6	6.4	7	0.47	3	4	16
7	7.7		0.36	9	-4.5	
8	8.5	3	0.42	5		
9	8.7	2	0.44		-2	
10	6.2	8	0.49	2		
11	6.8		0.38		1.5	
12	8.8	1	0.51	1		
					$\sum$ =	

Formula Application:

$$r_s = 1 - \frac{6\sum d^2}{n(n^2-1)}$$

The spearman's rank value of _____ is **higher / lower** than the critical value of _____ at the **0.01 / 0.05** significance level.

Therefore I will **reject / accept** the null hypothesis.

I am **99% / 95% / not** confident that there is a relationship between _____ and _____.

There is a **positive / negative** correlation so as _____ increases _____ **increases / decreases**.

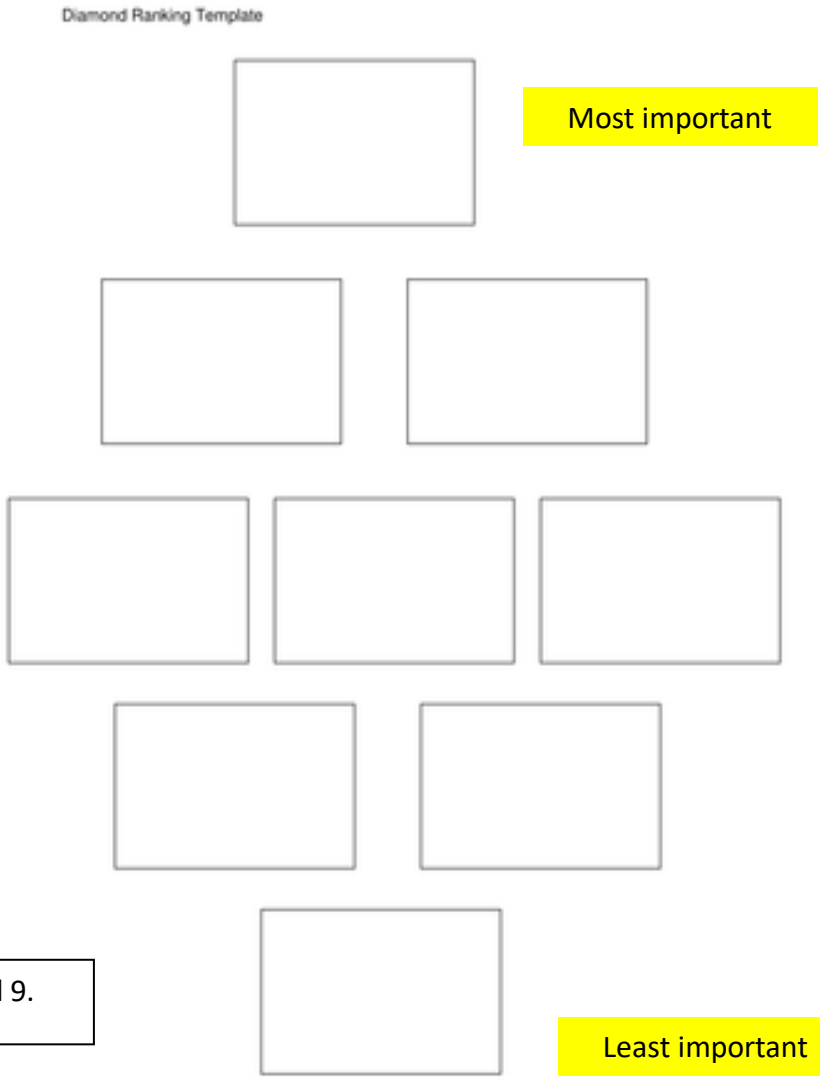
The relationship **may have / has not** occurred by chance.

Geographical Place

'Place' is vital to the study of geography, therefore it is vital for you throughout your A level studies.

Task 1: Thinking like a geographer – **prioritise:** Do a diamond 9 for - factors that influence our perception (thoughts) of place.

- Age
- Gender
- Wealth
- Media portrayal
- Culture
- Natural features
- Transport links
- Personal experience
- Media images



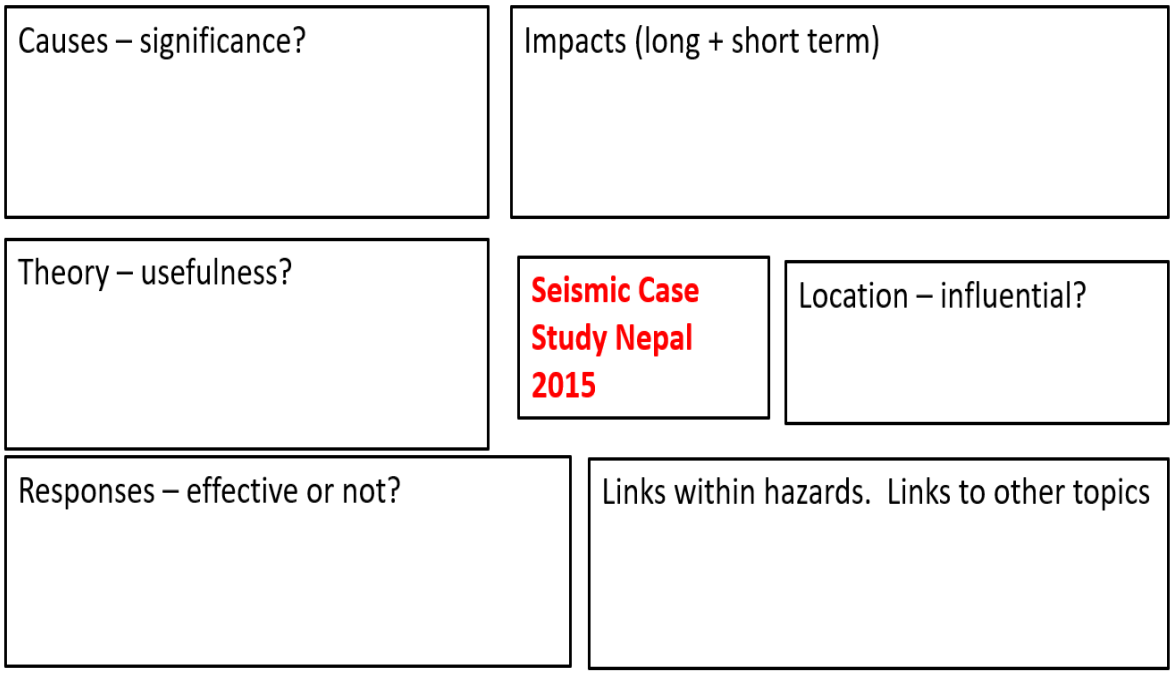
Task 2: Justify your diamond 9.

How you structure your case study can make it more useful to you. When you are researching your case study.

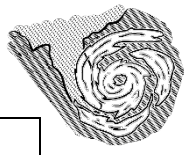
Task 3: For a topic you will study construct a really useful case study (use the template below as a guide).

Use the following process:

1. Decide on at least five key questions or headings that you need to investigate. Use your specification or PLCs to guide you.
2. Use a piece of A3 paper or write on the computer. Generate a template with your headings in boxes (remember to make the headings not merely content but also evaluative).
3. Do some meaningful research, use the guidelines to help you, then fill in the case study you generated.



Task 4: List three case studies that you might use in the exam, then write in where that case study might be useful to you in an exam.



Case study example Name of place: **Haiyan, The Philippines, 2013**	**How it might be used in an exam:** • Low income country suffering from tropical storm. • Severe social and economic impacts, short- and long-term ($13 billion to rebuild). • Devastation caused by massive storm surge − e.g. Tacloban. • Impact of topography on the severity of the disaster − e.g. shape of the coastline. • Ineffective warnings given linked to the storm surge, resulting in greater loss of life.
Case study 1 Name of place or organisation:	
Case study 2 Name of place or organisation:	
Case study 3 Name of place or organisation:	

Developing synoptic links within a case study is vital to gain those top marks. The greater the 'sense of place' within your work the more likely you are to edge towards those top marks.

The links can be within one topic or across other topics. It is essential that information can be linked and geographical connections can be made.

Example question. For a place you have studied, assess how **exogenous factors** can alter the **character of place**.

Knowledge of **character of place,** detail linked to what that place is actually like, might include the physical environment, built surroundings, or demographic structure.

Knowledge of **exogenous factors** is needed – e.g. national policies on industrial change.

Example question: So the two elements with the topic are: 1. exogenous factors, and 2. character of place.

Task 5: For a case study you have written write three questions that span more than one element of that topic. Clearly identify which parts of the speciation are being tested.

Question 1 _____

_____

Which parts of the topic are being tested?

_____

_____

_____

Question 2_____

_____

Which parts of the topic are being tested?

_____

_____

_____

Question 3_____

_____

Which parts of the topic are being tested?

_____

_____

_____

It is useful if you can easily identify the key elements within a case study.

Task 6: Using the key provided, read and highlight the case study below.

Water case study: Surplus in a drainage basin

Flooding in the UK is mainly the result of mid-latitude depressions. These bring both showers and rain; a sustained period of rainfall will cause the ground to become saturated. As a result of this, precipitation is transferred as run-off which can move quickly to river channels increasing the river flow. Once the maximum capacity of the channel is reached, the water will break the river banks and flow onto the floodplain.

There is range of physical and human factors which lead to widespread flooding.

Physical causes include the following:

- Heavy/prolonged precipitation over a short period of time (flash flooding/monsoon rainfall).
- Reduced vegetation – a loss in vegetation cover reduces the levels of interception, storage and evapotranspiration.
- Slope – steeper slopes mean less water is absorbed and causes an increase in surface run-off.
- Rock type – impermeable rock reduces infiltration and groundwater storage.
- Soil depth – deeper soil absorbs more water and results in less run-off.

Flooding results when the input of precipitation is greater than that which can be carried away by 'normal' drainage system.

Human causes include the following:

- Urbanisation and land use change – the increase in impermeable surfaces will lead to greater surface run-off.
- Deforestation – a loss in vegetation cover reduces the levels of interception, storage and evapotranspiration. During periods of drought, flash flooding can also occur.
- River management – a change in channel capacity can result in flooding elsewhere along the river channel.

Storm Desmond 2015 (United Kingdom)

Throughout history the UK is familiar with experiencing storms, with one of the worst on record 'The Great Storm of 1987' which resulted in 22 fatalities causing £5 billion in damage. Due to a combination of warm wet westerly winds and the topography of the Northwest, it receives high levels of orographic rainfall, and as a result Cumbria and Lancashire are among the wettest counties in England.

In 2015 Storm Desmond was the fourth storm to hit the UK, bringing record rainfall. Cumbria was among the worst-hit areas with 341.4 mm of rainfall in 24 hours, resulting in the government declaring it a major incident. It was caused by a prolonged Atlantic low-pressure system (depression).

Effects

- More than 1000 people were evacuated across Cumbria, and over 5200 homes were flooded.
- Local services, such as schools, healthcare, shops and offices were forced to close across Cumbria.

- The Meteorological Office reported that Storm Desmond had more of an impact because of the 'exceptional' levels of rain that fell on already saturated land.
- Many businesses closed, and transport and infrastructure (bridges, roads and sewers) were damaged.
- The cost of flooding in Cumbria was £100 million in 2005, £270 million in 2009 and £400−500 million in 2015.
- The Environment Agency stated that the Cumbrian flood defences in place did work, but water levels exceeded the height of them, resulting in water flowing over the top.
- Insurance claims exceeded £6 billion.
- Agriculture was brought to a halt as farmers lost livestock due to flooding.
- Many river banks were eroded, which can add to future flood risks.
- Landslides became a common feature as a result of saturated ground.
- A waterfall appeared at Malham Cove for a short time due to heavy rainfall.

Throughout Storm Desmond more than 120 flood warnings and 75 flood alerts were put in place across the Northwest. This resulted in a national emergency response with the Royal Engineers and Environment Agency working together to create temporary flood defences. The Cumbria Flood Recovery Fund 2015, launched by the Cumbria Community Foundation, provided short-term aid to the worst affected areas.

Looking towards the future, the Environment Agency believes that hard engineering schemes should not be the solution to flooding and that natural flood prevention measures should be put in place – e.g. afforestation, restoration of river channels to their natural meandering states, refusal of planning permission to build or expand developments near rivers (according to the Committee on Climate Change (CCC), housing in areas where flooding is likely has grown at a rate of 1.2% per year since 2011). The government anticipates trends which have seen drier summers and wetter winters in the UK to continue – with an estimated sea-level rise of between 15 cm and 80 cm for the UK by 2095.

Key

Locational Study

Historical Context

Concepts and processes

Stakeholders

Synoptic Links

In an exam it is not the recalling of facts about a place that will get you the top marks, it is the effective use of a case study to answer the exam question. The purpose of a case study or named example is to support your key points.

Task 7: For the water case study above, 'be evaluative'. Annotate the case study further to identify points in an evaluative way. You should be able to 'be evaluative' at least four times. E.g. which physical factors are most influential and why? Which of the effects would have the greatest long-term impacts and why?