

PiXL – Geography – Geographical Connections

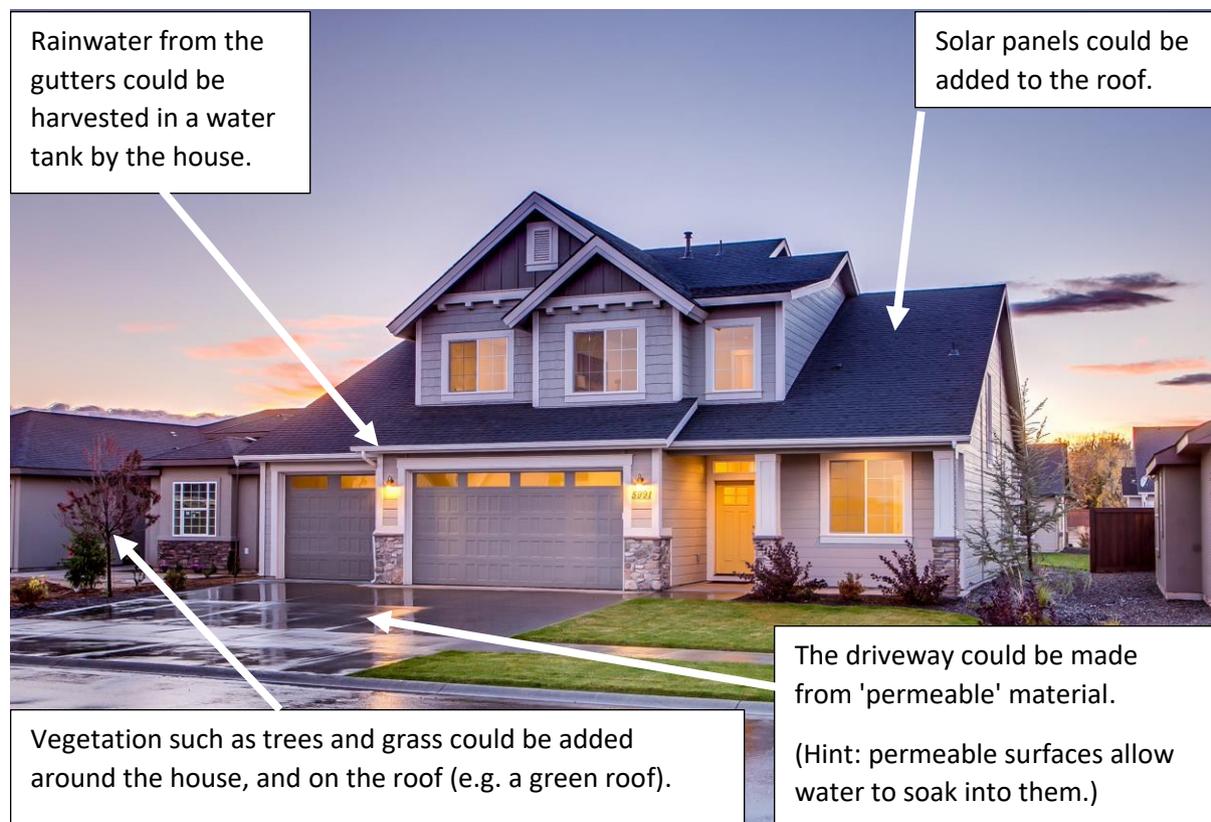
1. Sustainability

Sustainability can be connected to many geographical topics. Look back at the information sheet to remind you what sustainability means.

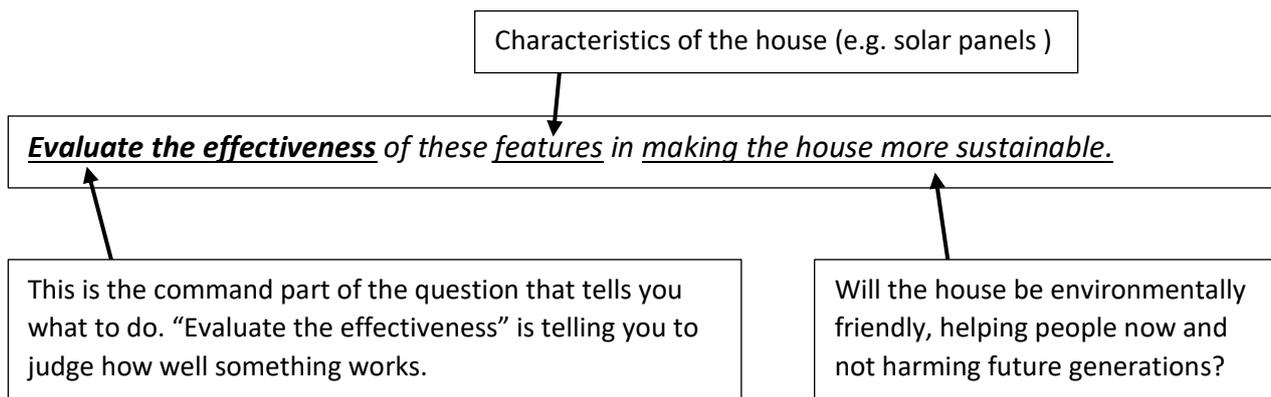
Quick task: Write a definition of 'sustainability' in your own words.

In geography, we often look at the way that people live their lives in different areas of the globe. Some people live more sustainably than others. Could we live more sustainably?

Look at the diagram below which shows how a house could add features to make it more sustainable.



Main task: You are going to write your own answer to this tricky question. First, look at the annotation of the question below and then the tips on the next page.



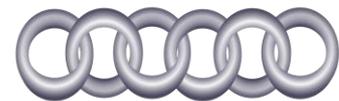
TIP 1: Now you know what the question means you need to know how to structure your answer. When evaluating the effectiveness of something, you need to write a balanced argument. You can achieve this in three simple sections.

On one hand, the new features of the house will make it more sustainable because...

On the other hand, the new features of the house will not make it more sustainable because...

Overall, the features will/won't make the house more sustainable because...

TIP 2: When writing your sections about why the features are sustainable, make sure you expand your points and link it back to sustainability all the time. (Make a connection!)



For example: On one hand, the new features of the house will make it more sustainable, because they include solar panels. These are sustainable because they take their energy from the sun which is a renewable resource, consequently they do not have to use non-renewable sources such as coal to get all their electricity. Therefore, less air pollution from power stations may be released. This conserves the environment and allows future generations to have resources to use.

Now try writing your own answer using the tips above.



Challenge task: Make a list of all the topics you can remember ever studying in geography. Can you explain why it is important to consider sustainability in each of those areas? E.g. Why might we want to consider sustainability when managing coastal erosion?

2. Development

Development levels across the world are not even. A country's development level can really affect it in many ways, many of which are connected to several areas of geography. Two examples of these connections are given below:

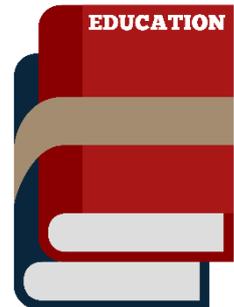
- The effects of a natural hazard such as an earthquake can vary depending on how developed a place is – e.g. the Nepal Earthquake in a less developed country had 9000 deaths compared to the Chile Earthquake in a more developed country which only had 500 deaths!
- The types of jobs that people do in countries is often directly linked to their development levels – e.g. when the UK was less developed than it is now, many people were employed as farmers in agriculture as there was not much opportunity for other careers. This has changed in modern times when more people work in offices and other services.

Quick task: Describe as many ways as you can in which development level can affect a country and the people living within it. Use the two examples on the page before as a guide.

Education and development

Education is often the key to success, you should listen to your teachers when they say this! There is a very clear link between the education levels of a population and how developed economically a country is.

Why is this?

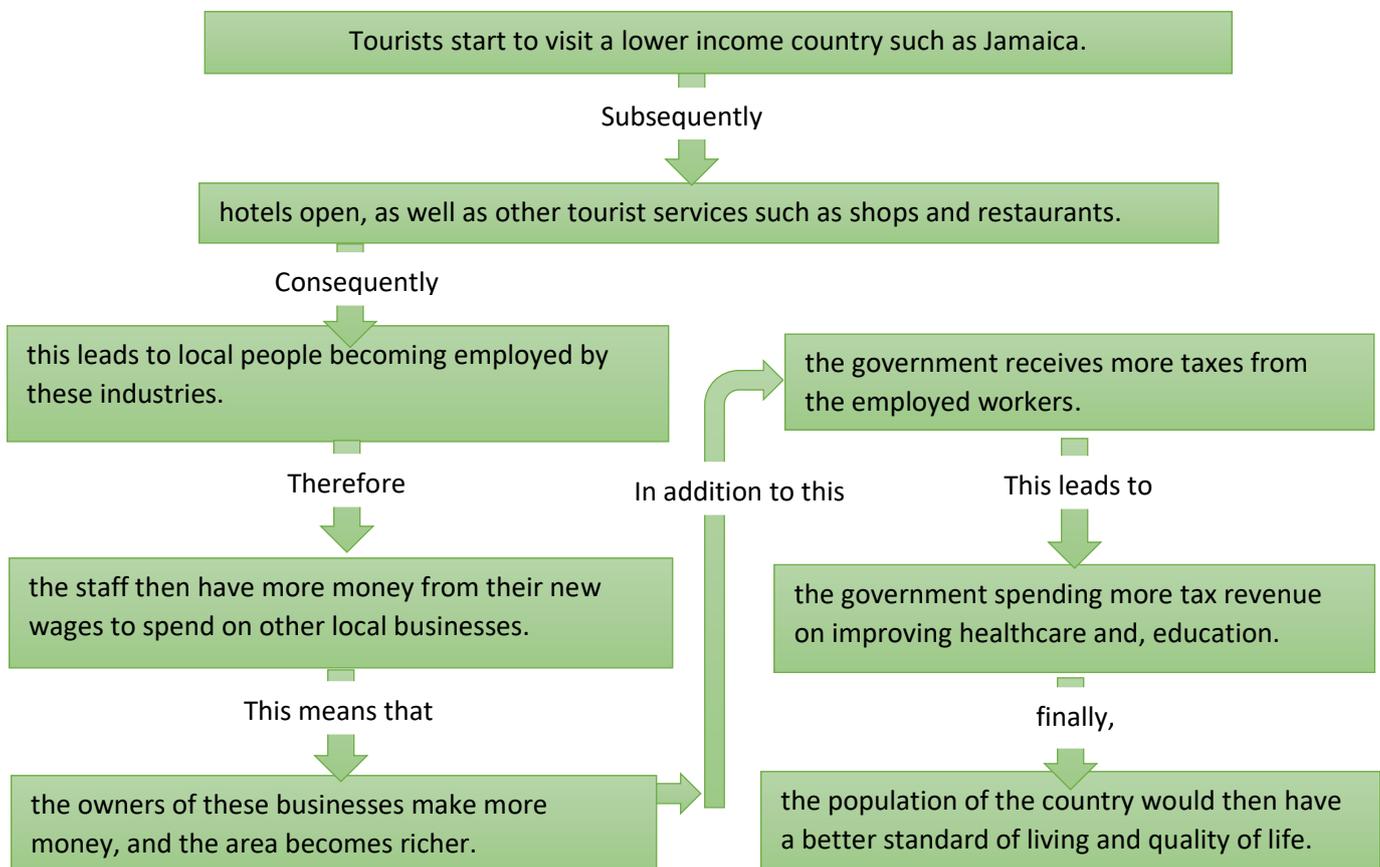


Main task:

1. Do some research using the internet, geography textbooks, friends and family to get ideas on how good education links to good economic development in a country.

This article might help you: <https://qbrauner.weebly.com/untitled/how-does-education-help-a-country-develop>

2. You are going to complete a flow diagram to create an extended explanation of how education is connected to development levels within a country. An example of an extended explanation flow diagram is given below, showing how tourism is linked to economic development. Use this example of a guide to create your own. Remember to include connectives on your arrows!



Challenge task: *Why are some places more developed than others? This question connects to things people have done in history, as well as in the present day, but also to nature itself! Below is a list of causes of uneven development (some places being more developed than others).*

1. Take each cause and find out a bit more about it – e.g. how does it cause uneven development?
2. Now rank the cause from the one you consider to be the most important to the least important.

- colonialism
- being landlocked
- lack of raw materials
- extreme climates
- corrupt governments

3. Processes and landforms

Quick task:

1. Write your own definition for a process and a landform without looking back at the A3 information sheet.
2. Copy and complete the table below by sorting the words below it into either the process or landform column.

Processes	Landforms

abrasion	cliff	bay	headland	corrosion	beach
traction	spit	bar	wave-cut platform	mountain	swash
saltation	solution	suspension	composite volcano	waterfall	backwash
biological weathering		ocean trench	deposition	subduction	hydraulic action
attrition		meander	ox-bow lake	chemical weathering	



Beach



Composite volcano



Waterfall

Beaches are formed where the waves on the coast are constructive. This means that as the waves push onto the shore they are very strong and push material up the beach. This movement of the wave is called the 'swash'. However, as the wave moves down the beach, it is weaker, so it does not drag the material back off. This movement is called the 'backwash'. This is repeated, and it means that a beach of material such as sand and pebbles builds up over time.

Composite volcanoes are formed mainly at destructive plate boundaries. This is where two large pieces of the earth's crust collide. As they collide, one plate is dragged below the other. The pressure built up between the plates as they collide and move causes the plates to buckle and fold upwards to create a cone shape, which forms a volcano. In addition to this, the volcano builds in size every time it erupts, as lava is cooled to leave layers of rock behind.

Waterfalls form where a river flows over harder and then softer rock. The softer rock erodes quicker than the harder rock, creating a slight step in the river. As the water erodes this step further through hydraulic action it also erodes backwards, undercutting the harder rock. This creates a plunge pool underneath the waterfall area. The water will continue to undercut the harder rock until it has no support and so collapses into the plunge pool. These pieces of rock cause abrasion to occur, deepening the plunge pool. As this process repeats, the waterfall moves backwards upstream.

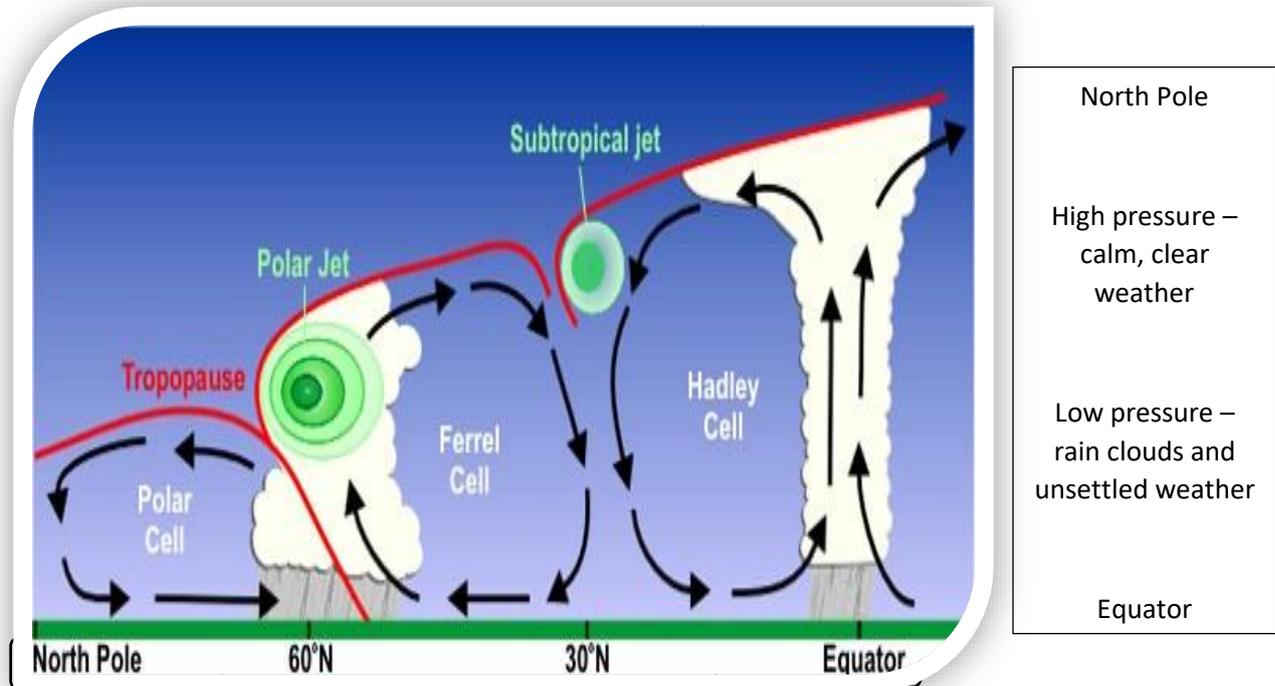
Main task:

1. Read the three simplified explanations of how three of the earth's landforms form due to various processes.
2. In one colour highlight or underline the names of any processes that you see in each explanation.
3. In a different colour highlight or underline where any connectives have been used.
4. Now use each explanation to create a series of connected diagrams to show the sequence of formation for each landform. Make sure you annotate each set of diagrams with the names of the processes that are occurring in each stage. This will help you connect the landforms and the processes.

Challenge task: Find out how the coastal landform of a spit is formed. Create your own explanation for its formation, like the ones you have read above.

4. Global atmospheric circulation

Quick task: Complete the global atmospheric circulation diagram by filling in the four blank boxes using the statements given to you.



Main task:

1. Use the text on the information sheet to create your own definition key word glossary for the following terms. Remember, your definitions must make sense to you.
 - the equator
 - low air pressure
 - high air pressure
 - tropopause
 - global atmospheric circulation
 - Polar Cell
 - Ferrel Cell
 - Hadley Cell

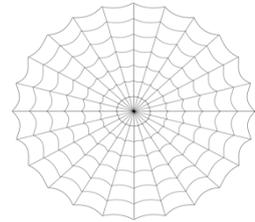
2. Use the model to explain:
 - why tropical rainforests form at the equator
 - why you find deserts at 30° North and South of the equator
 - why the Antarctic is a polar desert
 - why tropical storms always move in certain directions across the oceans.

Challenge task: Find out why air moves from high to low pressure and how this connects to the pattern of surface winds across the planet.

Independent Learning Task – Geographical Connections



You are going to create your own **connection web** for the whole topic of geography, to see how many topics you can interlink with each other and why.



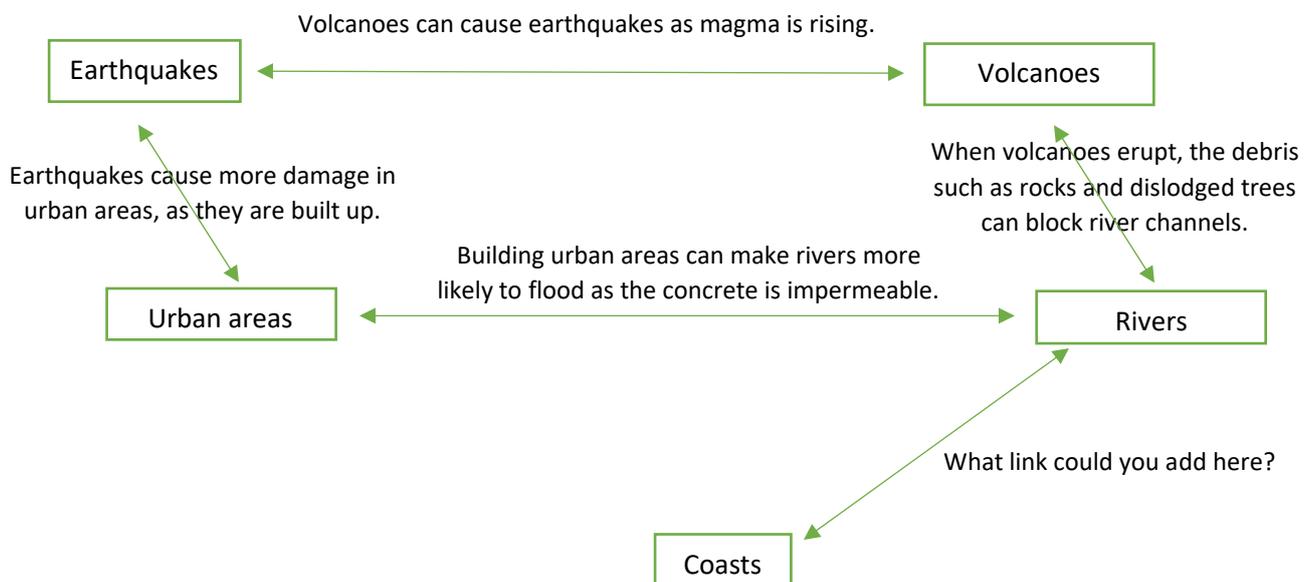
First steps

1. Make a list of any topic which could be studied in geography. It may help to use a geography textbook for this, think back to your lessons, or run through the alphabet to jog your memory. There are a few ideas below to get you started:

E.g. coasts, rivers, earthquakes, cities.

2. Now write these topics spread out over a large sheet of paper, try and place topics that link naturally close to each other – e.g. volcanoes are linked to earthquakes.

3. Now begin to draw linking arrows between them and on each arrow write an explanation of what the connection is. The links are entirely how you see the connections, they can be as out there as you like! But remember you may need to justify your connections. You can add as many links as you want, so make sure you start with a large piece of paper. A few examples are given below:



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