

# **Transition Materials for A Level Geography**



## **Introduction**

It is great that you are considering studying Geography at A Level.

This pack contains a programme of activities and resources to prepare you to start an A Level in Geography in September. It is aimed to be used after you complete your GCSE throughout the remainder of the summer term and over the summer holidays to ensure you are ready to start your course in September.

The pack is divided into some of the key topics you will study in A level Geography: Coasts, Water and Carbon Cycles, Globalisation and Rebranding. There are a range of different activities to do in each topic area.

Discovering the world we live in is great fun. I hope that you will agree!

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**I. Coasts**

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**3. The world is out there...**

## 1. **Wider Reading**

This is a list of books which we in the Geography department have enjoyed and feel you might benefit from reading to enhance your broader understanding of the subject.

1. Factfulness by Hans Rosling
2. How Britain works by Stig Abell
3. Prisoners of Geography by Tim Marshall (Divided is also very good if you enjoy this)
4. Underland by Robert Macfarlane (The Old Ways is also very good if you enjoy this)
5. How Bad are Bananas by Tim Berners-Lee

## 2. **Knowledge and Skills topics.**

### i. **Coasts**



### **Independent Research**

1. How does the geological structure of the coast influence the development of coastal landscapes?  
<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html>
2. What effect will sea level rise have on coastlines?  
<http://www.theguardian.com/environment/sea-level>  
<https://www.bgs.ac.uk/discovering-geology/climate-change/impacts-of-climate-change/>
3. Why is the UK at risk of coastal flooding and what are the consequences?  
<https://www.alevelgeography.com/coastal-flooding/>
4. Find four images representing a range of mass movement along the coastline. Annotate them in detail and include examples of where they have occurred around the world.
5. What is the difference between eustatic and isostatic sea level change?

### **Pre Knowledge Topics - Coasts**

1. Use GIS (Google Earth) to map of a variety of coastal landscapes in the UK and around the world  
*This is a really good tool to download onto your laptop that you use at home. It's free!*
2. Draw field sketches of contrasting coastlines
3. Annotate images to show a range of approaches to coastal management and their environmental impact
4. Create a map of the sediment cells around the UK
5. Sketch and annotate a recurved spit to show its formation
6. Annotate diagrams to show the different types of erosion and transportation at the coast
7. Draw sketches of concordant and discordant coastlines
8. Draw and annotate the formation of a stump

9. Find the definition for the following words:

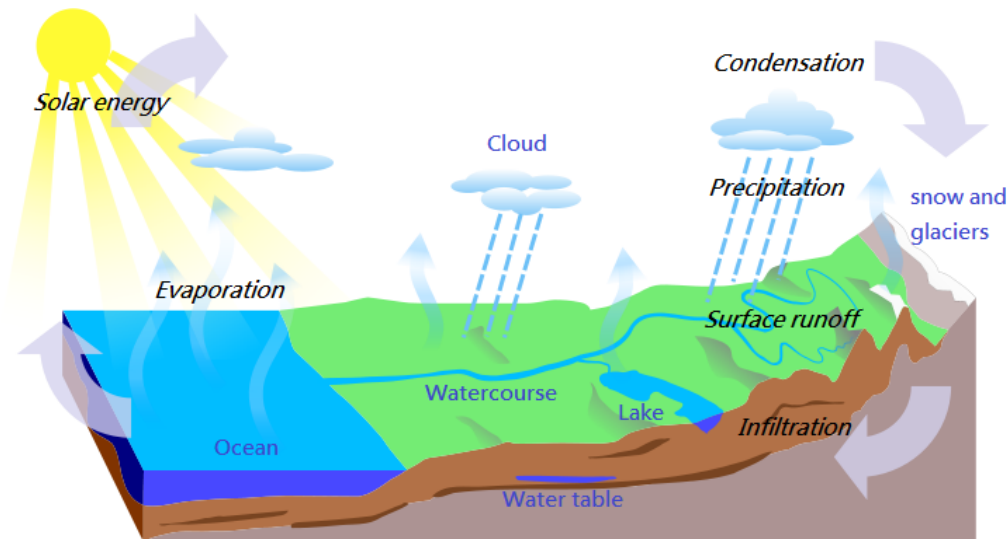
| Term                      | Definition |
|---------------------------|------------|
| <i>Abandon the line</i>   |            |
| <i>Abrasion</i>           |            |
| <i>Accretion</i>          |            |
| <i>Advance the Line</i>   |            |
| <i>Arch</i>               |            |
| <i>Attrition</i>          |            |
| <i>Attrition</i>          |            |
| <i>Backwash</i>           |            |
| <i>Bar</i>                |            |
| <i>Benefit cost ratio</i> |            |
| <i>Berm</i>               |            |
| <i>Beach nourishment</i>  |            |
| <i>Blow –hole</i>         |            |
| <i>Breaching</i>          |            |
| <i>Char</i>               |            |
| <i>Constructive waves</i> |            |
| <i>Concordant geology</i> |            |
| <i>Corrasion</i>          |            |
| <i>Corrosion</i>          |            |
| <i>Cusp</i>               |            |
| <i>Cuspate foreland</i>   |            |

|                                    |  |
|------------------------------------|--|
| <b><i>Defence line</i></b>         |  |
| <b><i>Deltas</i></b>               |  |
| <b><i>Destructive waves</i></b>    |  |
| <b><i>Differential erosion</i></b> |  |
| <b><i>Discordant geology</i></b>   |  |
| <b><i>Diurnal range</i></b>        |  |
| <b><i>Do Nothing</i></b>           |  |
| <b><i>Downdrift</i></b>            |  |
| <b><i>Dunes</i></b>                |  |
| <b><i>Eustatic</i></b>             |  |
| <b><i>Fetch</i></b>                |  |
| <b><i>Fiord</i></b>                |  |
| <b><i>Flocculation</i></b>         |  |
| <b><i>Flood</i></b>                |  |
| <b><i>Frequency</i></b>            |  |
| <b><i>Gabion</i></b>               |  |
| <b><i>Geo</i></b>                  |  |
| <b><i>Groyne</i></b>               |  |
| <b><i>Halophytes</i></b>           |  |
| <b><i>Hard engineering</i></b>     |  |
| <b><i>High energy coast</i></b>    |  |
| <b><i>Hold the line</i></b>        |  |
| <b><i>Hydraulic action</i></b>     |  |

|                                   |  |
|-----------------------------------|--|
| <b><i>Isostatic</i></b>           |  |
| <b><i>Isthmus</i></b>             |  |
| <b><i>Longshore drift</i></b>     |  |
| <b><i>Low energy coast</i></b>    |  |
| <b><i>Magnitude</i></b>           |  |
| <b><i>Managed retreat</i></b>     |  |
| <b><i>Mass Movement</i></b>       |  |
| <b><i>Plagioclimax</i></b>        |  |
| <b><i>Psammosere</i></b>          |  |
| <b><i>Recession</i></b>           |  |
| <b><i>Recurrence interval</i></b> |  |
| <b><i>Retreat the line</i></b>    |  |
| <b><i>Return period</i></b>       |  |
| <b><i>Revetment</i></b>           |  |
| <b><i>Ria</i></b>                 |  |
| <b><i>Runnel</i></b>              |  |
| <b><i>Saltation</i></b>           |  |
| <b><i>Sediment cell</i></b>       |  |
| <b><i>Sediment sink</i></b>       |  |
| <b><i>Slumping</i></b>            |  |
| <b><i>Soft Engineering</i></b>    |  |
| <b><i>Spit</i></b>                |  |
| <b><i>Spring tide</i></b>         |  |

|                                 |  |
|---------------------------------|--|
| <b><i>Stack</i></b>             |  |
| <b><i>Subaerial erosion</i></b> |  |
| <b><i>Surges</i></b>            |  |
| <b><i>Swash</i></b>             |  |
| <b><i>Swell</i></b>             |  |
| <b><i>Tidal bore</i></b>        |  |
| <b><i>Tidal Range</i></b>       |  |
| <b><i>Tombolo</i></b>           |  |
| <b><i>Updrift</i></b>           |  |
| <b><i>Wave cut platform</i></b> |  |
| <b><i>Wave crest</i></b>        |  |
| <b><i>Wave energy</i></b>       |  |
| <b><i>Wavelength</i></b>        |  |
| <b><i>Wave period</i></b>       |  |
| <b><i>Wave steepness</i></b>    |  |
| <b><i>Wave refraction</i></b>   |  |
| <b><i>Wave trough</i></b>       |  |
| <b><i>Weathering</i></b>        |  |

## ii. Water Cycle



### The drainage basin and hydrological cycle: the water balance.

With some extensive research this is quite an easy task.

You are to create an A3 poster with a **detailed** annotated diagram explaining the Water cycle and how it works. However, this also has to have the drainage basin incorporated into it as the two are linked.

There should be a clear process to the cycle and should be in extensive detail making it easy to follow and explain. The poster should be clear and in extensive detail. Within this you need to incorporate key words that are defined (a good idea is to have flaps with the key term on one side and then the definition under it). Make it bright bold and clear so it is an easy and “fun” revision tool.

For some information on the drainage basin and the hydrological cycle you can start here <https://www.alevelgeography.com/water-cycle/>.

### **Independent Research**

1. What affect can humans have on the hydrological (water) cycle?
2. What is a storm hydrograph and what factors can impact it? (Physical and human)
3. How have humans contributed to drought in Australia?
4. How might climate change impact the hydrological cycle?

## Pre Knowledge Topics – Water Cycle

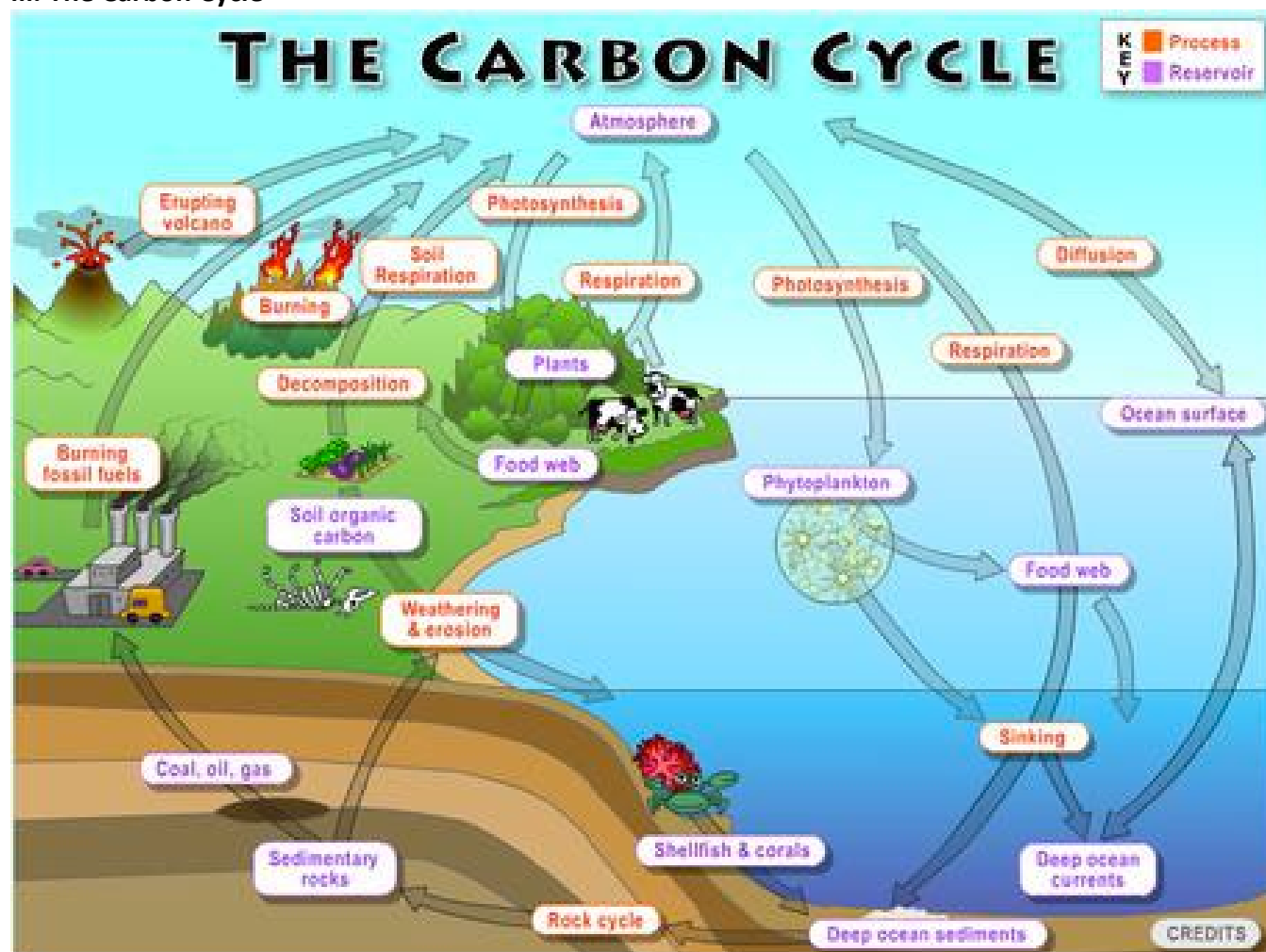
1. Using the following website, which areas of the UK are most at risk of flooding?  
<http://watermaps.environment-agency.gov.uk/wiyby/wiyby.aspx?topic=floodmap#x=357683&y=355134&scale=2>
2. Find the definition for the following words:

|                          |  |
|--------------------------|--|
| <b>Aquifer</b>           |  |
| <b>Desalination</b>      |  |
| <b>El Nino</b>           |  |
| <b>Economic scarcity</b> |  |
| <b>Geopolitical</b>      |  |
| <b>Groundwater</b>       |  |
| <b>High pressure</b>     |  |
| <b>Infiltration</b>      |  |
| <b>Irrigation</b>        |  |
| <b>La Nina</b>           |  |
| <b>Percolation</b>       |  |

|                          |  |
|--------------------------|--|
|                          |  |
| <b>Physical Scarcity</b> |  |
| <b>Precipitation</b>     |  |
| <b>Prevailing</b>        |  |
| <b>Privatisation</b>     |  |
| <b>Rain shadow</b>       |  |
| <b>Relief rainfall</b>   |  |
| <b>Riparian</b>          |  |
| <b>Salinity</b>          |  |
| <b>Spatial imbalance</b> |  |
| <b>Streamflow</b>        |  |
| <b>Surface runoff</b>    |  |

|                        |  |
|------------------------|--|
| <b>Urbanisation</b>    |  |
| <b>Virtual water</b>   |  |
| <b>Water pathways</b>  |  |
| <b>Water rights</b>    |  |
| <b>Water scarcity</b>  |  |
| <b>Water stress</b>    |  |
| <b>Water wars</b>      |  |
| <b>World water gap</b> |  |

### iii. The Carbon Cycle



You will be studying how the water and carbon cycles interact with each other so it will be important to initially understand how both work.

Initial task:

You are to create an A3 poster with a **detailed** annotated diagram explaining the carbon cycle and how it works. You should also include the rock cycle as this is a key part of the carbon cycle.

There should be a clear process to the cycle and should be in extensive detail making it easy to follow and explain. The poster should be clear and in extensive detail. Within this you need to incorporate key words that are defined (a good idea is to have flaps with the key term on one side and then the definition under it). Make it bright bold and clear so it is an easy and "fun" revision tool.

For some information you can start with <https://www.tutor2u.net/geography/reference/carbon-stores-and-cycles> and [https://timeforgeography.co.uk/videos\\_list/carbon-cycle/](https://timeforgeography.co.uk/videos_list/carbon-cycle/).

Further tasks:

1. Mind map reasons why climate change could impact the carbon cycle's stores (reservoirs) and transfers
2. What is the difference between the fast and slow carbon cycles?

3. Fill in the definitions of the following key words

|                                   |  |
|-----------------------------------|--|
| <b>Anthropogenic CO2</b>          |  |
| <b>Biosphere</b>                  |  |
| <b>Biological pump</b>            |  |
| <b>Carbon sequestration</b>       |  |
| <b>Carbon sink</b>                |  |
| <b>Enhanced greenhouse effect</b> |  |
| <b>Equilibrium</b>                |  |
| <b>Feedback loop</b>              |  |

|                                  |  |
|----------------------------------|--|
| <b>Geo-sequestration</b>         |  |
| <b>Greenhouse gas</b>            |  |
| <b>Hydrosphere</b>               |  |
| <b>Lithosphere</b>               |  |
| <b>Mitigation</b>                |  |
| <b>Net Primary Productivity</b>  |  |
| <b>Radiative forcing</b>         |  |
| <b>Salinity</b>                  |  |
| <b>Soil organic carbon (SOC)</b> |  |

|   |  |
|---|--|
| <b>The carbon budget</b>                    |  |
| <b>Vertical deep mixing<br/>(in oceans)</b> |  |
| <b>Weathering</b>                           |  |

#### iv. Globalisation

##### KEY INFORMATION

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In the last 30 years, globalisation has taken a real front seat in the concepts taught at A level geography. Changes in economy are at the forefront however changes in the environment, culture, demographics and politics of the world are also important and impact on areas at a range of scales.

##### Key past influences

- Since the discovery of the Americas, world trade and economy began to take shape.
- Colonialism practiced by certain countries enabled the British Empire to control  $\frac{1}{4}$  of the world leading to the global spread of British culture.
- The founding of the United Nations after the First World War allowed countries to work together easily.

##### Continued influences and evolution of globalisation

- Transnational Corporations (TNC): These are top firms with HQs usually in HICs however operate all over the world and are globally recognised (Coca Cola, Disney, Apple).
- Internet and IT: These have allowed design and manufacturing to be faster and easier. Jobs that typically humans would have done are now done online by less people- Allowing many high tech industries to be “footloose” and not reliant on being near by a resource or labour force.
- Transport: Now quicker, more efficient and low cost. The arrival of the 747 in the 1960s has revolutionised trade and movement of people.
- Growth of markets: Increase in urban living means more demand for trade, services and products.

##### TASK



Spiderman- a comic superhero, has been reimaged for an Indian audience.

1. Research the characteristics of this Spiderman that are Indian rather than American.
2. What is the difference between economic and cultural globalisation? What does this Spiderman represent?
3. What other examples can you find of glocalisation?

## Global groupings

- Trade blocs: To trade easily between countries, certain agreements have been created. Examples are EU, NAFTA, CARICOM



- Economic groupings: Countries are grouped together based on wealth and power. Examples include LICs/HICs (LDC or HDCs), NICs, OPEC and OECD.

## TASK

2. What do the acronyms above stand for?

### TNCs and Trade aims

- They tend to operate where labour is cheap and regulations are lacking
- To gain government grants from countries that are attracting new business
- They operate inside local trade barriers and avoid tariffs
- They like to be near markets

### Positives to TNCs

- Raising living standards – TNCs invest in the economies of many NICs and LICs
- Transfer of technology – South Korean firms e.g. Samsung have learned to design products for foreign markets
- Political stability – investment by TNCs has contributed to economic growth and political stability e.g. China
- Raising environmental awareness – due to large corporate image TNCs do respond to criticism e.g. Starbucks have their sustainability campaign

## Negatives to TNCs

- Tax avoidance – many avoid paying full taxed in countries they operate in through concessions, e.g. Starbucks and Amazon
- Limited linkages - FDI does not always help developing nations economies
- Growing global wealth divide – selective investment in certain global areas is creating a widening divide e.g. Southeast Asia vs. sub-Saharan Africa
- Environmental disaster and destruction – Rana Plaza, Bangladesh/Deepwater Horizon spill and Bhopal in India (1984).

## TASK

3. Create an annotated photo of either your family car or your living room with the various places where the parts/ features were manufactured.

4. Watch this video on Coca-Cola and its global impacts – it is now a little old but is a fantastic documentary - <https://www.youtube.com/watch?v=LH0r84W3LgU>

4. Choose an example of another TNC and create a timeline of events since their foundation as a company. What have been the costs and benefits that the company has brought to the countries involved. Examples could be Nike, Mattel, Disney or Tesco.

## Networks and hubs

The term 'global network' refers to links between different countries in the world, this includes – flows of capital, traded goods, services, information (and people). Some areas are well connected i.e. high income areas, others poorly i.e. low income areas.

- A network is a model that shows how places are linked together. E.g. London Underground.
- A global hub is used to describe a place which is especially well connected. Connections between these hubs are called flows and include:
  - ✓ Money- as major capital flows are routed through global stock markets
  - ✓ Raw materials - e.g. food and oil traded between nations
  - ✓ Manufactured goods and services - value of world trade is \$70 trillion
  - ✓ Information - internet has brought real-time communication between distant places
  - ✓ People - movement of people still an issue due to border controls and immigration law

## TASK

5. Create a case study of Ryanair- an example of a shrinking world. Include some background information, role of technology and current impact of the company.

### Being switched off

- Many countries in the world are unable to access global networks.
- Specific conditions have caused them being switched off.

| Physical   | Human  |
|--|--|
| <ul style="list-style-type: none"><li>- Poor soil for farming</li><li>- No coastline puts investors off as trade is harder</li><li>- Vulnerability to hazards and climate change</li></ul> | <ul style="list-style-type: none"><li>- Low skills of the population</li><li>- Poor literacy rates</li><li>- Politically instability</li><li>- Civil war</li></ul> |

## **v. Rebranding**

### **KEY INFORMATION**

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#### **Why rebrand?**

There are many reasons why areas need to rebrand and change their image. Some key definitions are:

Regeneration- This is the physical change of an urban or rural area. The intention is to attract investment and bring economic wealth in the area and bring in more visitors.

Re-Imaging- How areas construct and promote a more positive image to increase its popularity.

Rebranding- Helping change to the area to be more attractive to a different target audience.

Before an area rebrands itself, it must look into the following aspects:

- Environmental factors- improving derelict infrastructure
- Social factors- overcoming cycles of decline and poverty
- Economic factors- Improve investment and job opportunities
- Political factors- What money can be brought in from various initiatives and grants?

#### **CBD in decline**

- Many CBDs can fall into decline due a number of reasons
  - 1) Increase in rent and costs/upkeep
  - 2) Congestion in town centres puts people off coming in and spending money
  - 3) The rise of out of town shopping centres and outlets
  - 4) Edge of town science parks reducing the need for offices in the centre of town.

## TASK

1. Create a cycle of decline for a town where the CBD is suffering. What are the knock on effects?
2. Using the photo of Birmingham below, research how the city has transformed itself.



### Decline in countryside villages

Although many countryside areas are deemed as idyllic, the rural community has been hit with many crises and images of village life has been portrayed as difficult and sometimes boring. This is due to:

- Wide spread coverage of the foot and mouth scandal in 2001, showing the nation horrible images of burning dead animals.
- Pressure groups and coverage of hunting
- Bad reputation- boring, sleeping, backward and unfriendly

### This decline has led to a number of challenges for rural areas

- Affordable housing- often large farm houses or bought as second homes. This prices out first time buyers and a younger market
- Depopulation- younger residents moving out because of house prices, university or for job opportunities elsewhere.
- Changes in agriculture- low pay, long hours and increase of mechanisation
- Transport- difficult access and lack of reliant public transport

## Previous coalmining areas

Between 1984 and 1997, 170,000 coal mining jobs were lost in England. This has led to a number of challenges in a previous thriving community:

- Ground contamination from the mines and now areas of dereliction
- No grounding for entrepreneurial skills or education as the population went into the coal mining business.
- Long term illnesses sue to the amount of time spent by some in the mines.

## Seaside issues

Synoptic link- Tourism! As resorts tend to be seasonal in the UK, this has led to the decline of many seaside resorts.

## TASK

3. Create a timeline of decline for Blackpool. What have the impacts been? Have there been attempts to improve the area?



## Rebranding strategies

Key definition- A stakeholder is an individual or group that has an interest in a particular project. This would be economically or emotionally.

## Two types of approaches

- Top down approach where decisions are made by the authorities and then imposed on the specific people or places. The good things about this approach are that many considerations would be looked at and focus of the plans will be strategic.
- Bottom up approach is based on listening to locals and coming up with solutions. The advantage to this is that local will be in control and closely involved with the plans.
- A partnership approach is where a group of people come up with plans however they are made up from many stakeholders and will represent public, private and voluntary sectors.

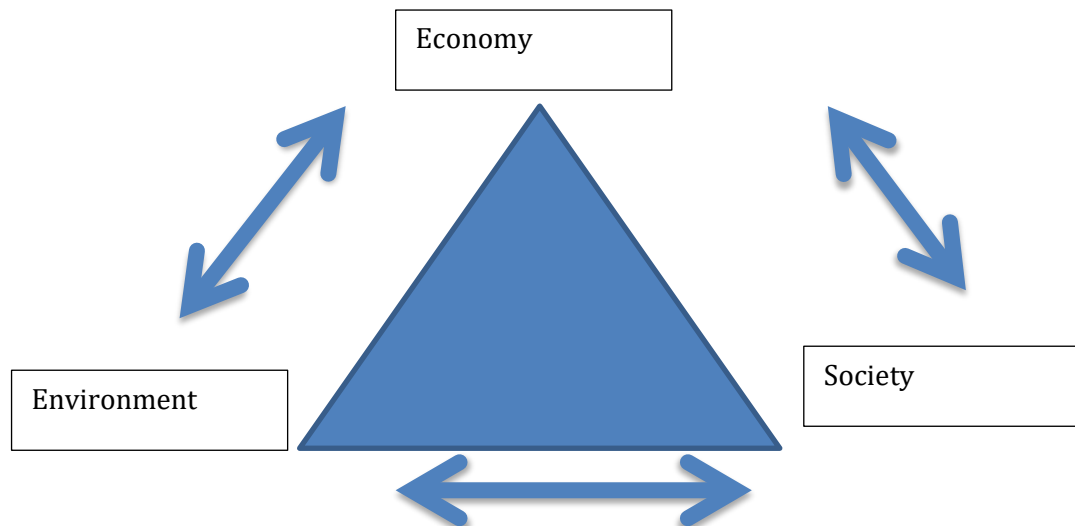
## Urban rebranding strategies

Towns and cities thrive on culture and heritage in the UK and when rebranding, it is important to harness these features.

- ✓ Technology led enterprise
- ✓ Sport, art and culture- such as the Turner Museum at Margate
- ✓ Improvements in retail- Bullring in Birmingham
- ✓ Improvement in public transport
- ✓ Themed events throughout the year- Christmas Markets are popular
- ✓ Food cities
- ✓ Redevelopment of warehouses- such as Royal Victoria docks and Docklands
- ✓ Creation of sustainable cities- Curitiba

## Sustainable rebranding

More and more redevelopment and rebranding will involve some form of sustainable development.



### Evaluation involves looking at an area before and after rebranding

1. Rebranding processes should begin with a detailed assessment, measuring the economic, environmental and social state of the place before rebranding starts.
2. Later evaluations can then measure any changes by comparing data – e.g. whether more residents are happy with the facilities after rebranding. They should also take into account the impact on different groups – e.g. local businesses and visitors.
3. Comparing the data can be a good way of measuring whether the rebranding has been successful, but it can never be completely reliable – e.g. residents might be happier, but that could be because the resident who weren't happy with the rebranding have moved away.

## **The World is Out There .....**

**This section is challenging in the current circumstance but you can 'visit' places using Google Streetview including some museums which have tours available online.**

1. Check your local museums/galleries and visit one that has an exhibition related to Geography eg; Nottingham Contemporary to see how the exhibiting artist has used their place identity in their work.
2. Local museums are great sources of information on development of settlements over time and local history / culture e.g. the re-opening Nottingham Castle
3. Watch some key geographical programmes – this does not just mean David Attenborough!
4. Follow some key players on Instagram and Twitter- Such as USGS, National Geographic and NASA.
5. <https://www.futurelearn.com/courses> - These are free online courses that anyone can join with many being based on topics you will study at A level. They are run by university's and are great background preparation for the students. Most of the courses have approximately 3 hrs study time a week.
6. Download news apps onto your phone and read on the go – BBC News provides a good overview, Vox is great for explainers and newspapers will provide opinions. A good knowledge of current affairs is a useful Geographic skill.
7. When visiting somewhere new – eg: on holiday- keep a journal of all the new geographical features you see and try to find out as much as you can about where you are visiting.
8. Use YouTube and TED to watch documentaries on topics you will be studying at A Level such as climate change, global trade and coastal systems.