

DME: Infrastructure Projects in Wales - Activity Sheet 1

Introduction

- Put the section title **Introduction**.
- Give a definition to explain the term 'Infrastructure'.
- Give a definition to explain the term 'Hard Infrastructure' use examples to help you to explain.
- Give a definition to explain the term 'Soft Infrastructure' use examples to help you to explain.
- Draw your own version of the table below but **rank** the projects from Low to high.

Rail Infrastructure Projects	
Project	Cost £ Billion
HS 1	5.4
HS 2	30
Crossrail	15.9
Crossrail 2	32
Great Western Electrification	5

- Draw a suitable graph to show the costs for the different rail projects above.
- How is the economy like a cake with infrastructure being the ingredients?
- Thinking about your answer to question 7 try to explain the phrase 'you have to speculate to accumulate'.
 - Use HS2 is an example to help you to explain it is estimated to cost £30 billion but is expected to generate an £42 Billion extra money as well as £27 billion in fares over 30 years.

Background

- Put the section title **Background**.
- Use a GIS (Geographical Information System) such as Google Earth (satellite view would be good) to get a map of an **urban** (towns and cities) area and a map of a **rural** (countryside) area (of the same size of area) that you know personally. The map does not need a hard copy; you could do this off a screen.

- Draw up a table to list the different examples of hard infrastructure found on each map. Try to find at least 12 in the urban area and at least 5 in the rural area.

Hard Infrastructure			
Urban Area		Rural Area	
1		1	
2		2	
3		3	
4		4	
5		5	
6			
7			
8			
9			
10			
11			
12			

- Use a diagram of your choice to help you to describe the main aspects of Hard Infrastructure below. Use examples to help you to explain them.

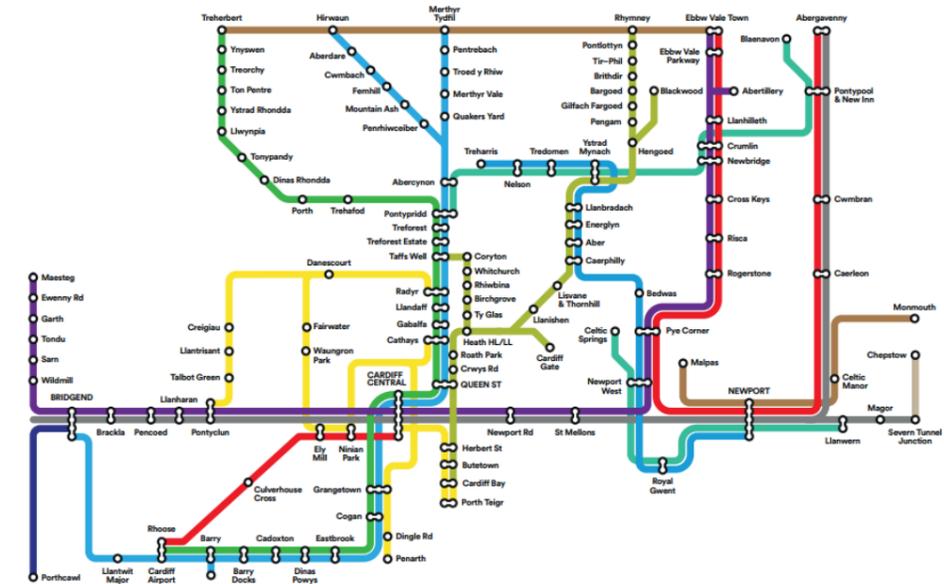
- Transportation
- Housing
- Energy
- Water Management
- Communications
- Solid Waste Management

- Use a diagram of your choice to help you to describe the main aspects of Soft Infrastructure below. Use examples to help you to explain them.

- Governance
- Economic
- Agriculture, Forestry & Fisheries
- Health Care
- Education & Research
- Culture, sports & recreation

- What is the 'Northern Powerhouse'?

- How might the Northern Powerhouse help North Wales?
- Give examples of large infrastructure projects in North Wales; use the current edition and past editions of GITN to help you do this.
- How many different Local Authorities will be part of the Cardiff City Region?
- How much public money will the Cardiff City Region Cost?
- Describe the planned South Wales Metro; use this map to help you:



- What does the plan for the South Wales Metro tell you about the importance of transport?
- What is meant by the term M4 'bottleneck' when describing the M4 motorway near Newport?
- Use a local map either an OS Map or a GIS map such as Google Earth on Satellite View. Firstly annotate your map using a colour code the different aspects of infrastructure that are present in your region.
- Next Identify very important (critical) parts of infrastructure that are missing. Use your local knowledge to help you to do this. Construct a list in rank order with the most important at the top.