## **DME:** Infrastructure Projects in Wales - Activity Sheet 1

## Introduction

- 1. Put the section title Introduction.
- 2. What is meant by the term Infrastructure?
- 3. What is meant by the term Hard Infrastructure?
- 4. What is meant by the term Soft Infrastructure?
- 5. Draw your own version of the table below but **rank** the projects from Low to high.

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

- 6. Draw a graph to show the costs for the different rail projects above.
- 7. How is the economy like a cake with infrastructure being the ingredients?
- 8. Thinking about your answer to question 7 try to explain the phrase 'you have to speculate (spend) to accumulate (to gather or increase)'.
  - 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

- 9. Put the section title Background.
- 10.Use a GIS (Geographical Information System) such as Google Earth to:
  - a. Find a map of an area that is mostly towns and cities (urban area).
  - b. Find a map that is mostly farmland and countryside (urban area).

The maps do not need a hard copy; you could do this off a screen.

11.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 Are	a l	Rural Area	
1	1		
2	2		
3	3		
1	4		
5	5		
5			
7			
3			
)			
10			
11			
12			

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.

- Housing
- Energy

13.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
- Health Care

14.Use a local map either an OS Map or a GIS map (such as Google Earth).

- map.
- important at the top.

• Transportation • Water Management • Communications Solid Waste Management.

• Agriculture, Forestry & Fisheries Education & Research • Culture, sports & recreation.

• Draw and label the different aspects of infrastructure that you can see on the

15. Make a list of important (critical) parts of infrastructure that are missing from your map.

16.Put your list into rank order with the most