National Junior College
SH1 Promotional Examinations for General Certificate of Education Advanced Level
Higher 2

GEOGRAPHY **9173/01**

26 September 2023

INSERT

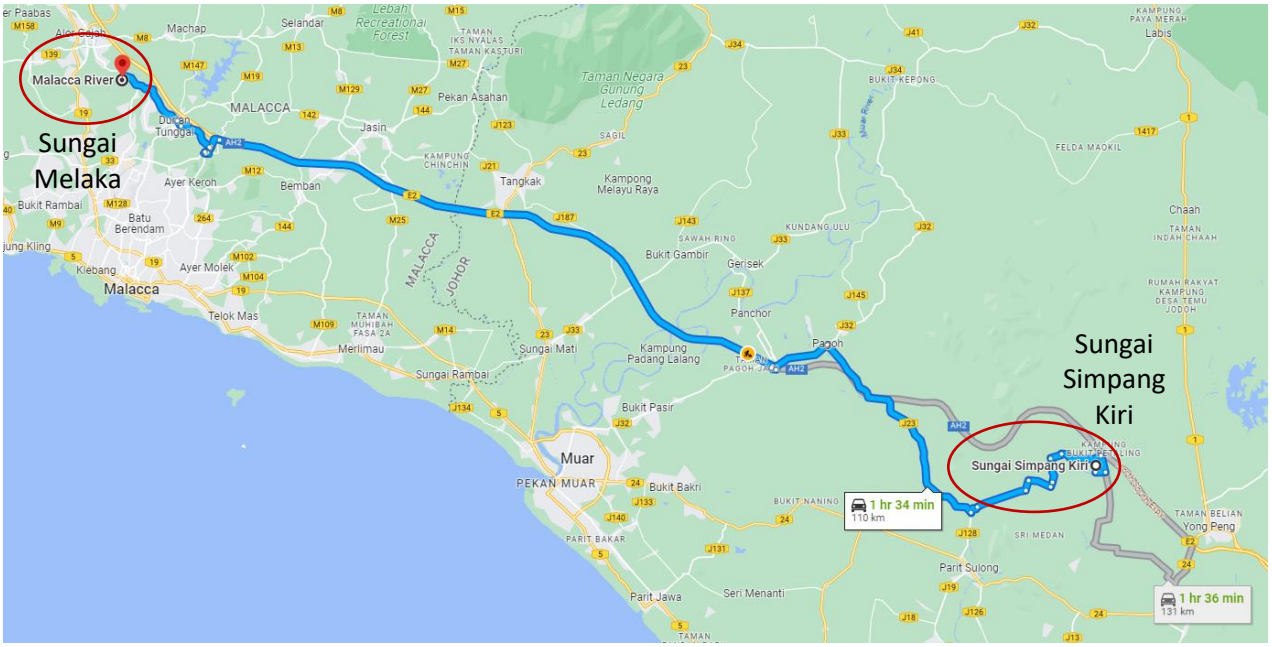
3 hours

READ THESE INSTRUCTIONS FIRST

This Insert contains all the Resources referred to in the questions.

Resource 1 for Question 1

Map showing locations of Sungai Melaka and Sungai Simpang Kiri



Resource 2A for Question 1

Photograph of Sungai Melaka

Resource 2B for Question 1

Photograph of Sungai Simpang Kiri

Resource 3 for Question 1

Questionnaire used by the students for data collection

1. How many years have you lived/worked here? _____

2. How old are you? _____

3. What is the risk of floods in this area?
   - No risk
   - Low risk
   - Medium risk
   - High risk

4. How often does the river flood?
   - At least once every month
   - At least once in 6 months
   - At least once a year
   - Never

5. How is flood risk reduced in the area?
   _____

6. Do you feel vulnerable to flood risk?
   - Yes
   - No

7. From 1-10, rate your adaptive capacity. _____

8. How severe have the floods here been?
   _____

9. Do you know what to do to evacuate when there is a flood?
   - Yes
   - No

10. Which months of the year do the floods usually occur? _____

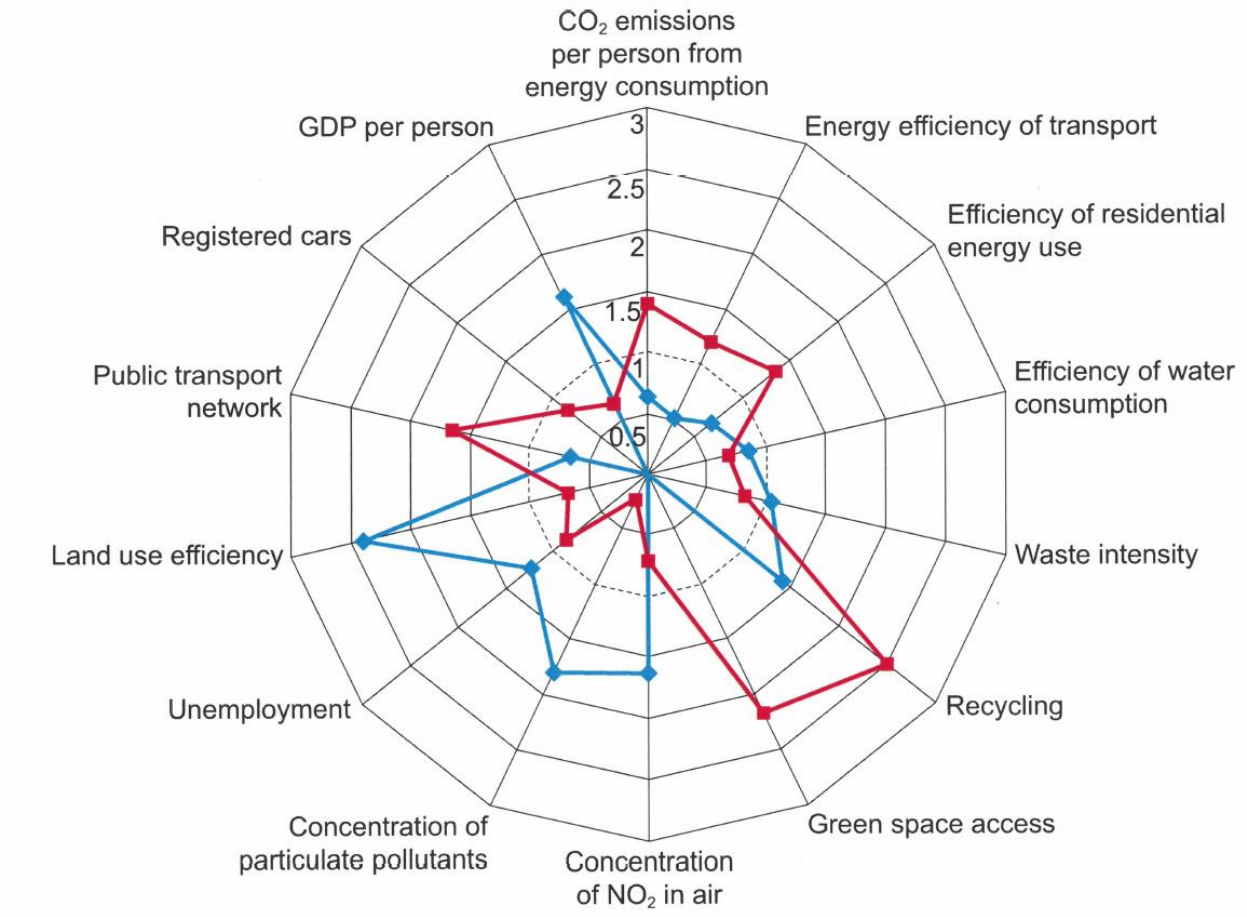
Resource 4 for Question 1

Responses tabulated from the question "What is the risk of floods in this area?"

Sungai Melaka			Sungai Simpang Kiri	
Respondent number	Response		Respondent number	Response
1	High risk		11	Medium risk
2	Medium risk		12	High risk
3	High risk		13	Low risk
4	Medium risk		14	Low risk
5	Low risk		15	Medium risk
6	High risk		16	High risk
7	Medium risk		17	Medium risk
8	Low risk		18	Low risk
9	High risk		19	Low risk
10	Medium risk		20	Medium risk

Resource 5 for Question 2

Urban Metabolism Framework performance of two selected cities in 2015



Key

◆	Barcelona, Spain
■	Freiburg, Germany
1	average for the cities measured by the framework
>1	characteristic more developed than average
<1	characteristic less developed than average
0	no data

The Urban Metabolism Framework was developed by the European Environment Agency (EEA). It is a low-cost monitoring measure for cities comprising 14 characteristics, using easily available data sources.

Resource 6 for Question 2

News excerpt on Freiburg, Germany

Freiburg: Germany's futuristic city set in a forest

This picture-perfect medieval city is celebrating its 900th anniversary, but its innovative design makes it one of the world's most sustainable and liveable cities.

With 400km of bike paths and twice as many bikes as cars, Freiburg is a cyclists' paradise. This intentional design can be traced back to the post-war period. While other German cities were focusing on rebuilding modern cities that put cars at the centre of future transport, planners in Freiburg took a different approach, centering their designs around public transport, thus widening the streets to accommodate trams and bike lanes, including large pedestrian zones. And at a time when much of Germany was building wide highways and sprawling car parks, Freiburg launched its first urban transport policy in 1969 focusing on environmentally-friendly modes of travel.

On match days, a sea of football fans travel along the FR1 (bicycle priority route) and descend on the 24,000-seat Schwarzwald-Stadion, Germany's first solar-powered football stadium that's home to local heroes SC Freiburg. Since solar panels were fitted to the grandstand roofs in 1993, the stadium has generated 250,000 kilowatt-hours per year, powering the stadium and feeding any excess back into the local grid. Borrowing this design ethos is the much-anticipated new Freiburg Stadium, which is integrating solar panels onto its roof and recycling energy generated from a nearby manufacturing plant to heat the stadium.

Lying just 3km from the city centre, the much-celebrated planned suburban community of Vauban, has a similar environmentally conscious ethos at its heart. Here, civic involvement goes hand in hand with "collective building" – where citizens buy a piece of land together and build an apartment building themselves, instead of individually buying an apartment from a development company – and ambitious environmental policy. All housing adheres to Freiburg's low-energy building standard of 65 kWh/sq m, and the minimal energy that is brought in is generated locally from the wood-chip powered heating systems located in the neighbourhood.

Resource 7 for Question 2

Urban Reimaging in Hamburg, Germany

Hamburg, Germany

Revitalising the Waterfront

With its inner city densification strategy, Hamburg has successfully regenerated its waterfront from former derelict docklands into a dynamic mixed-used district for residential, commercial and recreational uses. This new HafenCity was driven by collaborations among urban planners, investors, academic professionals and citizens. The focus on built heritage since its planning stages gives the lively area a blend of tradition and modernity.