Paper 3: Section A – Rivers fieldwork & Section B – Urban fieldwork

1. Stages of a fieldwork enquiry

	Stage	River Alyn, North Wales	Liverpool CBD
1	Question	How has the river changed from source to mouth.	How has Liverpool's CBD changed over time.
2	Hypothesis	The river will become wider and deeper as you move towards the source.	Liverpool's CBD has improved through regeneration.
3	Data collection	River depth, width, velocity, particle size, field sketch.	Questionnaire, pedestrian count, environmental quality survey, land use.
4	Data presentation	Bar chart, pie chart, graph.	Bar chart, pie chart, tally, graph.
5	Conclusion	Our investigation proved the river does become wider and deeper as you move from the source to mouth.	People have better opinions of the CBD as opposed to outer core of the city due to the regeneration.
6	Evaluation	Increase the number of times each investigation is measured to increase accuracy.	Use stratified sampling to get a range of different opinions from all members of the population.

2. Types of data

	Data definition	River Alyn, North Wales	Liverpool CBD
1	Primary data: data you have collected	Depth, width, velocity, particle size, field sketch	Questionnaire, pedestrian count, environmental quality survey, land use
2	Secondary data: data someone else has collected	Flood risk map	Liverpool's regeneration
3	Quantitive date: numerical data	River depth, width, velocity, particle size	Pedestrian count
4	Qualitative data: opinion based	Field sketch	Questionnaire, environmental quality survey, land use

3. Sampling

	Method	River Alyn, North Wales	Liverpool CBD
1	Random sampling: Collect data using a random number generator	Pick up random pebbles from the riverbed using a number generator	Question random people using a number generator
2	Systematic sampling: collect data at specific intervals	Sample every 5th pebble along the riverbed	Sample every 5th person that you pass
3	Stratified sampling: collect data from different groups to ensure fair representation	Survey 3 different locations along the river	Survey an equal number of pedestrians that hold different characteristics e.g. 5 male, 5 female

4. Key terms

Key term	Definition
Data collection methods	How did you collect the data? E.g. depth, questionnaires
Data presentation	How did you present your data? E.g bar chart
Reliability	Did the investigation provide consistent results?
Accuracy	How close to the true measurement are you?
Limitations	Problems with what you did
Anomalies	Are there data sets that don't follow the pattern?
Evaluation	How could your investigation be improved?

Paper 3: Section C – UK Challenges

1. Resource Consumption

The UK is overpopulated. By 2030 - 70million through natural increase & migration.

Create pressure on ecosystems: Building on greenfield, destruction of habitats, increased food/water demand.	To help combat this: Increase public transport, introduce congestion charges, promote the use of electric cars/bikes.

2. Economic Challenges

The UK has a two speed economy that refers to the uneven growth.

London is developing faster than the North as it is our capital city and attracts both high levels of tourism and income from business.	To help combat this: Increase public transport (HS2), introduce congestion charges, promote the use of electric cars/bikes.

3. Greenfield vs Brownfield

To cope with rapid urbanization/migration, developments are being built on green/brownfields.

Greenfield benefits: Cheaper / more space Greenfield costs: loss of land / destruction of habitats	Brownfield benefits: Infrastructure exists / improves area Brownfield costs: Contaminated / restricted rules

4. Migration

In 2015, 300,000 people migrated to the UK

Some businesses welcome migrant workers Increases diversity of the UK	Concerns about the increased demand on healthcare and education Some people believe this may reduce the number of available jobs

5. National Parks

Conservation of these areas are working hard to protect habitats and biodiversity.

Approaches include: renewable energy sources, river restoration, using electric bikes, extending National Parks.	Concerns about increasing the size of National Parks then links to settlements being built, increasing house prices which could lead to the brain drain.

6. River and Coastal flooding

The Environment agency are responsible for the management of these.

Soft engineering strategies include: monitoring and early warning systems, beach nourishment, sand dune regeneration & afforestation.	Hard engineering strategies include: sea walls, groynes, dams and reservoirs.

7. Climate change

The UK is expected to see temperature increases from 2-4 degrees.

Climate change could result in rising sea levels increasing the risk of coastal flooding, costal erosion. Risk of increased heatwaves & droughts. This will have negative impacts on health and food production.	Responses to climate change can be both local and national. Local – individuals reduce their carbon footprint by walking/cycling/using more energy efficient devices. National – Investment into more renewable resources.

Remember, paper 3 has strong links back to Paper 1 & 2, use your previous knowledge organisers to aid your revision!