Subject	Geography	Year Group	12/13	Sequence No.		Topic	NEA

Retrieval	Core Knowledge	Student Thinking
What do teachers need retrieve from students before they start teaching new content?	What specific ambitious knowledge do teachers need teach students in this sequence of learning?	What real life examples can be applied to this sequence of learning to development of our students thinking, encouraging them to see the inequalities around them and 'do something about them!'
From GCSE fieldwork retrieve the definitions and examples of primary, secondary, quantitative and qualitative data	**<u>Sampling strategies</u>** **Sampling size** • Point- sample taken at given point such as coordinates on a map • Linear- given points along a line or transect that has something alike such as along sand dunes • Areal- given area such as a quadrat to measure vegetation cover or on a grid square on a OS map ***Sampling method*** *Random sampling* • Using number tables to randomly generate a number to select a sample • Advantages- statistically sound so could lead to further analysis • Disadvantages- same item could be picked more than once, easy to miss something *Stratified sampling* • Take account of underlying patterns in data and ensures all are sampled • Advantages- ensures no significant aspect is missed • Disadvantages- data collection is biased, can't make valid statistical differences *Systematic sampling* • Item is selected at regular intervals • Advantages- easy to do, quick • Disadvantages- interval may coincide with in the data or location, can't make valid statistical inferences *Pragmatic sampling* • Sample where you can get access and where changes are observed such as troughs and crests of a sand dune system. • Advantages- safe realistic	Through the knowledge learnt in this section students will make decisions about what how they will collect data, present data and analyze data in their NEA. They will also be prepared for academic university dissertations. They will gain an understanding of how research that they have learnt about at school has been carried out. • Students will consider an enquiry for their investigations • Students will devise hypotheses/research questions to help with their investigation • Students will carry out a literature review • Students will consider the methodology they will use to collect data • Students will collect their own primary and secondary data

	• Disadvantages- can't make valid statistical inferences, not a fair sample *Location* • The exact boundaries for your location need to be specified in the planning stage • Location needs to be accessible, safe, and realistic in order to improve accuracy of results. **<u>Spearmans rank</u>** Spearman's Rank correlation coefficient is used to identify and test the strength of a relationship between two sets of data. It is often used as a statistical method to aid with either proving or disproving a hypothesis e.g. the depth of a river does not progressively increase the further from the river bank. The formula used to calculate Spearman's Rank is shown below. How can the calculation be carried out? Once the data has been collected calculate and graph Spearman's Rank correlation to discover if a relationship exists between the two sets of data, and how strong this relationship is. Please note this example uses a dataset of 10 samples, but your dataset should include a minimum of 15 to be valid.	• Students will devise a risk assessment and consider ethical issues linked to their investigation • Students will present their data in a variety of forms • Students will analyze their data and draw conclusions from it • Students will link their findings to their literature review-the existing research • Students will evaluate their data collection, data presentation and data analysis •