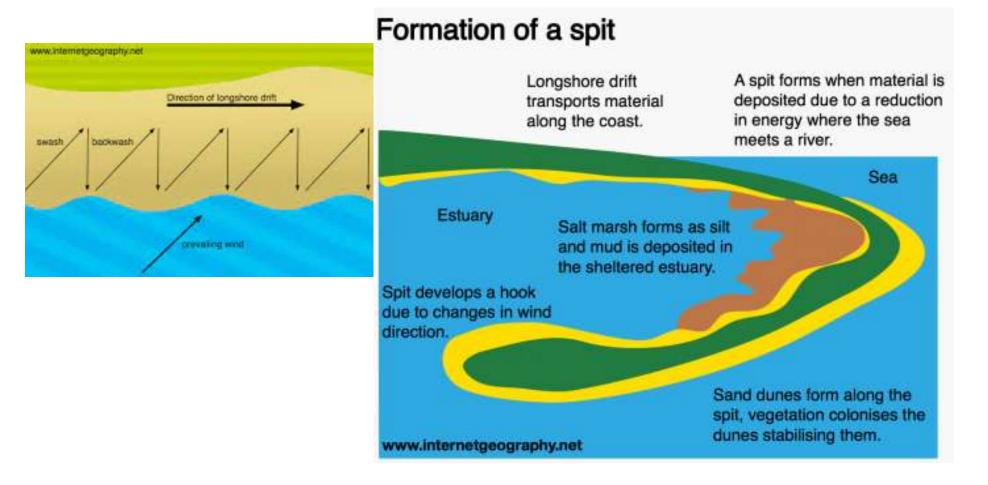
Starter for 10

Dawlish Warren was our PHYSCIAL fieldwork location. Dawlish Warren is an example of a spit.

Using the prompts below. Explain the formation of a sand spit.



Paper 3 – Dawlish Warren Fieldwork

Key Learning: Tuesday, January 21, 2025 Today you are going to: You have already: To understand what to Paper 1 – Natural expect in paper 3. In future: Hazards, Living To review the Dawlish What did the results World, Coasts and Warren Fieldwork. show? **Rivers – COMPLETE** Paper 2 – Urban How can they be Success criteria: **Issues**, Changing presented? Describe theory behind the Economic World, What conclusions can investigation. Resource we draw? Consider the risks involved in How can we reflect on Management and beach fieldwork. the fieldwork carried Water. Describe the methods used out? for data collection.

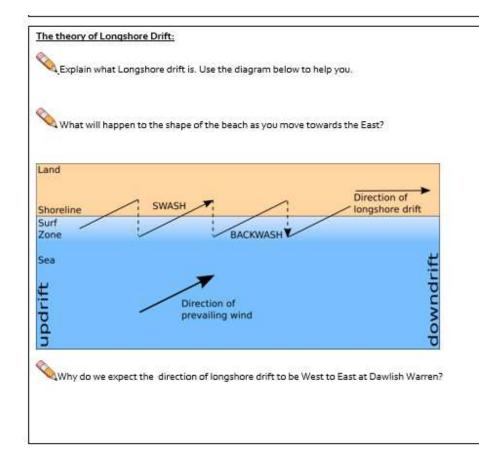


Key Terms

Hypothesis - a statement of fact that is either proven or disproven.
Longshore Drift – the movement of sediment in a zig zag direction along a coastline.
Sampling – selecting the group that you will actually collect data from in your research.

What's the theory?

Task: Answer the questions regarding the theory of longshore drift







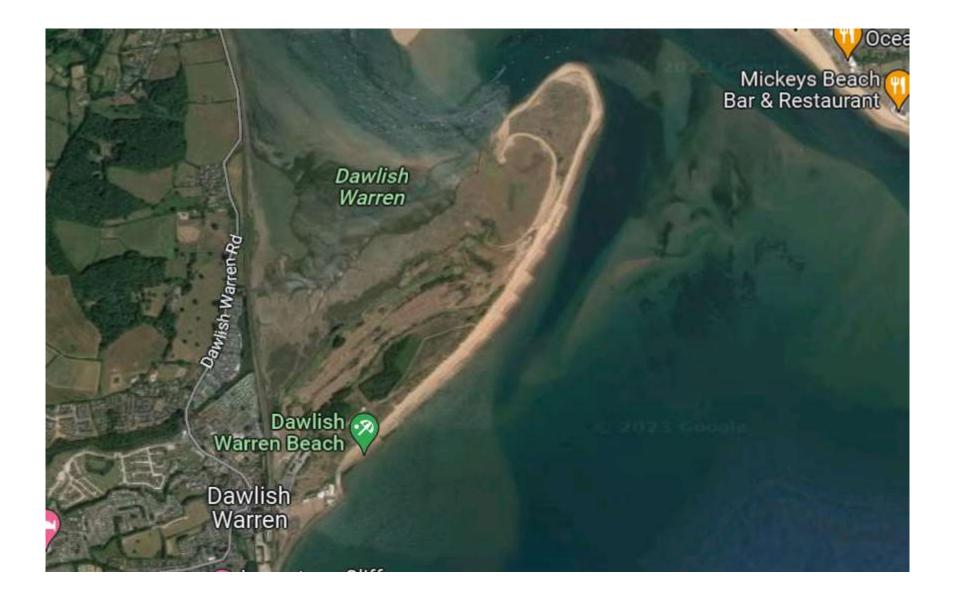
Physical Fieldwork investigation.

All fieldwork starts with a question or a hypothesis which is tested. You will need to know this for your Paper 3 exam.

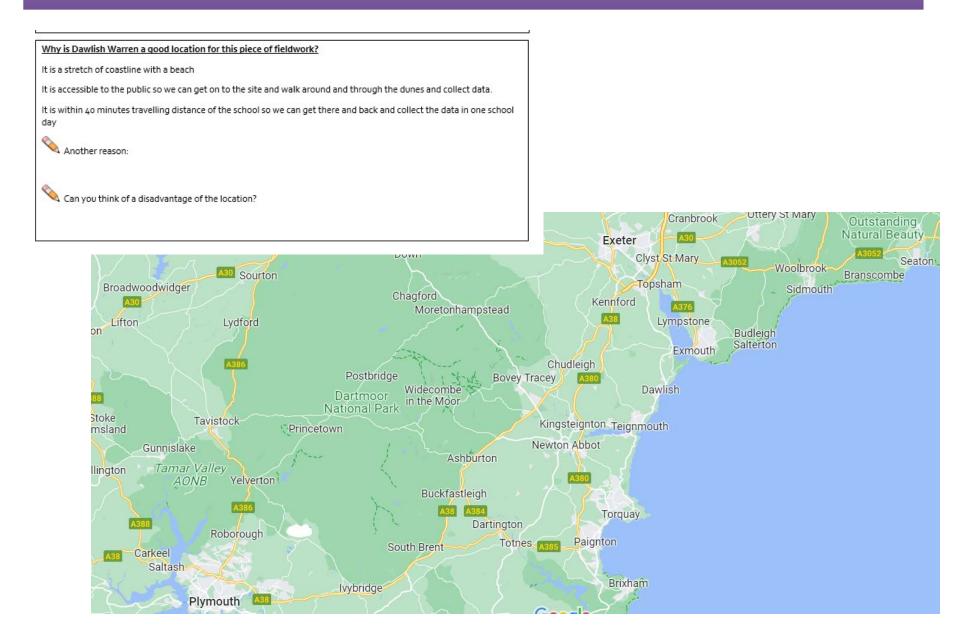
<u>Hypothesis</u>: These are the questions you are aiming to prove or disprove based on the data you collect.

- 1) Long-shore drift goes from west to east at Dawlish Warren beach
- 2) The beach will get wider as you go from west to east.

What's the theory?

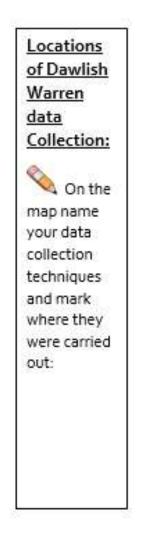


Where is Dawlish Warren?



Where on Dawlish Warren?





What are the risks?

A risk assessment is a careful examination of what could cause harm to people whilst taking part in a project, it aims to identify whether enough precautions, or 'control measures', are in place, or whether further action is required to minimize, or eliminate, the level of risk identified.

Task: Complete weather and walking on the beach. What is the risk? How can it be reduced. Identify one further risk and complete the finial row of the table.

ssessing the Risks:			without risk!
revent or reduce the risk	5.	ks which might be present and consider what we could do t will do at Dawlish Warren:	We just consider how we can
ACTIVITY:	RISKS:	WHAT CAN BE DONE TO REDUCE THE RISK?	reduce the risk!
Travel to Dawlish Warren by coach Weather	Road Traffic Accident Accident when getting off coach	Remind students to wear seat belts Carry first Aid Kits Remind students to look both ways when leaving the coa Unload coach in a safe position	ach
Walking on the Beach		6	.00

Predictions? What do we expect to find?

What do you expect to find when you go to Dawlish?

We are going to test two hypotheses...

- 1. Longshore drift moves material from west to east.
- 2. The beach will get wider as you go from west to east.

What evidence might there be for longshore drift moving west to east? What do you need to look out for?

What evidence might there be for the beach getting wider? What do you need to look out for?

Methods – What did we do?

Types of Data:

PRIMARY DATA: Data we collect ourselves - this is what we will do on the fieldwork - see below.

SECONDARY DATA: Data collected by someone else or an organisation e.g. OS map used to identify landforms and sites

QUANTIITATIVE DATA: Data which is numerical e.g. the length of a measurement in centimetres

QUALITATIVE DATA: Information which is descriptive e.g. a description of the site

Types of Sampling:

Systematic

You can't collect data on everything at Dawlish, we have to take some samples and draw conclusions based on our samples. There are a number of different types of sampling including:

STRATIFIED SAMPLING: This is where you choose where to take a measurement – we measured the angle of the beach at every change in gradient.

SYSTEMATIC SAMPLING: This is where a sample is taken at regular intervals, e.g. we measured longshore drift at 5 sites 200m apart

What are the advantages and disadvantages of these types of sampling?

	<u> </u>	
0		
V		

Stratified Sampling

The population is divided into subgroups (strata) based on specific characteristics, such as age, gender or race. Within the strata random sampling is used to choose the sample.

Advantages

Strata can be proportionally represented in the final sample. It is easy to compare subgroups. **Disadvantages**

Information must be gathered before being able to divide the population into subgroups.

Sampling technique	Advantage	Disadvantage
Stratified		

Systematic Sampling

All data is sequentially numbered and every nth piece of data is chosen. The number n is chosen by n = size of population divided by desired population size

Advantages

Easy to select.

Identified easily.

Evenly spread over the entire population.

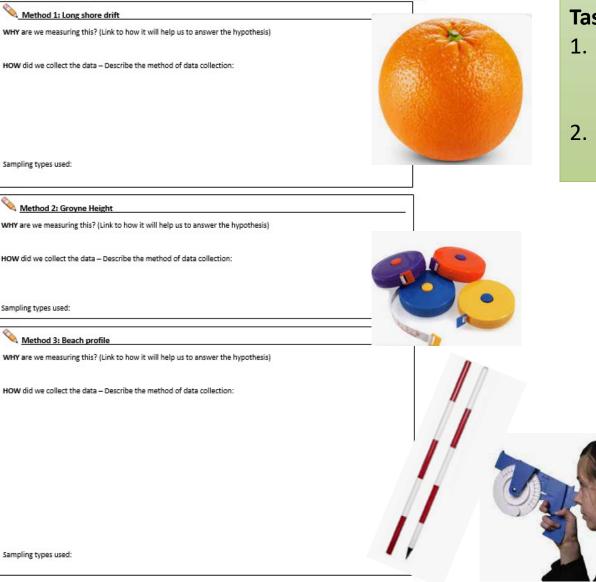
Disadvantages

May be biased where the pattern used for the samples coincides with a pattern in the population.

Beach Profiling of Dawlish Warren



Methods – What did we do?



Task:

- 1. Describe each of the methods that we carried out on the day.
- 2. Complete the equipment list box.



Paper 3 – Dawlish Warren Fieldwork

Key Learning Summary:

Today you are going to:

- To understand what to expect in paper 3.
- To review the Dawlish Warren Fieldwork.

Success criteria:

- Describe theory behind the investigation.
- Consider the risks involved in beach fieldwork.
- Describe the methods used for data collection.

Summary:

- Physical Fieldwork carried out tested the following hypothesis at Dawlish Warren.
- Long-shore drift goes from west to east at Dawlish Warren beach
- 2) The beach will get wider as you go from west to east.
- Risks of going to the beach were assessed and mitigations taken.
- Beach profiling, measuring of groyne height and measuring longshore drift were the methods carried out on the day.



Key Terms

Hypothesis - a statement of fact that is either proven or disproven.
 Longshore Drift – the movement of sediment in a zig zag direction along a coastline.
 Sampling – selecting the group that you will actually collect data from in your research.

Starter for 10

Q1.

State the title of your fieldwork enquiry in which physical geography data were collected.

Title of fieldwork enquiry:

(a) Explain the advantage(s) of the location(s) used for your fieldwork enquiry.

(2)

(b) Suggest why one set of data you collected in your physical fieldwork enquiry may not have been accurate.

- (2)
- (c) Identify one potential risk in your physical geography fieldwork and explain how the risk was reduced.

Risk

How the risk was reduced

(3) (Total 7 marks)

Hint: Physical fieldwork



Paper 3: Geographical Skills Fieldwork

Q1.

(a)

State the title of your fieldwork enquiry in which physical geography data were collected.

Explain the advantage(s) of the location(s) used for your fieldwork enquiry.

Title of fieldwork enquiry:

Paper 3: Geographical Skills Fieldwork

•	1	п.	

State the title of your fieldwork enquiry in which physical geography data were collected.

Title of fieldwork enquiry:

(a) Explain the advantage(s) of the location(s) used for your fieldwork enquiry.

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 - Risk

How the risk was reduced

(c) Identify one potential risk in your physical geography fieldwork and explain how the risk was reduced.

Risk_____

How the risk was reduced

(3) (Total 7 marks)

(2)

(2)

(3) (Total 7 marks)

Starter for 10

Q1 (a). Candidates must provide a developed reason why the location(s) used for the physical geography fieldwork enquiry was/were selected.

One mark for stating an advantage with second mark for developed explanation.

Answers will be dependent upon the type of investigation being undertaken, but could include some of the following:

- accessibility within walking distance (1), level ground (1), no risks (1)
- safety considerations away from unstable cliffs (1), water level not too deep (1), water flow not fast (1)
- range of survey points available (1).

Second mark for developed point, e.g.

• range of survey points available with enough variation within locality to show changes over distance (2). Allow one mark for single reason but cannot access second mark without having a developed point.

Q1 (b) There is an expectation that the response should relate to the physical fieldwork enquiry.

One data set only which should be clearly identified.

Accept any reasonable idea which focuses on accuracy / reliability.

Max 1 mark for generic point(s), which might include:

- not enough data
- poor sampling
- errors with equipment
- data recording affected by the weather
- because of the risks associated with data collection.

Developed points (2 marks)

Allow basic or generic point which then links to specific physical enquiry.

- Only collecting data on one day (1) meant that we couldn't see changes in vegetation over time (d) (1).
- We were unable to find all the painted pebbles (1) so the measurement of longshore drift was inaccurate (d) (1).
- The clinometer was sticking(1) so getting accurate slope measurements was difficult (d)(1)
- The river was in flood (1) so it was not possible to accurately measure the width of the channel (d)(1).

Max 1 mark if reference to human geography investigation.

Starter for 10

Q1 (b) There is an expectation that the response should relate to the physical fieldwork enquiry.

1 mark for the clear identification of a risk which is linked to the physical geography enquiry (be aware that some risks may well be generic / vague, for example weather based risks / becoming isolated).

Risks may include:

- the land was steep / uneven ground
- the temperature was very high / very cold
- the risk of becoming isolated
- the river was running fast
- the tide came in quickly
- the cliff face was unstable

Risks may be expressed as outcomes e.g. slipping, falling, drowning

Up to 2 marks for identifying way(s) of reducing the identified risk:

- there was a risk of becoming isolated or lost (1) so we all carried mobile phones (1).
- the river was running fast (1) so we carried out our measurements in a safer location (1).
- the temperature was too hot (1) so we applied suncream (1) and we wore hats (1).
- there was a risk of slipping (1) so we wore appropriate footwear (1) and we carried walking poles (1).
- the cliff face was unstable (1) so all students were issued with hard hats (1) and were told not to go nearer than 5 metres of the cliff (1).

Alternatively 2 marks for a developed idea:

- the temperature was too hot (1) so we applied suncream (1), which meant that we were unlikely to be affected by sunburn (d) (1).
- there was a risk of slipping (1) so we wore appropriate footwear (1) so we didn't fall over and injure ourselves (d) (1).
- there was a risk of becoming isolated or lost (1) so we all carried mobile phones (1). This meant that we could contact the teacher if there was an emergency (d) (1).
- the river was running fast (1) so we carried out our measurements in a different location (1), which meant that we didn't fall over in the river(d)(1)
- the cliff face was unstable (1) so all students were issued with hard hats (1) to avoid injury from being hit by falling rock (d) (1). No credit for repetition of initial risk.

Max 1 mark if reference to human geography investigation.

Paper 3 – Dawlish Warren Fieldwork

Key Learning: Tuesday, January 21, 2025 Today you are going to: You have already: To understand what to Paper 1 – Natural expect in paper 3. In future: Hazards, Living To review the Dawlish What conclusions can World, Coasts and Warren Fieldwork. we draw? **Rivers – COMPLETE** Paper 2 – Urban How can we reflect on Success criteria: the fieldwork carried **Issues**, Changing Describe the methods used Economic World, out? for data collection. Resource Considered the different data Management and presentation methods used. Water. Be aware of statistical Physical fieldwork – measures. why investigate, Begin to analyse data. risks.



Key Terms

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Methods – What did we do?

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Sampling technique	Advantage	Disadvantage
Stratified		

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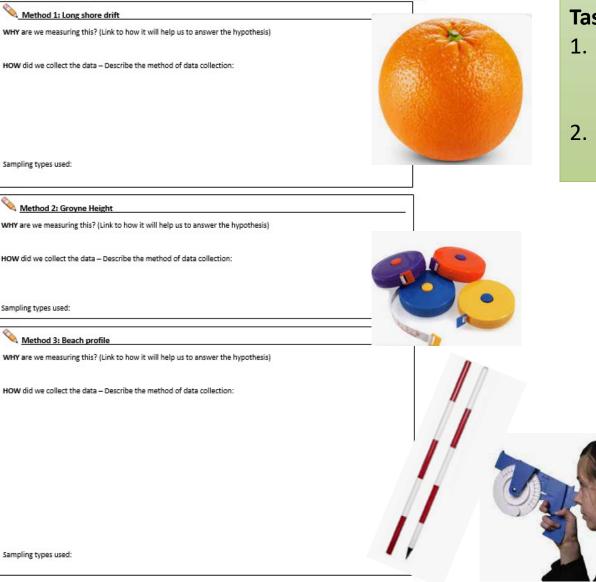
Disadvantages

May be biased where the pattern used for the samples coincides with a pattern in the population.

Beach Profiling of Dawlish Warren



Methods – What did we do?

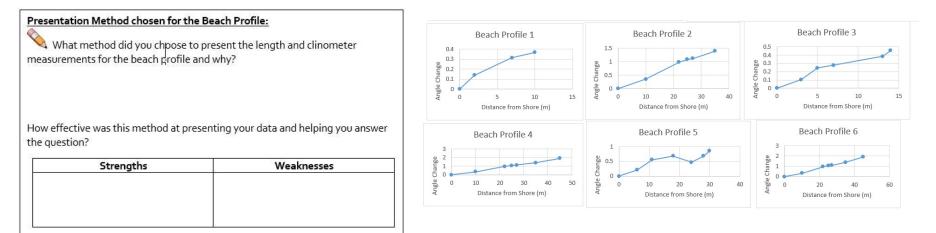


Task:

- 1. Describe each of the methods that we carried out on the day.
- 2. Complete the equipment list box.



Data Presentation – Beach Profile



You can use line graphs in many ways according to your requirements. But using a line graph is only helpful when you are using it at the right timing. You can use other graphs to record data sets, but you can only use them with data coming at continuous time intervals with a line chart. Line charts help predict the paths of data sets. It tells you how long the same pattern will continue or when the changes might occur. You can also look for missing fragments of data by analyzing the data line.

•You can easily show the data changes over time over a line graph.

•It is also helpful to show small changes that are difficult to measure in other graphs.

•A relationship between 2 or more variables get identified.

•It presents a good impression of trends and changes.

•Both negative, as well as positive values, are indicated.

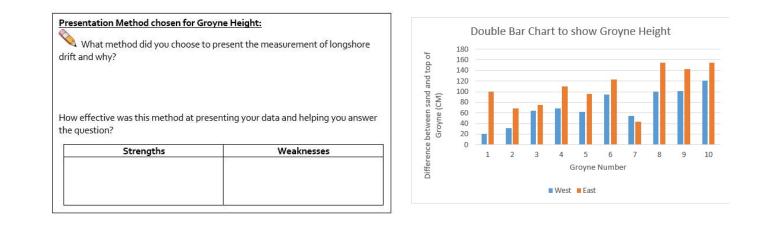
While using a line graph can help you with many things, it also comes with a few downsides that you can't ignore. We create a data line with both vertical and horizontal scales. Most of the time, it works just right, but sometimes the difference between scales is much broader, making the data line bland. If there is more than one line in the graph with a similar value, it makes it more complex.

•Plotting too many lines over the graph makes it cluttered and confusing to read.

•A wide range of data is challenging to plot over a line graph.

•They are only ideal for representing data made of total figures such as values of total rainfall in a month.

Data Presentation – Groyne Height



Pros

•Since there are no strict rules with comparison charts, they are easier to make.

•We can compare all kinds of entities and choices related to real-life instances easily.

•There is no limit to the number of things to compare or their parameters.

•Most of the comparison charts (like a table or bar) are extremely easy to draw and understand.

•They can help you provide precise information after detailed research.

Cons

If the information is too complex, then a comparative bar chart can become harder to understand.
Lack of standards or universally recognized rules

•If the entities have no common parameters, then we might not be able to compare them.

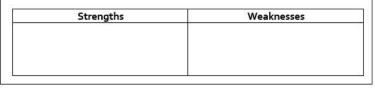
Data Presentation - LSD

Bar graphs are good for showing how data change over time.

Presentation Method chosen for the LSD:

What method did you choose to present the length and clinometer measurements for the beach profile and why?

How effective was this method at presenting your data and helping you answer the question?





Advantages

- •show each data category in a frequency distribution
- •display relative numbers or proportions of multiple categories
- •summarize a large data set in visual form
- •clarify trends better than do tables
- •estimate key values at a glance
- •permit a visual check of the accuracy and reasonableness of calculations
- •be easily understood due to widespread use in business and the media

Disadvantages

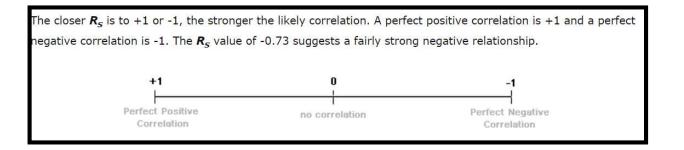
- •require additional explanation
- •be easily manipulated to yield false impressions
- •fail to reveal key assumptions, causes, effects, or patterns

Statistical Analysis

The Spearman's Rank Correlation Coefficient is used to discover the strength of a link between two sets of data.

Statistical analysis- Spearmans rank

Distance (m)	Rank	Beach width (m)	Rank	Difference between ranks(d)	Rank D²	The equation: R= 1- <u>6Σ d</u> n ³ -n
50	10	10	10	0	0	
100	9	12	9	0	0	Calculation (show your working
150	8	15	7	1	1	
200	7	14	8	-1	1	
250	6	19	6	0	0	
300	5	25	5	0	0	
350	4	29	4	0	0	Answer:
400	3	33	3	0	0	
450	2	35	2	0	0	What does this tell us?
500	1	45	1	0	0	
		512 (200		$\sum d^2 =$	2	1



Paper 3 – Dawlish Warren Fieldwork

Key Learning Summary:

Today you are going to:

- To understand what to expect in paper 3.
- To review the Dawlish Warren Fieldwork.

Success criteria:

- Describe theory behind the investigation.
- Consider the risks involved in beach fieldwork.
- Describe the methods used for data collection.

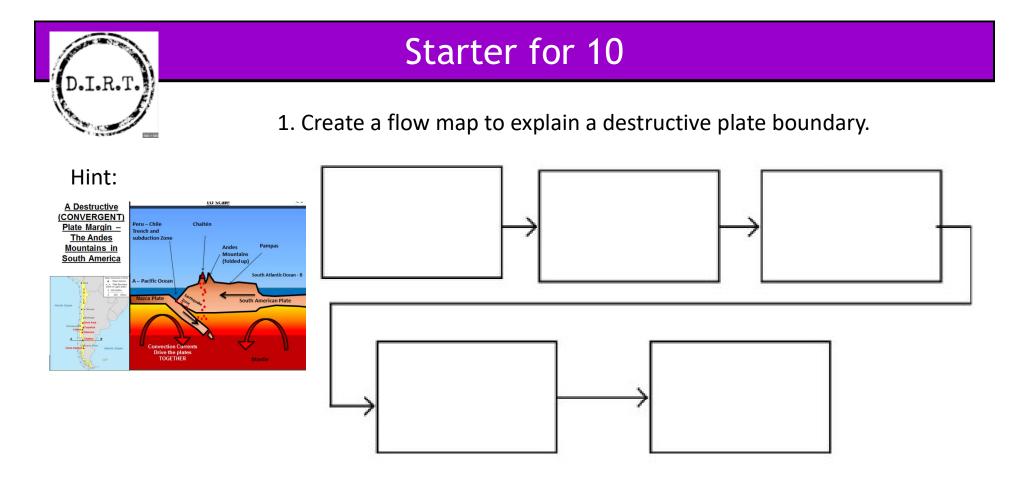
Summary:

- Beach profiling, measuring of groyne height and measuring longshore drift were the methods carried out on the day.
- Data presentation methods have both advantages and disadvantages.
- Spearman's rank shows the correlation between data sets.
- Our groyne height data proved the hypothesis that the Eastern side of the groynes were taller than the west, proving longshore drift was impacting the coastline.



Hypothesis - a statement of fact that is either proven or disproven.
 Longshore Drift – the movement of sediment in a zig zag direction along a coastline.
 Sampling – selecting the group that you will actually collect data from in your research.





2. Identify if the following are Nepal (LIC) or Chile (HIC).

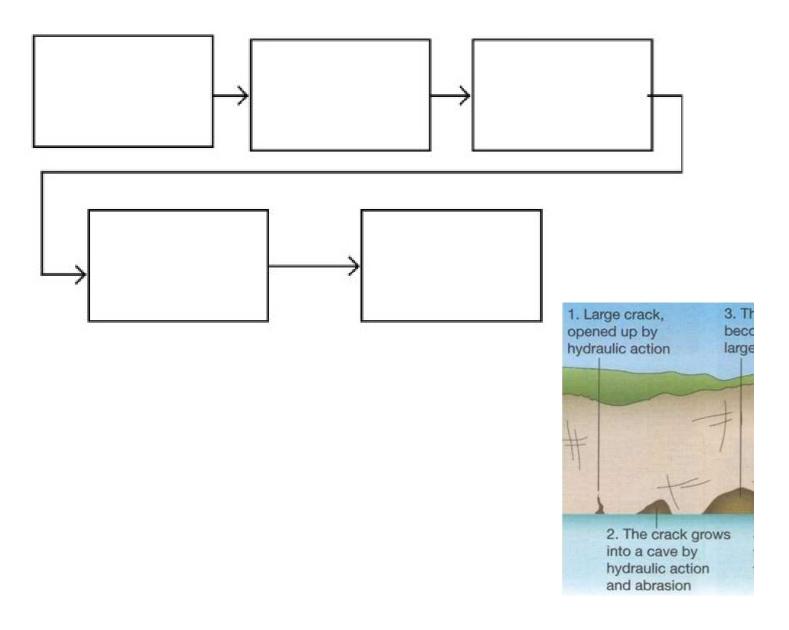
3. Why did Nepal
experience more deaths
and injuries than Chile?

4. Why was there a difference in national and international aid being used?

9000 killed, 20 000 injured	Overseas aid included NGO's, helicopters for each and rescue	coastal town by tsu	s devastated Inami
Us\$60 million national appeal	500 killed, 12 000 injured	Magnitude 8.8	Magnitude 7.9
Communities cut off by landslides,	Flood from rivers blocked by landslide	Communities cut off by landslides and avalanches	

Starter for 10

1. Create a flow map to explain the formation of a coastal arch / stack / stump

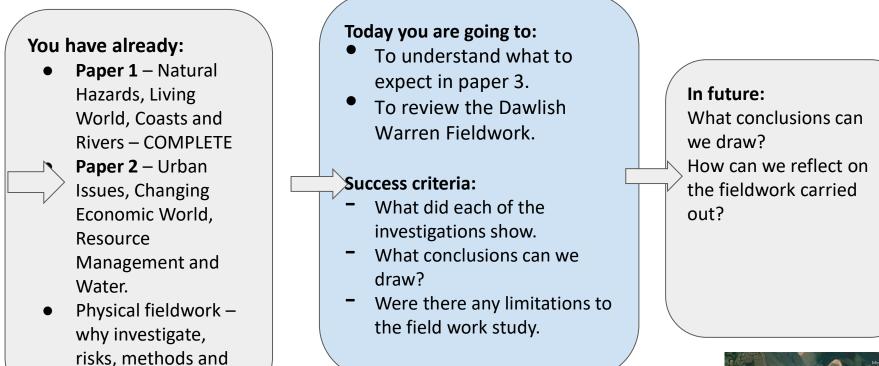


Paper 3 – Dawlish Warren Fieldwork

Tuesday, January 21, 2025

Key Learning:

data presentation.



Key Terms

Hypothesis - a statement of fact that is either proven or disproven.
Longshore Drift – the movement of sediment in a zig zag direction along a coastline.
Sampling – selecting the group that you will actually collect data from in your research.

Starter for 10



- 1. Nigeria's capital is Lagos (True / False)
- 2. The northern parts of Nigeria are dry (True / False)
- **3.** More children in urban areas attend school vs rural areas (True / False)

1. How has politics affected economic development in Nigeria? (4) 2x2 (2x Point + development)

Starter for 10

- 1. Nigeria's capital is Lagos FALSE
- 2. The northern parts of Nigeria are dry **TRUE**
- 3. More children in urban areas attend school vs rural areas TRUE

How has politics affected economic development in Nigeria? (4)
 2x2 (2x Point + development)

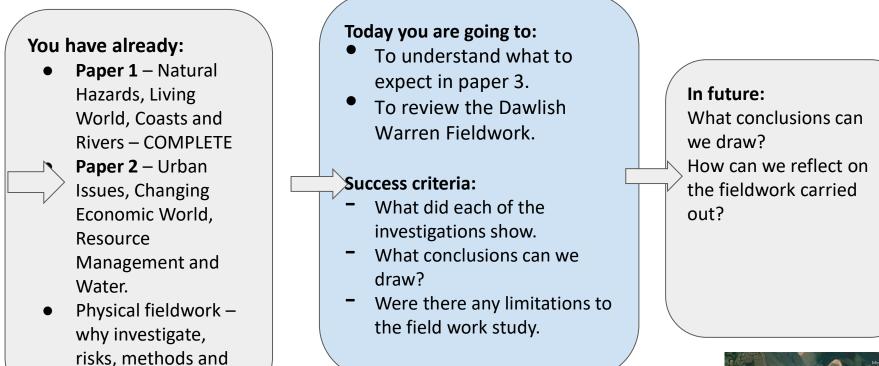
The recent investment in Nigeria from China has improved development as China has invested heavily in construction **which will improve people's quality of life** as people will have new roads to commute around the country. Also the development of a stable government from 1999 will encourage large international businesses to invest in Nigeria resulting in the potential for jobs to be offered **therefore allowing people access to higher incomes**.

Paper 3 – Dawlish Warren Fieldwork

Tuesday, January 21, 2025

Key Learning:

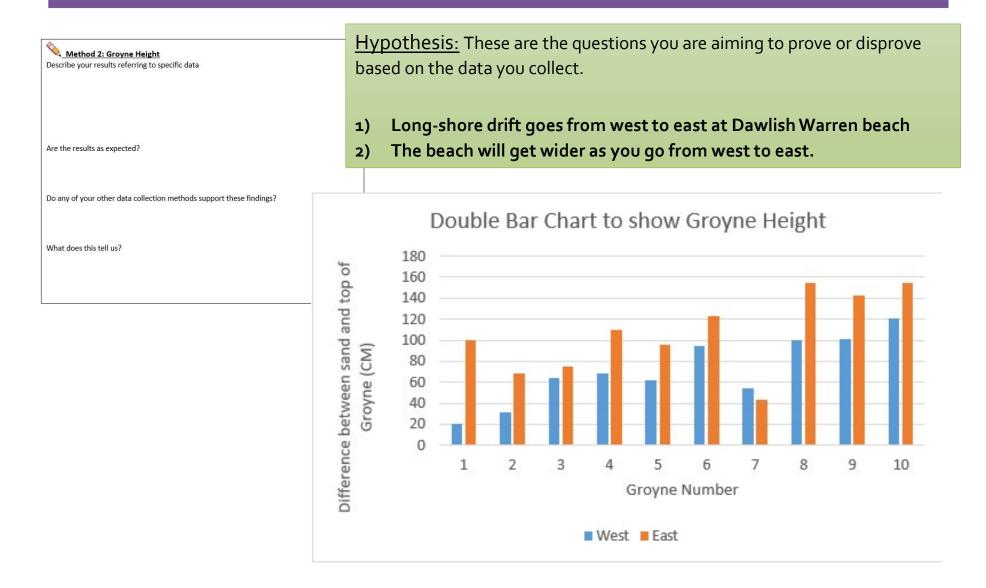
data presentation.



Key Terms

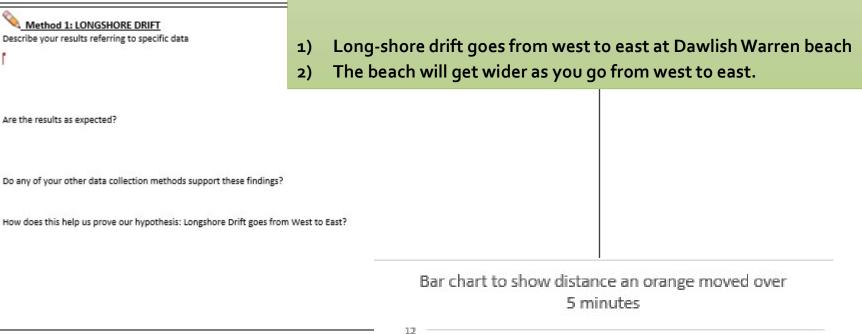
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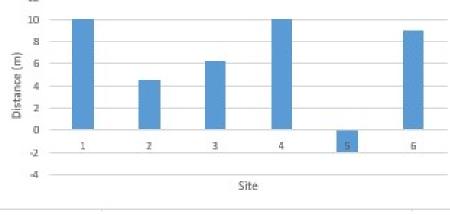
Analysing Results

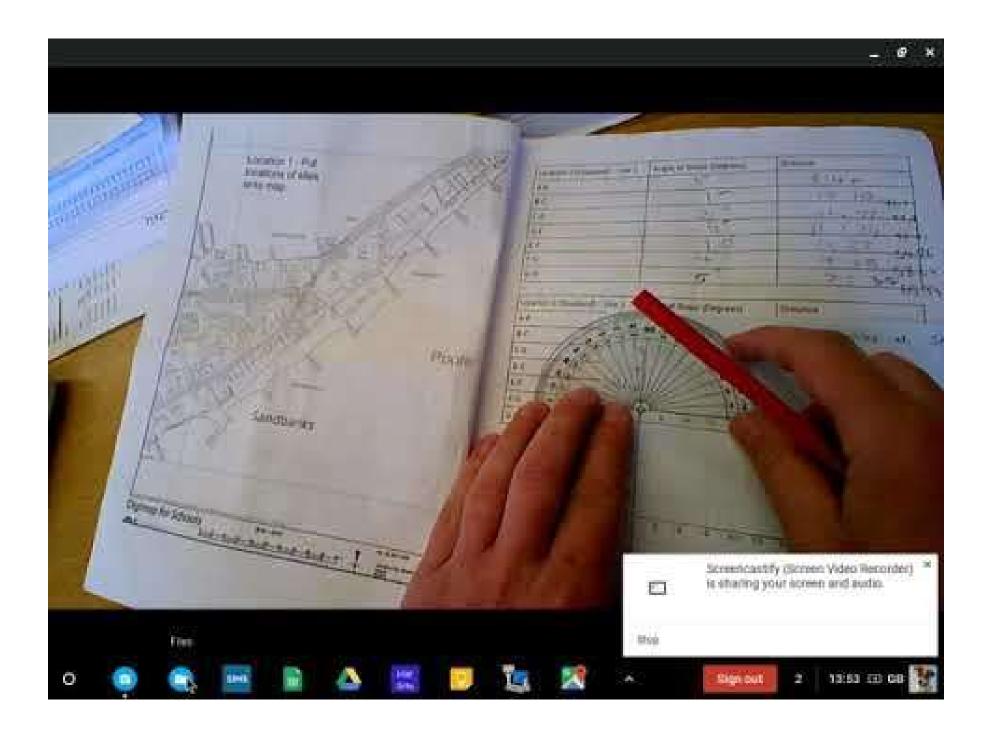


Analysing Results

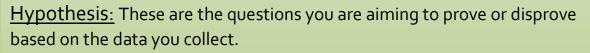
<u>Hypothesis</u>: These are the questions you are aiming to prove or disprove based on the data you collect.

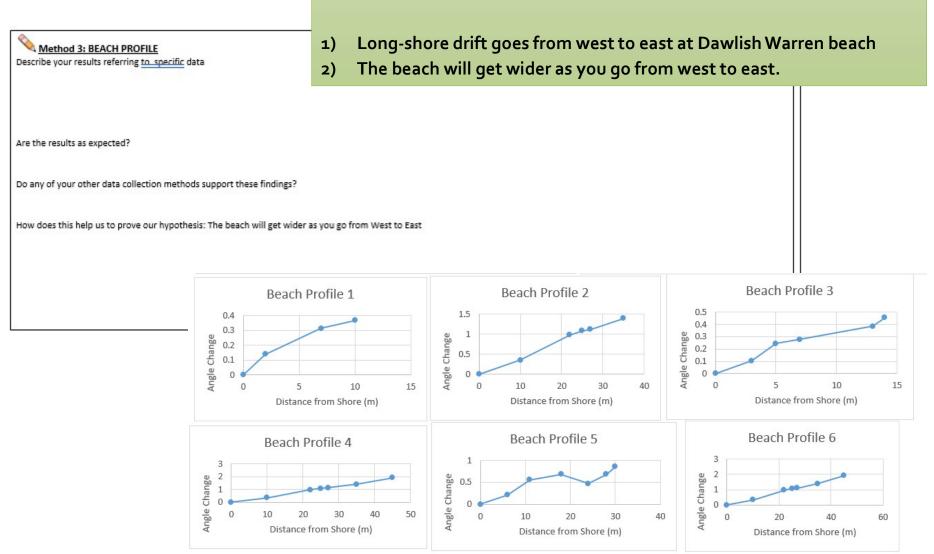






Analysing Results

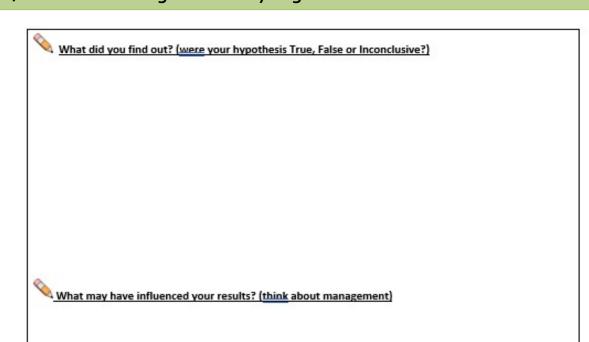




Reaching a conclusion

You should be able to draw together findings and evidence to reach conclusions that relate to the initial questions set in the fieldwork at the beginning of the activity. There should be a definite statement which answers the initial big question and any sub questions set. <u>Hypothesis</u>: These are the questions you are aiming to prove or disprove based on the data you collect.

Long-shore drift goes from west to east at Dawlish Warren beach
 The beach will get wider as you go from west to east.





Is your conclusion accurate?

- 1. Bullet point any problems you had in collecting data.
- Outline advantages and disadvantages of the methods used.
- Based on what went wrong do you think your conclusions are still valid – why?
- 4. Bullet point at least 3 ways the investigation could have been improved?

Limitatio	ns of data collection		
Did you have ar	ny problems collecting your da	ata?	
20			
Method	Advantage of method	Disadvantage of method	How this could be improved
Method	Advantage of method	Disadvantage of method	How this could be improved
Method	Advantage of method	Disadvantage of method	How this could be improved
Method	Advantage of method	Disadvantage of method	How this could be improved
Method	Advantage of method	Disadvantage of method	How this could be improved
Method	Advantage of method	Disadvantage of method	How this could be improved

<u>How could the investigation be improved?</u>

To what extent were your conclusions reliable?



Paper 3 – Dawlish Warren Fieldwork

Key Learning Summary:

Today you are going to:

- To understand what to expect in paper 3.
- To review the Dawlish Warren Fieldwork.

Success criteria:

- Describe theory behind the investigation.
- Consider the risks involved in beach fieldwork.
- Describe the methods used for data collection.

Summary:

- Our groyne height data proved the hypothesis that the Eastern side of the groynes were taller than the west, proving longshore drift was impacting the coastline.
- Beach profiling indicated as we went from West to East along grew in length indicating long shore drift may have been present.
- Results show both hypothesis to be true. Long-shore drift goes from west to east at Dawlish Warren beach and The beach will get wider as you go from west to east.
- Overall, there were problems with data collection on the day which means our conclusions can not be accepted as accurate.



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