Physical Geography fieldwork

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

How effective are the groynes in Swanage Bay?

Explain the advantages of the l**ocation** used for your **physical geography** fieldwork enquiry [2 marks]

Swanage beach has 19 groynes built to stop long shore drift removing the beach and exposing the town, cliffs and sea defences to the force of the waves. This is a large sample size for a study.

The beach is easily accessible for students to carry out fieldwork because Shore road runs most of the length of it, making it an easy location to study.

Explain why it is a **suitable topic** for a geographical enquiry [2 marks]

Effectiveness of sea defences is a suitable topic for an enquiry because the UK is an island nation surrounded by coastline on which many people live and work. e.g. Swanage. This makes coastal defences an important geographical issue in the UK.

It is also suitable because Swanage Bay is affected by Longshore Drift. The large sample of 19 groynes on the beach makes it a good site to study the effectiveness of groynes as a coastal defence.

Suggest one reason why **risk assessment was important** when planning your Physical geography enquiry [2 marks]

Risk assessment was important because coastal environments can be extremely dangerous, particularly the risk of drowning. We therefore needed to assess the potential hazards in Swanage so that we had plans in place if something happened, or we could call off the fieldwork if weather conditions made it too dangerous.

Justify the use of **maps, photographs** or **sketches in your physical geography enquiry** [3 marks]

Photographs of the groynes were useful in our fieldwork because it allowed us to visually see the amount of sand piled up against each side of the groynes. We could use these photos to support our data collection findings in concluding that the groynes were successful at trapping sand on the South side and were therefore effective at stopping long shore drift.

Justify one **primary data collection method** used in relation to the aim of your **physical geography** enquiry [3 marks]

or

Explain how one of your **primary data collection methods** helped to **support your results/conclusions** [3 marks]

We measured sand height below the top of the groyne every meter on either side. (every 5th groyne)
This allowed us to graph results to see if sand was higher on one side or the other of the groynes.
This helped us to see whether the groynes were trapping sand transported by Long Shore drift Northwards along the coast.
This is the purpose of groynes so would show us if the groynes in Swanage Bay were effective as a coastal defence.

Explain how one of your **data presentation techniques** used in your physical geography fieldwork helped you **interpret the data** [6 marks]

One of our data presentation techniques used was to present data was to use exel negative line graphs to display the height of the sand either side of the 5 groynes we surveyed along Swanage Bay beach.

We collected data for this by measuring sand height below the top of the groyne every meter from the land side of the groyne to the sea, on either side of the groyne. This gave us a large table of measurements for 5 groynes.

Once exel was used to create line graphs from the data collected we could clearly see that sand was higher on the South side of all five groynes.

We could then conclude that sand was being trapped, and piling up on the South side of each of the groynes. This allowed us to conclude that the groynes on Swanage beach are effective at trapping sand moved Northwards along the coast by longshore drift. We knew Longshore drift moved Northwards by doing secondary research.

We could also compare the graphs for each of the groynes to see if there were differences in their effectiveness at trapping sand.

It showed us that the groynes furthest North along the beach had trapped less sand. We concluded that this was probably because the groynes to the South had already trapped much of the sand so less was travelling to the North end of the beach.

To what extent were the **data collected** in your physical geography enquiry **useful** in **satisfying the original aims** of the enquiry? [6 marks]

Our sand height surveys of every 5th groyne were very useful at helping us to evaluate the effectiveness of the groynes in Swanage Bay.

This is because all of the five groynes surveyed had sand significantly higher on the South (updrift) side of the groyne than the North side. Every 5th groyne was also a good sample size of the 19 groynes on the beach.

This showed us that the groynes were very effective at trapping sand moved along the coast by Long Shore Drift. This is the main purpose of groynes, as the sand acts as a barrier and dissipates wave energy, protecting the land and sea wall behind from erosion.

Our bi-polar survey of the effectiveness of the groynes was less useful. We looked at 5 categories (effectiveness, accessibility, maintenance, environmental impact, appearance)

This is because we only carried out one survey at groyne 13 so it was not representative of all the groynes along the beach.

Also our findings were our own opinions and it might have been better to ask local people their views about the effectiveness of the groynes as they live in the area.

Assess how effective your **data presentation techniques** were in **representing the data** collected in your physical geography enquiry [6 marks]

We carried out a sand height survey at every 5th groyne along Swanage beach.

We presented this data by creating negative excel line graphs for each groyne.

This was very effective as it visually showed us the height of sand either side of each groyne so we could easily judge whether the groynes were trapping sand moved Northwards along the beach by long shore drift, so were effective defences.

We also carried out 1 bi-polar groyne effectiveness survey (accessibility, effectiveness, environmental impact, visual look, maintenance)

We presented the data as a clustered column chart.
This was very effective because we could clearly see the best and worst scores for the 5 effectiveness categories we scored by observing the positive or negative bars.

However they could have been even more effective if we had added labels to each bar to show the reasons for the scores. Also if we had collected data at more of the groynes.

Human Geography fieldwork

State the title of your fieldwork enquiry in which **human geography** data were collected

How successful is the regeneration of Bristol Harbourside?

Explain why it is a **suitable topic** for a geographical enquiry [2 marks]

This is a suitable topic because urban regeneration is an important geographical issue because it happens in all cities, and has important social , economic and environmental impacts.

It is also suitable because the Bristol Harbourside is a large regeneration project that is easily accessible to students, giving lots of opportunity to collect data in a short time span.

Explain the advantages of the **location** used for your **human geography** fieldwork enquiry [2 marks]

Bristol Harbourside is a good location as it is easily accessible to students as it is only 3 miles from the school so we spent less time travelling and more time collecting data.

Also because it is a large regeneration project in a fairly small area it gave lots of opportunity to collect lots of data in a short time span.

Suggest one reason why **risk assessment** was **important** when planning your Human geography enquiry [2 marks]

Risk assessment is important because city environments can be dangerous, particularly the Bristol harbourside, which has a lot of water so there is a drowning risk. With proper plans we knew what to do in an emergency, for example where to meet if we needed adult help.

Justify the use of **maps, photographs** or **sketches in your physical geography enquiry** [3 marks]

Maps were essential in our study of the harbourside. Using base maps showing the outlines of the buildings allowed us to map the functions of all the buildings in the Harbourside re-development. We could then use this map data to create divided bar charts showing the proportion of different types of buildings, allowing us to make conclusions about whether the buildings added to the success of the re-development socially or economically.

Justify one **primary data collection method** used in your human geography enquiry [3 marks]

or

Explain how one of your **primary data collection methods** helped to **support your results/conclusions** [3 marks]

We carried out a land use survey by using base maps to identify the land use of all of the newer buildings within the Harbourside re-development.

This allowed us to create divided bar charts of the proportion of different land uses in the re-development.

This was really useful to help us to decide on the re-developments success because it showed us the social and economic benefits of the redevelopment.
For example the wide range of new housing and apartments for Bristol people, jobs created in the many new leisure and tourism related businesses and eating out places, and leisure and tourism activities created in the museums, tourist attractions and clubs.

Explain how one of your **data presentation techniques** used in your human geography fieldwork helped you **interpret the data** [6 marks]

One data presentation technique we used was to use clustered column charts to display the data collected from bi-polar environmental quality surveys at 4 sites around the Harbourside.

The clustered column charts helped us interpret the data collected because they clearly showed the positive and negative aspects of each of the 4 sites surveyed.

This allowed us to identify common positives and negatives in each site, for example the lack of green space. We could then conclude that this was one of the failings of the Harbourside re-development.

We could also easily compare the 4 sites using the charts. We could clearly see that the 3 re-developed sites scored more highly for nearly all the data compared to the one site that had not been re-developed. We could then conclude that the re-development had a positive impact on the harbourside and was therefore quite successful.

Assess how effective your **data presentation techniques** were in **representing the data collected** in your human geography enquiry [6 marks]

We carried out a land use survey using base maps and a letter key to show different land uses in the re-generation.
We presented this data by creating 4 divided bar charts with a key.
This was quite effective as it showed us the proportion of different building types in each area surveyed, but was not so effective at showing the locations of the buildings within the re-development.
A colour coded base map may have been a better option as it would have shown us the number, proportion and location of different buildings.

We carried out bi-polar environmental quality surveys.
We presented the data as clustered column charts.
These were very effective because we could clearly see the best and worst points of each area surveyed by the positive and negative bars.
However, they could have been even more effective if we had added labels to each bar to show the reasons for the scores.

Our questionnaire results also clearly showed positive and negative responses as we used a bar chart to present the data.
This was clear and effective but would also have benefitted from explanatory labels to show why certain responses were given.

For **one** of your geography enquiries, **to what extent** were the **results** of this enquiry **helpful in reaching reliable conclusions** [9 marks + 3 SPAG]

For our enquiry about the success of the Bristol Harbourside re-development our results were very helpful in reaching a reliable conclusion that the re-development had been mostly successful but had some areas that could be improved.
We supported our findings with secondary data about the re-development.

Our land use surveys revealed that there were many new houses and apartments, along with a range of leisure and tourism e.g. M Shed and We the curious, and eating out places e.g. Za Za Bazaar within the development.
This allowed us to conclude that a major contribution to Bristol's housing shortage had been made. (However it didn't show the value of the housing that we later discovered had been criticised for being too expensive for many).
We could also conclude that thousands of jobs had been created for local people improving standard of living. Also that the leisure and tourism opportunities created would attract locals and tourists, boosting the Bristol economy.

Our environmental quality bi-polar surveys showed us that re-developed sites such as the Millennium Square and M Shed created a clean and well looked after environment with good accessibility by bike and foot.
Much of the historic feel of the Harbourside had also been retained e.g. watershed and Industrial museum, again attracting leisure and tourism.
The one site (Boatyard) that had not been re-developed scored significantly less than the other three, showing the re-developed sites had a positive impact on the environment of the area.
They also revealed one criticism of the re-development, a lack of green space in all sites.

Our questionnaires revealed that those questioned were happy with key social and environmental features of the re-development such as historic feel, facilities, signage, leisure opportunities and general look. It also revealed they were also concerned about lack of green space and access by car, highlighting some of the improvements that could be made.

Overall, our results allowed us to conclude that the re-development had many economic, social and environmental benefits that outweighed the few negative aspects we uncovered.

With reference to your **methods, results and conclusions**, **suggest** how one of your enquiries **could be improved** [9 marks +3 SPAG]

or

For one of your fieldwork enquiries, **assess the extent** to which the **accuracy of the results** and **reliability of the conclusions** could be **improved** [9 marks +3 SPG]

The methods, results and conclusions of our harbourside re-development enquiry could be improved in the following ways to support our conclusion that the re-development had been largely successful.

One method was to carry out questionnaires of the general public to collect their views about the success of aspects of the re-development such as accessibility, leisure and tourism opportunities, historic feel and facilities. We only carried this out at lunchtime for one day, so the respondents were likely to be people at work on a lunch break. To improve the quality of data and our results we could have questionnaired people at different times of the day or at the weekend to get a wider audience of responses, for example from residents and people visiting for leisure and tourism. This would give us a wider range of viewpoints about the re-development. It would also improve the validity of the conclusion as there would be more varied data to comment on.

One result could have improved was the way we displayed our land use survey data. We used divided bar charts to show the proportion of different buildings in the re-development to then judge the possible economic, social and environmental impact. An improved way of showing these results would have been to produce colour coded base maps. This would have shown us the proportion, but also design and layout of the site so we could have made better overall judgements about its design successes or failures in our conclusions.

Our environmental quality bi-polar survey results were presented as clustered column charts. These could also have ben improved by adding labels to bars to remind us of why we had allocated particular scores. This would have helped us draw more detailed and accurate conclusions.

Overall, more thorough data collection and some better data presentation techniques would have improved the validity of our conclusions.