

WJEC/Eduqas Geography A-Level

Independent Investigation Non-Exam Assessment

1- Introduction and Context Notes

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Introduction

Your investigation is worth a total of **80 marks** and accounts for **20% of your overall Geography A-Level grade**. The focus of the investigation must be derived from the specification content in Components 1 and 2 or the optional themes in Component 3. Achieving a good mark in your investigation could benefit your overall grade, so it is important that you **spend the necessary time** working on it. If you **choose an interesting topic with a real life purpose**, you should find your investigation enjoyable and interesting. You could research a nearby woodland area for your local wildlife association, or investigate urban form for your parish council - there are many opportunities. These guides from PMT aim to help you through the NEA and encourage you to try hard and create an **insightful, purposeful and unique investigation**. We would encourage you to **read through each guide** before you start your investigation.

Section	Contents	Top grade marking descriptors (quoted from the <u>Specification</u>)
Abstract	A short summary of the investigation of up to 250 words, including your research question and how it links to the specification.	
1. Context (introduction and literature review)	State and explain your research question and the related aims of the investigation. State and explain the chosen location of the fieldwork. Produce a fully referenced literature review of the existing published research and geographical theories on the topics relating to your research question. Risk assessment and address any ethical issues	Wide ranging, and thorough use of literature sources with a confident theoretical and / or contextual background leading to a well-defined research question. Confident and informed understanding of risk / ethical issues.
2. Methods of Field investigation (methodology)	Produce a methodology to justify your range of techniques of primary and secondary data collection	Strong evidence of wide ranging and good quality data collection approaches (quantitative, qualitative method and fieldwork skills) relevant to the topic linked to a well-defined, individual research question. Practical individual and group approaches taken in the field are accurate and well explained and justified. Sampling strategy is well designed, explained and justified. The strategy is wholly appropriate to the investigation.
3. Data Presentation of findings	Present your primary and secondary data in a range of ways using quantitative and qualitative skills	Wide ranging and accurate use of appropriate qualitative and / or quantitative data presentation methods / techniques. Well selected, applied and wholly appropriate

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Overview of the Investigation



		cartographic and graphical techniques to support the analysis of findings.
4. Analysis and interpretation of findings	Analyse, interpret and justify your findings in light of the data collected.	Sophisticated analysis and interpretation of findings, clearly showing why they were appropriate and relevant to the research question. Demonstrates some individuality and / or insights into links between the study and other aspects of geography.
5. Conclusions	Draw well-evidenced conclusions using both your findings from primary and secondary data analysis and the theories of the literature review . Discuss the wider findings of your investigation and refer back to your original question.	Sophisticated and confident summary, drawing convincing and thorough individual conclusions that address the research question and substantiate the analysis and interpretation. A well-structured, concise and logical report; accurately references secondary information.
6. Evaluation	Reflect on every one of the above stages by analysing the strengths and weaknesses of your approach. Reflect on the accuracy, reliability and validity of your data and acknowledge where bias and errors could have been involved. Make suggestions for further improvements and further research. Always provide a balanced view on your investigation - no investigation will be perfect, nor will everything be invalid.	Highly effective evaluation of the knowledge and understanding gained from field observation. Perceptive evaluation of each stage of the fieldwork investigation including the ethical dimensions of the field research. Perceptive and well considered reflections for further research and extension of their geographical understanding. Considered improvements suggested pertinent to the investigation.

Here is a suggestion for the **order** in which you could complete your investigation:

- 1. Choose a topic
- 2. Preliminary research into the topic
- 3. Choose a relevant title and define how it links to the specification
- 4. Aims and hypotheses
- 5. Rationale for hypotheses
- 6. Brief plan of methodology
- 7. Risk assessment and methodology
- 8. Data collection
- 9. Data presentation

- 10. Interpretation and analysis
- 11. Write up and collate findings
- 12. Conclusion
- 13. Introduction
- 14. Evaluation
- 15. Appendices and bibliography
- 16. Abstract

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- 17. Proofread
- 18. Contents page
- 19. Presentation/Formatting

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Choosing a Title

After choosing a topic, it is important to **focus on a specific area** that will allow the investigation to be easily conducted and ensures it will not be too time consuming. A **concise and directed title** is vital and it is necessary to spend time refining and improving it. If a title is too vague, you will struggle trying to prove it and may risk going over the word count.

The title should be **related to a particular area of the specification**, which you will specify in your candidate record form. Effective titles will also have a **locational context** and will explicitly link to a **key concept**, theory or process. The location may be **somewhere near to you**, that **you would like to study**, or that **your school is going on a field trip to**. The title could be a **question**, hypothesis or statement.

A hypothesis or statement can be proven/disproven, whereas a question is answered. e.g.:

- What effect have Coca-Cola had on the character of the PPSEZ, Phnom Penh?
- Coca-Cola have affected character of the PPSEZ, Phnom Penh
- Coca-Cola have positively affected character of the PPSEZ, Phnom Penh

To help decide on a specific focus within your chosen topic area, it is important to **conduct research into key theories, concepts and processes** which relate to it and choosing one of these to further research as part of your title. Once you have decided on a title, ensure to **complete further study into this area** and record this under the **rationale for hypotheses**. Ensure to record all researched sources into a suitable bibliography to ensure these sources do not become lost further into your investigation. Sources to investigate may include: social media posts, magazines, textbooks, podcasts, videos, articles, websites, academic papers and library sources.

When deciding the title and location, it is important to consider:

- If you can easily get to the location to collect primary data
- If you can relate it to contemporary issues
- If you can make it useful to another stakeholder. Contacting a local council or organisation may help with this and allow you to obtain secondary data
- If the location is a manageable size, suitable for fieldwork
- If you could feasibly investigate the title with the resources available to you
- If there are opportunities to collect primary and secondary data, of both qualitative and quantitative nature in that location, for the specific research title
- If it would allow you to access the whole mark scheme
- If it would be safe to conduct fieldwork in that area
- If you would find the investigation interesting you will spend a lot of time on it!

Before confirming your title, it is advisable to **start planning your data collection**. If it does not seem manageable and there are not opportunities for a wide range of data collection and potentially statistical analysis, you may want to adjust the title.

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Line of Enquiry	Example
1. Look through the specification and find an area of interest to you - the topic does not have to be from one of your chosen units	1. If you are interested in Hazards, you could investigate the success of flood mitigation and preparedness in a particular area (Hazards)
2. If you are going on holiday , consider the opportunities for conducting fieldwork there	 If you are travelling to the coast, you could investigate the effectiveness of hard and soft engineering (Coasts)
 Consider linking your interests or passions to the fieldwork 	3. If you enjoy attending gigs or sports matches, you could analyse the effect of an event on the surrounding area (Changing Places)
 4. If you find a specific area in the specification harder than others, completing fieldwork in this area could improve your confidence 	 If you struggle understanding the interrelationships between the Carbon and Water cycles, you could study the impact of woodland management in a local forest (Water and Carbon Cycles)
5. Examine recent issues in your local area , which may be suitable for an investigation	5. If urban growth is occurring in your locality, could you investigate the causes of this and its effects on the urban area? (Changing Places)
6. Contact local organisations and groups, who might already be investigating your local area. E.g. local councils or community groups	6. Have there been problems with water supply in your area recently? Which physical factors is this a result of and what are the council doing? (Water and Carbon Cycles)



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(N.B. The advice and examples above are intended as **suggestions only** and it is paramount that each student **independently chooses a unique topic** for their investigation)



Linking the Title to the Specification

You should make it clear as to which parts of the specification your investigation links to and explain which specific areas you will investigate. It may be useful to state the **code from the specification** - e.g. if you are investigating the impacts of deindustrialisation, link it to 1.3.4 Economic change and social inequalities in deindustrialised urban places.

Aims/Hypotheses

After confirming the title (e.g. What impact does longshore drift have on sediment size at Pentle Bay beach?), you will need plan out how you will break down this question into its **constituent elements** that are more manageable to investigate and prove. This will allow a clear direction for the investigation.

You may wish to create the following:

- Aims (Around 3) What are your targets for the investigation and what do you want to find out? E.g
 - 1. To determine the size of sediment along Pentle Bay beach
 - 2. To consider whether coastal management strategies have impacted on sediment size at Pentle Bay Beach
 - 3. To assess whether prevailing wind has lead to the process of longshore drift
- Hypothesis/Sub-Questions (Around 3) The hypothesis/sub-questions should help give direction to your investigation and link directly to the aims:
 - a. Sediment size decreases along the beach
 - b. Coastal management has had no effect on sediment size at Pentle Bay Beach
 - c. Prevailing wind blows in a regular direction and has caused the process of longshore drift

Literature Review

It is important to **research relevant and contemporary issues** surrounding your fieldwork topic and title as well as the theory that supports these areas so to act as a rationale for your hypothesis/ research question. This may be referenced in an **introduction** (to be written toward the end of the investigation) and/or in a **literature review**. This needs to be fully referenced as a bibliography in the appendices at the back of your report.

Example hypothesis: Carbon sequestration is greater in the virgin/ancient woodland of Whittlewood Forest, compared with new woodland at Heartwood Forest.

To research the theory surrounding this hypothesis, you might **investigate other woodland areas**, both in the UK and around the world and use these results to backup theories that you research such as **carbon storage**, **photosynthesis and Net Primary Productivity (NPP)**. You could also research **contemporary issues** such as **carbon fertilisation and starvation**, which relate to



global warming and relevant geographers in the subject. When linked with the **core theory from the specification** and the **history/contemporary issues of the locations** which you are studying, this would provide an excellent start to the investigation. Research may utilise relevant literature, articles, academic publications, videos, etc., found by going to libraries, searching the internet or using a specialist browser such as **Google Scholar**.

Referencing/Citations

It is important to **reference/cite any sources of secondary data** (text, images, data, etc.) which you use to assist your investigation as you go along. You can **use software** to help you, such as the referencing tab on Microsoft Word. It is recommended that you use **Harvard referencing**:

Harvard - Reference in text, which is linked to a **detailed bibliography** at the end of the write up. For example to reference the BBC article 'Death of the Nile', you would use the following details:

- Author: Peter Schwartzstein
- Name of Web Page: Death of the Nile
- Date Published: 10/10/17
- Date Accessed: 04/05/18
- URL: <u>https://www.bbc.co.uk/news/resources/idt-sh/death_of_the_nile</u>

This would create an **in-text citation** of:

... it is likely that water conflict on the Nile will soon occur (Schwartzstein, 2017).

And a bibliography reference similar to:

 Schwartzstein, P., 2017, *Death of the Nile* [Online], Available at: <u>https://www.bbc.co.uk/news/resources/idt-sh/death_of_the_nile</u>, [Accessed 4 May 2018]

You may also wish to include version, publisher or other contributing authors, though the above is the key information. When citing websites, **date accessed** is necessary as websites can be edited. For a **book**, you would list the **city published** and the **publisher**, instead of the **name of the website** and **URL**. If there is **more than one author**, you may write each one, or Peter Schwartzstein *et al.*. The way to reference can change dependent on the source (for example, referencing a recorded interview is different to referencing a documentary) so it is important to research how to reference your specific source.

Location Analysis

Your investigation must have a locational context and it is important that you describe the areas which you will be studying in your report - **contemporary issues**, **history**, **location statistics etc**, which can then be used later to help form your conclusions. These locations must be relatively small and at the **local level**, as for instance you cannot investigate the entire town of Bournemouth, but perhaps one suburb or the seafront area. If **comparing two locations** in your investigation, it is also important to compare the **overview of the locations** in your report.

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Risk Assessment

Safety of the researcher and those around them is the most important part of the fieldwork investigation. Before you conduct fieldwork or collect data, you should **assess the potential risks** in the area you will be studying and **plan the necessary methods of mitigating these risks**. There is a tendency to disregard the risk assessment until after the fieldwork, but completing it beforehand is essential. If there are any risks too great to mitigate, consider choosing another location. Risks may be as simple as air pollution when visiting a city, or high speed trains and dangerous platforms on a visit to a train station. All risks, no matter how severe, should be **noted and mitigated**. Always let someone know your exact location if you are conducting your investigation independently and **be mindful of your surroundings**. An example risk assessment may be:

Potential Hazard	Severity of Consequences (A)	Likelihood to Occur (B	Risk R Mitig	ating Without ation (A x B)	Methods of Control
Severity of 5 – Fatality 4 – Major Ir 3 – Injury/II 2 – Minor Ir 1 – Slight Ir	f Consequences /Major Injury njury Iness njury nconvenience	Likelihood to 5 – Very Likely 4 – Likely 3 – Possible 2 – May 1 - Unlikely	Occur	Risk Rating w Severity of Likelihood to c 1-8 Low Risk 9-17 Medium I 18-25 High Ris	vithout Mitigation Consequences x occur (Out of 25) Risk sk

Ethical Issues

When conducting your fieldwork it is essential to **consider the ethical issues** surrounding your investigation - what is the impact of your fieldwork? Always **aim to benefit the area you are investigating** and at least ensure that you leave it in the state you found it in. If you are visiting a beach, could you **help pick up litter** that would otherwise pose a fatal threat to sea life? If you are visiting an urban area, could you **help a local charity** supporting the homeless? Could you send your investigation (once the remark date for the fieldwork has passed) to a local group who may be able to use your findings, and could you work with local authorities? Whilst you are not expected to go to these lengths, it would be **beneficial to your fieldwork and give it a greater purpose**.

The countryside code is aimed at rural areas and its guidance is appropriate to follow for all students and can be accessed through this link: <u>Countryside Code</u>. You should also:

- Tell the locals about your investigation and its purpose
- Gain consent with people before conducting questionnaires/interviews
- Be polite and use good manners
- Show respect for other people and their views
- Be objective
- Avoid leading questions (e.g. Do you agree that Poole needs additional flood defences?)

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• Be aware of any social or cultural issues you may encounter

The actions you take to be mindful of these issues could be mentioned in your **data collection methodology**, or in a specific section toward the end of your report, but remember that **ethical issues may be present in other areas** of the investigation.

Useful Links

<u>This guide</u> produced by the Royal Geographical Society is highly useful for guidance on every step in the NEA process.

Checklist:

You could print this off and check each section against your final draft, to ensure your maximise your marks for the fieldwork:

Section		Done?
Title Pages	Write the main question & abstract (High Level Addition)	
	Contents page, listing all headings and subheadings with the appropriate page numbers	
Introduction	Define key words in main question	
	Describe appropriate theories & their influence over the investigation and/or what results they predict	
	Describe location. Why here?	
	Define sub-questions or hypotheses	
	What results do you predict for your investigation?	
Methodology	For each sub-question or hypothesis, describe what data needs to be collected	
	Sampling techniques for primary data	
	Annotated blank copies of any data collection sheets needed (Tally Charts, Interviews, Copy of Survey Monkey) explaining why it is necessary to ask these questions	
	List of sources of secondary data needed	
Data Presentation & Analysis	Variety of data representation used (graphs, tables, maps)	
	Each graph is analysed - trends described, anomalies identified, significance of results	

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Soveral analyzed graphs and some accordany data per	
sub-question/ hypothesis	
Use a statistical technique to further analyse some data (High Level Addition)	
Validity of data used: Were your sources necessary?	
Timescale of investigation - did your timing affect the results?	
Frequency of data collection (if repeated collections)	
Ethicality of data collected: Private information? Sensitivity of questions?	
Reliability of secondary sources: Do you trust the website or book? Does the data seem realistic?	
Future Improvements: If you redid this investigation, what would you change to improve your results?	
Discuss the sample size. Is it representative of the general population?	
Conclude answer to each sub-question/ hypothesis, explaining your reasoning for each	
Conclude your answer to your main question - explaining your reasoning	
Do your findings match your initial predictions? Try to explain why or why not	
Can you propose an adaptation or new theory to explain results? (High Level Addition)	
All sources (excluding secondary sources) are listed and correctly referenced	
Any statistical workings - screenshots of spreadsheets, scans of paper notes, photo of calculator (High Level Addition)	
Any further calculations - calculating areas, proportions, etc (High Level Addition)	
Pages are numbered	
Figures are numbered and labelled below the image	
Tables are numbered and labelled above the table	
	sub-question/ hypothesis Use a statistical technique to further analyse some data (High Level Addition) Validity of data used: Were your sources necessary? Timescale of investigation - did your timing affect the results? Frequency of data collection (if repeated collections) Ethicality of data collected: Private information? Sensitivity of questions? Reliability of secondary sources: Do you trust the website or book? Does the data seem realistic? Future Improvements: If you redid this investigation, what would you change to improve your results? Discuss the sample size. Is it representative of the general population? Conclude answer to each sub-question/ hypothesis, explaining your reasoning for each Conclude your answer to your main question - explaining your reasoning Do your findings match your initial predictions? Try to explain why or why not Can you propose an adaptation or new theory to explain results? (High Level Addition) All sources (excluding secondary sources) are listed and correctly referenced Any statistical workings - screenshots of spreadsheets, scans of paper notes, photo of calculator (High Level Addition) Any further calculations - calculating areas, proportions, etc (High Level Addition) Pages are numbered and labelled below the image Tables are numbered and labelled below the table

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