



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

GEOGRAPHY

GRADE 12
RESEARCH TASK
2018

EDUCATOR GUIDELINES FOR CONDUCTING RESEARCH

THE HYPOTHESIS TESTING APPROACH TO RESEARCH TASKS IN GEOGRAPHY FET

1. The Requirements in the Program of Assessment:

Research Activities	Steps	Marks	Length	Time Frame
Formulate the hypothesis	1	10	Statement	Term 1 (1 to 3 days)
Mapping	2	10	A4 size or smaller	
Background information about the study area (Paragraph)	3	10	Paragraph of EIGHT lines	
Data collection	4	10	75 to 100 words (Photographs/Questionnaires)	
Analysis and synthesis Representation of data	5	15	300 to 400 words (Graphs/Tables)	Term 2 (1 to 3 days)
Recommendations and possible solutions	6	10	Structured paragraph(s) of approximately EIGHT lines	
Conclusion – ACCEPT/REJECT the hypothesis	7	10	Paragraph of EIGHT lines	Term 3 (1 to 3 days)
Bibliography	8	10		
Cover page	9	5		
Presentation	10	10		
Total		100		
Submission	9			Due date

2. Choosing a topic for a Geography Research Project (Hypothesis testing):

Isolate topics to specific areas in the Geography CAPS content, for **example**:

- Climate and Weather: (An analysis of weather data over a longer period)
- Geomorphology: (A study of processes and factors influencing flow patterns in local stream/rivers)
- Settlement Geography: (A study of transport patterns in the local community)
- Economic Geography: (A study of the local informal sector and its impact on employment)

GUIDELINES FOR CONDUCTING A GEOGRAPHY RESEARCH

EDUCATOR'S GUIDE

Step 1: Formulating a hypothesis or a geographical statement

As Geographers we seek to understand and explain the interactions between humans, and between humans and the environment in space and time. This is achieved by asking questions or making informed geographical decisions on causes, effects and solutions/recommendations

Development of Hypothesis testing in the Geography FET:

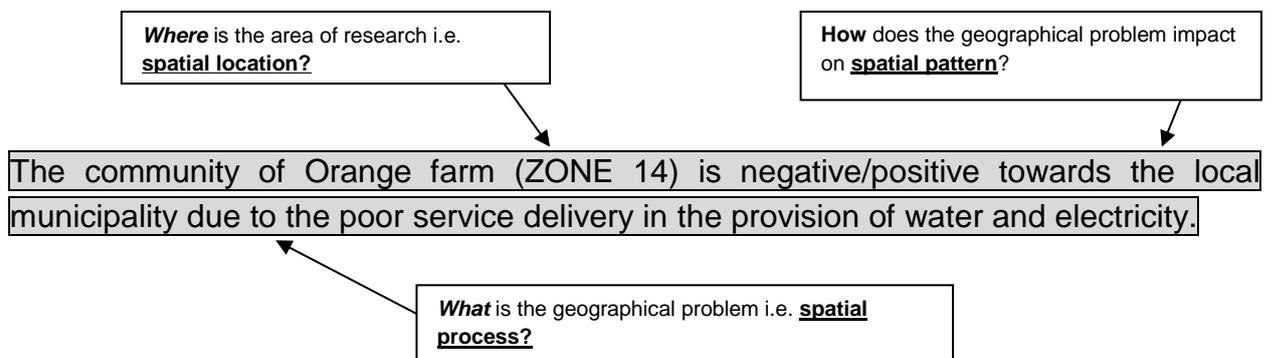
- The learner has to choose a specific area of study where a geographical statement can be made.
- During this stage a geographical statement is made to ask the following:

WHERE IS IT
WHAT IS IT
HOW OUGHT IT TO BE ...
HUMAN IMPACTS ...

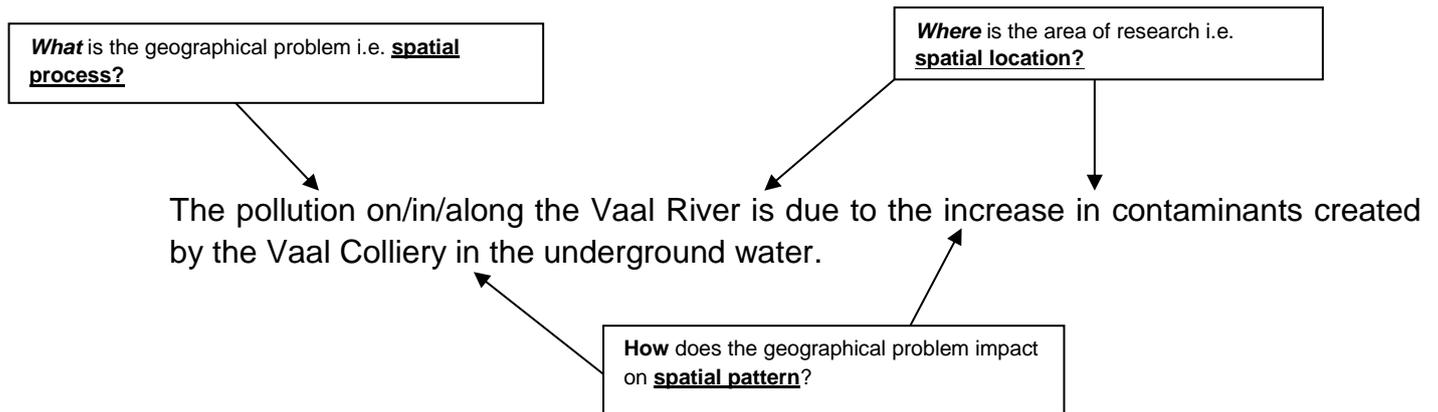
...THE BIG IDEAS OF CAPS (Empirical Analytical Approach)

- The learner should then follow the steps of research to ensure that the geographical statement is well defined.

A possible hypothesis in Settlement geography: Rural–Urban Migration.



A possible hypothesis in Geomorphology: Catchment and river management.



Other possible hypothesis type research:

- The E-Toll system will impact negatively on the economic position of people using private transport in Glenvista, south of Johannesburg.
- The E-Toll system in the area of the Gilloolys interchange will impact positively on motorists and traffic flow.

NB: The HYPOTHESIS is a GEOGRAPHICAL STATEMENT (GEOGRAPHICAL ENQUIRY)

Step 2: Mapping

- The learner must provide a map of the area in question.
- During this stage the learner has to create a buffer zone around the area where the geographical problem exists.
- The map should have a clear legend/key and must be drawn to scale. The scale must be indicated on the map.
- If the map used covers a wider area, buffer zones around the area of study should be created.
- The map used should be the most recent map of the study area.

Step 3: Background information about an area of study.

- Learners need to explain where in South Africa the study area is located. (This can be indicated on the map)
- Description of the study area in terms of its exact position (degrees, minutes and seconds).
- Provide relevant information about the area, for example population of the area or climate of the area.
- Provide media (newspaper/internet/magazine) sources.

Step 4: Methods of data collection

- (a) PRIMARY DATA SOURCES
 - The use of questionnaires
 - Interviews
 - Observations
 - Field trips

- (b) SECONDARY DATA SOURCES
 - Newspaper articles
 - Government department statistics
 - Books
 - Internet

Step 5: Analysis and synthesis of data (Data Representation)

- Collected data should now be used to formulate a discussion around the existing geographical problem.
- At this stage learners should represent some of the information graphically where necessary, for example graphs, sketches etc.
- Graphic information must be analysed during this stage.

Step 6: Recommendations and possible solutions

- Learners should now make recommendations to solve the geographical problem in question.
- Learners should be encouraged to present their original and realistic opinions as far as they possibly can.

Step 7: Conclusion – ACCEPT OR REJECT the hypothesis.

- Learners should now make a decision to either ACCEPT or REJECT the hypothesis.
- Learner to provide reasons for either ACCEPTING or REJECTING the hypothesis.

Step 8: Bibliography

- A comprehensive bibliography should be included.
- List web sites in full.
- Annexures of questionnaires and interviews conducted should be included.

Step 9: Submission

- Learners are encouraged to include graphs, tables, diagrams and pictures where necessary.
- On submission, ensure that a suitable cover page is included.

EXEMPLAR RESEARCH TASK ONE - GRADE 12

CURRICULUM CONTENT: Urban Decay

Inner city decay in Pretoria central takes ugly turn



TSHWANE - The ongoing decay regarding inner city in Pretoria central, took another turn, with rental agencies placing the blame at the door of the property owners who contracted them to administer the properties, and pocket the monthly rentals. The agencies are accused by tenants of prioritizing the collection of rentals but turning a blind eye to the derelict structures which many families call home in the city centre. "We manage property on behalf of owners, who pay us a commission on the rent received". Huurkor Agency has a maintenance department which handles all maintenance issues reported by residents," However, there are individuals [apartment owners] who do not renovate their property when faults are brought under their attention.

Source: ENCA

South African cities attract thousands of new residents every year in search of work and a better life. The housing shortage, along with a shortage of housing subsidies, means that for many South Africans there is no alternative but to live in informal housing and shack settlements. The rapid increase of informal settlements around the cities in South Africa has resulted in an increase in crime rates in the inner city.

The inner city is a part of the urban settlement that is found in the commercial zone. Inner city problems are a characteristic of old, established cities. In the case of South Africa, cities like Johannesburg, Pretoria, Cape Town, Durban and Port Elizabeth are good examples of urban settlements that experience problems in the inner city.

Compile your research by completing the following activities outlined below:

Step 1: Formulate the hypothesis

Formulate your own hypothesis based on a problem you have identified, e.g. from a newspaper article/observation/discussion etc.

The lack of INTERVENTION by city authorities on Urban Decay in the Pretoria CBD has resulted in poor service delivery within the inner city.

NB: Learners must formulate their own hypothesis using the above example.

Step 2: Mapping

- Provide a map showing the position of the informal settlement in relation to the city that you have identified for your research task. (It is easier to choose your local area as an area of study.
- The map should clearly indicate buffer zones where informal settlements are located.
- The map should include areas of the city that are regarded as crime “hotspots”
- The map must have a clear legend/ key.
- The scale should be indicated on the map.

Step 3: Background information about the study area

- Provide a brief introduction and description (background information) of the city (study area) you have selected in terms of:
- Historical background
- Population.
- Climate.
- Describe the location of informal settlements in relation to the inner city.
- Other relevant statistical information.

Step 4: Data collection

- (a) Collect data using at least THREE methods e.g.
- questionnaires
 - interviews
 - field trips
 - photographs and maps
 - Literature research (newspapers, magazines, books etc.)
 - internet research

Step 5: Analysis and synthesis of data

- Analyse the data that you have collected, and formulate a report on your findings. Support your findings with graphs, photos, etc.
- Briefly discuss how the existence of informal settlements contributes to crime in the inner city.
- Briefly discuss the contribution of high unemployment rate in the informal settlements to crime in the inner city.

Step 6: Recommendations and solutions

- Provide suitable recommendations and solutions to the problem

Step 7: Conclusion – ACCEPT/REJECT the hypothesis

- Based on your findings in activity five you may either ACCEPT or REJECT the hypothesis.

Step 8: Bibliography

- Provide a bibliography for your research. If you have done any internet research, you must provide the website that you have used in full.

Step 9: Submission

- Collate all your information.
- Include a table of contents.
- Ensure that you include a copy of the questionnaire and/or questions asked in your interviews as annexures.
- Design a suitable cover sheet.
- Submit your research.

EXEMPLAR RESEARCH TASK 2 - GRADE 12

Curriculum content: Catchment and River Management

THE IMPACT OF HUMAN ACTIVITIES ON RIVERS

Rivers obtain their water from surface run off and ground water of their drainage basin. Activities that take place in the drainage basin affect the quality of water in the river.

Humans impact rivers in many ways. The often flow of harmful substances produced by humans cause many kinds of changes in rivers and aquatic environment. Often human actions also change the river flow or the shape of the river bed.

When human settle in the river's catchment area they usually modify the land surface and even the river itself, these modifications can impact on the drainage basin in different ways. The amount of water reaching the river may be considerably reduced.

NB:

Choose the river/stream closest to your school as an area of study AND conduct your research by following the steps outlined below:

Step 1: Formulate the hypothesis:

Human activities impact negatively on the quality of water and the flow pattern in the section of the Vaal River passing the town of Parys.

Step 2: Mapping

- Provide a map showing the river being studied and the adjacent settlements.
- Create a clear buffer zone at the part of the river that is being studied.
- The map should have a clear key/legend.
- The scale should be indicated on the map.

Step 3: Background information about the river under study

- Describe the provincial location of the river.
- Climate – particularly the amount of rainfall that is received.
- Vegetation
- Relief and Topography
- Underlying rock structure
- Specify the river type: (permanent, periodic, etc.)
- Describe the river stage (youth, mature or old age) at your study area.

Step 4: Data collection

Collect data using at least THREE methods e.g.

- questionnaires
- interviews
- field trips
- photographs and maps
- literature research (newspapers, magazines, books etc.)
- internet research

Step 5: Analysis and synthesis of data

- Analyse the data that you have collected, and formulate a report on your findings. Support your findings with graphs, photos, etc.
- Using the above sets of data collected determine the extent to which the river is affected by human activities.
- Explain in detail how the identified human activities impact on the quality of water and the flow pattern of the river.

Step 6: Recommendations and solutions

- In your opinion as a researcher what would be the possible solution(s) to the negative impact caused by human activities in the river?
- Make the long term recommendations to the Government department(s) leading to the legislature that protects the rivers.

Step 7: Conclusion – ACCEPT/REJECT the hypothesis

- Based on your findings in activity five you may either ACCEPT or REJECT the hypothesis.
- Provide reasons for your conclusion.

Step 8: Bibliography

- Provide a bibliography for your research. If you have done any internet research, you must provide the website that you have used in full.

Step 9: Submission

- Collate all your information.
- Include a table of contents.
- Ensure that you include a copy of the questionnaire and/or questions asked in your interviews as annexures.
- Design a suitable cover sheet.
- Submit your research.

RUBRIC FOR RESEARCH TASK

NAME OF LEARNER: _____

GRADE: _____

HYPOTHEIS : _____

MARK	1	2 - 4	5 - 7	8 - 9	10	Educator Mark	Moderator Mark
Step 1: Formulation of hypothesis	Learner has not understood the formulation of a hypothesis and has merely stated a topic.	Learner has formulated the hypothesis Not a research topic specific to Geography Enquiry Specific area not identified No specific problem. No specific impact.	Learner has formulated the hypothesis Describes a topic specific to Geography Enquiry Geographical area is not specific. Problem not specific. Impact not specific.	Learner has formulated the hypothesis Describes a topic specific to Geography Curriculum. Geographical area is specific. Problem is specific. Impact is specific.	Learner has formulated the hypothesis Describes a topic specific to Geography Curriculum. Geographical area is specific. Problem is specific. Impact is specific.		
MARK	1	2 - 4	5-7	8-9	10	Educator Mark	Moderator Mark
Step 2: Map	Irrelevant map Limited to no information.	Relevant map of Research area included. Limited information No legend. No Scale No Buffer Zones created	Relevant map of Research area included with appropriate legend and limited detail.	Relevant research area identified on a map with an appropriate legend, appropriate labels and use of scale.	Accurate map used with appropriate detail showing accurate details of buffering and delineation of research areas with appropriate information including a legend and a scale.		
MARK	1	2 - 4	5 - 7	8 - 9	10	Educator Mark	Moderator Mark
Step 3: Background information	Unable to give a description or background information of the area being studied in a paragraph	Some description of an area is provided in a paragraph with limited background information given.	Relevant description of an with most of the background information provided in a paragraph	Study area is well motivated and forms part of the local community and a related geographical issue. Learner has fully described the study area in a paragraph and has provided the appropriate background information relevant to the Hypothesis.	Study area is well motivated and forms part of the local community and a related geographical issue Learner has fully described the study area in a paragraph of exactly EIGHT lines and has provided the suitable background information relevant to the Hypothesis.		

MARK	1	2 - 4	5 - 7	8 - 9	10	Educator Mark	Moderator Mark
Step 4: Data collection	Only one primary or one secondary source of data is used.	Primary and secondary sources of data collected which inadequately informs research methodology.	Primary and secondary data sources that mostly enable an understanding of the research area studied.	A variety of primary and secondary data sources collected, that accurately define the hypothesis.	Specific primary and secondary sources collected that accurately define the Hypothesis. Relevant communication from related authorities in the form of letters/emails etc.		
MARK	1 - 3	4 - 6	7 - 9	10 - 12	13 - 15	Educator Mark	Moderator Mark
Step 5: Analysis and synthesis of data	The learner shows little understanding of the topic and is unable to identify, interpret or show the effects from the sources used. Less than 300 words without appropriate graphical representation	The learner is able to identify some of the problems from the sources but shows limited understanding of interpretation and effects. Between 300 and 400 words. Graphical information not relevant to Hypothesis.	The learner is able to identify and interpret the sources in most case, but shows limited ability to show the effects. Between 300 and 400 words. Graphical Information relevant but not interpreted according to the Hypothesis.	The learner is able to identify the problems and interpret all the sources and is able to show some insight of the effects. Between 300 and 400 words Graphical Information relevant and interpreted according to the Hypothesis	The learner is able to identify the problems and interpret all the sources and is able to provide clear insight of the effects. Between 300 and 400 words used. Variety of Graphical Information used relevant to Hypothesis.		
MARK	1	2 - 4	5 - 7	8-9	10	Educator Mark	Moderator Mark
Step 6: Recommendations and solutions	The learner is unable to provide relevant recommendations and solutions to the problem in a paragraph format	The learner could only provide some recommendations and solutions to the problem in a paragraph format	The learner is able to provide meaningful recommendations and solutions to the problem in a paragraph format.	The learner provides clear insight into all relevant recommendations and possible solutions to the problem in a paragraph format	The learner provides clear insight into all relevant recommendations and possible solutions to the problem in a paragraph format of EIGHT lines		
MARK	0	1 - 4	5	6-9	10	Educator Mark	Moderator Mark
Step 7: Conclusion (Accept/Reject)	No conclusion provided with no ACCEPT or REJECT statement	Conclusion provided but research conducted does not accept or reject the hypothesis	Conclusion provided with an acceptance or rejection of the hypothesis.	Conclusion provided with an acceptance or rejection of the hypothesis. The research conducted provides a framework for the ACCEPT/REJECT statement	Clear Research methodology using Hypothesis testing techniques. Is able to see the ACCEPT/REJECT statement with a variety of sources and findings		

MARK	0	1 - 2 - 3	4 - 5 - 6	7 - 8 - 9	10	Educator Mark	Moderator Mark
Step 8: Bibliography	No bibliography provided. No references used.	Bibliography provided is incomplete. Sources used are not acknowledged. Poor understanding in/of the creation and use of a bibliography. 1 to 3 mostly correct references	Limited Bibliography provided but is correctly formatted. Some sources and materials are referenced accurately. 4 to 6 mostly correct referenced data.	Bibliography provided in correct format. Most sources and materials are referenced accurately. 7 to 9 mostly correct referenced data.	Bibliography provided in the correct format. Extensive research conducted and bibliography shows insight into research area. 10 or more correctly referenced sources		
MARK	0	1 - 2	3	4	5	Educator Mark	Moderator Mark
Step 9 Cover page	No cover page is provided.	Cover page is provided with incomplete details.	Cover page contains all the required details.	Creative cover page used that contains elements of research captured and most of the relevant information.	Cover Page with all relevant information including stated hypothesis and creative expression of selected area of study		
MARK	0	1-4	5-7	8-9	10	Educator Mark	Moderator Mark
Step 10 Presentation	Learner does not present himself on the due date/day of the presentation (No proper medical certificate/reason) for absence given	Learner is unable to present the process followed in identifying the hypothesis and conducting the research and reaches a state of ACCEPT/REJECT phase	Learner is able to present process in identifying the hypothesis and conducting the research to reach a state of ACCEPT/REJECT phase. Is not able to show how research area is able to benefit the natural and/or social environment.	Learner is able to present process in identifying the hypothesis and conducting the research to reach a state of ACCEPT/REJECT phase. Is able to show how research area is able to benefit the natural and/or social environment.	Learner is able to present Hypothesis related to the Geography Curriculum. Traces steps of research processes and is able to make a logical ACCEPT/REJECT statement. Research is centred around adding value to natural and social environment and is directly related to the GEOGRAPHY CURRICULUM		
						Educator Mark	Moderator Mark
TOTAL MARK – 100							

COMMENTS