Examiners' Report

June 2016

GCSE Geography A 5GA1H 01

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Introduction

As in previous series, this paper demonstrated the best and the worst answers from candidates. Excellent case-study knowledge (which was focused on the questions set) saw generally high marks for many in the last section of the paper, but explanations were mostly absent. Section A, once again, revealed patchy skills with OS map-skills especially weak from some candidates. Competency in understanding the relevance of technology, census, GIS etc. and its application to how it could provide additional data / information were also notably absent from many responses (Question 3). Many candidates seemed very prepared for AO1 questions where there was basic recall, but failed to make broader geographical linkages required for AO2 and AO3.

Once again, the greatest discriminator was often a lack of clarity about what to do, with command words too often ignored and problems of scale and context all too apparent when looking at the map extract.

As in previous series, there were a few candidates who looked as if they may have run out of time since there were some blank responses on occasion towards the end of the exam. In this year's exam, Question 5(b) had a high tariff at 9+4 marks so it should have been attempted if at all possible. Please remember to advise candidates that they really should only need to use the answer-space provided, and not over-write.

This was the fourth series since the introduction of SPAG. As before remember that the 4 SPAG marks are based both on the technical quality of written communication, e.g. sentence structure, full-stops and capitals as well as the complexity of the writing and the use of technical geographical language and / or complex terms. A candidate who scores a 0 response for the answer, i.e. incorrect, would normally be given 0 for the SPAG since there is a requirement to write in the 'context of the demands of the question'.

Compass skills are the 'bread and butter' of this part of the exam, yet even at this tier there were a number of candidates who were unable to link the map to the ground evidence from the photograph. This is clearly a skill that needs continual practice from Year 7 upwards. This will also be an essential skill for the new 2016 GCSEs as well.

This report will provide exemplification of candidates' work, together with tips and/or comments, for a selection of questions. The exemplification will come mainly from questions which required more complex responses from candidates.

Question 1 (b)

Generally this question was answered well with most candidates having an understanding of the concept of what impacts a settlement's site. Due to the large range of potential site features, many candidates could have scored maximum marks a number of times over. Candidates did not achieve full marks when they did not develop at least one of their ideas, or if they only focused on the roads and accessibility (which generally only scored 1 mark). A few also focused on the issue of flooding – which was not relevant or just listed features of the village, such as the hotel or campsite, which again received no credit. It was a little disappointing to see how many candidates use the term 'low relief' and 'flat land' interchangeably. By GCSE it would be expected that candidates know that low relief does not always mean the land is flat.

(b) Suggest why the **site** of Little Stretton (4491) may have been chosen for a settlement.

(3)

> Little Stretton lies within a u-shaped valley. It has mountains on either side which act as natural defenses and wind-breakers.
> There are forests nearby which could have provided resources for building.
> There is a number of small rivers flowing around it, making the land fertile and perfect for growing crops.

ResultsPlus
Examiner Comments

Good use of map evidence secures full marks here. The physical factors seem much more obvious in the context of a site response, rather than the human factors.

ResultsPlus
Examiner Tip

Use of 4 or 6 figure grid references is always encouraged in these types of questions.

This response also scored 3 marks.

(b) Suggest why the **site** of Little Stretton (4491) may have been chosen for a
settlement.

(3)

It could have been chosen because the
land is flat so it's easy to build on
or grow crops. It's also near a river, so
theres a good natural water supply.
There is also a train track near it, so
theres good connection links to and from
other places.

ResultsPlus
Examiner Comments

Human factors were given credit within the context of
accessibility which featured on the mark scheme.

Question 1 (c)

This question was one of the more poorly answered questions on the paper. This was fundamentally because the question was about the road pattern and unless the candidate referred back to the OS map (as they were instructed to do); they did not pick up on the relationship between relief and road pattern. Many just described the sketch map. Consequently, most just wrote about the roads and railway line going between the settlements. A number of candidates once again focused on flooding, mentioning that there were no roads near the Darnford Brook due to flood risk – clearly there was no credit for this. Only a handful of candidates identified the clear North-South direction of the route pattern, although 'flat land' or 'located in a valley (which was easier to build in)' were more common answers.

(c) Using the OS map extract, suggest reasons for the pattern of transport in the area shown on Figure 1c.

(3)

Because it is in high land (because all the contour lines are close together) it's hard for roads to be built so they built them on flat land (46 95) (in All Stretton) Ratlinghope has rivers/tributarys so in the high land so had to build road on flat land (4197)

(Total for Question 1 = 9 marks)

ResultsPlus
Examiner Comments

Map evidence and linkage to physical features with some development earns this response 3 marks.

This answer was also awarded 3 marks.

(c) Using the OS map extract, suggest reasons for the pattern of transport in the area shown on Figure 1c.

(3)

There is a primary route running ~~through~~ ~~there~~ just East of All Stretton because on either side the land seems to be steeper which wouldn't be ideal and would be too steep to build roads. The railway line avoids the wooded areas and the river and the road avoids the river to avoid flooding. The road and railway goes through built up areas ~~also~~ because it would give these areas good access.

(Total for Question 1 = 9 marks)

Question 2 (a) (ii)

This is a basic map skill – information from the map to understand cross sections (Topic 2, page 13 in the current specification). Yet the 'V' appeared all over the place; this is clearly a skill that a majority of candidates find challenging.

Many candidates seemed to struggle with the question, either marking the 'V' in the wrong place on the cross section or in many cases not attempting the question at all.

This response did not score any marks.
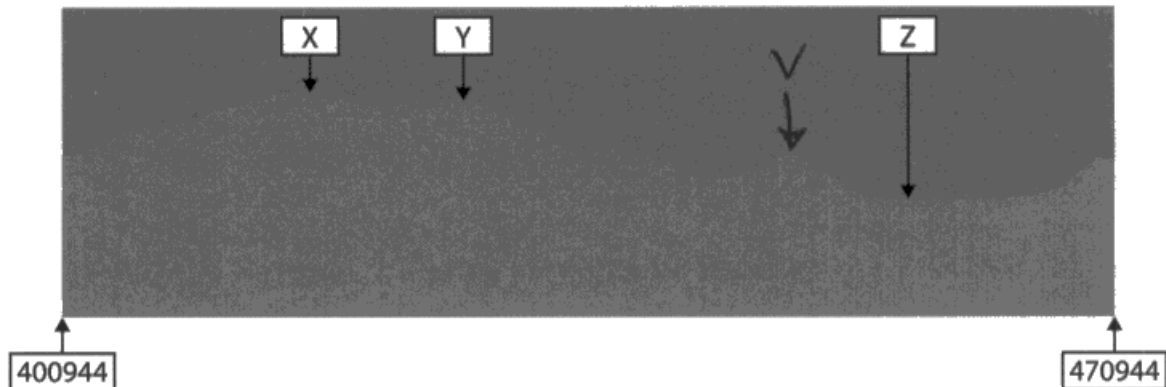
2   (a) Study Figure 2a and the OS map extract.

Figure 2a

A valley cross-section from grid square 400944 to 470944

(i) Identify the features found at locations X, Y and Z on Figure 2a.

(3)

Location	Feature
X	View point
Y	Boiling Well
Z	ꞏꞏꞏ Parking

(ii) On Figure 2a, mark on the cross section with **V** the location of Carding Mill Valley.

(1)

In this example the arrow is incorrectly placed.
Unfortunately, many answers were like this one.

Question 2 (b) (ii)

This question was generally answered well with a good proportion of candidates attaining full marks. It was encouraging to see that candidates are being taught the well-used structure of 'general trend-evidence-anomalies' for describing graphs. This approach allowed them to attain all 3 marks. Also interestingly not many candidates identified the strong positive correlation in the data set – something they do naturally in maths, but this appears not to be a skill they think to transfer to geography. Also some of the candidates expressed the trend in very unusual ways such as 'with lessening distance to the source the river gets less deep'; obviously this is correct, but perhaps rather clumsily expressed.

(ii) Describe the relationship between distance from source and average depth.

(3)

As the source distance increases so does the average depth. It begins to increase by 0.01 between distance 50 - 200 m. Further on at distance 1000-1200 the average depth increase is 0.5. However at site 10, the average depth begins to decrease as the distance increases. Throughout the majority of the graph, the average depth does increase once the distance from the source does. The final site may be an anomaly. It begins to space out one the graph reaches a distance (Total for Question 2 = 9 marks) of 1200 instead of the depth being compact.

ResultsPlus
Examiner Comments

This is a 3 mark response, but it has been selected to show how the candidate has often repeated themselves. Candidates need to always be reminded to write in a concise style and to re-read their work.

Question 3 (a) (i)

Again, this question was answered well with many candidates scoring full marks. For those candidates who identified a trend such as 'an ageing population' or 'numbers of people increase with age' or 'slightly more males than females'; attaining 3 marks was easy as two additional pieces of data-based description allowed them to achieve full marks with ease. A small number of candidates added the male and female %'s together stating that therefore '70% of the population is over 60 years old' – which is inaccurate. Also a number of candidates made their answers far more complicated than they needed to be by literally writing down the percentages of every age category and by how much they had increased or decreased from the one below.

In some cases however, answers were not always expressed precisely: 'more men aged 15-29' (more than what?) and 'most people over 60' (35% is not most). A number of responses described the pyramid in generic terms – 'shows ages of men and women', which did not get credit as candidates needed to use the information in the resource.

3 (a) Study Figure 3 in the Resource Booklet.

(i) Describe the characteristics of the population pyramid.

Use data in your answer.

(3)

There a high percentage was for 60+ years for both female and male. Male being 35% and females being 35%. In addition theres 47% of females from ages 0-44. In addition theres a total of 35% males aged 15-44 in southShropshire. Theres 70% males aged 30-60+ in southShropshire.

ResultsPlus
Examiner Comments

This was typical of many responses. Candidates were able to pick off items of data from the resource to give clear descriptive comments which earned them 3 marks.

Question 3 (a) (ii)

Many candidates failed to pick up the 1 mark allocated to this question. A high proportion of responses were either that the data was 'unreliable' or 'not 100% accurate' or 'wrong'. Other incorrect answers quite frequently given were that the data was 'hard to read off' or 'not precise' and others seemed confused by what the question was asking, responding with 'doesn't show how many people only %'. Some candidates also focused on the census data taking 'too long to complete' or being 'expensive/costs more' and so also scoring 0. For those that responded correctly, it was generally for noting that it was 10 years between census data collection and that the data was therefore 'out of date' or 'not up to date' or 'old'. Quite a few candidates also noted that 'people may lie' on the forms or that 'not everyone is included'. Such responses were able to be credited.

(ii) State **one** limitation of using census data as a part of geographical research.

(1)

It's old data and so won't fit with the current society, meaning that it won't be accurate enough to use fn the geographical research. Therefore ft don't be reliable to use as data.

ResultsPlus

Examiner Comments

This is a clear response, but only 1 mark is allocated to it, so extension is not required.

ResultsPlus

Examiner Tip

'Out of date' gets a mark, but few candidates were aware that the census is taken every 10 years. This is an important part of geography.

This example was not awarded the mark.

(ii) State **one** limitation of using census data as a part of geographical research.

(1)

Expensive to carry out

ResultsPlus

Examiner Comments

This kind of comment was common, with candidates not recognising the need to frame their answer in the context of undertaking geographical research themselves, rather than as the agency collecting the census data.

Question 3 (b)

Examiners reported that a large proportion of the candidates scored only 2 marks for this question. Answers were very vague about how accurate computers are or how computers show information without errors so analysis is easy. So, with no specifics such as using excel or spreadsheets or generating graphs to reveal age, income etc., it was difficult to award many marks. Also a number of the candidates seemed to think that they need to write about collecting the data using ICT so wrote about making surveys or questionnaires on a computer. The candidates who did score well tended to be those who identified the usefulness of using GIS which involves layering of data – this immediately allowed them to gain 2 marks and then a general comment about using computers to draw graphs or tables to organise data allowed them to attain full marks.

(b) Explain how you might use a computer to analyse census and population data.

(3)

You may use a GIS (Geographic Information System) programme to layer a base map of population (such as one from Google Earth) with a map of census data (for example crime rates) in order to make connections between census data and the census data. Eg Such as, if crime occurs in densely populated areas more frequently.

(Total for Question 3 = 7 marks)

TOTAL FOR SECTION A = 25 MARKS

ResultsPlus
Examiner Comments

Often GIS was included in the response, and in this case it has been well used in a meaningful way to get full marks.

Question 4 (a) (i)

This was another question which often produced very vague comments or sweeping statements. However, once again, for those candidates who identified a general trend such as 'decreasing yields around the equator' or 'most countries experience a decrease in crop yields' - attaining the additional 2 marks through located examples was easy. It was impressive to see that quite a few candidates identified the link between current climate types and the impact, namely hotter countries would suffer the greatest decrease in yield while cooler climate areas might see an increase. It was easy to give credit here as this is a sophisticated trend. It was also interesting to note that some candidates have a good general knowledge of the world and are able to identify country names whereas others clearly could not. Not many candidates confused the crop yields data with temperature data (the blue and red did not obscure their thinking). However, what was disappointing was that many candidates wrote things like 'at the bottom of the equator' or 'countries up high' or 'countries to the left or right'. Correct and sometimes sophisticated language should always be taught as a matter of best practice.

SECTION B: CHALLENGES FOR THE PLANET

Answer ALL questions in this section.

Spelling, punctuation and grammar will be assessed in 5*(b).

4 (a) Study Figure 4a in the Resource Booklet.

(i) Describe the pattern of the predicted impact on crop yields of a 3°C rise in global temperatures.

(3)

> The South America and some parts of Africa are expected to decrease significantly. Other places such as North West of Europe are expected to increase. North America have areas in which are expected an increase or decrease of crop yield.

ResultsPlus
Examiner Comments

Here there are three concise and relevant statements based on distribution data from the map.

ResultsPlus
Examiner Tip

'Pattern' forms a common part of exam questions; candidates need to be aware of its significance in trying to describe an overview.

Question 4 (a) (ii)

Again, this question was generally answered well by the majority of candidates. If two different ideas were identified and explained gaining 4 marks was relatively straightforward. When only one idea was explored, such as the burning of fossil fuels, it was difficult to achieve maximum marks unless the enhanced greenhouse effect was explicitly well explained. Increased car ownership, burning fossil fuels and cows and their methane contribution were the most common answers given. Some candidates also included some facts and figures, such as the number of coal power stations in China or the number of cars in Delhi, for which credit was given as long as it was in the context of developing an explanation.

(ii) Explain how the actions of people contribute to climate change. *however some parts are expected to have a decrease in crop yields.*

(4)

> Human activity contributes to climate change for instance the burning of fossil fuels due to driving cars for instance releases pollutant gases such as carbon dioxide into the atmosphere Thus contributing to the greenhouse effect. Also increased cattle ranching due to the high demands of beef for e.g. for burgers in McDonalds leads to the release of methane a greenhouse gas which also contributes to the greenhouse effect which causes climate change.

ResultsPlus
Examiner Comments

This response gives two clearly explained actions which are well linked to climate change.

4 marks were awarded.

ResultsPlus
Examiner Tip

Using words such as 'because', 'causes' etc in the context of these questions reinforces the idea of explanation.

(ii) Explain how the actions of people contribute to climate change.

(4)

People cause climate change. Cars burn fuels which were once fossil fuels so the cars release CO_2 (carbon dioxide) into the atmosphere, this causes a warming effect because carbon dioxide is a greenhouse gas and it prevents heat escaping. Also methane is released into the atmosphere when mining fossil fuels. Methane traps heat in and is responsible for 20% of the greenhouse gases. Both methane and carbon dioxide contributes to climate change.

Question 4 (b) (i)

Many candidates only scored 2 marks for this question, as they only focused on ash blocking out radiation (1 mark) and temperatures cooling (1 mark). Only a few candidates expanded on the idea of 'back scattering' and many confused the role of SO2. Most mentioned SO2 as part of the particulate matter blocking out the sun (which could be ignored as the ash bit was correct), but for those who mentioned that it was a greenhouse gas (without also mentioning CO2) and so caused global warming – no marks were given. Also there was a lot of confusion over the role of the ozone layer in global warming and global dimming and some candidates correctly identified the 'cloak effect' of ash but then went on to mention that it traps heat causing warming. Methane was another gas which was often mentioned – but it is not significant in the context of volcanic eruptions. If the idea of a cloak was discussed and the release of CO2 was mentioned it was easier to gain full marks. Exemplification was only credited if it formed an explicit part of the explanation.

(b) Study Figure 4b.

Volcanic eruptions 'contributed to global warming pause', scientists claim

Figure 4b

A newspaper headline linking volcanic eruptions and climate change

(i) Explain why volcanic activity causes climate change on a global scale.

(3)

When volcanos erupt, they spew huge amounts of dust and other material into the atmosphere. This volcanic dust stays in the atmosphere for a long time, and blocks infra-red rays coming into the Earth from the Sun. This can cause volcanic winters, like the eruption of Krakatoa in 1883. The build up in volcanic ash leads to a drop in global temperatures as more and more infra-red radiation from the Sun is blocked.

ResultsPlus
Examiner Comments

This response scored 3 marks, as the exemplification was used to develop the explanation required in the response.

ResultsPlus
Examiner Tip

Often 'explain' questions (2 or 3 marks) don't need examples of case studies to be used and, in fact, they usually serve as a distraction.

Question 4 (b) (ii)

What the candidates struggled with here was the concept of an attitude, despite it being explicit in the specification. If the candidates started their answer with 'One attitude to climate change is...' they generally managed to gain 2 marks. However, for many they just dived in with an action like – recycle or walk to school which then did not allow them to score anything as this did not reveal an attitude (either implicit or explicit), but instead an action. For those that recognised that global warming might be a natural occurrence due to changes in orbit etc., it was easy to gain full marks. For those that chose the route of the Kyoto agreement, most scored nothing as they gave correct detail about the conference but failed to link it to an attitude.

(ii) Outline **one** attitude towards climate change.

(2)

Countries attended the Kyoto Protocol and promised to reduce their carbon emissions back to 1995 standards

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Examiner Comments

This type of response was all too common. No attitude was indicated, so 0 marks were awarded.

ResultsPlus
Examiner Tip

Candidates need to be familiar with the specification, not only in terms of expected content and exemplification, but also with the technical language.

(ii) Outline **one** attitude towards climate change.

(2)

Some people beleive climate change is a myth created by scientists, despite all of the evidence. They may only be using this 'myth' attitude as an excuse so they can continue to unneccessarily damage the environment.

(Total for Question 4 = 12 marks)

ResultsPlus
Examiner Comments

This is a much stronger response which was awarded 2 marks. It is clearly linked to attitude rather than action. Regrettably answers such as this one were quite rare.

(ii) Outline **one** attitude towards climate change.

(2)

In Kyoto, 181 countries have signed a protocol agreeing on to having a limit on the gas emissions. E-g burning fossil fuels.

ResultsPlus
Examiner Comments

Sadly, this type of response was all too common. No marks were awarded as 'attitude' is nowhere to be seen, either implicit or explicit.

Question 5 (a)

Despite the stimulus material – namely Bogota's road deaths, the vast majority of candidates wrote about other schemes like London congestion charging and park and ride schemes. When they did this they then tended to give loads of case study facts (cost of bus ride into Cambridge or how to hire a 'Boris bike') but often did not focus on the advantages for the urban population. Therefore they did not score well despite a lot of writing.

Also most candidates mentioned the benefit of 'less deaths' (no credit as it was in the question) and those that used the data wrote so much on the actual numbers and how they had changed – which only scored 1 mark. Also many candidates wrote about a number of schemes but came back to the same advantages of fewer cars on the road and quicker journey times – which could only be credited once. Also many made sweeping statements about safety or buses being cheaper without comparing them to an alternative transport method.

Finally, many answers focused on global warming and CO2 emissions (again) but this had already been tested. Only 1 mark was awarded for this effect, especially as this is a global advantage and is not exclusive to the urban area in question.

5 (a) Study Figure 5 in the Resource Booklet.

The Bus Rapid Transit system (BRT) has significantly reduced the number of road traffic deaths along the Avenida Caracas in Bogotá since it was introduced in 1999.

Suggest the advantages of sustainable transport schemes such as the BRT for people in urban areas.

(4)

The Bus Rapid Transit System significantly reduces road accidents as there are less cars on the road. The area is near enough free from congestion.
The ~~Con~~ London Congestion charge enables people to have to pay £8 to ride a car from 7am–8pm. This encourages more people to walk and become healthier as well as decrease congestion rau rates by 21 percent. Park and ride in Swansea means that people do not have to drive into the city, reducing traffic and congestion.

ResultsPlus
Examiner Comments

A range of exemplification is included in this response as well as reference to the resource. There is sufficient development for maximum marks.

Question 5 (b)

Examiners sometimes found that it was difficult to use the full range of the mark scheme, with many answers achieving either Level 3 or Level 1 marks or 0 marks. A significant number of candidates did not read the question carefully enough and so wrote about TRF damage and not management. Some of these were clearly written by able candidates as they were very well written with outstanding case study detail and facts. Sadly, these then achieved zero marks on both the score and the SPAG – a loss of 13 marks.

For those that focused on management strategies it was relatively easy to reach the top of Level 2 as only 1 strategy needed development through explanation. Many had this for more than one strategy which allowed them to gain 7 marks. However, generally, when candidates gave very detailed case study material – their answers became very descriptive with no explanation as to how the scheme actually helps to benefit or manage the TRF.

Candidates who only knew one or two facts about a scheme tended to expand on their effectiveness using partially evaluative language and so were then able to attain 8 marks. Only a small minority managed to provide both detailed case study material as well as explicit evaluation of the schemes considered. There were a number of candidates who focused on what individual companies were doing in terms of their sustainability like Nokia and Andrex, which then never really focused on a TRF area.

On a positive note Examiners reported that for this year they felt that the standard of spelling and grammar was quite high and due to the nature of this question, specialist terms like 'biodiversity' were often used, consequently most candidates achieved 3 marks for SPAG.

*(b) Tropical rainforests are a rich source of natural resources which many companies
wish to extract.

Examine contrasting management approaches in tropical rainforests where
resources are being extracted.

Use examples in your answer.

(9)

Annotations in margin: Malaysia, E, B, i, e, E, C, Malaysia, Madagascar, Venezuela

In ~~Madagascar~~ ~~Ecuador~~ there was 280,000 tonnes
worth of waste being thrown into the rivers
every day, however the large business, Texaco decided
to fund Ecuador $400 million dollars to
clear up their waste, however the locals
say they need £6 billion dollars. Furthermore
in Brazil, the Carajas iron ore was powered by
wood ~~and~~ ~~61000~~ 61000 km² of deforestation
every year to compensate. In addition in
Ecuador ~~there~~ it was large 5 time more frequent that
you were going to get stomach cancer ~~however~~ due
to hydro carbons in the water. Countries such
as Madagascar are deciding to use there forests
~~resources~~ to gain tourist attraction and for getting
perfume. In a addition Costa Rica decided
to turn its ~~£~~ forest into an Eco-tourist
site.

*(b) Tropical rainforests are a rich source of natural resources which many companies wish to extract.

Examine contrasting management approaches in tropical rainforests where resources are being extracted.

Use examples in your answer.

(9)

Some areas wish to manage resource extraction in tropical rainforests through sustainable development. They wish to develop areas of tropical rainforest through ecotourism. This allows local people to get employed and may help the local economy. Areas of rainforest where resources have been extracted may leave the piece of land derelict but ecotourism allows for the area to be used without causing harm to the environment. For example, in Costa Rica the cloud forest area has been developed by putting zip wires and trails in place to attract tourists. Alternatively, to manage tropical rainforest extraction some countries choose to refuse to allow the development of the rainforest at the expense of wildlife. The governments may refuse to give out mining permits so extraction can not occur. Hence, the area is managed as extraction is put to a halt. For example, in Venezuela the government have not given out of mining permits for gold or diamond since 2005. Another approach may be to plant or regrow areas of the forest that have been destroyed as a result of extraction. Reforestation can be successful in managing the tropical rainforests and maintaining them. In conclusion, governments taking action is the more effective comparably but not sustainable as resources need to be extracted. Therefore ecotourism and reforestation is the best approach.

Paper Summary

The new 2016 GCSEs bring a number of significant changes to this specification and others. Preparation will dictate that both teachers and candidates have a good understanding of the new modes of assessment, including the revised AO (Assessment Objective) balance. There is less need to 'do' case studies, instead a blended focus on skills and deeper understanding should be targeted. This paper now most closely links with the new Unit 3, which includes fieldwork, skills and a new (unseen) decision-making exercise. Please remember as well there is now no tiering available.

Examiners wish you all the best of luck as you start the teaching in September 2016.

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