

WELCOME TO GEOGRAPHY A LEVEL!!!

Year 11 into 12 Bridging project May 2020

RGS

Young Geographer of the Year Competition 2020

**Royal
Geographical
Society**

with IBG



Advancing geography
and geographical learning

'THE WORLD BEYOND MY WINDOW'



Rationale

- As part of your transition from GCSE to A Level geography we would like to enter you in to a national competition!
- The idea is for you to bring geography to life and make it relevant to the current situation.
- You should attempt to include ideas from what you have studied in geography to now but also look at the suggested readings, videos etc in the bridging project booklet.
- Finalists will be invited to London for an awards ceremony at a later date with prizes to be won!

Background

- Describe three or more geographical ideas
- Use at least three annotated images, diagrams, charts or maps
- We are interested in entries that explore the human and physical geography of places that exist beyond a young person's window, be it locally or further afield.
- We want to know how young people's lives are connected to and influenced by these places - be the connections physical, digital or emotional.
- We also want to understand how geographical processes in the physical and human worlds have created these places and might be changing them.

Suggestions for ideas....

- Globalisation- connecting virtually (socially, economically...)
- Impact on industry- working from home, retail, travel and hospitality industry
- Physical landscapes-exploring your local place through walks/ bike rides etc
- Pollution- reduced air pollution but increased waste/ fly tipping?
- Biodiversity- wild animals on the streets of cities. Impact on flora and fauna?
- Disease – how different ages/gender/ ethnicity/ socio economic groups nationally and internationally are affected differently. Effectiveness of Government strategies
- These are just a few ideas you could consider- there is no wrong answer here!
- The prior and new learning comes in when you explain the physical and human processes that have caused these things to happen i.e. climate change, reduction in traffic, government management strategies, wealth vs health, education level.
- You can do this from a local perspective, national, global or a combination!

Entry requirements

- Produce an A3 size entry. This can be hand-made or using PowerPoint, word, publisher or PDF, etc.
- All entries should address this year's theme and must meet the following criteria:
 - Excellent attention to spelling, punctuation and grammar
 - Use of accurate geographical terminology
 - Clearly labelled and appropriately acknowledged sources, including diagrams, charts, maps or images
 - Accurate use of symbols, scales and keys,
 - Original and independently produced—class sets of identical entries will not be accepted or entries which have copied information from other sources, such as the internet
 - If produced electronically, please use a minimum font size of point 10
 - See final slides for examples of last years winners

Over to you...

- Each week we would like you to submit what you have done so far to your teacher- Ms Hill so that it can be checked for you and some feedback can be given.

Suggested plan:

- Week 1 (11th May)- basic ideas mind map and idea 1 developed
- Week 2 (18th May)- idea 1 complete and idea 2 developed

Half term

- Week 3 (1st June)- Idea 2 and 3 finalised and final presentation
- Your final deadline is Monday 8th June.

GOOD LUCK ☺

Not only does Geography provide you with transferable skills and a link to the world beyond the classroom, it also has connections with other subjects/interests such as photography. There are a few different ways in which the two are related and having knowledge of one, opens up new possibilities for the other.

Being a photographer includes being alert for chances to take a photo and for me, being able to capture more of a story within an image. Having background knowledge on certain details allows you to make the most out of possible opportunities and create a composition (layout) that captures a moment or an object. It's difficult to shoot a good photo if you don't know what you're taking a photo of.

Personally, I prefer taking photos that are purposeful and meaningful. Sometimes, it's not obvious in someone else's photography work that the image is symbolic or purposeful as being able to infer meaning requires an understanding of the subject in the image. Not only this but being able to further develop ideas into possible meanings and sometimes, the most powerful form of photography is where it's up to interpretation. Thinking of more than one possibility is another skill that Geography allows you to develop.

Culture is the "way of life" of a group of people. Learning about how others live and comprehending their way of life leads us to being more open minded and encourages exploration outside of our own lives and experiences.

Sheffield, a city near me with approximately 576,000 inhabitants, offers entertainment such as: The Crucible theatre, multiplex cinemas, museums and sports including snooker and ice hockey while also providing religious and educational opportunities. Known for its well-established steel industry, Sheffield like every other city faces its own set of obstacles. One of these challenges includes unemployment where wages are driven down and there is a pressure on the number of jobs available. This means that housing is limited and often overpriced for people due to their low incomes.

Around 5,000 miles away, Chawra in Mumbai, India a completely different culture, home to nearly a million people per square mile. While some benefits include nearly 85% of people being employed as well as the fact that 80% of plastic used in the area is recycled, there are also pressing issues such as the 4,000 cases of typhoid and dysentery a day and the fact that hospitals are immensely overcrowded due to the poor condition that people live in.

In most cases, there is a vicious circle whereby a negative can lead to a loss of a benefit for example, employment may be high but if healthcare deteriorates, those in employment become unable to work due to their illness. Exploring these cultures will allow solutions to arise and people working together to devise actions necessary to improve these situations.

Geography leads you to investigate the world we live in and brings relevance to learning about people and their cultures.



Photography enables us to study events with physical evidence that can be analysed. Not only to look at coastal landforms/features but to observe the way in which the world is changing.



Coasts are a great example of how Geography links so closely to photography. Taking photos is an accurate way of understanding how different coastal features form over time and creates a story. For example, a spit, which is a finger of sediment that projects out to sea (often with a curve and due to changes in wind direction); these are formed by the continuous transportation and deposition of sediment via the prevailing wind. A series of photos taken over a period of time would show this change, how the sediment slowly builds up to create an 'extension' of the beach. Knowing this coastal feature would allow you to take a more purposeful photo.

It's important to know what I'm taking a photo of in order for me to bring more meaning. Geography plays a key role in collecting skills that enable me to take more significant pictures and also allows me to be more particular and creative with my photography.

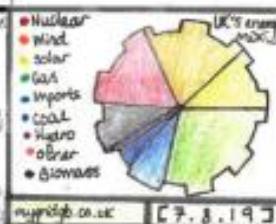
PHOTOGRAPHY



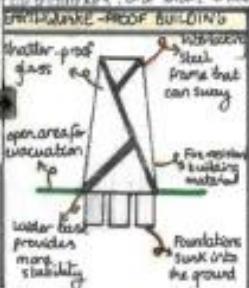
CULTURE FUTURE

Understanding our world and the way in which humans live on it allows us to advance in technology and create a healthier planet.

The major focus of development surrounds the idea of a sustainable planet. The UK's energy mix is constantly changing and while some changes are voluntary, others have evidently decreased dramatically. Such as coal usage having decreased by 25.3% over the past 4 years. Learning about the variety of energy sources enables us to advance technologically and develop ideas for new or improved sustainable methods of generating electricity.



While helping us understand man-made issues, Geography also gives us an insight into dealing with natural occurrences. This includes how we are planning to deal with them in the future and plans that are already in place right now. A prime example of this is earthquakes. One area that has already been put in place in some areas are earthquake-proof buildings. By improving the structure of a building, we are able to eliminate extra damage when one of these natural disasters occur. Predicting earthquakes is a vital part of reducing fatalities, having a reliable early warning system would allow evacuation to occur leading to social advantages including personal savings being saved and emergency responders and hospitals being prepared. In order to advance in technology and create a more sustainable and prepared Earth, it's critical to know the different aspects of what you're dealing with and the skills acquired from Geography allow you to look at it from all angles; the surrounding landscape in order to design specific improvements, looking at data for the zone and comparing it to current data in order to make a prediction and knowing the impacts of certain decisions and movements.





Although not a career, you can become an advocate for protecting the environment from destruction and pollution. This is what an environmental activist is. Being an environmentalist makes you a supporter of the goals of the environmental movement - a movement seeking to improve and protect the quality of the natural environment through change to harmful human activities. Knowledge of geography allows you to be informed of global issues and challenges and ways to improve the natural world. To make you environmentally conscious and can push you to become active in changing the world for the better. Environmental activism can start with your local communities, talking to people about the changes the world is heading to and effects of climate change - what we can do to prevent it getting worse. Environmental activists can even think with yourself by reducing your carbon footprint, using solar panels, recycling and growing your own food to help. Only real and reliable is what makes an impact on people most.

Famous environmentalists:

- Greta Thunberg
- Thich Nhat Hanh
- David Attenborough
- John Muir

Simply having geographical knowledge can be enough to be an activist. Other skills that can help however are communication and analysis to help with possible change).

Source: geography-united.com



TOWN PLANNER

A town planner is a career path you can take through geography. It involves making decisions about management of cities, towns, villages and the countryside. Town planners have to balance the competing demands of housing, industrial development, agriculture, recreation (leisure activities), transport and the environment - all to ensure the appropriate development can take place. Town and urban areas require planners to take into account the competing needs of businesses and communities. Rural areas require planners to ensure the development is sustainable and the countryside is preserved. Planners also make a positive contribution towards fighting climate change too.

Key planning activities:

- Developing livable and resilient planning solutions
- Consulting with stakeholders and negotiating with developers and professionals like transport and architects
- Researching and analysing data about strategic development
- Promoting environmental education and awareness

GEOGRAPHY

And where it can take you

Some careers in it:

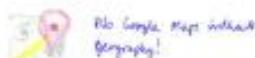
Geography skills like research, analyse and communication help with town planning in all different aspects of the career.



A cartographer may be a route you want to take through geography. A cartographer is someone who studies, draws and produces maps. Cartographers are concerned with all aspects of map-making (scientific, technological and artistic). You will then present complex information via diagrams, charts and spreadsheets. Maps and detailed geographical information is used everyday by individuals and on a large scale basis. Cartographers work in government, governments, military, publishing or surveying. Cartographers need to research and decide what should appear on a map. That is one of their key roles.

Other key roles:

- Design maps, graphs, illustrations and diagrams
- Communicate information through the use of colour, symbols and style
- Analyse and evaluate mapable information



Source: geography-united.com



CARTOGRAPHER

Geography skills like collecting, analysing and manipulating data are key to cartography. This allows for construction of maps and other geographical information in different forms.



TEACHER

A teacher is a great career to choose if you would rather educate the next generation. This would involve inspiring and motivating young people to learn about the physical world and environmental development and changes. This can encourage students to change their attitude and ways to protect the environment, being aware of issues like climate change. Teachers that teach geography can also interest pupils in taking up a career in geography to study. Subject like cartography,

Geography teacher tasks:

- About the physical environment
- About the climate
- About the wild
- About the population

Other responsibilities:

- Grading student work and tests
- Maintaining order in the classroom
- Ensuring students are paying attention
- Differentiate plan and deliver lessons
- Deal with behaviour of students
- Time management in lessons

Geography skills would include practically everything you learnt in geography! Knowledge of geography is the most basic skill but skills like research, analysis, communication are skills to be taught to students which you would need to possess.

Source: geography-united.com

VOLUNTEERING IN THE AMAZON

Through my geographical understanding I ask, why are we losing one of the most precious biomes on this Earth when we can protect it and the species that call it home.

The Amazon Rainforest

- Home to over 2000 different species of animal
- Recently lost 1130 square miles due to raging wildfires caused by slash and burn.

Opinions on the Causes

- Ricardo Salles (environmental minister) tweeted - "dry weather, wind and heat"
- Haley Brink (CNN meteorologist) - definitely human induced!

Either way the fires will increase as it is getting warmer and drier due to global warming, and there is an increased demand for space for mining, housing, commercial and subsistence farming.

You can help the rainforest by volunteering in aid highly advertised in the media and taught within the classroom.

The Amazon Rainforest Deforestation



Annual food-related Carbon footprints per person.

SKILLS THAT GEOGRAPHY CAN PROVIDE YOU WITH

- Knowledge of how the world changes around us
- Problem Solving skills
- Map reading skills
- Understanding how to live with the environment sustainably
- The understanding of different cultures
- How to interpret diagrams and graphs
- ESG (Environmental, Social, Governance)
- Team Skills



Solariedlung in freiburg

RENEWABLE ENERGY

The understanding of geography leads to understanding how greenhouse gases are produced and contribute to global warming and how to help combat these effects by creating sustainable renewable energy sources and transport networks.

The demand to find renewable energy sources is very high but we still rely on non-renewable sources because:

- They are abundant, affordable, continuous
- Mines and extraction points have been set up for years
- We cannot rely fully on renewable energy.

One country that has managed to reduce its CO₂ output is Freiburg. This city has achieved:

- Integrated traffic plan
- Main route of transport is the tram network - reduce

Freiburg's car density - less than 500 cars per 1000 residents

- Network of cycle paths
- 4000 parking spaces for bikes including 'Bike and Ride'
- encouraging residents cycle more = heating and reduce CO₂ output
- Freiburg updates the plan every 10 years which allows it to be efficient

Plan by 2050:

- 100% powered by renewable energy - solar is crucial as it's one of the sunniest cities in Germany already.
- Producing 10 kilowatts of electricity per year from solar.

For these plans to work and take action, they need to be designed very carefully by a team of experts. Jobs these experts may have include:

- Energy engineer - design, build, develop renewable energy - earn up to £60,000
- Renewable energy consultant - carry out energy audits and surveys - earn around £30,000
- Transport planner - assess public, commercial and private transport schemes - earn up to £60,000.

If you have the correct qualifications then your understanding of geography can take you to a new job and lifestyle.

ANYWHERE, SOMEWHERE, EVERYWHERE

The understanding of geography is helped through the awareness of the media, teaching within school, college and university and leads you to approach world issues with creative, vital, and sustainable solutions. This allows us to view the world from a perspective where we can understand global connections, issues, benefits to people, the economy and the environment.

LOCAL SUPPORT

Don't fancy going to the Amazon or being an engineer? You can still help the environment through your understanding of Geography by:

- Taking a walk to the front room to turn off the lights.
- Taking a bike ride to a different supermarket to buy palm oil free products.
- Taking a walk to your local market to buy fresh and veg that is in season.
- Taking a look down the vegetarian aisle in the supermarket.
- Taking a journey down the toothpaste aisle to buy 'recycled' without micro-beads and other micro-plastics.

Geography takes you to these places and many more and allows you to change your life style in simple and affordable ways to help prevent the continuation of global warming.

HOLIDAYS

Geography can take you on holiday too! You can go and see some very famous landmarks such as:

- Niagara Falls - located in the United States
- formed by fluvial erosion processes
- The Grand Canyon - located in Arizona, United States
- formed by regressive plate action
- White Cliffs of Dover - located in the UK
- formed by sea and weather erosion processes
- Mount Vesuvius - located in Naples, Italy
- formed by tectonic processes
- surrounded by the African Plate by the European Plate

The Grand Canyon

Niagara Falls

Solar Energy Diagram



WHERE CAN GEOGRAPHY TAKE YOU?

Geography
Student Project

This year, I have been given the task of describing where geography can take you. I've decided to look at the field in which I find most fascinating but also the most worrying – Anthropogenic Climate change. I have decided to split my ideas into 3 sections to do with this – disease and agriculture, increase of natural disasters, and ways for mitigation and prevention. I think people are not aware of the full picture of damage global temperature change can have on their lives and the uneducated world that think the imminent variations would simply be nice, hot weather. On this poster, I will be discussing. I strongly believe that Geography is one of those subjects which can really take you on any journey and path, whether it be career, hobby or interests. However in this time of climate crisis, I believe it is only right for me to discuss how Geography has made my awareness of Global issues a new level and appreciation.

Agriculture

What geography has really allowed me to grasp, is the potential devastation climate change can really have. Yes, there's the Amazon on fire, dying and student protest, but what about the unspoken realities, the headlines that will haunt us in the limited time we have to fight it? In 10 years? Due to climate change, Disease and agricultural patterns (subject to extreme bonds and changes, which subsequently may heavily affect lives here in England).



Figure 2: The female Anopheles Mosquito.

Change of temperature in a climate will welcome diseases into new areas of the world as mosquitoes need rainfall conditions, all in regions of the world. I not only make vectors and allow vectors to spread but will also affect invasive species. I will be studying – Malaria.

Caused by the *Plasmodium falciparum* parasite and carried by the female Anopheles Mosquito (Figure 2), Malaria is an extremely common protozoan parasite that causes fever and flu-like symptoms. It is transmitted through the bite of an infected mosquito. Malaria is a disease that has been around for thousands of years and is still a major health problem in many parts of Africa and South Asia. In 2017, Malaria was responsible for around 435,000 deaths, predominantly from children in sub-Saharan Africa. Due to the rise in global temperature, these Mosquitoes will start being able to settle in places like Morocco, South and West USA and Australia (Figure 1), which will cause significant social disturbances to urban areas, as large-scale vaccination programs take place, and things like mosquito nets having to be installed in the majority of houses.

Due to Mosquitoes entering new areas, ecosystems may also be affected. Species that feed on Mosquitoes mainly include birds, bats and spiders. Because of this, there may be a further rise of pests in different areas (for example, an increase in source of food for spiders will result in more offspring.)

also be subject to change. Although this may be beneficial to certain areas of the world (for in northern Europe could potentially be able to grow exotic crops due to the rise in temperature), I may accept this due to certain authentic UK limited coping mechanisms. Many countries contain crops that seem a heritage to the people. By believe in traditional ways, this could be a risk too drastic for them. For example, there are 10 million people employed in the tea industry in China, million hectares of land used to grow tea there. Traditional tea farmers think if say, 'Lipton' tea were to be grown in parts of Scotland with modern, and efficient methods that could outcompete it. This could result in outrage due to defiance of social and

Plants & Tropical

Shrubs require conditions of at least 26°C sea surface temperature, and need to be between 5 and 30° north or south of the equator (as prevailing winds are able to move them).

Globally warming will change this however – from this graph, we see that it will not only affect average temperatures, but also increase the frequency of extreme temperatures. There will be a greater probability of hot weather, meaning that countries we won't likely to "farm in a colder area of the world with more energy (strong sun)." However, hot weather, and so if it even likely.

I will look at different areas outside of the same example that can be applied to different challenges.

- ① - As indicative of land-use changes, permafrost thawing and column deposition
- ② - The range of prediction of 35 possible climate scenarios.
- ③ - The range of 35 possible climate scenarios.

In conclusion, I think the best thing about Geography is that it covers so much of our modern, changing world and for me, geography has raised awareness of the potential difficulties we may face if action is not done sooner or later, and has given me the motivation to potentially fight climate change or other humanitarian disasters as a profession later on in my life. I believe Geography can give you certain skills in every field, and these skills will also be very practical as we live our daily, modern lives.

- Subsistence farming in Sub-Saharan Africa may be a direct matter of life and death situation. It is already shown that common fluctuations in climate and weather can severely affect their crops, rate change, the weather will be much more and droughts could happen at the regular. This

Natural Disasters

This could be the most terrifying out of all the consequences – studying Geography has allowed me to grasp the fact that our world could have to adapt to disasters that are out of our human control.

Deforestation is one of the hardest things to control due to illegal felling and the massive forests cover in the world. Over the last few years, there has also been a higher rate of deforestation due to developing countries for wood materials but also within countries themselves as they need more land to settle their growing population. One scheme in the Paris agreement – the REDD+ program that aims to tackle this problem, has already raked up \$10 billion in funding, which I think will make a huge difference in mitigating climate change by preventing unsustainable tree felling.



Figure 1: Climate Change and Water

man-made ways for the entirety of the processes in there are much in tackling global economic impacts.



Figure 4: Aerial view of a tropical forest showing deforestation.

change, however only a handful from everything proposed protocol, which aims to control greenhouse gases in Annex I projects that reduce emissions in the territory of other countries; the Clean Development Mechanism, which developed countries to implement projects in developing countries, and can be traded – where industrialized countries can purchase emissions from other countries.

A key breakthrough in international negotiation and agreement for climate change is should be in order to turn global warming around. Of course, there have been the Paris Agreement, recent UN climate negotiations and the Paris agreements, which give me an insight to what these are about and has given me the basic skill to understand and arguments, to simply the things Greta Thunberg talk about.

climate change can be mitigated. With the increased carbon fertilisation effect, as plants can photosynthesise and respire in growing plants. The effect is particularly applicable to C3 plants as they can take advantage of – experiments show that growth can increase. Simply reforesting, conserving forests, peats and other natural areas can mitigate climate change naturally.

It must adapt to accept more dramatic defences or adaptation is not upon us, and that we are still somewhat safe. At a metre by 2100, despite whether emissions are curbed or not, it must be considered sooner or later, for example, placing flood-prone areas prone to storm surges, and ultimately, evacuating or being submerged. Predictions show that 17.5 million