STOKE DAMEREL

Aspire Achieve Thrive

Spring Term
(Half Term 5 and 6)
Geography
Year 10

Name: _____

Tutor: _____

GREENSHAW LEARNING TRUST

Year 10 Homework Timetable

Monday	English Task 1	Ebacc Option A Task 1	Option C Task 1	
Tuesday	Tassomai	Option B Task 1	Modern Britain Task 1	
Wednesday	Sparx	Science Task 1	Option C Task 2	
Thursday	Ebacc Option A Task 2	Tassomai	Option B Task 2	Modern Britain Task 2
Friday	Sparx	Science Task 2	English Task 2	

Tassomai - 2 Daily Goals per week

Sparx - 4 tasks of Sparx per week

Option A (EBACC)
French
Geography
History

Open B
Art
Business Studies
Catering
Computer Science
History
Health & Social Care
Music
Sport
IT

Open C
Business Studies
Childcare
Catering
Drama
Geography
Health & Social Care
Triple Science
Sport

Geography Half Term 5 - Year 10		
Week / Date	**Homework task 1 Cornell Notes**	**Homework task 2 Exam Question**
Week 1 17th April	**Cornell Notes on:** Development opportunities in Svalbard	**Question**: Explain why fishing and tourism provide opportunities for development in Svalbard. (6)
Week 2 24th April	**Cornell Notes on:** Challenges of development in Svalbard	**Question**: Explain how cold environments like Svalbard can provide challenges for development. (6)
Week 3 1st May	**Cornell Notes on:** Threats and management of cold environments	**Question**: Explain how two different strategies can help reduce environmental damage in cold environments. (6)
Week 4 8th May	**Cornell Notes on:** Global atmospheric circulation system	**Question**: Explain how the global atmospheric circulation system affects the weather and climate of the tropics. (6)
Week 5 15th May	**Cornell Notes on:** Formation and structure of tropical storms	**Question**: Explain the formation of tropical storms. (6)
Week 6 22nd May	**Cornell Notes on:** Typhoon Haiyan	**Question**: Describe the primary and secondary effects of a tropical storm. Use a named example and your own knowledge. (9)

Geography Half Term 6 - Year 10		
Week / Date	**Homework task 1 Cornell Notes**	**Homework task 2 Exam Question**
Week 7 5th June	**Cornell Notes on:** Reducing the effects of tropical storms (monitoring, prediction and planning)	**Question**: Explain why planning and being prepared is the best option for reducing the effects of tropical storms. (6)
Week 8 12th June	**Cornell Notes on:** Weather hazards in the UK	**Question**: Describe three types of weather hazard that could affect the UK. (6)
Week 9 19th June	**Cornell Notes on:** Somerset Levels Floods	**Question**: Evaluate the impacts of the flooding of the Somerset Levels (6)
Week 10 26th June	**Mock revision**	**Mock revision**
Week 11 3rd July	**Mock revision**	**Mock revision**
Week 12 10th July	**Cornell Notes on:** Any topic from the list above that you struggled with in your mock exam	**Question**: Repeat a question from above that you think you can improve your answer to.
Week 13 17th July	**Cornell Notes on:** Any topic from the list above that you struggled with in your mock exam	**Question**: Repeat a question from above that you think you can improve your answer to.

Geography Year 10 Knowledge Organiser: Cold environments and weather hazards

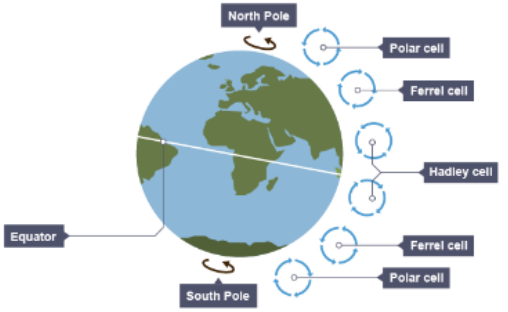
<table>
<tr><th>Session</th><th>Key terms</th><th colspan="2">Subject knowledge</th></tr>
<tr><td>1.

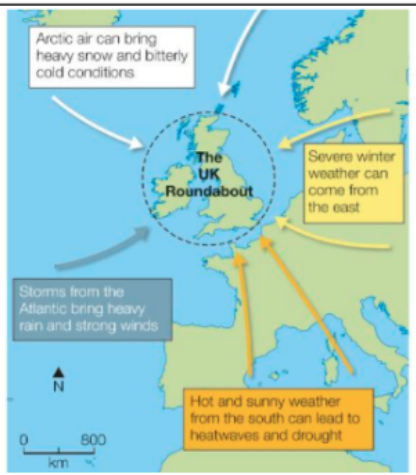
Opportunities for development in Svalbard</td><td>Opportunities for development
The process of a country in terms of economic growth, the use of technology and human welfare</td><td>Svalbard is located in the Northern Hemisphere in the Arctic Circle. It is in the continent of Europe and is an archipelago of islands north of Norway. To the West of Svalbard is Greenland. The Ocean surrounding Svalbard is the Arctic Ocean, to the East of Svalbard is the Barent Sea. Much of Svalbard has a polar climate with 60% being covered with glaciers.</td><td>Opportunities for Development in Svalbard
• Mineral extraction - more than 300 people employed in coal mines. New mine opened in 2014 near Svea.
• Energy developments - Svalbard is located close to the Mid-Atlantic ridge and could develop geothermal energy
• Fishing - 150 species of fish. The Barents Sea is one of the richest fishing grounds in the world.
• Tourism - In 2011 70,000 people visited Longyearbyen. Harbour was recently enlarged with a new terminal. Tourism provides 300 jobs and could be developed further</td></tr>
<tr><td>2

Challenges in Svalbard</td><td>Infrastructure
The basic equipment and structures (roads, utilities, water, sewage) that are needed for a region to function properly</td><td colspan="2">Challenges in Svalbard
Extreme temperature: Winter temperatures can drop below -30°C in Longyearbyen. In the winter, there is limited sunlight, the sea freezes and roads become very dangerous.
Construction: Due to harsh conditions most construction has to be done in the brief summer period. The frozen ground (permafrost) can provide a solid foundation but if it melts it can be very dangerous as it becomes unstable and can cause houses and roads to collapse or crack.
Services (water, electricity, sanitation etc.) : Most services here are provided to individual buildings by overground heated water and sewage pipes. These pipes need to be kept off the ground to prevent thawing of the permafrost.
Accessibility: Located in a remote part of the world and can only be reached by plane or ship and there is only one airport which is located at Longyearbyen. There are only 50 km of roads in Longyearbyen and the rest of the island has no roads. Most people use snowmobiles to get around the area, especially in winter.</td></tr>
<tr><td>3

Management for economic development</td><td>Conservation
Managing the environment in order to preserve, protect or restore it
Management Strategies
Techniques of controlling, responding to, or dealing with an event</td><td>Cold environments have an high value as wilderness areas and therefore need to be protected
Strategies can be used to balance the needs of economic development and conservation.</td><td>Economic development in Alaska
The Trans-Alaskan pipeline carries oil from the ground which is very hot (49°C). This could melt the soil. The pipeline crosses caribou migration routes. The Trans-Alaskan pipeline carries a risk of cracking due to earthquakes, which could cause oil leaks. Off road driving is popular in Alaska. Usually taking place in summer when snow has melted. Vehicles leave deep tyre tracks and destroy vegetation.
Strategies in Alaska
Technology: The pipeline is raised and insulated to retain heat and prevent it melting the ground. It was needed to raise the pipe above the ground allowing migrating Caribou to continue their pattern. Technology allows the pipeline to move and slide if earthquakes happen. The flow is automatically cut off if there is a leak.
Governments: The National Environmental Policy Act ensure companies involved with oil must protect the environment and recognise the rights of native people. The USA have created the Western Arctic Reserve, a 9 million hectare protected wilderness where drilling for oil and tourism is banned.
International agreements: Agreement on the Conservation of Polar Bears, Oslo, 1973. THis was signed by USA and Norway (Svalbard) and other countries to to ban hunting of Polar Bears unless for scientific purposes.
Conservation agreements: The World Wildlife Fund is a conservations group that helps to protect Arctic environments in Canada. It works with local communities, oil companies to manage ecosystems. They work with Alaska Native communities to help them find solutions</td></tr>
</table>

Geography Year 10 Knowledge Organiser: Cold environments and weather hazards

Session	Key terms	Subject knowledge			
4. Global atmospheric circulation system	**Natural hazards** are physical events such as earthquakes and volcanoes that have the potential to do damage to humans and property. Hazards include tectonic hazards, tropical storms and forest fires.	**Global atmospheric circulation** High pressure = dry / Low pressure = wet As the air heats it rises – causing low pressure. As it cools, it sinks, causing high pressure. Winds move from high pressure to low pressure. They curve because of the **Coriolis** effect (the turning of the Earth) Global atmospheric circulation creates winds across the planet and leads to areas of high rainfall, like the tropical rainforests, and areas of dry air, like deserts.	The system is driven by the equator, which is the hottest part of the Earth. Air rises at the equator, leading to low pressure. When the air reaches the edge of the atmosphere, it cannot go any further and so it travels to the north and south. The air becomes cold and falls to create high pressure and dry conditions at around 30° north and south of the equator. Large cells of air are created in this way. Air rises again at around 60° north and south and descends again around 90° north and south.		
5. Tropical storms	**Tropical storm:** Also known as a hurricane, typhoon or cyclone. A large mass of cloud brining high winds and heavy rain.	Tropical storms form where oceans are above 27°C. The central part of the tropical storm is known as the **eye**. It is an area of light wind speeds and no rain. It contains descending air. Large towering cumulonimbus clouds surround the eye. These are caused by warm moist air condensing as it rises. This leads to very heavy rainfall and wind speeds of up to 320 km/h. Tropical storms form 5° to 15° north and south of the equator, but not at the equator, as there is no coriolis force present.		**Formation of Tropical Storms** 1. Air is heated above warm tropical oceans 2. Air rises under low pressure conditions 3. Strong winds form as rising air draws in more air and moisture causing torrential rain 4. Air spins due to Coriolis effect 5. Cold air sinks in the eye so it is clear and dry 6. On meeting land, it loses source of heat and moisture so loses power.	
6. Typhoon Haiyan	**Typhoon Haiyan -** A tropical storm that hit the Philippines **Date**: November 2013 **Strength:** One of the strongest cat 5 storms! 170mph wind	**Primary Effects** 6,300 killed, most by the storm surge 40,000 homes destroyed 400mm of rain caused major floods 600,000 people displaced Wind damaged power lines 90% of Tacloban (a city in the Philippines) destroyed	**Secondary Effects** 6m jobs lost (fishing / farming) 14 million people affected Flooding caused landslides - blocking roads and restricting aid Looting and violence in Tacloban Infrastructure destroyed Shortages of power, water, food and shelter leads to disease	**Immediate Responses** Overseas aid from NGOs US helicopters assisted search and rescue Field hospitals for injured 1200 evacuation centers	**Long-term Responses** Oxfam help re-establish fishing and rice industries quickly UN and international financial aid, supplies and medical support Rebuilding infrastructure More cyclone shelters built

Geography Year 10 Knowledge Organiser: Cold environments and weather hazards					
Session	**Key terms**	**Subject knowledge**			
7. . Reducing the effects of tropical storms	**Path**: The direction a tropical storm takes (also known as the track).	**Monitoring** Monitoring wind patterns allows the path of a tropical storm to be predicted. Use of satellites to monitor path to allow evacuation, meaning less people would be impacted by the storm.	**Protection** To protect against tropical storms people can: - Use sandbags to protect against flooding and board up windows to protect against the high winds. - Avoid building in high risk areas - Practice emergency drills and evacuation routes	**Planning** Planning involves building structures that will protect people in high risk areas. These can include; Reinforced buildings and stilts to make safe from floodwater Flood defences eg levees and seawalls	
8. UK Weather Hazards	**Heatwave:** An extended time of very high temperatures and little rainfall.	The UK's weather is becoming more extreme. Some examples of extreme weather in the UK include: heavy rain / gales / floods / heavy snowfall / thick fog / heat wave / drought **Climate change** can increase the frequency and intensity of extreme weather events.	**Examples include:** 2014 thunderstorms where 3000 lightning strikes shook the UK 2003 heatwave, where 500 people in Europe died 2018 Beast from the East, a prolonged period of extreme low temperatures 2022 Storm Eunice brought 90mph winds and closed schools in the south west.		
9. Somerset Levels Floods	**The Somerset Levels floods -** An extreme weather event in the UK **Date:** January 2014	The Somerset Levels area of low-lying land in SW England. **Causes:** Record rainfall in January and February (350mm). The River Parrot had not been dredged for 20 years. High tide and storm surge swept up rivers from the Bristol Channel	**Social Effects:**600 houses flooded and 16 farms evacuated. Villages such as Moorland cut off - disrupting work, schools and shopping. Power supply, roads and railway cut off **Economic Effects:** £10 million damage, 14,000ha of farmland flooded and 1,000 livestock evacuated. Bristol to Taunton railway line closed **Environmental impacts:** Floodwaters contaminated with sewage, oil and chemicals. Stagnant water that had collected for months had to be reoxygenated before being pumped back into rivers	**Immediate responses:** Cut-off villagers used boats for transport to go to school and for shopping. Community groups gave support	**Long-term responses:** £20 million Flood Action Plan launched by Somerset County Council and Environment Agency to reduce future risk. In March 2014, 8km of the Rivers Tone and Parrot dredged River banks raised and strengthened and more pumping stations built

STEP 2: CREATE CUES

What: Reduce your notes to just the essentials.

What: Immediately after class, discussion, or reading session.

How:

- **Jot down key ideas, important words and phrases**
- **Create questions that might appear on an exam**
- **Reducing your notes to the most important ideas and concepts improves recall. Creating questions that may appear on an exam gets you thinking about how the information might be applied and improves your performance on the exam.**

Why: Spend at least ten minutes every week reviewing all of your previous notes. Reflect on the material and ask yourself questions based on what you've recorded in the Cue area. Cover the note-taking area with a piece of paper. Can you answer them?

STEP 1: RECORD YOUR NOTES

What: Record all keywords, ideas, important dates, people, places, diagrams and formulas from the lesson. Create a new page for each topic discussed.

When: During class lecture, discussion, or reading session.

How:

- **Use bullet points, abbreviated phrases, and pictures**
- **Avoid full sentences and paragraphs**
- **Leave space between points to add more information later**

Why: Important ideas must be recorded in a way that is meaningful to you.

STEP 3: SUMMARISE & REVIEW

What: Summarise the main ideas from the lesson.
What: At the end of the class lecture, discussion, or reading session.
How: In complete sentences, write down the conclusions that can be made from the information in your notes.
Why: Summarising the information after it's learned improves long-term retention.

WEEK 1: Cornell Notes (Homework task 1)

Date / /	**Topic:** Development opportunities in Svalbard	Revision guide page: 53

Bitesize links	**Notes**
Questions	

Summary

WEEK 1: Exam Question (Homework task 2)

Date……

Question: Explain why fishing and tourism provide opportunities for development in Svalbard. (6)

Answer: _____

WEEK 1: Exam Question review and improvement (Classwork)

Question: Explain why fishing and tourism provide opportunities for development in Svalbard. (6)

Answer: _____

WEEK 2: Cornell Notes (Homework task 1)

Date / /	**Topic:** Challenges of development in Svalbard	Revision guide page 54

Bitesize links	**Notes**
Questions	

WEEK 2: Exam Question (Homework task 2)

Date……

Question: Explain how cold environments like Svalbard can provide challenges for development. (6)

Answer: _____

WEEK 2: Exam Question review and improvement (Classwork)

Question: Explain how cold environments like Svalbard can provide challenges for development. (6)

Answer: _____

WEEK 3: Cornell Notes (Homework task 1)

Date / /	**Topic:** Threats and management of cold environments	Revision guide page 55-56

Bitesize links	**Notes**
	
Questions	

Summary

WEEK 3: Exam Question (Homework task 2)

Date……

Question: Explain how two different strategies can help reduce environmental damage in cold environments. (6)

Answer: _____

WEEK 3: Exam Question review and improvement (Classwork)

Question: Explain how two different strategies can help reduce environmental damage in cold environments. (6)

Answer: _____

WEEK 4: Cornell Notes (Homework task 1)

Date / /	**Topic:** Global atmospheric circulation system	Revision guide page 24

Bitesize links	**Notes**
Questions	

Summary

WEEK 4: Exam Question (Homework task 2)

Date……

Question: Explain how the global atmospheric circulation system affects the weather and climate of the tropics. (6)

Answer: _____

WEEK 4: Exam Question review and improvement (Classwork)

Question: Explain how the global atmospheric circulation system affects the weather and climate of the tropics. (6)

Answer: _____

WEEK 5: Cornell Notes (Homework task 1)

Date / /	**Topic:** Formation and structure of tropical storms	Revision guide page 25-26

Bitesize links	**Notes**
Questions	

Summary

WEEK 5: Exam Question (Homework task 2)

Date……

Question: Explain the formation of tropical storms. (6)

Answer: _____

WEEK 5: Exam Question review and improvement (Classwork)

Question: Explain the formation of tropical storms. (6)

Answer: _____

WEEK 6: Cornell Notes (Homework task 1)

Date / /	**Topic:** Typhoon Haiyan	Revision guide page 27

Bitesize links	**Notes**
Questions	

Summary

WEEK 6: Exam Question (Homework task 2)

Date……

Question: Describe the primary and secondary effects of a tropical storm. Use a named example and your own knowledge. (9)

Answer: _____

WEEK 6: Exam Question review and improvement (Classwork)

Question: Describe the primary and secondary effects of a tropical storm. Use a named example and your own knowledge. (9)

Answer: _____

WEEK 7: Cornell Notes (Homework task 1)

Date / /	**Topic:** Reducing the effects of tropical storms (monitoring, prediction and planning)	Revision guide page 28

Bitesize links	**Notes**
	
Questions	

Summary

WEEK 7: Exam Question (Homework task 2)

Date……

Question: Explain why planning and being prepared is the best option for reducing the effects of tropical storms. (6)

Answer: _____

WEEK 7: Exam Question review and improvement (Classwork)

Question: Explain why planning and being prepared is the best option for reducing the effects of tropical storms. (6)

Answer: _____

WEEK 8: Cornell Notes (Homework task 1)

Date / /	**Topic:** UK Weather Hazards	Revision guide page 29

Bitesize links	**Notes**
Questions	

Summary

WEEK 8: Exam Question (Homework task 2)

Date……

Question: Describe three types of weather hazard that could affect the UK. (6)

Answer: _____

WEEK 8: Exam Question review and improvement (Classwork)

Question: Describe three types of weather hazard that could affect the UK. (6)

Answer: _____

WEEK 9: Cornell Notes (Homework task 1)

Date / /	**Topic:** Somerset Levels Floods	Revision guide page 30-31

Bitesize links	**Notes**
Questions	

Summary

WEEK 9: Exam Question (Homework task 2)

Date……

Question: Evaluate the impacts of the flooding of the Somerset Levels (6)

Answer:

WEEK 9: Exam Question review and improvement (Classwork)

Question: Evaluate the impacts of the flooding of the Somerset Levels (6)

Answer:

Week 10: Mock Exam Revision (Homework task 1)

Week 10: Mock Exam Revision (Homework task 2)

Week 11: Mock Exam Revision (Homework task 1)

Week 11: Mock Exam Revision (Homework task 2)

WEEK 12: Cornell Notes (Homework task 1)

Date / /	**Topic:** Any topic from the list above that you struggled with in your mock exam **Chosen topic**:	Revision guide page

Questions	**Notes**

Summary

WEEK 12: Exam Question (Homework task 2)

Date……

Question: Repeat a question from above that you think you can improve your answer to.

Write the question here: _____

Answer:_____

WEEK 13: Cornell Notes (Homework task 1)

Date / /	**Topic:** Any topic from the list above that you struggled with in your mock exam **Chosen topic**:	Revision guide page

Questions	**Notes**

Summary

WEEK 13: Exam Question (Homework task 2)

Date……

Question: Repeat a question from above that you think you can improve your answer to.

Write the question here: _____

Answer:_____

Aspire Achieve Thrive

Develop your character

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