



Preparation for Year 12



Geography

Congratulations on your GCSE successes and welcome to your post-16 studies at All Saints!

At this significant moment in your education, you have selected to study courses that reflect your own unique gifts, talents, interests and future goals.

So let's get started! These tasks are designed to introduce you to some concepts that you will be exploring over the year ahead as well as giving you the opportunity to demonstrate your commitment and sincere interest in this subject.

We look forward to seeing your preparation work and welcoming you to our department in September.

Deadline for
submission

Wednesday 2nd September 2026

Choose **TWO** tasks to complete from the following list:

Week	Task / question	Links to help you	Notes
1	Conduct a geographical investigation into the geography of Dagenham. This needs to examine the human geography of the area. What are the features that make it a unique area? What are the major events which have taken place e.g. deindustrialisation which have shaped the geography of Dagenham? Include maps and data from sources such as the census.	https://www.ons.gov.uk/visualisations/censusareachanges/E09000002/ https://www.lbbd.gov.uk/council-and-democracy/statistics-and-data/population-and-demographics https://www.fdiintelligence.com/content/feature/made-in-dagenham-80102	
2	Create a diagram to show the carbon cycle. This needs to include both flows and stores of carbon. Explain the	https://www.energy.gov/science/doe-explainsthe-carbon-cycle	



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	difference between the fast and slow carbon cycles.	https://www.bbc.co.uk/bitesize/guides/zg9v6yc/revision/2	
3	Watch <i>Into the Inferno (2016)</i> on Netflix and create an infographic on volcanoes - this should consider why people live near hazards, impacts and responses.	https://www.netflix.com/gb/title/80066073	
4	Geography in the news - Collect relevant news clips and articles of geography focusing on hazards or climate change. Write a short summary of each article. Minimum 5 articles.	https://www.bbc.co.uk/news/topics/cnx753jenvjt https://www.sciencedaily.com/news/earth_climate/geography/	



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Keywords and definitions:

You will need to be familiar with the following keywords in term 1.

Keyword	Definition	Use of keyword within context
Carbon Budget	A way to use data to describe the amount of carbon that is stored and transferred within the carbon cycle	It's important to consider how human activities such as deforestation and fossil fuel consumption impact the carbon budget .
Carbon Sequestration	An umbrella term used to describe the long-term storage of carbon in plants, soils, rock formations and oceans.	Examining carbon sequestration helps us understand how forests, soils, and oceans capture and store carbon dioxide, thereby mitigating the effects of climate change
Hydrosphere	All of the water on or surrounding the Earth, including oceans, seas, lakes, rivers, and the water in the atmosphere	The hydrosphere is a key focus when studying the global water cycle and its impact on climate and ecosystems.
Cryosphere	The frozen parts of the Earth's surface including ice caps, frozen oceans, glaciers and snow cover	The cryosphere is studied to understand its role in sea-level changes and global climate patterns.
Closed system	A system with no inputs or outputs	A drainage basin is often considered a closed system because it has defined boundaries and exchanges energy but not matter with its surroundings.
Open system	A system with inputs from and outputs to other	A coastal environment is an example of an



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	systems	open system, as it continuously exchanges both energy and matter, such as sediments and water, with its surroundings.
Lithosphere	The outermost solid layer of the Earth, approximately 100 km thick, comprising the crust and upper mantle	The lithosphere is a key area of study for understanding tectonic processes and landform development.
Vulcanicity	The process of molten rock and gases extruding onto the Earth's surface or intruding into the Earth's crust	Vulcanicity plays a crucial role in shaping landscapes and affecting human activities
Lahar	Mudflow composed mainly of volcanic ash mixed with water from a crater lake, snowmelt, glacier melt, or prolonged torrential rain	A lahar can be triggered by volcanic eruptions or the rapid melting of snow and ice on a volcano.
Magma Plumes	A rising column of hot rock usually at a plate margin (but can also burn through a plate) creating a hotspot	Magma plumes can create volcanic island chains like Hawaii and influence tectonic activity and landform development over long periods of time.
Tephra	Pyroclastic material that ranges in size from dust to blocks the size of cars	Tephra can affect local environments, air quality, and even global climate patterns depending on the scale of the eruption.