Walthamstow School for Girls: Humanities Faculty

Year group: 8	**Subject**: Geography	**Topic**: What are the factors that affect population?

Context: *In this unit students will look at how global population has changed over time and then explore how natural increase and migration can affect the population of a particular area. Students will then go on to consider how governments around the World have worked to try and control their population through a combination of pro and anti natalist policies as well as different rules centered on migration. The assessment for this unit will take the form of a skills test focused on interpreting population data from a variety of graphs and using simple statistical techniques.*

Learning Journey

Prior Learning: *In year 7 students were briefly introduced to some of the factors that may influence where people live considering the impact of natural hazards and coastal processes. They have also done some basic mapping work of key urban areas across the UK and some of the major global cities.*

	Learning Sequence						Endpoint
Main learning Steps	Students will use data to construct a graph showing how global population has increased and practice describing trends shown on a graph.	Students look at how population increase is driven by natural increase and examine the reasons behind this.	Students explore the factors that effect population density, thinking about why places are sparsely or densely populated.	Students will look at population structure learn how this can be shown on a population pyramid.	Students will briefly consider some of the issues caused by over and under population, before looking at how governments try to control population.	Students finish the unit looking at the causes and effects of migration for both the places and people involved.	Students are able to interpret a range of data related to population change and explain how and why population changes over time and space.
Assessment	Use of highlighters to *self-assess* graph description picking out where dates, figures and adverbs have been used.	Students identify factors which influence birth and death rates and can calculate natural increase. This will be *self-assessed* with guidance from teacher.	Students identify connectives within their explanation of why different factors influence population density.	Students can draw and interpret population pyramids. This will be *self-assessed* with guidance from teacher.	Students will have completed an overview of different population policies.		Students complete a short skills test with answers being *peer assessed* with guidance from class teacher.

Where will we use these ideas again?

The issue of overpopulation underpins much of what is learnt through the rest of year 8, notable the units on resource consumption and challenges facing our urban environments. It is also a key theme at GCSE particularly for paper 2, Challenges in the Human Environment. The mathematical skills developed in this unit are also an important foundation for future GCSE study where there is a heavy reliance on students being able to manipulate data through a variety of mathematical techniques.

Walthamstow School for Girls: Humanities Faculty

Year group: 8	Subject: Geog	Topic: What is the problem with resource consumption?

Context: *Having completed our introductory unit for year 8 on population, we now move on to looking at the challenges that our growing population creates in terms of ensuring there is enough food, water and energy for everyone. We will consider some of the impacts of trying to meet growing demand and consider what changes society might need to make to ensure that we are living in a way that our resource consumption is more sustainable.*

Learning Journey

Prior Learning: *Students have already examined the causes of our rapidly growing population and started to consider some of the issues that overpopulation might bring.*

	Learning Sequence					Endpoint
Main learning Steps	This unit begins with an examination of what we mean by 'resources' and the ways in which different types of resource can be classified. They will also start to consider the challenges we face with growing global demand for resources.	Students will look at water scarcity, why this is a growing challenge. For HW students will investigate some possible solutions to this challenge.	Students will look at the issues we face in providing enough food for everyone, the problems this creates and some possible solutions.	Students will examine the issues we face with our current reliance on fossil fuels as our main source of energy.	Students will learn about alternative energy sources and evaluate the pros and cons of these types of renewable energy.	Students will be able to explain the issues of water scarcity, food shortages and energy insecurity as well as some possible solutions to these challenges.
Assessment	Students will have completed a Venn diagram which will highlight whether they have understood the ways in which resources can be classified.		Students will complete a diamond 9 where they practice giving justification for an opinion. This will support with the end of unit essay they have to write.			Students write an essay outlining the challenges we face in meeting water, food and energy demand and identify which resource issue they believe is the most significant.

Where will we use these ideas again? The idea of sustainable energy will feed into the next unit on settlement and the ways we can change urban design to make it more sustainable. The work completed on global warming and climate change will also support some of the learning in the year 7 unit on weather and climate when we look at extreme weather. At KS4, paper 2 has an entire unit focused on the challenge of resource management which explores these themes in much more detail.

Walthamstow School for Girls: Humanities Faculty

Year group: 8	Subject: Geography	Topic: What challenges are there in Urban Environments?

***Context**: This is the third unit of year 8 and follows on from the units on population growth and resources. Having examined how and why population is changing, students look at how population growth is impacting upon the places we live. Students begin by looking at urbanisation and the growth of 'megacities' considering the impact such large urban spaces can have on our natural and built environment. Student then look at how life in cities differs around the World, contrasting life in Rio with London. There will be a particular focus on life in favelas with a consideration of what can be done to make improvements for slum residents. Finally, students will look at what can be done to make cities more sustainable with a focus on Masdar City in Abu Dhabi, questioning whether this is really a good model for the future of urban living. The unit ends with an assessment which requires students to design their own sustainable urban space, explaining how different features of their design promotes sustainability.*

Learning Journey

Prior Learning: Students previously looked at the challenge of population growth and its impact on access to resources. This unit takes this idea further, exploring the impact on the places in which we live. Students already have a grounding in the concepts of migration and the factors which drive this movement, as well as natural increase and why this occurs. In year 7, students also looked at what is meant by 'Urban,' identifying some of the main urban areas in the UK.

	Learning Sequence						Endpoint
Main learning Steps	Students begin by examining different types of settlement and looking at how through urbanisation and urban sprawl they change over time.	Students examine the concept of our largest 'megacities' and think about the challenges such environments create.	Students compare life in London to that in Rio to see the similarities and differences that exist in different large cities.	Students look at life in Rio's favelas and how different stake holders are trying to address some of the challenges facing residents.	Students will look at what can be done to make settlements more sustainable.	Students examine how Masdar City Is trying to promote sustainable living and question the extent to which is has achieved this.	Students will know the key features of sustainable urban design and be able to explain how different features can promote sustainability.
Assessment					There is a core formative assessment task for this part of the unit where students will design their own sustainable school and then explain their design ideas.		Students complete a DME where they locate different features in a new settlement and explain what can be done to promote sustainability in their new town.

Where will we use these ideas again? This unit provides the foundation for the GCSE unit "Urban Issues and Challenges" where students will develop their knowledge and understanding of these themes and others in different cities around the World.

Walthamstow School for Girls: Humanities Faculty

Year group: 8	Subject: Geog	Topic: Why do we get different types of weather?

Context: *In this fourth unit, we shift our focus from looking at predominantly human geography themes linked to population growth and its impacts, to exploring a core physical geography topic, weather. We will study the core fundamentals which determine different types of weather and climate. This will require looking at a wide range of complex geographical terminology so the assessment for this unit will be focused on students disciplinary literacy and their understanding of key terms. We will then look at examples of extreme weather with an emphasis on tropical storms. This will include a project where students produce a newspaper report on Typhoon Haiyan.*

Learning Journey

Prior Learning: Students will have some sense of the causes of climate change, itself a contributor to extreme weather events. They will also have some sense of how geographical events can be hazardous from their year 7 work on tectonics. The emphasis here is now on atmospheric hazards but principles of hazard risk and hazard management are similar and provide a solid foundation for this unit of work.

	Learning Sequence						Endpoint
Main learning Steps	Students begin this unit by exploring the difference between weather and climate and consider the characteristics of different climate zones.	Students will examine factors which determine temperature and rainfall. They will then examine how this data can be shown on a climate graph.	Students will examine how we measure weather. They will also look at how weather data can be display including through the use of synoptic weather symbols.	Students will look at examples of extreme weather. They will then consider whether the UKs weather is becoming more extreme.	Students will be introduced to tropical storms. They will look at their character, causes, effects and how people manage such events.	Students conclude the unit by looking at Typhoon Haiyan. They will use their class work as the basis for writing a newspaper report on this disaster.	By the end of this unit we want students to have a sound grasp of the processes which contribute to different types of weather including extreme weather.
Assessment		Students will produce and interpret a climate graph, developing their geographical skills in the process.	Students will be able to identify a range of weather instruments and interpret synoptic weather symbols.	Students will have reviewed the UKs recent weather history, producing a timeline of extreme weather events.		Students will have produced a newspaper report which can be peer assessed to offer comment on the quality of language and explanation of processes.	This unit will be assessed through a short key term test offering students a chance to show their understanding of specialist geographical terminology.

Where will we use these ideas again? Issues of climate change and it's impact will crop up again in year 9 when looking at glaciers and also Earth's future. For those who choose to study geography at GCSE the fundamentals of this unit will provide a solid foundation for the work on atmospheric hazards and also ecosystems which are both core components for paper 1.

Walthamstow School for Girls: Humanities Faculty

Year group: 8	Subject: Geog	Topic: How do rivers shape the land?

Context: This unit focuses on how river processes shape the landscape. It builds on the key ideas about the processes of erosion, transportation and deposition which were introduced in the year 7 unit on coastal landscapes and considers how these same processes work together to shape river landscapes. The unit also builds on the previous unit of weather, particularly in the second half of the unit where it considers how river environments respond to climatic events and can cause flooding events. It finishes with a consideration of adaptation and mitigation strategies thinking about how people can try to manage flooding and reduce its impact.

Learning Journey

Prior Learning: Students should already be familiar with a lot of the specialist language from their year 7 unit on rivers and familiar with erosional processes (solution, hydraulic action, abrasion and attrition), transportational processes (traction, saltation, suspension and solution) and deposition. Having just studied weather, they should also be familiar with the language associated with the water cycle and have the literacy to enable them to scientifically discuss key aspects of the hydrological cycle and how this is linked to the movement of water through the drainage basin and possible implications for flood events.

	Learning Sequence						Endpoint
Main learning Steps	Students consider why rivers are important and are introduced to the main river systems around the World.	Students will look at the key features of the drainage basin, building on what was learnt previously about the water cycle.	Students will review the core river processes of erosion, deposition and transportation.	Students will look at how river processes create waterfalls and gorges, and meanders and oxbow lakes.	Having completed the summative assessment for this unit, students will shift their attention to river flooding and its effects.	The unit ends with a consideration of factors that affect flood risk and what can be done to try and manage these factors.	Students can explain how river processes create different landforms. They also know why rivers flood & how to manage this.
Assessment			Students will be tasked for HW with review the key terms introduced so far and revising for a mini key term test next lesson.	The **formative assessment** for this unit will review a modelled answer of how meanders and oxbow lakes are formed. This will then be applied by students to explain the formation of waterfalls & gorges.	**Summative assessment**: Explain how river processes lead to the creation of waterfalls and gorges.		Students will have written a GCSE style 4 mark question explaining the formation of waterfalls and gorges.

Where will we use these ideas again? Core processes of erosion, transportation and deposition will be covered again as part of the year 9 curriculum in the unit on glaciation. This unit also provides a foundation for the GCSE Physcial geography unit in paper 1 “UK Physical Landscapes.”

Walthamstow School for Girls: Humanities Faculty

Year group: 8	Subject: Geography	Topic: How varied are Africa's Ecosystems?

***Context**: This short unit which sits at the end of year 8 introduces students to the basics of ecology, looking at some of the key characteristics of some of Africa's main Biomes and how these ecosystems function. It includes a look at the interactions between different species with Africa's Savana looking at how plants and animals are interdependent within the food chains and food webs which operate in this biome. It also looks at the value of rainforests, why they are threatened and what can be done to protect them. Finally, it explores the harsh conditions of Africa's deserts with a particular focus on how plants and animals have adapted to survive this hostile environment. There is an opportunity to supplement what is delivered in lessons with the BBC Earth series focused on Africa, a copy of which is held in humanities. This will lend additional interest and support in contextualising some of the content being delivered.*

Learning Journey

Prior Learning: This is the first main unit students will have completed on ecology as part of the KS3 curriculum. They have touched on some of the environmental issues which can impact upon different environments and briefly considered links between ecology and hydrology but the content of this unit is largely new to students.

	Learning Sequence					Endpoint
Main learning Steps	Students are briefly introduced to ecology, what an ecosystem is and the differences between biotic and abiotic features,	Students are introduced to Africa's main Biomes, considering the key human and physical characteristics of Deserts, semi desert, savanna and rainforest.	Students carry out an in depth study of Savanna grasslands with a particular focus on climate, migration and food chains.	Students will look at rainforest environments in the African continent, considering their key characteristics, threats to their survival and ways of managing these environments more sustainably.	Students will carry out a study into desert environments, focusing particularly on the ways in which different plants and animals have adapted to survive in these environments.	By the end of this unit students should be familiar with what an ecosystem is and the ways in which different ecosystems across the African continent operate.
Assessment						This unit is assessed through a short key term test which focuses on specialist terminology developed through the unit.

Where will we use these ideas again? Students will briefly touch on ecology in year 9 in both units on glaciation and thinking about geographical futures. As part of the GCSE studies, students will also have to study The Living World" as part of paper 1 which explores themes from this unit in much more depth, with a particular focus on rainforests and hot desert environments.