Geography

Curriculum Principles

By the end of year 11, a student of geography at Dixons Newall Green will:

- know a wide range of challenging geographical concepts through strategic exposure to diverse geographical contexts.
- understand the complex interactions between human and physical geographical processes, using the evidence of the past to extrapolate future trends.

Our uniting 'sentence' is "The Geography Department provided students with a deep understanding and awe of the complex interactions that have shaped and continue to change our planet".

In order to achieve a true understanding of geography, topics have been intelligently sequenced based on the following rationale:

- students are introduced to key underlying geographical principles before studying concepts in depth. For example, students rehearse and recall the principles of geographical cycles (e.g. the hydrological cycle) and geographical models (e.g. the pillars of sustainability). These principles are introduced early and revisited frequently, they form the backbone of the deep understanding that all successful geographers possess.

- complex concepts such as landscape systems are introduced early, this is critical to ensure enough time is dedicated for this knowledge to be revisited and purposefully built upon. It is also common for these physical geographical topics to be unfamiliar to children of urban areas. This can make it difficult for the students to commit this knowledge to their long-term memory as they have little real-life experiences of these landscapes to which they can anchor this new knowledge. Therefore, it is important that complex concepts are explored through a range of contexts, this ensures curriculum breadth and supports securing this knowledge into long term memory. Therefore, throughout their study of Geography they will revisit concepts through diverse contexts, for example students study glacial landscapes in Middle Peak and through coastal landscapes in Upper Peak. This is also supported through expeditions and fieldwork to boost real life experience of geographical processes and environments.

The geography curriculum will address social disadvantage by addressing gaps in students' knowledge and skills:

- the geography curriculum will expose students to knowledge and skills they may otherwise fail to encounter in their everyday lives. The study of geography will develop the ability to support arguments with specific evidence. This will allow students to discuss and debate topical issues with confidence, credibility and clarity.

- is advantaged students and those from identified underrepresented groups are priority for extra intervention sessions so that every opportunity to close the disadvantage gap is capitalised. For example, students have the opportunity to receive extra guidance and tutoring which closes their specific gaps in understanding during weekly 'Prep' and 'Morning Mastery' sessions.

We fully believe geography can contribute to the personal development of students at DNG:

- students will gain knowledge of the different cultures of our planet and will encounter challenging themes such as the development gap, conflict and climate change. Gaining knowledge of these issues will develop students understanding of the global social and moral issues of today and of those facing future generations.

- the geography curriculum at DTC is committed to our anti-racism agenda. Students are taught the historical context of a range of nations and cultures to ensure that are fully informed in their analysis of current issues.

In Middle Peak and Upper Peak, our belief is that homework should be interleaved revision of powerful knowledge that has been modelled and taught in lessons. This knowledge is recalled and applied through a range of low-stakes quizzing and practice and a task entitled 'Read, Cover, Write Check'.

Opportunities are built in to make links to the world of work to enhance the careers, advice and guidance that students are exposed to:

- each topic in Middle Peak and Upper Peak has a 'careers spotlight', where students will explore a profession linked to that particular unit of work. For example, when year 7 students study the climate change topic they will learn about careers in climatology. Students will learn about the qualifications and skills required and the responsibilities of the job.

- students have the opportunity to experience a range of talks from external speakers on topics such as 'Geography at University' and 'Geographical Careers'.

- through our expeditions, fieldwork and visits students will experience the real-life geographical skills needed for a diverse range of related careers. These skills are the fundamental foundation for all geographical careers ranging from Climate Scientist to Urban Development Coordinator, careers with opportunities to work in every continent and influence the greatest issues affecting our entire planet.

- during the study of upland areas students will study the Dixons Newall Green House mountains, this provides a special opportunity to reinforce the mission of climbing their mountain to University and to a successful career.

A true love of geography involves learning about various cultural domains. We teach beyond the specification requirements, but do ensure students are well prepared to be successful in GCSE examinations:

- to be a successful geographer it is essential to know much more than the GCSE specification. Students are exposed to additional and sometimes commonly assumed knowledge of cultural, historical, political geography – knowledge that they may otherwise not encounter. Students will read around the topic to enable broader exposure to the contextual knowledge surrounding both historical and topical geographical issues.

Curriculum Overview

All children are entitled to a curriculum and to the powerful knowledge that will open doors and maximise their life chances. Below is a high-level overview of the critical knowledge children will learn in this particular subject, at each key stage 3 through to Year 11, in order to equip students with the cultural capital they need to succeed in life. The curriculum is planned vertically and horizontally giving thought to the optimum knowledge sequence for building secure schema.

		Knowledge, skills and understanding to be gained at each stage*		
		Cycle 1	Cycle 2	Cycle 3
YEAR 7	Knowledge introduced	**Geography Mastery** Foundations of geography; focus on building of key knowledge from primary curriculum; this knowledge is vital for accessing and progressing through all subsequent topics **Hot Deserts** Biome distribution; nutrient cycles; hot desert development opportunities and challenges; desertification; case	**Climate Change** Greenhouse effect; natural and human climate change; Earth's spheres; carbon cycle; adaptation and mitigation **Fieldwork** Features of study site; validity; subjectivity; open and closed questioning; analysis; evaluation.	**Urbanisation** GDP; LIC; NEE; HIC; urbanisation; megacities; population change; employment categories; urban development challenges and opportunities; sustainability; London and Rio de Janeiro comparisons **Sustainability** Concept of sustainability; housing; resources; urban planning; sustainable countries.

		study Sahel region and The Green Wall.		
	Geographical skills introduced	Cartographical skills focus (e.g. longitude, grid references and scale).	Graphical skills focus (e.g. hot desert climate graphs, accurate diagrams).	Graphical skills focus (e.g. pie charts, flow line map)
	Knowledge revisited	Geography of the UK; Europe; continents; oceans	Biomes; food chains; adaptations; farming; impacts; sustainability; photosynthesis; weather and climate; climate zones; hydrological cycle; renewable energy	Urban; rural; global population change; migration; slum settlements; push and pull factors; development inequalities; sustainability
	Geographical skills revisited	Cartographical skills (e.g. compass directions)	Graphical skills (e.g. bar and line graphs)	Cartographical and graphical skills (e.g. locating cities on maps, line and bar graphs and OS map grid references)
	CEAIG	Cartographer and Desert Ecologist	Meteorologist and environmental consultant	Urban planning and water resource manager
YEAR 8	**Knowledge introduced**	**Volcanoes** Natural hazards; natural disasters; hazard risk; detailed theory of plate tectonics; volcano distribution; constructive; destructive; conservative; viscosity; shield and composite; volcanic hazards; primary and secondary effects; immediate and long-term responses; super volcanoes	**Global Development** Development indicators, Human Development Index; GNI; causes of uneven development; primary employment; secondary employment; tertiary employment; quaternary employment; transnational corporations; Clark Fisher Model; Demographic Transition Model; UK and India comparisons; comparing population structures	**Glaciation** Upland and lowland areas; UK landscapes; geological timescale; geology; glacial and interglacial; distribution of ice sheets during last ice age; landscape processes (e.g. weathering, erosion); formation of a corrie; economic opportunities and challenges in glaciated landscapes; sustainability and conservation in glaciated landscapes **Fieldwork** Features of study site; validity; subjectivity; open and closed questioning **Issue Evaluation** Plastic pollution (evaluation of causes, impacts and solutions)
	Geographical skills introduced	Numerical skills focus (e.g. calculating plate movement)	Cartographical, graphical and numerical skills focus (e.g. choropleth maps, scatter graphs)	Cartographical skills focus (e.g. contour lines and additional fieldwork skills)
	Knowledge revisited	Structure of earth; tectonic plates; structure of volcano; cause; impact; response	Sustainable development; GDP; HIC; NEE; LIC; development differences; trade; globalisation; employment types; population policies; sustainability	UK physical features; rock cycle; erosion; natural causes of climate change; opportunities; challenges; sustainable management; climate change impacts; waste management; sustainability; cause; impact; solution; stages of fieldwork investigation
	Geographical skills revisited	Cartographical skills (e.g. describing map distributions)	Cartographical and graphical skills (e.g. grid references, map keys, pie charts, scale and population pyramids)	Cartographical skills (e.g. grid references, scale, gradient, landscape maps, direction and fieldwork skills)
	CEAIG	Volcanologist	Public health officer	Glaciologist and infrastructure engineer
YEAR 9	**Knowledge introduced**	**Urbanisation and Lagos Case Study**	**Natural Hazards and Tectonic Theory**	**Rivers**

		Global pattern of urban change; urban trends in HICs and LICs; emergence of megacities; location and importance of Lagos (regionally, nationally and internationally); causes of growth of Lagos (natural increase and migration); urban growth opportunities in Lagos (access to services, access to resources and economic development); urban growth challenges in Lagos (slums, clean water, sanitation, energy, services, unemployment, crime and environmental issues); urban planning **Ecosystems** Small scale ecosystem in UK; detailed nutrient cycle; food web; the balance between components; impact of changing one component; characteristics of large-scale global ecosystems (detailed) **UK Resources** Significance of food, water and energy; global inequalities in the supply and consumption of resources; food, water and energy resources in the UK	Factors affecting hazard risk (detailed); plate tectonics theory (detailed); global distribution of earthquakes and volcanoes; processes at plate margins leading to earthquakes and volcanic activity **Reducing the Development Gap** Economic and social measures of development; limitations of economic and social measures; Demographic Transition Model (detailed); consequences of uneven development; reducing the development gap (investment, industrial development, tourism, aid, intermediate technology, fairtrade, debt relief and microfinance loans); example of tourism reducing development gap **Cold Environments** Physical characteristics of cold environments; interdependence of climate, permafrost, soils, plants, animals and people; how plants and animals adapt to the physical conditions; issues related to biodiversity; development opportunity and challenges in cold environments; the value of cold environments as wilderness areas; why these fragile environments need protecting; strategies to balance the needs of economic development and conservation in cold environments	Long profile and changing cross profile of a river and its valley; fluvial processes; characteristics and formation of fluvial landforms (e.g. interlocking spurs, waterfalls, gorges, meanders, ox-bow lakes, levées, flood plains and estuaries); example of river valley in the UK; physical and human factors affecting flood risk; hydrographs; costs and benefits of management strategies (e.g. hard engineering and soft engineering); case study of flood management scheme in the UK **Economic Change - UK** Causes of economic change in the UK (de-industrialisation, decline of traditional industrial base, globalisation and government policies); moving towards a post-industrial economy (development of IT, service industries, finance, research and science/business parks); impacts of industry on the physical environment; example of how modern industry can be more environmentally sustainable; social and economic changes in the rural landscape (area of population growth and area of population decline); improvement and new developments in road, rail, port and airport infrastructure; the north-south divide; strategies used in an attempt to resolve regional differences; the place of the UK in the wider world (e.g. trade, culture, transport, electronic communication, the EU and the Commonwealth)
	Knowledge Revisited	Urbanisation; slums; push and pull factors; natural increase; megacities; urbanisation opportunities and challenges; urban sustainability; interrelationships within a natural system; producers; consumers; decomposers; food chain; distribution and characteristics of large-scale global ecosystems; natural	Definition of natural hazard; types of natural hazard; factors affecting hazard risk; plate tectonics theory; global distribution of volcanoes; plate margins (constructive, destructive and conservative); classifying the world; development indicators; Clark Fisher Model; Demographic Transition Model; causes of uneven development; reducing the development gap (e.g. transnational corporations in India); sustainability; biome characteristics; ecosystem characteristics; food webs; nutrient cycles; biodiversity; development opportunities and challenges (e.g. from hot deserts, Rio de Janeiro, India and glaciated landscapes); protecting our biomes/landscapes; sustainable management	Major upland and lowland areas and river systems; UK landscapes and landforms; geology; geological timescale; weathering; erosion; transportation; deposition; landform formation; hydrological cycle; rock cycle; landscape management strategies; costs and benefits; location of major UK cities; Clark Fisher Model; de-industrialisation; globalisation; sustainability; environmental impacts of industry; rural challenges and opportunities

		resources; inequalities in resources; carbon footprints; food miles; water pollution; water deficit; fossil fuels; renewable energy; environmental issues of energy exploitation		(e.g. glaciated landscapes); infrastructure; inequality within and between countries; trade; Europe
	Geographical skills introduced	Graphical skills focus	Numerical skills focus	Cartographical skills focus
	Geographical skills revisited	Cartographical, graphical, numerical and statistical skills	Cartographical, graphical, numerical and statistical skills	Cartographical, graphical, numerical and statistical skills
	CEIAG	Architectural technologist, environmental consultant and civil engineer	Disaster Risk Manager, Rural Development Planner and Mapping Specialist	Flood Risk Surveyor

*A powerful, knowledge-rich curriculum teaches both **substantive knowledge** (facts; knowing that something is the case; what we think about) and non-declarative or **procedural knowledge** (skills and processes; knowing how to do something; what we think with). There are no skills without bodies of knowledge to underpin them.

In some subjects, a further distinction can be made between substantive knowledge (the domain specific knowledge accrued e.g. knowledge of the past) and disciplinary knowledge (how the knowledge is accrued e.g. historical reasoning).

Please refer to the DAT Curriculum Principles, published on our website, for further information about how we have designed our all-through curriculum.