



Geography Department



Name:

Class:

Teacher:

These core questions cover key facts for each of the units you will study during year 9. It is an important revision skill to return to these throughout the year. You will be tested on these throughout the year and in your year 9 end of year exam.

## 9.1 Fieldwork skills

#	<u>Question</u>	<u>Answer</u>
1	What is primary data?	Data that you have collected for the investigation
2	What is secondary data?	Data that someone else has previously collected for their research
3	What is the difference between population and sample?	Population is the entire dataset that could be measured whereas a sample is a limited number of measurements to represent the entire data set.
4	Give one way to sample randomly	Roll a dice, draw from a hat, random number generator
5	What is random sampling?	Each part of the population is equally likely to be included in a sample
6	What is systematic sampling?	Measurements / data is taken at regular intervals
7	What is stratified sampling?	The population is split into sub groups and samples are taken from each group.
8	What are the benefits of sampling?	Quicker and easier than obtaining data from the whole population Data obtained should be representative of the whole population
9	What is evaluation?	Studying the strengths and weaknesses of your work
10	What is the purpose of a geographical investigation?	To learn about the environment To find trends / patterns To help with decision making To help find solutions to problems

## 9.2 Geographical skills

#	Question	Answer
1	What is the difference between latitude and longitude?	Latitude measures the distance north or south from the equator whereas longitude measures the distance east or west from the Meridian line
2	How is latitude and longitude measured?	Degrees
3	What is found at 23.5°N on a map?	Tropic of Cancer
4	What is found at 0° on a map?	The equator
5	What is meant by hemisphere?	Half of the Earth
6	Where would you find eastings on a map?	Numbers going across
7	What do 4 figure grid references help with?	Locating a square km on a map
8	What do 6 figure grid references help with?	Pinpoints a specific feature on a map (an area of 100mx100m)
9	What is the difference between a bar graph and histogram?	Bar graphs show categorical data whereas histograms show quantitative data
10	How does a choropleth map help to show patterns?	Shading is used to show patterns (from dark to light to show quantity)
11	What does a dispersion graph show?	The spread of data
12	What is a field sketch?	Simple outline drawing with annotated key points
13	Why do geographers draw field sketches?	Support data collection Can highlight information when doing fieldwork (e.g. where samples are taken)
14	What is a sketch map?	Simplifies an image to only include the most important features
15	What do curved distances measure on a map?	Roads, railways and rivers
16	What is relief on a map?	The shape of the land
17	How is relief shown on an OS map?	Contour lines and spot heights
18	What is the relief like if contour lines are close together?	Steep
19	What is a risk assessment?	Deciding what could go wrong with an activity and agreeing what needs to be done to prevent it from happening
20	What is the difference between qualitative and quantitative data?	Qualitative is descriptive and is written in words whereas quantitative is numerical

### 9.3 Decision making exercise – UK reservoir

#	Question	Answer
1	What is water supply?	The provision of water by individuals, communities, public bodies or companies
2	What is water demand?	The quantity of water required to meet people's needs
3	What are water transfer schemes?	Move water via pipe or truck from areas of supply to areas of demand
4	Where is the driest area of the UK?	The south east
5	Which area of the UK has the greatest rainfall?	North west Scotland
6	What is the rain shadow?	A dry area on the leeward side of a mountainous area
7	What is a reservoir?	A lake that is used for storing water before it is supplied to people
8	What is an embankment?	A thick wall of earth that is built to prevent water from flooding an area
9	What is desalination?	The process of removing salt from sea water
10	What is meant by water stress?	Demand for water exceeds the available amount
11	How much has the amount of water used by UK households gone up since 1975?	70%
12	Why has water usage increased in the UK?	More appliances (e.g. dishwashers and washing machines)
13	What is the difference between water deficit and water surplus?	Deficit is a place that has less water than required whereas surplus is a place that has more water than required
14	What is water conflict?	Where water supplies or access to water are the root cause of tension between people
15	What is the difference between site and situation?	Site describes the land a settlement is built on whereas situation describes where the settlement is located in relation to surrounding features
16	Where is Abingdon?	Oxfordshire
17	What is the average rainfall for Oxfordshire?	737mm per year
18	When did Thames Water first propose plans for a reservoir at Abingdon?	1976
19	Give one reason Abingdon is a good place for a reservoir	Close to London Accessibility by road Large open space No risk of flooding to major settlements Impermeable ground
20	Why is Abingdon not a good place for a reservoir?	Flat land meaning a 20m high embankment will have to be built
21	What could happen if a reservoir is not built in Abingdon?	Oxford will have a shortfall of 1 million litres of water per day by 2020

## 9.4 Rivers

#	Question	Answer
1	What is the hydrological cycle?	The continuous movement of water from the sea to the sky, onto the land, and back to the sea
2	What is evaporation?	The sun heats the water and turns from liquid to gas
3	What is condensation?	Water vapour cools in the sky and turns from gas to liquid
4	Where is most water stored on Earth?	Groundwater in aquifers
5	What three processes happen in a river?	Erosion, transport and deposition
6	What is the difference between erosion and deposition?	Erosion is wearing away of the land whereas deposition is the dropping of material
7	Why does a river deposit material it is transporting?	Lack of energy
8	How many types of erosion are there? What are they?	4 – attrition, abrasion, hydraulic action, solution
9	Which process occurs most in the upstream of a river?	Erosion
10	What is a drainage basin?	An area of land drained by a river
11	How will the size of a drainage basin influence the amount of water at the mouth?	A bigger drainage basin will mean a larger area for water to be drained over
12	Give one way humans influence drainage basins	Farming, building urban areas, taking water for our own uses, dams, deforestation
13	What are the names of the start and end of a river?	Start – source / End - mouth
14	What happens at the confluence of a river?	Two rivers meet / A tributary joining a main river
15	What three landforms are found in the upper course of a river?	V shaped valley, interlocking spurs and waterfalls
16	What four landforms are found in the lower course of a river?	Ox-bow lake, floodplains, levees and deltas
17	What are flood hydrographs used for?	Measure a river's flow and show how the water flow changes through a river after a storm
18	What does the recession limb of a hydrograph show?	Falling flood water in a river
19	What needs to happen for a waterfall to be created?	A river needs to cross a band of soft rock after flowing over hard rock
20	What feature forms on the inside bend of a meander?	Slip off slope
21	How is river discharge measured?	Cross sectional area multiplied by rivers mean velocity
22	Why does the removal of vegetation increase the chances of flooding?	Less rainfall is intercepted before it hits the ground, meaning that it moves down towards rivers more quickly

## 9.5 The Living World (GCSE)

### Ecosystems Glossary

#	Key Word	Definition
1	Abiotic	Related to all non-living things
2	Biotic	Related to living things
3	Consumer	Creature that eats herbivores and/or plant matter
4	Decomposer	An organism such as bacteria or fungus which breaks down dead plant or animal tissue which is recycled into the environment
5	Ecosystem	A community of plants and animals that interact with each other and their physical environment.
6	Food chain	The connections between different organisms (plants and animals) that rely on one another as their source of food.
7	Food web	A complex hierarchy of plants and animals relying on each other for food.
8	Global ecosystem	The large ecological areas on the earth's surface with animals and plants adapting to their environment.
9	Nutrient cycling	A set of processes whereby organisms extract minerals necessary for growth from soil or water. Passing them on later through the food chain and ultimately (decomposed) back into the soil.
10	Producer	An organism or plant that is able to absorb energy from the sun through photosynthesis.

### Hot Deserts Glossary

#	Key Word	Definition
1	Appropriate (intermediate) technology	Technology best suited to the needs, skills, knowledge and wealth of the locals, often used in LICs. <i>Usually combines simple ideas with cheap, readily available materials.</i>
2	Biodiversity	The variety of life in the world or a particular habitat
3	Desertification	The process where land becomes drier and degraded, as a result of climate change or human activities, or both
4	Hot deserts	Parts of the world that have high average temperatures and very low precipitation
5	Mineral extraction	The removal of solid mineral resources from the earth. <i>Ores, precious metals or building materials could be dug up, along with fuel mining such as coal or oil shale.</i>
6	Over cultivation	Exhausting the soil by over-cropping (using) the land on a repeated basis.
7	Overgrazing	Grazing too many livestock for an extended period of time on a piece of land, meaning it is unable to regrow and recover its vegetation cover.

## Tropical Rainforests Glossary:

#	Key Word	Definition
1	Biodiversity	The variety of life in the world or a particular habitat
2	Commercial farming	Farming to sell produce for a profit to retailers or food processing companies.
3	Debt reduction	Countries are relieved of some of their debt in return for protecting their rainforests.
4	Deforestation	The chopping down and removal of trees to clear an area of the forest
5	Ecotourism	Responsible travel to natural areas that conserves the environment and supports the livelihood of locals. <i>It sustains the wellbeing of local people, involves educational action and usually carried out in small groups to have minimal shock to the ecosystem it takes place in.</i>
6	Logging	The business of cutting down trees and transporting timber to mills for processing and sale
7	Mineral extraction	Removing mineral resources from the earth
8	Selective logging	Cutting down trees which are mature or inferior, encouraging the growth of remaining trees within the forest.
9	Soil erosion	Removal of top soil faster than it can be replenished. <i>This may be due to natural causes such as flooding, or human activity such as farming.</i>
10	Subsistence farming	A type of agricultural practise to only produce enough food and material to sustain and benefit the farmer.
11	Sustainability	Actions and forms of progress that meet the needs of the present without reducing the ability of future generations to meet their need.

## The Living World Pop Quiz:

#	Question	Answer
1	What is an ecosystem?	An ecosystem is community of plants and animals living together in a habitat. The lives of the plants and animals are closely linked to each other and the climate and soil of the area that they live in
2	Name three areas of a freshwater pond ecosystem	Pond margin, pond bottom, mid pond water, pond surface, air above pond
3	Give an example of a producer in a freshwater pond	Detritus (decaying leaves) Algae
4	Give an example of a consumer in a freshwater pond	Great diving beetle Heron Fish Midge larvae
5	What is the difference between a food web and a food chain?	Food chains follow a single path of energy as organisms find food whilst food webs display how

		plants and animals are connected in many ways to help them all survive
6	What is a biome?	A biome is a large geographical area of distinctive plant and animal groups, which are adapted to that particular environment
7	List the structure of a tropical rainforest from the ground up	Shrub layer, lower canopy, canopy, emergent layer
8	Name two adaptations of vegetation in a tropical rainforest	Lianas, buttress roots, leaves with flexible bases, thin branchless trunks, smooth bark, epiphytes, emergent, drip-tips
9	Describe the soil in a tropical rainforest	Red in colour due to high iron and aluminium content and is infertile with a thick layer of leaf litter and decomposing organic leaf matter on the surface
10	What is the soil in rainforests called?	Latosol
11	Explain the nutrient cycle	<ol style="list-style-type: none"> <li>1. Trees shed leaves all year round</li> <li>2. Decaying vegetation decomposes rapidly releasing nutrients</li> <li>3. Nutrients enter the soil surface but don't get chance to sink in</li> <li>4. Shallow roots quickly take up the nutrients</li> <li>5. The nutrients help the trees to grow rapidly</li> </ol>
12	State two effects of deforestation	Loss of biodiversity, climate change, conflict between indigenous tribes and newcomers to the area, less CO <sub>2</sub> absorbed from the atmosphere, water pollution, decrease in unemployment rate
13	What is the percentage change in annual deforestation rate 2000 - 2005 vs 2005 – 2010 in Indonesia?	107%
14	Between 2000 – 2010, the population in the Amazon increased by what percentage?	23%
15	What is extracted from mines in the Amazon rainforest?	Iron, nickel, tin, zinc and gold
16	What is the BR163?	A dirt track that ran through huge sections of untouched forest in the Amazon which was planned to be tarmacked to turn it into a superhighway
17	Define the term 'sustainable use of the rainforest'	Sustainable uses of the rainforest are uses that allow current generations to make a living from the forest without damaging the forest for future generations to use
18	What are the five standards for sustainable forest management?	<ol style="list-style-type: none"> <li>1. Clearing of intact rainforests is prohibited</li> <li>2. Sustainable management plan</li> <li>3. Sensitive forest areas are to be preserved</li> <li>4. The rights of indigenous groups are to be protected</li> <li>5. Workers are assured of fair working conditions</li> </ol>
19	Why was the International Tropical Timber Agreement of 2006 set up?	To "promote the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests



		and to promote the sustainable management of tropical timber producing forests"
20	How much rainfall does a desert receive per year?	Less than 250mm
21	Describe one way that a camel is adapted to live in the desert	Long eyelashes to keep out sand/dust and sun, fat stored in hump so it can survive periods with no food, fur for insulation (cold nights and hot days), nostrils can close to keep out blowing sand and broad feet so they don't sink into sand
22	Where is the Thar Desert located?	On and around the border between India and Pakistan
23	What are the main problems in Jaisalmer due to tourism?	The demand for water in the fort in the city has increased 12-fold, and the waste water passes under the foundations and undermines them
24	What is the benefit of the Indira Ghandi canal in the Thar Desert?	It brings water to major cities such as Bikaner and Jaisalmer, but also water to irrigate the land
25	Name three development opportunities in hot desert environments	Tourism, sustainable farming, commercial farming, mineral extraction, energy use
26	How many people in the Sahel region of Africa faced hunger due to desertification in 2014?	20 million
27	What is the Acacia Project?	In Senegal, FAO and the Forestry Service provided Acacia seeds and seedlings and taught the people how to sow and plant the Acacia trees and extract and market the gum that they extract.