North Oxfordshire Academy
The best in everyone™
Part of United Learning

GCSE Geography Self-Quizzing Booklet

Name:

Teacher:

Retrieval practice for revision – self quizzing

- Retrieval – *"retrieving something from our memories to make it easier to recall in future"*

- Retrieval is forcing yourself to recall information from memory – it helps with your learning & progress

- Research has proven that frequent testing and recalling (or retrieval) of information can help to strengthen connections in your long-term memory.

- We have compiled questions and answers to help consolidate and build fluency and fingertip knowledge, both critical for success at GCSE.

- It is about doing more than just reading or highlighting notes – **two poor uses of your time**

Steps:

1) Use look, cover, write, check (or other methods) to memories the answers in the self-quizzing grid (you may have done this with spellings in primary school)

2) Focus on the first 5 questions only

3) Fold the sheet over (so that you can't see the answers) and put it next to your book

4) Write out the answers to the questions. If you can't remember one, leave it blank and wait until the end

5) Then get a different colour pen, turn the paper over and mark and make corrections. Check your answers are accurate. Then, repeat the process for the next 5 answers to slowly increase the amount of knowledge you are focusing on

Variations:

- ✓ You could actively speak the answers rather than writing (writing is best though, so don't miss this out entirely)

- ✓ You could cut the questions and answers up into mini-flashcards, with questions on the front and answers on the back. You can then mix them up and use them for quizzing

- ✓ You could change the order of questions to introduce difficulty

- ✓ You could flip the way you do it and try to figure out the question from the answer.

- ✓ You could create your own retrieval grid from your notes

Do not use the resource badly – **highlighting, copying answers out or staring at** the sheet are bad uses of time. They are really inefficient ways of learning and have been scientifically proven to be very poor ways of revising content! Start quizzing instead to test your knowledge and then check your work for accuracy and completeness.

Self-quizzing log – when did you last self-quiz?

	When did I last self-quiz this topic? (put in the date)																							
Topic 1 – Earthquakes																								
Topic 1 – Tropical Storms																								
Topic 2 – Development Dynamics																								
Topic 3 – Challenges of an urbanising world																								
Topic 4 – The UK's physical environment																								
Topic 5 – The UK's urban landscape																								
Topic 6 – Geographical investigations																								
Topic 7 - People and the biosphere																								
Topic 8 – Forests under threat																								
Topic 9 - Consuming energy resources																								

What case study is this?

- Japan Sendai 2011 earthquake
- Nepal 2015 earthquake

Earthquakes in both a developed and emerging or developing country (Paper 1)

Topic 1 - Earthquakes: Nepal 2015 (developing – GDP per capita = $1,048 (2019))			Japan 2011 (developed – GDP per capita = $48,850 (2019))		
1	How many people died?	9107	16	How many people died?	15900
2	How many people were injured?	23000	17	What was the magnitude?	9.0
3	How many people were made homeless?	3.5 million	18	How many people were made homeless?	350000
4	What happened to water supplies?	Destroyed and sanitation drains destroyed also	19	How many were injured?	6150
5	What happened to the airport in Kathmandu?	The airport's runway was damaged	20	What were the primary effects?	1 dam collapsed, 2 nuclear power stations were damaged
6	Why was the closure of the airport important?	It slowed down the delivery of international aid	21	What were the primary effects?	Tohoku motorway badly damaged, rail links damaged
7	How large was the economic damage cost?	US$7 billion (35% of Nepal's GDP)	22	What were the secondary effects?	93% of deaths were caused by drowning in the tsunami
8	What happened to agriculture?	Crop planting was delated. Many rural families lost £	23	What were the secondary effects?	Loss of power as 2 nuclear reactors went into meltdown, homelessness
9	How did the UN help?	Provided blankets, tents, water, hygiene kits	24	How were people affected?	Disrupted schooling, unemployment as business damaged, stress
10	How did India help?	Provided troops to search for people and clear rubble	25	What was the immediate response?	A tsunami warning was issued 3 minutes after the earthquake.
11	How did US and China help?	Provided helicopters to access isolated mountains	26	How did Japan respond?	Japan's army and emergency services responded very quickly
12	What were the long term responses?	Wooden cross bracing and lightweight roof (eq proof)	27	What were the long term responses?	Sea walls and tsunamis flood gates have been built
13	How big was the earthquake?	7.8	28	How are people warned about future earthquakes?	Warning message is sent to TVs and mobiles
14	Which area of Nepal did it hit?	Kathmandu and the Langtang Valley	29	How well prepared is Japan for a future event?	40% of coastline is has sea walls up to 10m high
15	How many landslides did it cause?	329 in the Langtang Valley	30	Where did the earthquake take place?	70km from coast in Sendai Bay

Topic 1 - Earthquakes: Nepal 2015 (developing – GDP per capita = $1,048 (2019))		Japan 2011 (developed – GDP per capita = $48,850 (2019))	
1	How many people died?	16	How many people died?
2	How many people were injured?	17	What was the magnitude?
3	How many people were made homeless?	18	How many people were made homeless?
4	What happened to water supplies?	19	How many were injured?
5	What happened to the airport in Kathmandu?	20	What were the primary effects?
6	Why was the closure of the airport important?	21	What were the primary effects?
7	How large was the economic damage cost?	22	What were the secondary effects?
8	What happened to agriculture?	23	What were the secondary effects?
9	How did the UN help?	24	How were people affected?
10	How did India help?	25	What was the immediate response?
11	How did US and China help?	26	How did Japan respond?
12	What were the long term responses?	27	What were the long term responses?
13	How big was the earthquake?	28	How are people warned about future earthquakes?
14	Which area of Nepal did it hit?	29	How well prepared is Japan for a future event?
15	How many landslides did it cause?	30	Where did the earthquake take place?

Topic 1 - Earthquakes: Nepal 2015 (developing – GDP per capita = $1,048 (2019))		Japan 2011 (developed – GDP per capita = $48,850 (2019))	
1		16	
2		17	
3		18	
4		19	
5		20	
6		21	
7		22	
8		23	
9		24	
10		25	
11		26	
12		27	
13		28	
14		29	
15		30	

Topic 1 - Earthquakes: Nepal 2015 (developing – GDP per capita = $1,048 (2019))		Japan 2011 (developed – GDP per capita = $48,850 (2019))	
1	9107	16	15900
2	23000	17	9.0
3	3.5 million	18	350000
4	Destroyed and sanitation drains destroyed also	19	6150
5	The airport's runway was damaged	20	1 dam collapsed, 2 nuclear power stations were damaged
6	It slowed down the delivery of international aid	21	Tohoku motorway badly damaged, rail links damaged
7	US$7 billion (35% of Nepal's GDP)	22	93% of deaths were caused by drowning in the tsunami
8	Crop planting was delated. Many rural families lost £	23	Loss of power as 2 nuclear reactors went into meltdown, homelessness
9	Provided blankets, tents, water, hygiene kits	24	Disrupted schooling, unemployment as business damaged, stress
10	Provided troops to search for people and clear rubble	25	A tsunami warning was issued 3 minutes after the earthquake.
11	Provided helicopters to access isolated mountains	26	Japan's army and emergency services responded very quickly
12	Wooden cross bracing and lightweight roof (eq proof)	27	Sea walls and tsunamis flood gates have been built
13	7.8	28	Warning message is sent to TVs and mobiles
14	Kathmandu and the Langtang Valley	29	40% of coastline is has sea walls up to 10m high
15	329 in the Langtang Valley	30	70km from coast in Sendai Bay

What case study is this?

- Hurricane Katrina 2005 USA
- Cyclone Aila 2009 Bangladesh

Tropical storms in both a developed and emerging or developing country (Paper 1)

	Topic 1 - Tropical storms: Cyclone Aila 2009 (developing – GDP per capita = $2,174 (2019))			Hurricane Katrina 2005 (developed – GDP per capita = $65,112 (2019))	
1	What month did the cyclone take place in?	May (monsoon season June-October)	16	How many people died?	1833
2	How many people were killed?	190	17	What was the estimation of damage costs?	US$108 billion
3	How many people were made homeless?	750,000	18	How high was the storm surge that hit New Orleans?	4 metres
4	How was agriculture affected?	Farmlands were flooded with salt water.	19	What percentage of New Orleans was left flooded for weeks?	80%
5	What were the long term effects?	Poverty / slums / homelessness (200,000)	20	Why did river levees collapse?	Government spending cuts, left levees poorly maintained.
6	What happened to animal dung?	Source of cooking fuel was lost	21	How many people were evacuated?	1.04 million people (33% black Afro-Americans
7	What were the secondary effects?	Diseases spread rapidly – typhoid / malaria	22	What soft engineering strategies have been proposed since 2005?	Beach nourishment / creating reefs and wetlands (to absorb wave energy)
8	What was the short term response?	Clothes & drinking water issued by the Red Cross	23	How many weather satellites operate globally every day?	20
9	How did the government help the people?	Government camps were set up to provide shelter	24	How may phones are in the USA?	103 per 100 people (high access to technology/warning systems)
10	What happened to rice and drinking water supplied?	Water supplies had been contaminated	25	Why is forecasting and prediction not perfect?	Satellites are getting old and regularly fail (3 left in operation)
11	What was the government's long term response?	3500 shelters built, early warning system introduced	26	Why are 'risk zones' put in place?	To aid evacuation – higher risk areas evacuated first.
12	How does the government help rural communities?	Runs awareness campaigns (45000 volunteers)	27	Why were warning systems largely successful?	Huge numbers of people have access to mobile phones.
13	What were the successes of the response?	successfully used foreign warnings and evacuations	28	What category storm was Katrina?	Category 3 (wind speeds 120mph)
14	What were the failures of the response?	Illiteracy means not all follow warnings	29	How long did it take for 'normal' to return to New Orleans?	10 years – most buildings and businesses rebuilt by 2015
15	What is the capital of Bangladesh?	Dhaka	30	Why were people so badly impacted following hurricane Katrina?	Low income families lost their homes.

	Topic 1 - Tropical storms: Cyclone Aila 2009 (developing – GDP per capita = $2,174 (2019))			Hurricane Katrina 2005 (developed – GDP per capita = $65,112 (2019))	
1	What month did the cyclone take place in?		16	How many people died?	
2	How many people were killed?		17	What was the estimation of damage costs?	
3	How many people were made homeless?		18	How high was the storm surge that hit New Orleans?	
4	How was agriculture affected?		19	What percentage of New Orleans was left flooded for weeks?	
5	What were the long term effects?		20	Why did river levees collapse?	
6	What happened to animal dung?		21	How many people were evacuated?	
7	What were the secondary effects?		22	What soft engineering strategies have been proposed since 2005?	
8	What was the short term response?		23	How many weather satellites operate globally every day?	
9	How did the government help the people?		24	How may phones are in the USA?	
10	What happened to rice and drinking water supplied?		25	Why is forecasting and prediction not perfect?	
11	What was the government's long term response?		26	Why are 'risk zones' put in place?	
12	How does the government help rural communities?		27	Why were warning systems largely successful?	
13	What were the successes of the response?		28	What category storm was Katrina?	
14	What were the failures of the response?		29	How long did it take for 'normal' to return to New Orleans?	
15	What is the capital of Bangladesh?		30	Why were people so badly impacted following hurricane Katrina?	

Topic 1 - Tropical storms: Cyclone Aila 2009 (developing – GDP per capita = $2,174 (2019))		Hurricane Katrina 2005 (developed – GDP per capita = $65,112 (2019))	
1		16	
2		17	
3		18	
4		19	
5		20	
6		21	
7		22	
8		23	
9		24	
10		25	
11		26	
12		27	
13		28	
14		29	
15		30	

	Topic 1 - Tropical storms: Cyclone Aila 2009 (developing – GDP per capita = $2,174 (2019))			Hurricane Katrina 2005 (developed – GDP per capita = $65,112 (2019))
1		May (monsoon season June-October)	16	1833
2		190	17	US$108 billion
3		750,000	18	4 metres
4		Farmlands were flooded with salt water.	19	80%
5		Poverty / slums / homelessness (200,000)	20	Government spending cuts, left levees poorly maintained.
6		Source of cooking fuel was lost	21	1.04 million people (33% black Afro-Americans
7		Diseases spread rapidly – typhoid / malaria	22	Beach nourishment / creating reefs and wetlands (to absorb wave energy)
8		Clothes & drinking water issued by the Red Cross	23	20
9		Government camps were set up to provide shelter	24	103 per 100 people (high access to technology/warning systems)
10		Water supplies had been contaminated	25	Satellites are getting old and regularly fail (3 left in operation)
11		3500 shelters built, early warning system introduced	26	To aid evacuation – higher risk areas evacuated first.
12		Runs awareness campaigns (45000 volunteers)	27	Huge numbers of people have access to mobile phones.
13		successfully used foreign warnings and evacuations	28	Category 3 (wind speeds 120mph)
14		Illiteracy means not all follow warnings	29	10 years – most buildings and businesses rebuilt by 2015
15		Dhaka	30	Low income families lost their homes.

What case study is this?

- India (an emerging country)

A case study of development in an emerging country (Paper 1)

Topic 2: Development Dynamics – case study of a developing country (India)

#	Question	Answer	#	Question	Answer
1	What is the population of India?	1.25 billion	16	What is the example of a top-down development project in India?	Narmada River Scheme
2	How many people live in urban slums?	40 million (25% of its urban population)	17	Why was the Narmada River Scheme introduced?	To provide drinking water and electricity, irrigation for farmland
3	Which international organisations is India part of?	UN & G20	18	What were the benefits of the Narmada River Scheme?	3.5 billion litres of water, 1.8 million hectares irrigated
4	Which Indian city is BT located in?	Delhi	19	What were the problems of the Narmada River Scheme?	234 villages flooded, 320000 displaced, locals cant afford elec
5	How much does BT pay its workers in India?	£3000 a year (20% average UK graduate salary)	20	What is the example of a bottom-up project development project in India?	Biogas in rural areas (4 million cattle dung plants in India)
6	Which university provides BT with workers?	Bangalore University provides graduates	21	Why was biogas introduced?	reduce time women & girls had to spend collecting firewood
7	What is the name of the urban core?	Maharashtra	22	How does biogas work?	Cow dung produces a gas which can be used for cooking and elec
8	Why is Maharashtra the site of economic growth?	Manufacturing in Mumbai, port, construction industry	23	What are the benefits of the biogas scheme?	Smoke-free kitchens, so fewer lung infections than firewood
9	How have people benefited?	High incomes, positive multiplier effect	24	What are the benefits of the biogas scheme?	Girls have more time to spend at school.
10	What is the name of the rural periphery?	Bihar	25	What are the problems of the biogas scheme?	It is very small scale, only applicable in rural areas
11	How many people live in Bihar?	100 million people	26	What challenges does India face in the future?	Low investment infrastructure, 25% people no electricity
12	What % of Bihar's population is rural?	86%	27	What is the cause of India's problems?	Low tax paid by TNCs – encourages FDI into India
13	Why have people in Bihar missed out from the benefits of globalisation?	Caste based system keeps people poor	28	What is India's relationship like with Asia?	Tense. Conflict over Kashmir. Water scarcity reason for conflict
14	Why have people in Bihar missed out from the benefits of globalisation?	School attendance is low, low literacy rate (33%)	29	What is India's relationship like with the rest of the world?	Member of G20 & can therefore help to resolve global issues
15	What are the environmental impacts of growth in India?	Water and air pollution, loss of biodiversity	30	What are the problems for India's people?	low water supply, access to education poor, poverty high

Topic 2: Development Dynamics – case study of a developing country (India)				
1	What is the population of India?		16	What is the example of a top-down development project in India?
2	How many people live in urban slums?		17	Why was the Narmada River Scheme introduced?
3	Which international organisations is India part of?		18	What were the benefits of the Narmada River Scheme?
4	Which Indian city is BT located in?		19	What were the problems of the Narmada River Scheme?
5	How much does BT pay its workers in India?		20	What is the example of a bottom-up project development project in India?
6	Which university provides BT with workers?		21	Why was biogas introduced?
7	What is the name of the urban core?		22	How does biogas work?
8	Why is Maharashtra the site of economic growth?		23	What are the benefits of the biogas scheme?
9	How have people benefited?		24	What are the benefits of the biogas scheme?
10	What is the name of the rural periphery?		25	What are the problems of the biogas scheme?
11	How many people live in Bihar?		26	What challenges does India face in the future?
12	What % of Bihar's population is rural?		27	What is the cause of India's problems?
13	Why have people in Bihar missed out from the benefits of globalisation?		28	What is India's relationship like with Asia?
14	Why have people in Bihar missed out from the benefits of globalisation?		29	What is India's relationship like with the rest of the world?
15	What are the environmental impacts of growth in India?		30	What are the problems for India's people?

Topic 2: Development Dynamics – case study of a developing country (India)				
1		16		
2		17		
3		18		
4		19		
5		20		
6		21		
7		22		
8		23		
9		24		
10		25		
11		26		
12		27		
13		28		
14		29		
15		30		

Topic 2: Development Dynamics – case study of a developing country (India)				
1		1.25 billion	16		Narmada River Scheme
2		40 million (25% of its urban population)	17		To provide drinking water and electricity, irrigation for farmland
3		UN & G20	18		3.5 billion litres of water, 1.8 million hectares irrigated
4		Delhi	19		234 villages flooded, 320000 displaced, locals cant afford elec
5		£3000 a year (20% average UK graduate salary)	20		Biogas in rural areas (4 million cattle dung plants in India)
6		Bangalore University provides graduates	21		reduce time women & girls had to spend collecting firewood
7		Maharashtra	22		Cow dung produces a gas which can be used for cooking and elec
8		Manufacturing in Mumbai, port, construction industry	23		Smoke-free kitchens, so fewer lung infections than firewood
9		High incomes, positive multiplier effect	24		Girls have more time to spend at school.
10		Bihar	25		It is very small scale, only applicable in rural areas
11		100 million people	26		Low investment infrastructure, 25% people no electricity
12		86%	27		Low tax paid by TNCs – encourages FDI into India
13		Caste based system keeps people poor	28		Tense. Conflict over Kashmir. Water scarcity reason for conflict
14		School attendance is low, low literacy rate (33%)	29		Member of G20 & can therefore help to resolve global issues
15		Water and air pollution, loss of biodiversity	30		low water supply, access to education poor, poverty high

What case study is this?

- Lagos, Nigeria (an example of a megacity in an emerging country)

A case study of why quality of life varies so much in a megacity in an emerging country (Paper 1)

Topic 3: Challenges of an Urbanising World – case study of a megacity (Lagos)				
What is urbanisation?	The increased proportion of people living in cities	16	Lagos contributes to what percentage of Nigeria's total GDP?	30%
What is a mega city?	A city with a population greater than 10 million	17	Lagos is home to what percentage of Nigeria's industry?	80%
What is a world city?	A city that has global importance	18	What is the name of Lagos' CBD?	Lagos Island
What is the informal economy?	Unofficial economy – no records kept or taxes paid	19	What is the population of Lagos?	21 million
What is urban primacy?	When a major city dominates a country	20	What percentage of waste is collected in Lagos?	40%
What are the 4 main employment sectors?	Primary, secondary, tertiary, quaternary	21	What is the name of the main squatter settlement in Lagos?	Mokoko
Which employment sector is largest for emerging countries?	Secondary	22	Lagos planned to plant how many trees by 2020 to combat pollution levels?	10 million
What are the three stages of the Clark-Fisher model called?	Pre-industrial, industrial, post-industrial	23	What is the name of the gated community in Lagos?	Banana Island
What is the CBD of a city?	Central business district – economic hub of a city	24	What percentage of people are working informally in Lagos?	60%
Migration largely occurs towards what type of area?	Urban areas	25	What is the purpose of the bottom-up strategy in Lagos - the Oando Foundation?	Renovates schools and provides training for teachers
What is de-industrialisation?	The closure of factories in an area	26	What are top-down projects?	Large government or TNC projects run - lots of money/tech
What is the point of land use?	To divide areas of land into different functions	27	What is a bottom-up project?	A small scale project that is run by NGO's with local input
What are the negative impacts of de-industrialisation?	Unemployment, high crime rates, derelict buildings	28	Give one benefit of Lagos' site.	On a lagoon / coastal – trade / water access
Suggest one environmental impact of industrialisation.	Air pollution, water pollution	29	How is Lagos of cultural importance for the west Africa region?	Nollywood / afrobeat
What is counter-urbanisation?	The movement of people out of urban areas	30	What percentage of Lagos is connected to clean running water?	40%

Topic 3: Challenges of an Urbanising World – case study of a megacity (Lagos)				
What is urbanisation?		16	Lagos contributes to what percentage of Nigeria's total GDP?	
What is a mega city?		17	Lagos is home to what percentage of Nigeria's industry?	
What is a world city?		18	What is the name of Lagos' CBD?	
What is the informal economy?		19	What is the population of Lagos?	
What is urban primacy?		20	What percentage of waste is collected in Lagos?	
What are the 4 main employment sectors?		21	What is the name of the main squatter settlement in Lagos?	
Which employment sector is largest for emerging countries?		22	Lagos planned to plant how many trees by 2020 to combat pollution levels?	
What are the three stages of the Clark-Fisher model called?		23	What is the name of the gated community in Lagos?	
What is the CBD of a city?		24	What percentage of people are working informally in Lagos?	
Migration largely occurs towards what type of area?		25	What is the purpose of the bottom-up strategy in Lagos - the Oando Foundation?	
What is de-industrialisation?		26	What are top-down projects?	
What is the point of land use?		27	What is a bottom-up project?	
What are the negative impacts of de-industrialisation?		28	Give one benefit of Lagos' site.	
Suggest one environmental impact of industrialisation.		29	How is Lagos of cultural importance for the west Africa region?	
What is counter-urbanisation?		30	What percentage of Lagos is connected to clean running water?	

Topic 3: Challenges of an Urbanising World – case study of a megacity (Lagos)				
		16		
		17		
		18		
		19		
		20		
		21		
		22		
		23		
		24		
		25		
		26		
		27		
		28		
		29		
		30		

Topic 3: Challenges of an Urbanising World – case study of a megacity (Lagos)				
	The increased proportion of people living in cities	16		30%
	A city with a population greater than 10 million	17		80%
	A city that has global importance	18		Lagos Island
	Unofficial economy – no records kept or taxes paid	19		21 million
	When a major city dominates a country	20		40%
	Primary, secondary, tertiary, quaternary	21		Mokoko
	Secondary	22		10 million
	Pre-industrial, industrial, post-industrial	23		Banana Island
	Central business district – economic hub of a city	24		60%
	Urban areas	25		Renovates schools and provides training for teachers
	The closure of factories in an area	26		Large government or TNC projects run - lots of money/tech
	To divide areas of land into different functions	27		A small scale project that is run by NGO's with local input
	Unemployment, high crime rates, derelict buildings	28		On a lagoon / coastal – trade / water access
	Air pollution, water pollution	29		Nollywood / afrobeat
	The movement of people out of urban areas	30		40%

What case study is this?

- The UK's evolving physical landscape (rivers and coasts)

A study of coasts and rivers (Paper 2)

Topic 4: The UK's Evolving Physical Landscape (Coasts and Rivers)

1	Where in the UK is there igneous and metamorphic upland areas?	Scotland	16	Why is the Holderness coastline at such a high risk of erosion?	Weak geology, long fetch, longshore drift
2	Where in the UK is there low land sedimentary rock?	South England	17	What is a hard engineering strategy?	Concrete barriers to absorb wave energy
3	What is weathering?	The break down of rock in situ	18	Give an example of a hard engineering strategy.	Sea wall, rip rap,
4	What is erosion?	The break down and removal of rock	19	What is a soft engineering strategy?	A defence that works with nature – looks natural
5	What is a discordant coastline?	Strata of rock perpendicular to the sea	20	Give an example of a soft engineering strategy.	Beach replenishment
6	Give a key characteristic of a constructive wave.	Stronger swash than backwash	21	What happens to a rivers size, discharge and velocity as it moves downstream?	Increases
7	What are the 4 types of erosion?	Hydraulic action, abrasion, attrition, corrosion	22	What are the 4 types of river transportation?	Traction, saltation, suspension, solution
8	What is a headland?	An area of hard rock that is resistant to erosion	23	How does a meander become an ox-bow lake?	Erosion cuts through the neck of a meander
9	What is the pattern of longshore drift?	Zig-zag	24	Sheffield is at a confluence of which 3 rivers?	Loxley, Rivelin, Don
10	What is the prevailing wind?	The direction the dominant wind comes from	25	What is interception?	when trees block water from reaching the ground
11	Name 1 depositional features of a coastline.	Beach, bar, spit	26	How much rainfall fell in June 2007 in Sheffield?	90mm
12	Name 2 erosional features of a coastline.	Cave, arch, stack, stump, bay, wav-cut platform	27	How did the urbanisation of Sheffield contribute to the flooding in 2007?	Impermeable surfaces – water cannot infiltrate – surface run off
13	What is terminal groyne syndrome?	Groynes starve areas of coast of sediment	28	What is the lag-time on a hydro graph?	The time between peak rainfall and peak river discharge
14	Since Roman times, how many villages have been lost to erosion at Holderness?	29 villages lost	29	What does it mean if the lag-time on a hydro graph is short?	Water gets into the river very quickly
15	What is holistic management?	Looking at the whole area of coastline	30	How many homes and businesses were flooded during the Sheffield flood of 2007?	1200 homes and 1000 businesses

Topic 4: The UK's Evolving Physical Landscape (Coasts and Rivers)

1	Where in the UK is there igneous and metamorphic upland areas?		16	Why is the Holderness coastline at such a high risk of erosion?	
2	Where in the UK is there low land sedimentary rock?		17	What is a hard engineering strategy?	
3	What is weathering?		18	Give an example of a hard engineering strategy.	
4	What is erosion?		19	What is a soft engineering strategy?	
5	What is a discordant coastline?		20	Give an example of a soft engineering strategy.	
6	Give a key characteristic of a constructive wave.		21	What happens to a rivers size, discharge and velocity as it moves downstream?	
7	What are the 4 types of erosion?		22	What are the 4 types of river transportation?	
8	What is a headland?		23	How does a meander become an ox-bow lake?	
9	What is the pattern of longshore drift?		24	Sheffield is at a confluence of which 3 rivers?	
10	What is the prevailing wind?		25	What is interception?	
11	Name 1 depositional features of a coastline.		26	How much rainfall fell in June 2007 in Sheffield?	
12	Name 2 erosional features of a coastline.		27	How did the urbanisation of Sheffield contribute to the flooding in 2007?	
13	What is terminal groyne syndrome?		28	What is the lag-time on a hydro graph?	
14	Since Roman times, how many villages have been lost to erosion at Holderness?		29	What does it mean if the lag-time on a hydro graph is short?	
15	What is holistic management?		30	How many homes and businesses were flooded during the Sheffield flood of 2007?	

Topic 4: The UK's Evolving Physical Landscape (Coasts and Rivers)				
1		16		
2		17		
3		18		
4		19		
5		20		
6		21		
7		22		
8		23		
9		24		
10		25		
11		26		
12		27		
13		28		
14		29		
15		30		

Topic 4: The UK's Evolving Physical Landscape (Coasts and Rivers)					
1		Scotland	16		Weak geology, long fetch, longshore drift
2		South England	17		Concrete barriers to absorb wave energy
3		The break down of rock in situ	18		Sea wall, rip rap,
4		The break down and removal of rock	19		A defence that works with nature – looks natural
5		Strata of rock perpendicular to the sea	20		Beach replenishment
6		Stronger swash than backwash	21		Increases
7		Hydraulic action, abrasion, attrition, corrosion	22		Traction, saltation, suspension, solution
8		An area of hard rock that is resistant to erosion	23		Erosion cuts through the neck of a meander
9		Zig-zag	24		Loxley, Rivelin, Don
10		The direction the dominant wind comes from	25		when trees block water from reaching the ground
11		Beach, bar, spit	26		90mm
12		Cave, arch, stack, stump, bay, wav-cut platform	27		Impermeable surfaces – water cannot infiltrate – surface run off
13		Groynes starve areas of coast of sediment	28		The time between peak rainfall and peak river discharge
14		29 villages lost	29		Water gets into the river very quickly
15		Looking at the whole area of coastline	30		1200 homes and 1000 businesses

What case study is this?

• The UK's evolving human landscape – London

A study of changing human landscapes focussing on one major city - London (Paper 2)

Topic 5: The UK's Evolving Human Landscape				
1	What does population density mean?	Number of people living in 1 kilometre squared	16	What does a population pyramid show?	The distribution of a population by age and sex
2	What is an "age structure"?	The distribution of a population by age	17	What is the 'knowledge economy'?	Highly skilled quaternary sector employment
3	What is an "enterprise zone"?	Area where tax incentives are given to attract invest.	18	What is an impact rural-urban migration?	Young leave, lower workforce, elderly / very young left
4	What is the multiplier effect?	Where one positive impact causes another and so on	19	How has the UK's total population changed between 1965-2015?	54.3 million – 65 million
5	What is conurbation?	Where cities expand to include nearby towns	20	Where do the majority of international immigrants to the UK come from?	India, Poland, Pakistan
6	What is retirement migration?	Elderly move to rural areas	21	What are the Ascension 8 countries? (A8)	Czech R, Estonia, Hungry, Latvia, Lithu, Poland, Slovakia, Slovenia
7	What is rural-urban migration?	Moving from countryside to towns and cities	22	How does London's site play a role in its expansion / growth?	Grown around the River Thames
8	Suggest one physical cause of a low population density.	Relief, climate, landlocked	23	How does London's situation relative to Europe benefit the area?	Easier trade and flow of people, greater connectivity with Europe
9	What is international migration?	Movement of people from on country to another	24	Which part of London has migration had the biggest impact on?	Newham – 30% white, 26% black Caribbean/African, 39% Asian
10	What is globalisation?	Making the world 'smaller' and more interconnected	25	Suggest reasons for London's urban sprawl.	Counter-urban, suburbanisation, smaller families, more divorces
11	What is internal migration?	People move from 1 place to another within a country	26	Where in London has been regenerated in order to make the area more sustainable?	London docklands – Canary Warf
12	What is primary employment?	Collecting raw materials e.g. farming or mining	27	Suggest 2 methods of making London more sustainable.	Transport, waste collect., afford. housing, energy efficiency
13	What is secondary employment?	Working with machines to manufacture products	28	Suggest 1 impact of rural-urban fringe development.	Pressure on housing, leisure and healthcare, elderly migrants,
14	What is tertiary employment?	Services provided e.g. teacher or doctor	29	Suggest 1 problem of the Eden project (rural regeneration project).	Lots arrive by car and very few return for a 2nd visit
15	What is quaternary employment?	High tech, R&D – highly specialised equipment	30	How did the Olympics aid regeneration in London?	Flats from athletes village, new sports facilities, cultural quarter

Topic 5: The UK's Evolving Human Landscape				
1	What does population density mean?		16	What does a population pyramid show?	
2	What is an "age structure"?		17	What is the 'knowledge economy'?	
3	What is an "enterprise zone"?		18	What is an impact rural-urban migration?	
4	What is the multiplier effect?		19	How has the UK's total population changed between 1965-2015?	
5	What is conurbation?		20	Where do the majority of international immigrants to the UK come from?	
6	What is retirement migration?		21	What are the Ascension 8 countries? (A8)	
7	What is rural-urban migration?		22	How does London's site play a role in its expansion / growth?	
8	Suggest one physical cause of a low population density.		23	How does London's situation relative to Europe benefit the area?	
9	What is international migration?		24	Which part of London has migration had the biggest impact on?	
10	What is globalisation?		25	Suggest reasons for London's urban sprawl.	
11	What is internal migration?		26	Where in London has been regenerated in order to make the area more sustainable?	
12	What is primary employment?		27	Suggest 2 methods of making London more sustainable.	
13	What is secondary employment?		28	Suggest 1 impact of rural-urban fringe development.	
14	What is tertiary employment?		29	Suggest 1 problem of the Eden project (rural regeneration project).	
15	What is quaternary employment?		30	How did the Olympics aid regeneration in London?	

Topic 5: The UK's Evolving Human Landscape

#		#	
1		16	
2		17	
3		18	
4		19	
5		20	
6		21	
7		22	
8		23	
9		24	
10		25	
11		26	
12		27	
13		28	
14		29	
15		30	

#			#		
Topic 5: The UK's Evolving Human Landscape					
1		Number of people living in 1 kilometre squared	16		The distribution of a population by age and sex
2		The distribution of a population by age	17		Highly skilled quaternary sector employment
3		Area where tax incentives are given to attract invest.	18		Young leave, lower workforce, elderly / very young left
4		Where one positive impact causes another and so on	19		54.3 million – 65 million
5		Where cities expand to include nearby towns	20		India, Poland, Pakistan
6		Elderly move to rural areas	21		Czech R, Estonia, Hungry, Latvia, Lithu, Poland, Slovakia, Slovenia
7		Moving from countryside to towns and cities	22		Grown around the River Thames
8		Relief, climate, landlocked	23		Easier trade and flow of people, greater connectivity with Europe
9		Movement of people from on country to another	24		Newham – 30% white, 26% black Caribbean/African, 39% Asian
10		Making the world 'smaller' and more interconnected	25		Counter-urban, suburbanisation, smaller families, more divorces
11		People move from 1 place to another within a country	26		London docklands – Canary Warf
12		Collecting raw materials e.g. farming or mining	27		Transport, waste collect., afford. housing, energy efficiency
13		Working with machines to manufacture products	28		Pressure on housing, leisure and healthcare, elderly migrants,
14		Services provided e.g. teacher or doctor	29		Lots arrive by car and very few return for a 2nd visit
15		High tech, R&D – highly specialised equipment	30		Flats from athletes village, new sports facilities, cultural quarter

Topic 7 – People and the Biosphere

Paper 3

Topic 7: People and the Biosphere

#	Question	Answer	#	Question	Answer
1	What is the biosphere?	The living layer of the Earth	16	What are the 4 categories of service that biomes provide?	Provisioning (goods), Supporting, Regulating, Cultural
2	What is latitude?	Horizontal bands around Earth showing N/S of eq	17	What are ecosystem services?	Actions ecosystems do to regulate itself e.g. water cycling
3	What is a biome?	A large scale eco-system	18	Give examples of ecosystem goods?	Timber, fish etc. raw materials that can be harvested
4	How does latitude affect temperature?	High sunshine intensity at equator = hotter temps	19	Why are large areas of biomes being cleared?	Commercial farming (cattle) and crops (e.g. palm oils)
5	How does latitude affect seasonal variation at the equator?	No seasonal variation at the equator	20	Why are large areas of biomes being cleared?	Palm oil plantation, construction of dams/reservoirs for HEP
6	How does latitude affect seasonal variation nearer to the poles?	Clearly defined seasons – summer/winter	21	What are the 3 nutrient stores in the nutrient cycle?	Biomass, Litter and Soil
7	What are the 3 major atmospheric heat cells called?	Hadley, Ferrel and Polar	22	How can deforestation within a biome influence/change the water cycle?	Lack of interception and infiltration = increased flooding
8	At which type of pressure do we get rainfall?	Low pressure	23	At which type of pressure do we get arid conditions?	High pressure
9	What is happening with the air at low pressure?	Hot air is rising – regular rainfall	24	What does the Malthus theory say will happen to the population and food supply?	Pop will double every generation but food supply will not - crisis
10	What is happening with the air at high pressure?	Cooler air is sinking – desert biomes	25	What does the Boserup theory say will happen to the population and food supply?	Food supply will increase as technology advances to allow it
11	What local factors affect ecosystems?	Rock/soil type, water availability, altitude	26	Which theoretical view on population growth is pessimistic?	Malthus theory (run out of food and pop will decline)
12	What happens to temperature for every 1000m increase in altitude?	Decrease temp by 6.5˚C	27	What 2 biomes exist at latitudes of low air pressure?	Tropical rainforest and Taiga
13	What is the difference between biotic and abiotic?	Biotic = living (e.g.plants) Abiotic = non-living (rocks)	28	What happens to air at the equator?	Heats up (high solar insolation) and rises – clouds – rainfall
14	How does temperature change as you move poleward?	Decreases	29	What is a natural resource?	Materials found in the environment used by humans
15	What are 'goods' within biomes?	Physical materials e.g. timber / fish	30	Which 2 biomes are found along the equator and at the poles?	Tropical Rain Forest (equator) and Tundra (poles)

	Topic 7: People and the Biosphere				
1	What is the biosphere?		16	What are the 4 categories of service that biomes provide?	
2	What is latitude?		17	What are ecosystem services?	
3	What is a biome?		18	Give examples of ecosystem goods?	
4	How does latitude affect temperature?		19	Why are large areas of biomes being cleared?	
5	How does latitude affect seasonal variation at the equator?		20	Why are large areas of biomes being cleared?	
6	How does latitude affect seasonal variation nearer to the poles?		21	What are the 3 nutrient stores in the nutrient cycle?	
7	What are the 3 major atmospheric heat cells called?		22	How can deforestation within a biome influence/change the water cycle?	
8	At which type of pressure do we get rainfall?		23	At which type of pressure do we get arid conditions?	
9	What is happening with the air at low pressure?		24	What does the Malthus theory say will happen to the population and food supply?	
10	What is happening with the air at high pressure?		25	What does the Boserup theory say will happen to the population and food supply?	
11	What local factors affect ecosystems?		26	Which theoretical view on population growth is pessimistic?	
12	What happens to temperature for every 1000m increase in altitude?		27	What 2 biomes exist at latitudes of low air pressure?	
13	What is the difference between biotic and abiotic?		28	What happens to air at the equator?	
14	How does temperature change as you move poleward?		29	What is a natural resource?	
15	What are 'goods' within biomes?		30	Which 2 biomes are found along the equator and at the poles?	

Topic 7: People and the Biosphere

1			16		
2			17		
3			18		
4			19		
5			20		
6			21		
7			22		
8			23		
9			24		
10			25		
11			26		
12			27		
13			28		
14			29		
15			30		

	Topic 7: People and the Biosphere				
1		The living layer of the Earth	16		Provisioning (goods), Supporting, Regulating, Cultural
2		Horizontal bands around Earth showing N/S of eq	17		Actions ecosystems do to regulate itself e.g. water cycling
3		A large scale eco-system	18		Timber, fish etc. raw materials that can be harvested
4		High sunshine intensity at equator = hotter temps	19		Commercial farming (cattle) and crops (e.g. palm oils)
5		No seasonal variation at the equator	20		Palm oil plantation, construction of dams/reservoirs for HEP
6		Clearly defined seasons – summer/winter	21		Biomass, Litter and Soil
7		Hadley, Ferrel and Polar	22		Lack of interception and infiltration = increased flooding
8		Low pressure	23		High pressure
9		Hot air is rising – regular rainfall	24		Pop will double every generation but food supply will not - crisis
10		Cooler air is sinking – desert biomes	25		Food supply will increase as technology advances to allow it
11		Rock/soil type, water availability, altitude	26		Malthus theory (run out of food and pop will decline)
12		Decrease temp by 6.5˚C	27		Tropical rainforest and Taiga
13		Biotic = living (e.g.plants) Abiotic = non-living (rocks)	28		Heats up (high solar insolation) and rises – clouds – rainfall
14		Decreases	29		Materials found in the environment used by humans
15		Physical materials e.g. timber / fish	30		Tropical Rain Forest (equator) and Tundra (poles)

Topic 8 – Forests Under Threat

Paper 3

	Topic 8: Forests Under Threat				
1	What is biodiversity?	The number of plant and animal species in an area	16	What is the difference between direct and indirect threats?	Direct = deforestation. Indirect = pollution/disease
2	Why is biodiversity so high in the Tropical Rain Forest (TRF)?	Ancient and stable climate for all year round growth	17	What are the main direct threats to the TRF?	Poverty/debt, economic dvpment, demand for resources
3	Why is biodiversity so high in the Tropical Rain Forest (TRF)?	Multiple different layers – constant supply of food	18	How can we use Geographical Imaging Systems (GIS) to monitor forest loss?	Dark green = forest, brown = deforested areas (google maps)
4	What are the 4 layers of the TRF?	Forest floor, understory, canopy, emergent	19	What are the main indirect threats to the TRF and taiga?	Climate change – plants and animals can't adapt quickly
5	What is the climate like in the TRF?	No seasonal change – high temp and rainfall all year	20	If global temperatures rise by 3˚C, what % of land species could be lost in the TRF?	20-50%
6	Give examples of plants that have adapted to live in the TRF.	Drip tip leaves, epiphytes, lianas and buttress roots	21	What impact can climate stress put on forests?	Droughts or fires that kill animals and potentially species
7	Give examples of animals that have adapted to live in the TRF?	Sloths, big cats, primates and birds	22	What is the main direct threat to the taiga?	Deforestation for logging – paper production and construction
8	Which store is largest in the nutrient cycle for the TRF?	Biomass (living)	23	What threat do tar sands pose to the taiga?	Deforestation for oil extraction and contamination of water
9	How does energy pass through a food web?	Producers, consumers, detrivores	24	What are the indirect threats to the taiga?	Fires, pests and acid rain, climate crisis
10	Where in the world do we find the taiga biome?	Between 50˚ and 70˚ north of the equator	25	What is the purpose of CITES and REDD?	Protect endangered species and stop deforestation
11	What is the climate like in the taiga?	Seasonal – short, wet summers / long dry winters	26	What is a geographical conflict?	Conflict caused based on geographical factors e.g. land
12	Give an example of a plant that has adapted to the taiga.	Evergreen trees	27	Where does the Juma SFR (Amazon) get its funding from?	Marriott Hotels
13	Give an example of an animal that has adapted to the taiga.	Wolves, bears, moose and lynx	28	Which species is the Wood Buffalo National Park (Canada) aiming to protect?	Grey wolves, black bears, moose and Canadian lynx
14	Which is the largest store in the nutrient cycle of the taiga?	Litter (decay takes a long time due to cold)	29	What is the purpose of the 'Everyman's Right' law in Finland?	Everyone has a right to access the land so it is protected
15	What does Net Primary Productivity (NPP) mean?	Amount of new plant and animal growth each year	30	Why do the opinions on exploiting the taiga differ between locals and logging companies?	Locals: preserve nature and heritage, company: make profit

Topic 8: Forests Under Threat				
1	What is biodiversity?		16	What is the difference between direct and indirect threats?
2	Why is biodiversity so high in the Tropical Rain Forest (TRF)?		17	What are the main direct threats to the TRF?
3	Why is biodiversity so high in the Tropical Rain Forest (TRF)?		18	How can we use Geographical Imaging Systems (GIS) to monitor forest loss?
4	What are the 4 layers of the TRF?		19	What are the main indirect threats to the TRF and taiga?
5	What is the climate like in the TRF?		20	If global temperatures rise by 3°C, what % of land species could be lost in the TRF?
6	Give examples of plants that have adapted to live in the TRF.		21	What impact can climate stress put on forests?
7	Give examples of animals that have adapted to live in the TRF?		22	What is the main direct threat to the taiga?
8	Which store is largest in the nutrient cycle for the TRF?		23	What threat do tar sands pose to the taiga?
9	How does energy pass through a food web?		24	What are the indirect threats to the taiga?
10	Where in the world do we find the taiga biome?		25	What is the purpose of CITES and REDD?
11	What is the climate like in the taiga?		26	What is a geographical conflict?
12	Give an example of a plant that has adapted to the taiga.		27	Where does the Juma SFR (Amazon) get its funding from?
13	Give an example of an animal that has adapted to the taiga.		28	Which species is the Wood Buffalo National Park (Canada) aiming to protect?
14	Which is the largest store in the nutrient cycle of the taiga?		29	What is the purpose of the 'Everyman's Right' law in Finland?
15	What does Net Primary Productivity (NPP) mean?		30	Why do the opinions on exploiting the taiga differ between locals and logging companies?

Topic 8: Forests Under Threat						
1			16		
2			17		
3			18		
4			19		
5			20		
6			21		
7			22		
8			23		
9			24		
10			25		
11			26		
12			27		
13			28		
14			29		
15			30		

Topic 8: Forests Under Threat					
1		The number of plant and animal species in an area	16		Direct = deforestation. Indirect = pollution/disease
2		Ancient and stable climate for all year round growth	17		Poverty/debt, economic dvpment, demand for resources
3		Multiple different layers – constant supply of food	18		Dark green = forest, brown = deforested areas (google maps)
4		Forest floor, understory, canopy, emergent	19		Climate change – plants and animals can't adapt quickly
5		No seasonal change – high temp and rainfall all year	20		20-50%
6		Drip tip leaves, epiphytes, lianas and buttress roots	21		Droughts or fires that kill animals and potentially species
7		Sloths, big cats, primates and birds	22		Deforestation for logging – paper production and construction
8		Biomass (living)	23		Deforestation for oil extraction and contamination of water
9		Producers, consumers, detrivores	24		Fires, pests and acid rain, climate crisis
10		Between 50˚ and 70˚ north of the equator	25		Protect endangered species and stop deforestation
11		Seasonal – short, wet summers / long dry winters	26		Conflict caused based on geographical factors e.g. land
12		Evergreen trees	27		Marriott Hotels
13		Wolves, bears, moose and lynx	28		Grey wolves, black bears, moose and Canadian lynx
14		Litter (decay takes a long time due to cold)	29		Everyone has a right to access the land so it is protected
15		Amount of new plant and animal growth each year	30		Locals: preserve nature and heritage, company: make profit

Topic 9 – Consuming Energy Resources

Paper 3

Topic 9: Consuming Energy Resources

#	Question	Answer	#	Question	Answer
1	How many different categories of energy are there and what are they?	3: non-renewable, renewable and recyclable	16	How much oil does Saudi Arabia and Russia extract daily?	SA = 10 million barrels a day! Russia = 9.9 million barrels a day!
2	Give examples of recyclable energy sources.	Nuclear and biofuels	17	Why do very developed countries often reduce their energy consumption?	Outsourcing factory work overseas / move to renewables
3	What percentage and where does the UK use non-renewable (natural gas) from?	60% of the UK's natural gas comes from the North Sea	18	Why does the cost of oil change?	Amount of supply and demand, wars above oil reserves
4	Why does California use 16,000 wind turbines for power?	High levels of wind off the coast of California	19	How does fracking work?	Pumping water into shale under ground to release oil from rock
5	Why is the recyclable biogas best suited as an energy source in rural India?	Cheap, low skilled to operate/maintain	20	Why is the Arctic at risk from drilling for oil from several countries?	Env damage, political tension, 25% global forest here (taiga)
6	What are the negative impacts of non-renewable (fossil fuel) extraction?	Landscape scarring, oil spills, fires, pollution	21	Where are the Athabasca Tar Sands located?	Alberta, Canada. Just south of Wood Buffalo National Park
7	Suggest 1 negative impact of hydroelectric power (HEP).	Flooding huge areas of land, dam collapsing	22	How big is the Athabasca Tar Sands site?	140,000km² and uses 359 million tons of water for extraction
8	Why did coal mining stop in 2013 in South Yorkshire?	High cost, difficulty extracting, pollution levels	23	What is the UK's Green Deal approach to reducing energy demand?	Money towards making houses more energy efficient
9	What percentage of energy in the UK comes from renewable or recyclable sources?	Renewable = 10% Recyclable = 16%	24	How can we make houses more energy efficient?	Double glazing, energy saving light bulbs, wall insulation etc
10	Which part of the world has the highest reserves of coal?	North America and Russia	25	How is London trying to reduce its carbon footprint?	Hybrid buses, congestion charge, cycle hire scheme
11	Which part of the world has the highest reserves of natural gas?	Middle East and Russia	26	What is a 'business as usual' approach?	Everything stays the same – no change to energy sources
12	Which part of the world has the highest reserves of oil?	Middle East and Russia	27	What is a 'sustainable future' approach?	Adopt renewable energy sources and a mix of energy supplies
13	Why is NW Scotland or SW England, best suited as a location for a wind farm in the UK?	Highest amount of wind energy in UK	28	What are 'food miles'?	How far food has travelled to where it is consumed
14	Which part of the world has seen the largest increase in energy consumption 2000-2014?	Asia (think emerging countries!)	29	What role does affluence (money/wealth) play in the demand for energy?	More money = more tech /cars etc = higher energy demand
15	Which employment sector generally uses the highest consumption of energy?	Secondary – manufacturing / machinery / factories	30	At what stage of devpment do countries reach the 'turning point' of the Kuznets curve?	Industrial economies – emerging countries

Topic 9: Consuming Energy Resources

#	Question		#	Question	
1	How many different categories of energy are there and what are they?		16	How much oil does Saudi Arabia and Russia extract daily?	
2	Give examples of recyclable energy sources.		17	Why do very developed countries often reduce their energy consumption?	
3	What percentage and where does the UK use non-renewable (natural gas) from?		18	Why does the cost of oil change?	
4	Why does California use 16,000 wind turbines for power?		19	How does fracking work?	
5	Why is the recyclable biogas best suited as an energy source in rural India?		20	Why is the Arctic at risk from drilling for oil from several countries?	
6	What are the negative impacts of non-renewable (fossil fuel) extraction?		21	Where are the Athabasca Tar Sands located?	
7	Suggest 1 negative impact of hydroelectric power (HEP).		22	How big is the Athabasca Tar Sands site?	
8	Why did coal mining stop in 2013 in South Yorkshire?		23	What is the UK's Green Deal approach to reducing energy demand?	
9	What percentage of energy in the UK comes from renewable or recyclable sources?		24	How can we make houses more energy efficient?	
10	Which part of the world has the highest reserves of coal?		25	How is London trying to reduce its carbon footprint?	
11	Which part of the world has the highest reserves of natural gas?		26	What is a 'business as usual' approach?	
12	Which part of the world has the highest reserves of oil?		27	What is a 'sustainable future' approach?	
13	Why is NW Scotland or SW England, best suited as a location for a wind farm in the UK?		28	What are 'food miles'?	
14	Which part of the world has seen the largest increase in energy consumption 2000-2014?		29	What role does affluence (money/wealth) play in the demand for energy?	
15	Which employment sector generally uses the highest consumption of energy?		30	At what stage of devpment do countries reach the 'turning point' of the Kuznets curve?	

Topic 9: Consuming Energy Resources

1		16		
2		17		
3		18		
4		19		
5		20		
6		21		
7		22		
8		23		
9		24		
10		25		
11		26		
12		27		
13		28		
14		29		
15		30		

Topic 9: Consuming Energy Resources					
1		3: non-renewable, renewable and recyclable	16		SA = 10 million barrels a day! Russia = 9.9 million barrels a day!
2		Nuclear and biofuels	17		Outsourcing factory work overseas / move to renewables
3		60% of the UK's natural gas comes from the North Sea	18		Amount of supply and demand, wars above oil reserves
4		High levels of wind off the coast of California	19		Pumping water into shale under ground to release oil from rock
5		Cheap, low skilled to operate/maintain	20		Env damage, political tension, 25% global forest here (taiga)
6		Landscape scarring, oil spills, fires, pollution	21		Alberta, Canada. Just south of Wood Buffalo National Park
7		Flooding huge areas of land, dam collapsing	22		140,000km² and uses 359 million tons of water for extraction
8		High cost, difficulty extracting, pollution levels	23		Money towards making houses more energy efficient
9		Renewable = 10% Recyclable = 16%	24		Double glazing, energy saving light bulbs, wall insulation etc
10		North America and Russia	25		Hybrid buses, congestion charge, cycle hire scheme
11		Middle East and Russia	26		Everything stays the same – no change to energy sources
12		Middle East and Russia	27		Adopt renewable energy sources and a mix of energy supplies
13		Highest amount of wind energy in UK	28		How far food has travelled to where it is consumed
14		Asia (think emerging countries!)	29		More money = more tech /cars etc = higher energy demand
15		Secondary – manufacturing / machinery / factories	30		Industrial economies – emerging countries