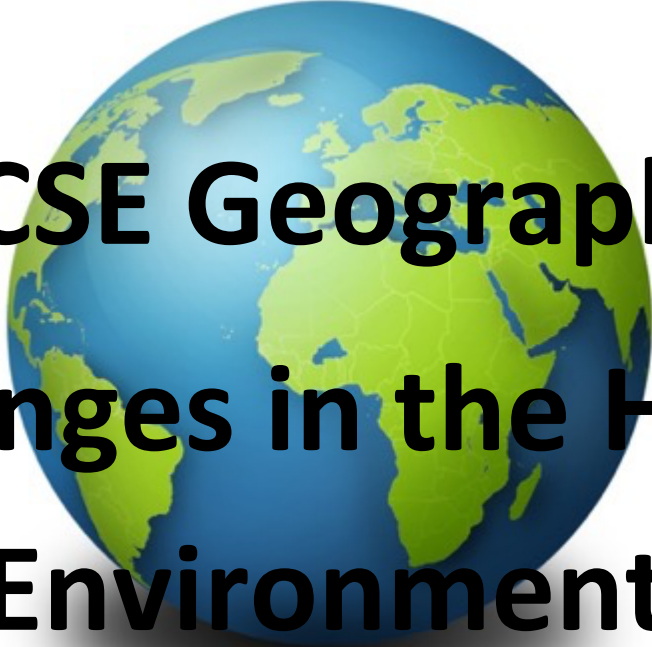




Geography Department



# GCSE Geography

# Challenges in the Human

# Environment

# Core Knowledge

Name:

Class:

Teacher:














**Paper 2:**















3.2.1 Urban issues and challenges (p.2-5)

3.2.2 The changing economic world (p.6-11)

3.2.3 The challenge of resource management (p.12-15)

## Urban Issues and Challenges Glossary

Keyword	Definition	Icon
<b>Brownfield site</b>	Land that was built on, been abandoned and now awaits a new use.	
<b>Choropleth map</b>	A map using one colour to show information e.g. population density. <i>The higher categories (e.g. largest populations) are shown in a darker colour and they get lighter as the figures are reduced (e.g. smallest populations).</i>	
<b>Decentralisation</b>	The movement of shops, offices and industry away from urban centres in HICs into retail and business parks in the suburbs	
<b>Deindustrialisation</b>	The decline in the countries traditional manufacturing industry.	
<b>Dereliction</b>	Abandoned buildings and wasteland.	
<b>Economic opportunities</b>	Chances for people to improve their standard of living through employment.	
<b>Formal economy</b>	The type of employment where people work to receive a regular wage and are assured certain rights (e.g. paid holidays, sickness leave).	
<b>Greenfield site</b>	Land that has not been built on.	
<b>Inequalities</b>	Differences between poverty and wealth. <i>Inequality can also occur in housing provision, access to services (e.g. jobs, education, healthcare), access to open land, safety and security).</i>	
<b>Integrated transport</b>	Multiple transport systems are connected, making travel easier. <i>One aim is to enable people to switch from private car transport to a more sustainable option.</i>	
<b>Megacity</b>	An urban area with a total population of ten million or more people.	
<b>Migration</b>	When people move from one area to another. In many LICs people move from rural to urban areas (rural-urban migration).	
<b>Natural decrease</b>	The death rate is higher than the birth rate. Population is getting smaller.	

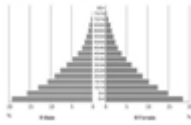





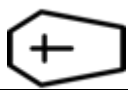




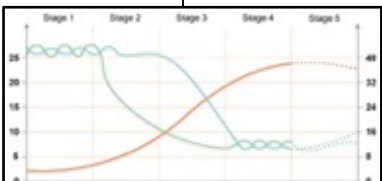
<b>Natural increase</b>	The birth rate is higher than the death rate. Population is getting bigger.	
<b>Pollution</b>	Presence of chemicals, noise or dirt which have harmful or poisonous effects on an environment.	
<b>Rural-urban fringe</b>	The area between a built up area and the countryside. <i>It is an area of mixed land uses, from out of town shopping centres and golf courses to farmland and motorways.</i>	
<b>Sanitation</b>	Measures designed to protect health (e.g. providing clean water and disposing of waste).	
<b>Slum</b>	An area of poor-quality housing lacking in basics such as fresh water supply and sewers.	
<b>Social deprivation</b>	The degree to which an area does not have certain services (e.g. decent housing and the disposal of sewage and waste).	
<b>Social opportunities</b>	Chances for people to improve their quality of life (e.g. through access to education and health care).	
<b>Sustainable urban living</b>	A city which limits damage to the environment and allocates jobs fairly. <i>People are involved with the decisions that affect their living and a strong sense of community is present. The city strives to use renewables, public transport while being accessible to all people.</i>	
<b>Traffic congestion</b>	Volume of traffic is too great for roads to cope with, so traffic jams form and traffic slows or is stationary.	
<b>Urbanisation</b>	Where an increasing percentage of a country's population comes to live in towns and cities.	
<b>Urban greening</b>	The process of increasing and preserving open space such as public parks and gardens in urban areas.	
<b>Urban regeneration</b>	Revival of old parts of the built-up area by either installing modern facilities in old buildings (renewal) or opting to redevelop entirely through demolition.	
<b>Urban sprawl</b>	The unplanned growth of urban areas into the surrounding countryside.	
<b>Waste Recycling</b>	Extracting and reusing useful substances found in waste.	













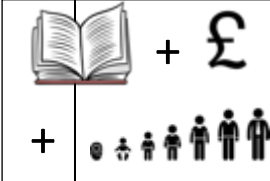
## Urban Issues and Challenges Pop Quiz













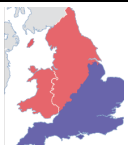
<b>Define birth rate.</b>	The number of live babies born in a year for every 1000 of the population.
<b>Define death rate.</b>	The number of people who have died each year for every 1000 of the population.
<b>Give two push factors</b>	Extreme climate, lack of resources, lack of safety, lack of services, limited job opportunities, crop failure, political and/or religious persecution, risk of natural hazards.
<b>What percentage of migrants to Mumbai come from Maharashtra state?</b>	38%
<b>What percentage of slum-dwellers in Dharavi Slum work there?</b>	85%
<b>State three social opportunities of Dharavi Slum</b>	Community spirit, education for most children, flexible use of space and virtually no crime.
<b>What are the challenges of disease in Dharavi Slum?</b>	Doctors deal with 4000 cases of sickness per day and there are rats inside and outside homes.
<b>State two of the issues of the informal economy in Dharavi Slum</b>	Unregistered companies make small profits, it's illegal, working conditions are poor, cheap labour, no legal age for workers so children are also employed.
<b>What are the 5 development points of the Slum Rehabilitation Authority?</b>	Health Income Knowledge Environment Socia-Culture
<b>Define conurbation. Give an example.</b>	Major high density areas (e.g. London and Greater Manchester).
<b>As of 2012, what was the population of London?</b>	8.1 million
<b>How many jobs were there in London in 2012?</b>	5,053,000
<b>What percentage of London's population is black, Asian or ethnic minority?</b>	36%
<b>List three opportunities in London.</b>	Cultural mix, recreation and entertainment, employment, integrated transport systems and urban greening.
<b>What is urban greening?</b>	Increase of the amount of green spaces within a city.
<b>List three challenges in London.</b>	Urban decline, deprivation and dereliction. Inequalities in housing, education, health and employment.

	<p>Waste disposal.</p> <p>Atmospheric pollution.</p> <p>The impact of urban sprawl on the rural–urban fringe.</p> <p>Building on brownfield and greenfield sites.</p>
<b>State two effects of urban sprawl.</b>	Extra cost to the tax payer, increased traffic, health issues due to having to commute regularly to work, environmental issues as animals are displaced from their habitat, isolation as people live further from their neighbours.
<b>What is the benefit of the athletes' village in the Olympic park?</b>	The athletes' village has been relaunched as a housing estate where 40% will be affordable homes.
<b>How many acres of brownfield land was the Olympic park built on?</b>	560 acres
<b>What was an environmental disadvantage of the Olympic park and games?</b>	<p>Materials came from overseas</p> <p>The games produced 3.3 million tons of CO<sub>2</sub></p> <p>Wildlife had to be relocated</p>
<b>What is park and ride?</b>	Parking your car on the outskirts of a city and take a bus to the city centre.
<b>Why is the London congestion charge sustainable?</b>	Encourages people to use public transport instead of private which reduces the amount of emissions from vehicles












## The Changing Economic World Glossary

Key Word	Definition	Icon
<b>Age structure</b>	The amount of each age group in a population.	
<b>Asylum seekers</b>	Someone forced to leave their country e.g. over religion or politics. <i>They seek asylum in another country and do not return to their original country.</i>	
<b>Birth rate</b>	Number of babies born per 1,000 people per year.	
<b>Child mortality</b>	The number of children that die under five years of age, per 1,000 live births.	
<b>Choropleth map</b>	A map using one colour to show information e.g. population density. <i>The higher categories (e.g. largest populations) are shown in a darker colour and they get lighter as the figures are reduced (e.g. smallest populations).</i>	
<b>Commonwealth</b>	The voluntary association of 54 independent and equal states. <i>Home to 2.2 billion, member states share history, language, culture and democracy.</i>	
<b>Death rate</b>	Number of deaths per 1,000 people per year.	
<b>Debt crisis</b>	A situation whereby a country cannot pay its debts, often leading to calls to other countries for assistance.	
<b>Debt relief</b>	When HICs write-off some LIC debt, so the LIC has less to pay back.	
<b>Dependency ratio</b>	The balance between people who are independent (work and pay tax) and those who rely on them (children and elderly people).	
<b>Deindustrialisation</b>	The decline in the countries traditional manufacturing industry.	
<b>Demographic Transition Model</b>	Shows population change over time and space.	

<b>Development</b>	The progress of a country in terms of economic growth, the use of technology and human welfare.	
<b>Development gap</b>	The difference in standards of living and wellbeing between the world's richest and poorest countries (HIC versus LIC).	
<b>Economic migrant</b>	Someone seeking to improve their standard of living by moving willingly from one place to another for work.	
<b>Emigrant</b>	Someone leaving their country of residence to move to another country.	
<b>European Union (EU)</b>	A group of 27 countries across Europe that work together towards a single market <i>E.g. they trade as if they were one country, without any trade barriers.</i>	
<b>Exponential growth</b>	Population growth rate is constantly increasing.	
<b>Fairtrade</b>	When producers in LICs are given a better price for the goods they produce. <i>From farm products like cocoa, coffee or cotton. Better prices reduce exploitation.</i>	
<b>Free trade</b>	When trade between countries is not restricted ( <i>e.g. no / low import duties</i> ).	
<b>Gender structure</b>	The balance between the number of males and females in a population.	
<b>Globalisation</b>	Links between different countries around the world.	
<b>Gross Domestic Product (GDP) per capita</b>	The total value (amount) of goods and services produced by a country in one year divided by its total population.	
<b>Gross National Income (GNI) per capita</b>	Measurement of economic activity that is calculated by dividing the gross (total) national income by the size of the population. <i>GNI takes into account not just the value of the goods and services, but also the income earned from overseas.</i>	
<b>Human Development Index (HDI)</b>	Measuring development using the combined data from GDP, life expectancy and literacy rates.	

<b>Immigrant</b>	Someone entering a new country with the intention of living there.	
<b>Industrial structure</b>	The relative proportion of the workforce employed in different sectors of the economy (primary, secondary, tertiary and quaternary).	
<b>Infant mortality</b>	The number of babies that die under a year of age, per 1,000 live births per year.	
<b>Information technologies</b>	Computer, internet, mobile phone and satellite technologies used in a range of economic activities.	
<b>Intermediate technology</b>	The simple, easily learned and maintained technology used in a range of economic activities serving local needs in LICs.	
<b>International aid</b>	Money, goods and services given by one country or a multilateral institution (e.g. <b>World Bank</b> ) to help improve quality of life and economy of another country.	
<b>Life expectancy</b>	The number of years a person is expected to live from birth.	
<b>Literacy rate</b>	The percentage of adults in a country who can read and write well enough to function in their job and society.	
<b>Microfinance loans</b>	Very small loans which are given to people in LICs to start a small business.	
<b>Migration</b>	Movement from one place to another, with the intention of staying at least a year. <i>This move may be within a country (national) or between countries (international).</i>	
<b>Multiplier Effect</b>	Initial investment and jobs lead to a knock on effect. <i>This knock on effect creates more jobs and money which are then reinvested.</i>	
<b>Natural change</b>	The difference between birth rate and death rate.	
<b>North-South divide (UK)</b>	Economic and cultural differences between Southern England and Northern England that relate to issues such as health and lifestyle.	
















<b>Post-industrial economy</b>	The economy of countries where most employment is now in the tertiary sector.	
<b>Primary industry</b>	Economic activity related to the extraction of raw materials (e.g. <i>farming, mining</i> ).	
<b>Pull factors</b>	The attractions and opportunities of a place that encourage people to move there.	
<b>Push factors</b>	The negative aspects of a place that encourage people to move away.	
<b>Quaternary industry</b>	Economic activity related to technology, research and development (e.g. <i>scientific research</i> ).	
<b>Refugee</b>	Someone forced to leave their country due to war or famine. <i>They often return to their own country once the war or famine is over.</i>	
<b>Science and business parks</b>	Purpose built office areas at the edge of a city where high tech, large scale complexes can be built often in co-operation with a university.	
<b>Secondary industry</b>	Economic activity related to making goods (e.g. <i>car industry</i> ).	
<b>Tertiary industry</b>	Economic activity that provides a service (e.g. <i>teacher, doctor, supermarket worker</i> ).	
<b>Trade</b>	The buying and selling of goods and services between countries.	
<b>Transnational Corporation (TNC)</b>	A large and wealthy corporation or enterprise (business). Headquarters are in one country and they have many other branches spread across the world.	














## The Changing Economic World Pop Quiz

<b>List three things that can be used to measure development.</b>	GNI per capita, Human Development Index, birth rates, death rates, infant mortality, people per doctor, literacy rate, access to safe water, life expectancy.
<b>What is the North-South Divide?</b>	An economic division between the wealthy developed countries (the North) and the poorer developing countries (the South).
<b>What is the difference between First and Second World countries?</b>	First World countries are the richer, democratic and industrialised countries and Second World are often communist countries.
<b>What is the poverty trap?</b>	Poverty can lead to poverty. <i>Low investment in infrastructure (e.g. roads, rail), education and healthcare can exacerbate (make worse) poverty and keep countries at a low level of development.</i>
<b>List two consequences of uneven development.</b>	More international migration, lack of social opportunity, a lower growth of wealth, political instability and billions of people live in poverty.
<b>What does a population pyramid show?</b>	A population pyramid shows the age and gender structure for an area or country.
<b>How does the DTM show population change?</b>	Change over space (a number of countries can be in different stages). Change over time (a country will progress through the stages).
<b>What happens in the second stage of the DTM?</b>	Birth rate remains high and death rate decreases rapidly. Total population increases.
<b>State three ways of reducing global inequalities.</b>	Investment and industrial development, aid, intermediate technology, free trade, fair trade, debt relief and microfinance loans.
<b>What are microfinance loans?</b>	Very small loans which are given to people in LICs who would otherwise not have access to finance. This would help people start up businesses.
<b>How much of Kenya's GDP comes directly from tourism?</b>	8.8%
<b>How are NEEs different from LICs?</b>	They no longer rely primarily on agriculture and have made gains in infrastructure and industrial growth, and are experiencing increasing incomes and high levels of investment.
<b>Where is Nigeria located?</b>	West Africa.
<b>How many people in Nigeria live below the poverty line?</b>	Approximately 60 million.
<b>What are two limits to growth in Nigeria?</b>	Poor infrastructure, barriers to exports, lack of financial services for independent small/medium businesses and an unstable government.
<b>Why do TNCs have factories in poorer countries?</b>	To take advantage of cheap labour, lower environmental standards and lower raw material costs.

<b>What is the negative effect of Shell extracting oil on the Ogoni people?</b>	Many of them live without electricity or running water, and see none of the oil profits, instead having to live with the poisoning of land and water from pipelines, oil spills and gas fires.
<b>What percentage of Nigeria's economy is oil revenue?</b>	75%
<b>State three areas in which UK aid money was spent in Nigeria</b>	Governance, wealth creation, health, education, water and sanitation and poverty and vulnerability.
<b>Why has the UK's economic structure changed?</b>	Globalisation, deindustrialisation, government policies and decline in resources.
<b>What is a science park?</b>	Scientific research and development are carried out close to university.
<b>What is the aim of the HS2?</b>	Reduce journey times between the cities in Northern England and to London. <i>The idea is that businesses will function better with less loss of time spent travelling.</i>
<b>How many jobs is the HS2 expected to create?</b>	100,000
<b>How expensive is the HS2 expected to be?</b>	£106bn
<b>What is the Northern Powerhouse?</b>	Linking of northern cities to match, rival and compete with the economic muscle of London.
<b>What is the Commonwealth?</b>	An intergovernmental organisation of 53 countries that were mainly territories of the British Empire. They are linked together by history, culture, language and 3 shared values: democracy, human rights and the rule of law.
<b>What is the European Union?</b>	The European Union is a group of 27 countries that have common goals and close ties to one another. The UK withdrew on the 31 <sup>st</sup> January 2020.

## The Challenge of Resource Management Glossary

Key Word	Definition	Icon
<b>Agribusiness</b>	Application of business skills to farming (e.g. large scale production methods).	
<b>Biomass</b>	Renewable organic materials (e.g. wood, agricultural crops or waste) used as a source of fuel.	
<b>Carbon footprint</b>	The amount of carbon emissions generated by human activity (e.g. travel and a demand for out of season foods like strawberries in winter).	
<b>Economic wellbeing</b>	Measure of how much money people have to sustain their standard of living.	
<b>Energy conservation</b>	Reducing energy consumption through using less energy.	
<b>Energy exploitation</b>	Developing the use of energy for profit.	
<b>Energy mix</b>	The range of energy sources used by a region or country, the mix may be both renewable and non-renewable.	
<b>Energy security</b>	Uninterrupted availability of energy sources at an affordable price.	
<b>Famine</b>	Extreme and widespread scarcity of food.	
<b>Food insecurity</b>	Being without reliable access to a sufficient quantity of affordable, nutritious food.	
<b>Food miles</b>	The distance that food items travel from.	
<b>Food security</b>	When people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life.	
<b>Fossil fuels</b>	A natural fuel (e.g. coal, oil or gas) formed in the geological past from the remains of living organisms.	

<b>Fracking</b>	The process of injecting liquid at high pressure into rocks to force open existing cracks and extract oil or gas.	
<b>Geothermal energy</b>	Energy generated by heat stored deep in the earth.	
<b>Hydroelectric power</b>	Electricity generated by turbines, driven by moving water.	
<b>Local food sourcing</b>	Food produced and distributed locally.	
<b>Nuclear power</b>	Energy released by nuclear reactions. <i>From mined and processed uranium, it creates heat energy, making steam and generating electricity.</i>	
<b>Organic produce</b>	A method where food is produced using environmentally friendly farming with no chemicals <i>Food produced in this way is free from synthetic additives and pesticides.</i>	
<b>Renewable energy</b>	A resource which is not diminished when it is used.	
<b>Resource management</b>	The control and monitoring of resources so that they do not become depleted or exhausted.	
<b>Social wellbeing</b>	The social condition of an individual or group.	
<b>Solar energy</b>	The sun's light energy collected by solar panel cells to heat water or air, generating electricity.	
<b>Sustainable development</b>	Development that meets the needs of the present without limiting the ability of future generations to meet their own needs.	
<b>Undernourishment</b>	Having insufficient food or other substances for good health and condition.	
<b>Wind energy</b>	Electrical energy obtained from harnessing the wind with windmills or wind turbines.	

## The Challenge of Resource Management Pop Quiz

<b>What is social well-being?</b>	The social condition of an individual or group (often related to economic, psychological, spiritual or medical issues).
<b>What is economic well-being?</b>	A measure of how much money people have to sustain their standard of living.
<b>How can poor water quality affect economic well-being?</b>	Poor water quality can lead to disease, which weakens people and therefore has a direct impact on their productivity and hence economic development.
<b>What is agribusiness?</b>	The application of business skills to agriculture or food production. <i>Farms are run as big businesses to increase food production by using lots of inputs such as fertilisers or labour-saving machines.</i>
<b>What are water transfer schemes?</b>	These make up for water shortages by transporting water from one area to another.
<b>Give an example of a UK water transfer scheme</b>	Kielder Water - <i>Water is trapped behind a dam in north-west Northumberland then moved into the River Derwent, River Wear and River Tees to supply the major settlements along the north-east coast.</i>
<b>State two ways that the UK government attempt to combat water pollution</b>	Educating people, putting in laws and legislation, treating our water and improving our water courses.
<b>What are the concerns over fracking?</b>	Water contamination, increased water use and small earthquakes being triggered.
<b>State one main issue with fossil fuel use</b>	<ul style="list-style-type: none"> <li>• Damage to the natural environment during extraction</li> <li>• Production of pollutants during burning such as CO<sub>2</sub></li> <li>• Dust which is hazardous to human health</li> <li>• Sulphur dioxide which contributes to acid rain</li> </ul>
<b>Which continent produces the most food?</b>	Asia
<b>What does NEE stand for? Give an example</b>	Newly Emerging Economies (e.g. China or India)
<b>State three things that can affect food supply</b>	Climate, technology, pests and diseases, water stress, conflict.
<b>State three causes of soil erosion</b>	Deforestation, overgrazing of animals and over-cultivation.

<b>State three strategies to increase food supply</b>	Irrigation, aeroponics, hydroponics, use of biotechnology, appropriate technology.
<b>What is the benefit of golden rice?</b>	People lacking vitamin A in their traditional diet can make the vitamin if they eat genetically modified 'golden' rice.
<b>What is an advantage of the weather in Almeria to greenhouse technology?</b>	It helps cut energy costs.
<b>Why do migrants from North Africa and Eastern Europe go to Almeria?</b>	There are large amounts of cheap temporary labour available to help in the greenhouse farms.
<b>State one way that organic farming is sustainable</b>	<ul style="list-style-type: none"> <li>• Reduces food production intensification allowing the land to "rest"</li> <li>• Encourages a local approach</li> <li>• Artificial fertilisers are largely banned</li> <li>• Farmers develop fertile soil by rotating crops and using compost, manure and clover</li> <li>• Strict regulations define what organic farmers can and can't do</li> <li>• Uses biological pest control rather than pesticides</li> </ul>
<b>How does rice-fish agriculture work?</b>	Rice is grown in flooded paddies with deeper water either side for fish.
<b>Why is a net stretched over a rice-fish farm?</b>	To keep out predator birds.
<b>Why do rice-fish farms have bunds?</b>	To keep water in place.
<b>State two ways rice-fish farming has helped families in Jamalpur, Bangladesh</b>	<ol style="list-style-type: none"> <li>1. Selling rice and fish enable families to afford better food at markets.</li> <li>2. Selling rice and fish enable families to send their children to school.</li> </ol>

# Wider reading list

These are some suggestions of useful books to read to further your understanding of the topics you are studying this year.

Please let your geography teacher know if you read any these or if you come across any other great geography books we can add to the list.

## Urban environments:

<b>Author</b>	<b>Title</b>	<b>Type</b>
Mike Davis	Planet of Slums	Non-fiction
Robert Neuwirth	Shadow Cities: A Billion Squatters	Non-fiction
Danny Dorling	Population 10 Billion	Non-fiction
Sarah Harper	How Population Change will Transform our World	Non-fiction
Philip Steele	Population: Are there too many of us?	Non-fiction
Lonely Books	The Cities Book	Non-fiction
Andy Mulligan	Trash	Fiction
Gillian Cross	In the Sea there are Crocodiles	Fiction
Jon Walter	Close to the Wind	Fiction
Sarah Crossan	The Weight of Water	Fiction
Floella Benjamin	Coming to England	Fiction

## Changing economic world:

<b>Author</b>	<b>Title</b>	<b>Type</b>
UN Publications	The Sustainable Development Goals	Non-fiction
Guy Fox	How the World Really Works: The Economy	Non-fiction
Elena Fernandez Prados	Economics through Everyday Stories from Around the World	Non-fiction
Gillian Cross	In the Sea there are Crocodiles	Fiction
Jon Walter	Close to the Wind	Fiction
Sarah Crossan	The Weight of Water	Fiction
Floella Benjamin	Coming to England	Fiction
Scott Westerfeld	Uglies	Fiction
Susin Nielsen	No Fixed Address	Fiction
Polly Ho-Yen	Boy in the Tower	Fiction
Gemma Malley	The Declaration	Fiction

## Challenge of resource management:

<b>Author</b>	<b>Title</b>	<b>Type</b>
Carolyn Steel	Hungry City: How food shapes our lives	Non-fiction
Mark Winne	Closing the Food Gap: Resetting the table in the land of plenty	Non-fiction
Mike Burners-Lee	The Burning Question: We can't burn half the world's oil, coal and gas. So how do we quit?	Non-fiction
Philip Steele	Water: Is there enough for everyone?	Non-fiction
Cameron Stracher	The Water Wars	Fiction