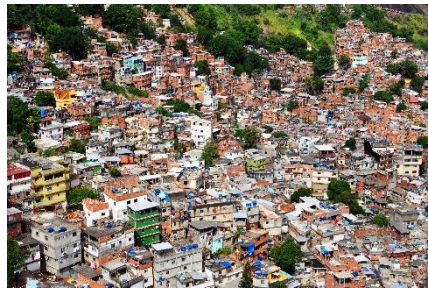# Geography Year 10
Blended Learning Booklet

Y10-2 // Y10-3 Urban Issues and Challenges

Name:

Form:

Teacher Initials:

- Aim to complete follow your existing timetable of lessons (4 lessons over 2 weeks)
- Write down the title and LI for each lesson and then complete the tasks.
- Upload all work onto ClassCharts for feedback.

Contents

Big Picture – Year Overview
Year 10 Geography

Exam

Students examine how water supplies can be sustainably managed and increased.

Students study why the global demand for water is increasing and insecure water supplies could lead to conflict.

Students analyse how the UK's changing needs creates opportunities and challenges.

Water supplies need managing

The demand for water is increasing

Water Resources

Changing resources creates benefits and problems

Students explain how and why the UK's demand for resources is changing.

Students examine why food, water and energy are fundamentally important to human activity.

Water, energy and food are vital to people

The UK's demand for resources is changing

Students explain how deforestation has both economic and environmental impacts. Rainforests need to be sustainably managed.

Resource Management

Students analyse how the development of hot deserts creates both challenges and opportunities.

Students examine the physical characteristics of hot deserts.

Development of deserts creates opportunities & challenges

Hot deserts have distinctive characteristics

Deforestation of rainforests has many impacts

Students assess how urban change in the UK has created social, economic and environmental challenges and opportunities.

Students evaluate the features if sustainable urban living in the UK such as methods of water and energy conservation.

Students examine how ecosystems exist at a variety of scales and have biotic and abiotic components.

Tropical rainforests have unique characteristics

Students explain why rapid urban growth in LICs and NEEs creates both challenges and opportunities.

Urban change in the UK

Creating sustainable urban areas in the UK

Living World

Ecosystems involve both biotic and abiotic components

Urban growth creates opportunities and challenges

Students examine the causes if rapid urban growth.

Students explain what strategies can be used to manage climate change – mitigation and adaptation.

Students examine the human and natural causes of climate change.

Urban Issues & Challenges

How can climate change be managed?

What causes climate change?

Students study atmospheric circulation and how tropical storms are formed

Students examine the impacts of tropical storms and how people respond t tropical storms.

Students examine the weather hazards which affect the UK and the impacts of extreme weather in the UK.

Students analyse the impacts of natural hazards and how people responds to natural hazards.

How do people respond to hazards?

What causes weather hazards?

What are the impacts of tropical storms?

How is the UK affected extreme weather?

Students explain how hazards can be classified into tectonic and weather hazards.

Students assess the impacts of tectonic hazards

Students explore the processes which cause earthquakes and volcanoes.

Impacts of tectonic hazards

What causes tectonic hazards?

How can hazards be classified?

Natural Hazards

Year 10

ZOOM IN...
MY LEARNING JOURNEY:

Subject: Urban Issues and Challenges
Year: 10   Unit: 2

CAREERS
- Urban Planner
- Public services

AIMS
- To understand the changes associated with urban growth developing and developed countries
- To understand how Urban areas in LICs and NEEs can be improved

DEVELOPING COURAGE
- I will understand why people in LICs and NEEs are attracted to urban areas (pull factors).
- I will understand the challenges and problems found in many urban areas.
- I will examine the strategies which are used to improve the quality of life in LIC and NEE cities.

PREVIOUS LEARNING
- Pupils will need to have some understanding of hat drives people to live in urban areas and the problems associated with that. They will also need to understand what life is like in rural areas.

WHAT WE KNOW/ REMEMBER
- What is development?
- What are HICs, NEEs and LICs?

RECOMMENDED READING
- BBC Bitesize 'Urban Issues'
- coolgeography.co.uk 'Urban Issues'

PERSONAL OBJECTIVES
- I can understand that NEE's have significant differences in quality of life between the rich and poor, and this is evidenced in residential areas of its cities.

ZOOM IN...
MY LEARNING JOURNEY:

Subject: **Urban Issues and Challenges**
Year: 10   Unit: 3

CAREERS
- Town Planner
- Geography Teacher
- Public services

AIMS
- To introduce students to the changes and problems associated with urban areas in the UK.

- Can understand the distribtion of the UK population – why doe more people live in the South?
- Observe the impacts national and internation migration has on a named UK city
- Understand the environmental challenges associated within a city – are cities doing enough?
- Review the impact on urban sprawl on the rural-urban fringe
- Asess the impacts of development on a casestudy of a major urban redevelment in the UK
- Evaluate how urban transport strategies are used to reduce traffic congestion.

PREVIOUS LEARNING
Pupils will need to have some understanding about what drives people to live in urban areas and the problems associated with that. They will also need to understand what life is like in rural areas.

WHAT WE KNOW/ REMEMBER
- Urban vs. Rural – what is the definition?

RECOMMENDED READING
- CoolGeography.co.uk
- 'How Population Change Will Transform Our World?' – Sarah Harper

PERSONAL OBJECTIVES
- Understand how migration and immigration can affect the growth and character of a city

3

Key words and terms:

Urban: Town and cities.

Rural: Countryside (areas outside towns and cities).

Urbanisation: When an increasing percentage of a country's population comes to live in towns and cities.

Counter-urbanisation: When an increasing percentage of a country's population moves away from towns and cities.

Migration: When people move from one area to another.

Rural to urban migration: When people move from the countryside to towns or cities.

HIC: High income country.

LIC: Low income country.

NEE: Newly emerging economies.

Megacities: Cities with a population over 10

Urbanisation:

- Urbanisation is the proportion of the world's population who live in cities.
- Urbanisation is growing because of the dramatic increase in the world's population and rural to urban migration.
- Urbanisation occurs at different times in different parts of the world.
- The UK experienced a rapid period of urbanisation between 1750 and 1900. This was due to the industrial revolution, where most people changed from working on farms in the countryside to working in factories in towns and cities.

Global patterns of urbanisation:

- Globally, the proportion of people living in cities is increasing. In 2015 there were 28 megacities in the world. The UN has predicted that there will be as many as 50 by 2050.
- Generally, in richer countries, more than 60% of the population live in urban areas. This percentage appears to be lower in poorer countries.
- However, urbanisation is occurring at different rates in different areas of the world.
- In 1950, the majority of the world's population lived in cities in Europe by 2007, this pattern dramatically shifted. Most now lives in Asia.
- Research suggests that cities in poorer parts of the world are growing more quickly and growth of cities in richer parts of the world Is slowing down. Some cities are even experience counter-urbanisation.

Rates of Urbanisation vary:

- Highest rates of urbanisation in LICs in Asia and Africa - majority of population here still live in rural areas
- Population of cities is usually younger so high rate of natural increase (birth rate minus death rate)
- low rate of urbanisation in HIC, HIC have the majority of population already living in urban area—ageing (older) population so low rate of natural increase

Factors that affect Rate of Urbanisation:

- Natural increase - cities have younger populations leads to higher rate of natural increase / cities have better health care so death rate is lower.
- Migration - rural–urban migration biggest factor / most migrants are young / migrate from rural areas for jobs, better education.
- Location - historically on transport routes (rivers, coasts) where trade thrived Many megacities are ports.
- Economic development - cities good for trade and business therefore they grow economically this creates jobs which attracts people who bring in new ideas and enterprise to make the city thrive.

Megacities

- Cities grow at different rates - Lagos (Nigeria) urbanizing rapidly.
- China plan to merge three cities and create a new megacity of 120million people
- Most new megacities likely to be in Asia particularly China and India

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Exam Questions

- Explain the varying rates of urbanisation
- Outline the trends are there in global patterns of urbanisation?
- Explain what attracts people to live in urban areas?
- Describe the distribution of the worlds megacities
- Outline the reasons for urbanisation
- Why are LICs experiencing faster rates of urbanisation today compared to HICs?

Rio de Janeiro

WHAT IS THE CITY'S IMPORTANCE?

It has the largest GDP in Brazil. It is headquarters to many of Brazil's main companies, particularly with oil and gas (NOC Petrogas).

Sugar Loaf mountain is one of the seven wonders of the world.

It is one of the most important and visited places in the southern hemisphere.

Hosted the 2014 World Cup and the 2016 Summer Olympics

Major tourist attractions: Copacabana beach, Christ the Redeemer, Sugar Loaf Mountain, Ipanema Beach

A major port – main exports are coffee, sugar and iron ore

The culture capital of Brazil, and a UNESCO World Heritage Site

Location and Background

Rio is a costal city situated in the south east region of Brazil within the continent of South America. It is the second most populated city in the country (6.5 million, 2010/13.3 million, 2019) after Sao Paulo.

Migration to Rio de Janeiro

The city was founded when Portuguese settlers with slaves arrived around 1502. Since then, Rio has become home to various ethnic groups. However, more recently, millions of people have migrated from rural areas that have suffered from drought, lack of services and unemployment to urban areas like Rio de Janeiro. People do this to search for a better quality of life. This expanding population has resulted in the rapid urbanisation of Rio de Janeiro.

Almost a quarter of Rio's population lives in favelas. A favela is a squatter settlement.

Rocinha – the largest favela

The rapid growth of Rio's population has led to severe shortage of housing. The city has several favelas, like Rocinha, which people flock to. Rocinha is the largest favela in Rio, with a population of 200,00. It is located on a steep hill. Not all people in Rio are poor – many wealthy people live in the central business district and areas like Barra.

Challenges in Rio de Janeiro

Social	Economic	Environmental
Migration has put huge pressure on housing, schools and healthcare. Favelas are unplanned and made on poor quality land. Houses are built with cheap materials like wood or corrugated iron. Many people are cramped together. Street crime is high, with drug gangs like the Red Command controlling favelas.	There is a huge gap between rich and poor citizens. Some favelas have grown on hillsides right next to wealthy areas. Unemployment remains high in the favelas (over 20%), where most people work in the informal economy (street vendors). Poor transport systems make it difficult for favela dwellers to access other parts of the city.	As the city grows, it continues to spread into rural areas (urban sprawl). Air pollution is a major issue, as is pollution of the sea with industrial waste. Waste is a problem in the favelas as many are inaccessible to rubbish collection trucks due to their steep incline and narrow pathways.

Opportunities in Rio de Janeiro

Social

People in favelas create their own economy (shops). Their community is strong, and recycling takes place to create a cleaner neighbourhood.

Economic development has led to improvements in roads and buses.

Rio has several universities including the Universidade Federal do Rio de Janeiro.

Rio is home to a huge range of races, religions and cultures.

The Rio Carnival is an important cultural event for traditional dancing and music.

Economic

Industrial growth has boosted Rio's economy through steel making, port industries, oil refining, manufacturing and a growing range of services such as banking and finance.

Rio is one of the most-visited cities in the southern hemisphere and generates a lot of money through tourism.

The largest steelworks in South America is located in Septiba Bay in Rio. This has led to new construction and supply industries being attracted to the area further encouraging economic growth and job opportunities. This is known as the multiplier effect. As the population has grown and industry has developed, so too has the service sector (e.g. retail and finance) to meet the demands of the area.

Environmental

The Atlantic beaches continue to attract tourists. The Tijuca national park is one the largest urban forests in the world.

How are favelas being improved?

THE FAVELA BAIRRO PROJECT (1990s)

This is a site and service scheme, where the local authorities provides land and services for residents to build homes. E.g. Complexo de Alemao in Rio's north zone.

Successes	Failures
The environment is cleaner as waste lorries can collect rubbish and water is not contaminated. The roads have been made wider and safer. They have also been paved. People have been given formal addresses and the government receives taxes which helps improve services. People are given loans to help buy their homes. Infant mortality rate is reduced as is their access to local healthcare. Literacy rate is being improved for both children and adults, giving people better jobs. Community policing has been established with military-backed police.	The budget of $1bn is not enough to cover all favelas in Rio so some areas remain in poverty. There is still high illegal activity (gangs) and unemployment in Complexo de Alemao. Rent has risen so pushing the poorest out again to build illegal settlements further away. Newly built infrastructure is not maintained by residents or the government. High risk favelas can't be improved. Those on land that is unsafe have their houses bulldozed over and torn down.

Solutions to Rio's Problems

Air Pollution and Traffic Congestion: New toll roads into the city centre to reduce congestion. Making coast roads one way during rush hour to improve traffic flow.

Crime: The police have taken steps to control crime. In 2013, Pacifying Police Units were established to reclaim favelas from drug dealers.

Unemployment: The Schools of Tomorrow program aims to improve education for young people in the poor and violent areas in the city – they are given practical skills-based courses. Free education is provided for teenage parents to allow them to return to education.

Key questions:

1. Describe the importance of Rio de Janeiro.
2. Explain why people migrate to Rio de Janeiro.
3. What are the social, economic and environmental challenges?
4. What are the conditions of the favelas like?
5. What are the social, economic and environmental opportunities in Rio?
6. How are the favelas being improved?
7. How can Rio de Janeiro solve it's problems? What is being done?

Map showing the location of the UK's major urban areas

Urban Issues & Challenges focuses on the UK's urban areas (our cities and towns). In this unit of work, we shall study:

- The names and locations of major UK urban areas.
- The challenges and problems which face UK cities.
- We shall examine how UK cities are attempting to become more sustainable.
- We shall examine how areas which are derelict (rundown) can be transformed by regeneration projects.
- We shall evaluate the success and failures of some of these regeneration projects.
- We shall evaluate how Harlow's proposed expansion could affect the existing area of Harlow and the surrounding area.

Improving urban sustainability in London

Urban areas can be made more sustainable by encouraging the following:

Water conservation - dual flush toilets in businesses and homes, collecting rainwater for gardens and the use of water meters in properties

Energy conservation - insulating businesses and homes, use of double and triple glazing in buildings, use of low-energy lighting and appliances

Waste recycling - recycling of household and commercial waste, adopting a 'reduce, reuse, recycle' policy, using 'grey' water to flush toilets in public buildings

Creating green spaces - increasing the number of parks and planting more trees e.g., Queen Elizabeth Park in London

Transport - London is attempting to be sustainable by encouraging the use of public transport. To reduce traffic congestion, London has adopted or improved several schemes such as redeveloping **London Underground** - the extension of the Jubilee Line has encouraged more people to use public transport.

Questions on UK Urban areas

Q1) Explain how London aims to become more environmentally sustainable.

Q2) Describe the problems facing Stratford before it was regenerated.

Q3) Evaluate the social and economic benefits of the Stratford regeneration project.

Q4) Explain how the Olympic Park has encouraged environmental sustainability.

Stratford Urban Regeneration project in London

After the closure of many of London's docks in the 1960s, thousands of people lost their jobs. People left the area to look for jobs elsewhere. Between 1981 and 1998, the London Docklands underwent urban regeneration and continues to improve to this day.

Canary Wharf is a part of the London Docklands where expensive apartments, exclusive shops and large company head offices are now found.

Stratford in the Lower Lea Valley lies to the north of the London Docklands. It had one of the most deprived communities in the country, where unemployment was high and levels of health were poor. There was a lack of infrastructure and the environmental quality was poor.

The 2012 London Olympics bid was partly successful on the understanding that Stratford would be used during the games and regenerated for local people to use after the competitors had left. After the Olympic Games were over, the park was named the Queen Elizabeth Olympic Park.

View of the Queen Elizabeth Olympic Park at Stratford

Benefits of the Stratford regeneration

Social - by 2030, more than 10,000 new homes will have been built in the park. Five new neighbourhoods, with lots of green spaces planned in, will be built and around a third of those houses will be affordable. A new academy has been built, which is used to educate around 2,000 pupils between the ages of 3 to 18.

Economic - Stratford is now a well-connected area of London, which allows commuters to travel to work easily. New jobs in construction and tourism have created a multiplier effect. It is estimated that over 20,000 jobs could be created by 2030, bringing more than £5 billion into the area.

Environmental - the Olympic bid was partly successful based on sustainability. The park is sustainable in several ways, e.g. walking and cycling routes, the provision of public transport, the water-efficient design of homes and the protection of green spaces. New habitats were created by planting flowers which encourage insects and bees.

Map showing the location of Stratford in east London

Y10-2

Lesson 1 – Patterns of Urban Change

LI: To understand the global pattern of urban change

Task 1: Read through the key terms. Practice covering the terms to check what you can recall

HIC: High Income Country

LIC: Low Income Country

NEE: Newly Emerging Economy

Rural: countryside

Urban: cities and towns

Migration: movement of people from one place to another

Natural Increase: when the birth rate is higher than the death rate

Urbanisation: increase in the number of people living in urban areas

Task 2: Describe the patterns of urban change shows on Figure 1
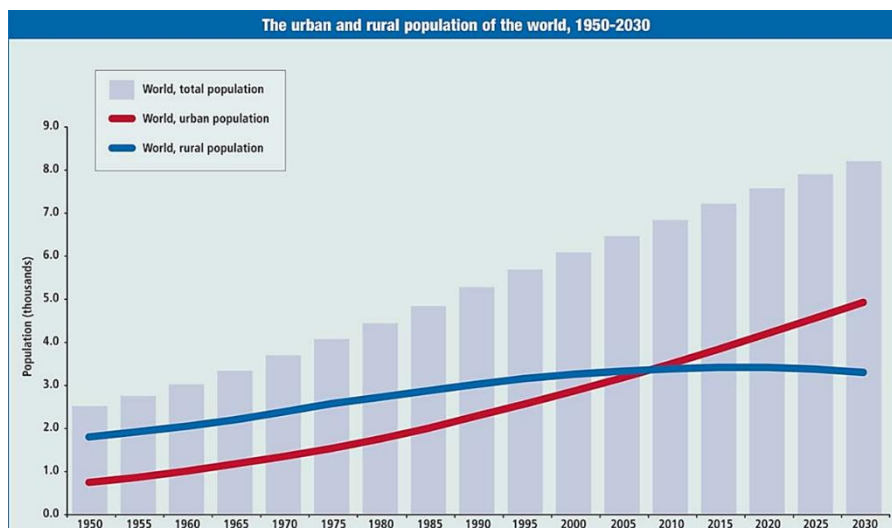
Figure 1 Urban and rural population change

Task 3: Read through the different rates of urban change

High Income Countries	Newly Emerging Economies & Low Income Countries
• Slowest rates	• Fastest rates of urbanisation
• Urbanisation has already happened	• Economic development is increasing rapidly
• People now move out of cities for a better quality of life	• The percentage of population living in urban areas varies
• In some regions there is still overcrowding, and conditions are poor	• NEEs tend to have very high urban densities
	• Due to informal housing
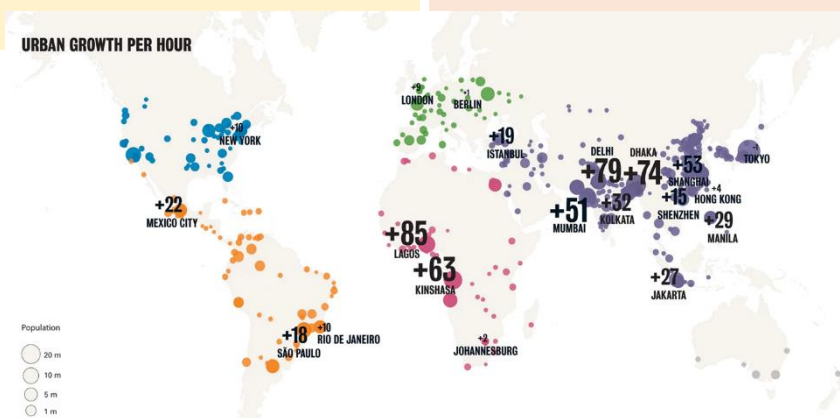
Lesson 2 – Processes of Urban Change

LI: To understand the push and pull factors which affect the rate of urbanisation

Task 1: Complete gap fill to recap patterns of urban change

As a country _____, the number of people living in urban areas tends to _____. The UK and many other HICs urbanised during the 18th and 19th _____. People migrated from rural areas (due to the mechanisation in _____) to _____ areas where there was employment in the new _____ and rows of terraced housing were built for these workers. Today the UK is a mostly urban society, with _____ of the population living in towns or cities. Prior to 1950 the majority of urbanisation occurred in _____. Rapid urbanisation took place during the period of _____ that took place in Europe and North America in the nineteenth and early twentieth centuries. Many people moved from rural to urban areas to get jobs in the rapidly _____ industries in many large towns and cities. Since 1950 _____ has slowed in most HICs, and now some of the biggest cities are losing population as people move away from the city to rural _____. Since 1950 the most _____ growth in urbanisation has occurred in LICs in South America, _____ and Asia. Between 1950 and 1990 the urban population living in LICs _____. In _____ countries the increase was less than half.

doubled	increase	Africa	expanding	farming
rapid	urbanisation	industrialises	90%	HICs	urban
industrialisation	environments	developed	centuries	factories

Task 2: Factors causing urbanisation

A. Migration affects the rate of urbanisation, and push-pull theory helps to explain this. For each of the factors below, say whether it is push or pull, and explain how it causes migration.

A push factor is something that encourages someone to leave an area; a pull factor is something that encourages someone to move to an area

Factor	*Push or Pull?*	*How does it cause migration?*
Natural disasters		
Mechanisation of farming		
Family living abroad		
Better job opportunities		
Desertification		
Improved quality of life		
Better health care and education		
Conflict or war		

B. Natural increase also causes urbanisation. This is when there are more births than deaths and so the greater the difference the faster the population grows. Younger people often move to cities and then have children – causing urban populations to increase.

Task 3: Complete the exam question below

Study **Figure 2**, a pie chart showing the reasons for rural–urban migration in a region of Pakistan, a country in Asia.
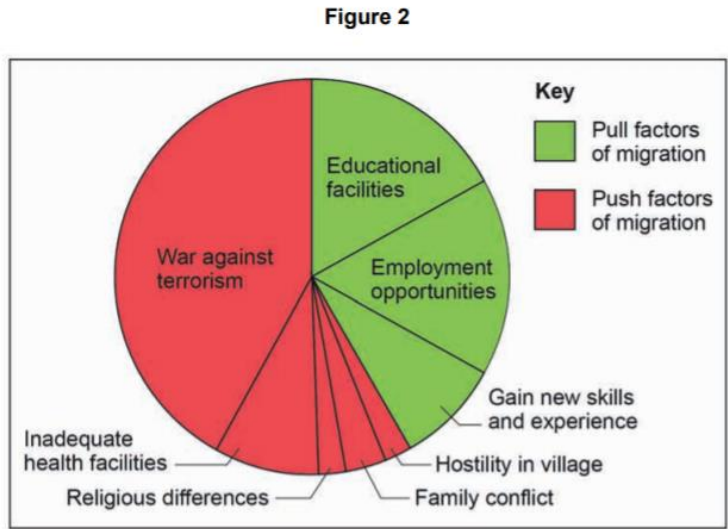
Figure 2

| 0 | 1 | . | 3 | Describe the pattern of reasons for migration shown in **Figure 2**.

[2 marks]

Lesson 3 – Megacities and rapid urban growth

LI: To examine the rise of global 'megacities' and what problems do they face

Today more than 50% of the world's population live in urban areas. The number of cities with over 10 million people is increasing. These are called megacities. There are now 34 megacities in the world.

Task 1: With reference to Figure 2, suggest reasons for the locations of future megacities
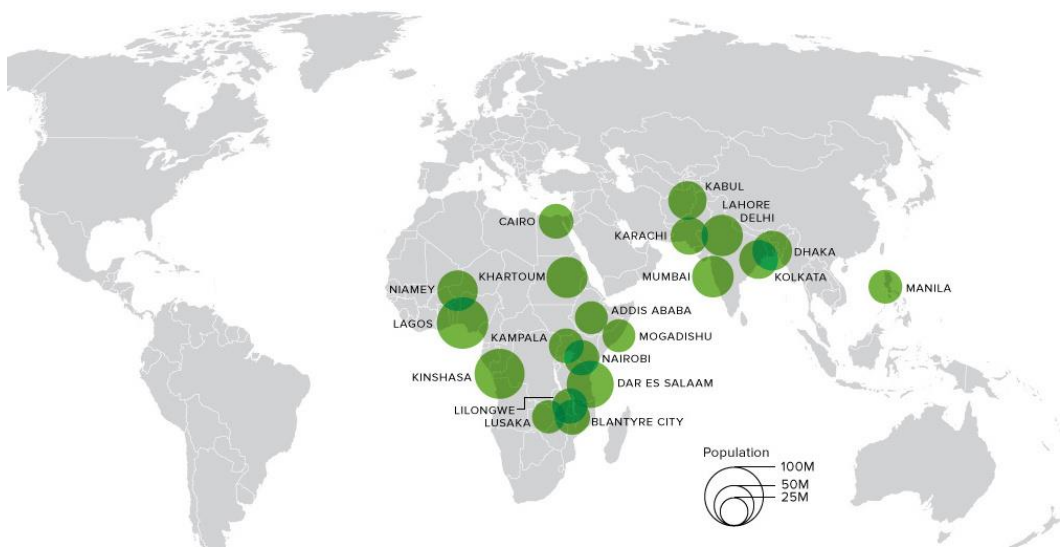
Figure 2 Most populous cities by 2100

Task 2: Read through the DART and answer the questions

DART: The growth of Asia's cities

The two faces of Asia's megacities – extreme poverty and extreme wealth

Asians are on the move. Hundreds of millions of people across Asia are migrating from rural areas and moving into cities. Asia's megacities (a city with a population of 10 million or more) have already reached a scale that is unimaginable in the Europe and North America.

The pace of Asia's urban population growth is breath-taking. The United Nations estimates that well over half of Asia's 4.5 billion residents will live in cities by 2026. Some will move to megacities – Asia will be home to 60% of all of them by 2025. While the spectacular expansion of megacities such as Tokyo (Japan), New Delhi (India), Shanghai (China) and Dhaka (Bangladesh) is mesmerizing. Collectively, Asian cities experience nearly one million new arrivals every single week.

For the most part, Asia's spectacular city growth has been good for its residents and creates opportunities. Many larger cities offer a wider choice of jobs, higher wages and more chances to enjoy social activities. With some exceptions, the overall quality of life for many Asian city dwellers is improving.

Even so, city growth in NEEs like China and India creates challenges with traffic congestion, unemployment and slums emerging as critical problems for many Asian cities. Large pockets of poverty and educational inequalities exist. Many people are stuck in a **'cycle of poverty'**, they are born into poor families, they often do not receive a good enough education to get well-paid jobs and remain 'stuck' in poverty throughout their lives.

Even in Asia's **most developed HICs** like South Korea and Japan, city planners simply cannot afford to ignore problems such as a lack of affordable housing, inadequate water and sewage provision, rising air pollution, crime and loneliness. Dealing with these challenges will be vital to the health and success of all megacities over the next 100 years. Large scale improvements such as new sewage systems and improving the environment in cities will take careful planning, lots of money and for leaders to agree.

India's megacities also suffer from notoriously poor urban planning and decaying infrastructure, including poor roads, a lack of water and appalling levels of pollution. Mumbai recently used new laws to increase the stock of affordable housing for poorer people, while New Delhi – which faces record levels of smog – is building more public transportation and reducing diesel vehicles.

Questions

1) What is a megacity?
2) How many people in Asia will live in a city by 2026?
3) How many people arrive in Asia's cities each week?
4) What opportunities do cities provide?
5) Describe the problems and challenges found in many of Asia's cities.
6) In your own words, explain what the 'cycle of poverty' is.
7) What solutions have the Indian cities of Mumbai and New Delhi used to partly solve their problems?

Lesson 4 – NEE/LIC Case Study (Rio de Janeiro)

LI: To examine a case study of a major city in a LIC/NEE – location and context

Task 1: Describe the location of Rio de Janeiro using the maps provided
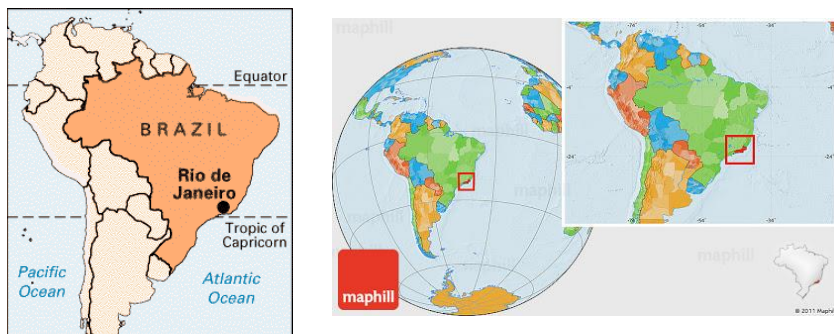
Task 2: Read through the info about Rio de Janeiro and summarise into 10 key points about the context of the city

What is Rio like?

Rio de Janeiro is situated on Brazil's Atlantic coast at 23°S and 43°W. It has grown up around a large natural bay called Guanabara Bay (photo **A**). Until 1960 Rio was the capital of Brazil — it is now Brasilia. It is the cultural capital of Brazil, with over 50 museums, and its famous annual carnival is one of the world's biggest music and dance celebrations. It is a UNESCO World Heritage Site. The staging of the 2014 soccer World Cup and the 2016 Olympics have increased its global importance.

Brazil's second most important industrial centre, producing 5 per cent of Brazil's Gross Domestic Product (GDP)

A major port – main exports are coffee, sugar and iron ore.

Sugar Loaf Mountain

The Statue of Christ the Redeemer is one of the Seven New Wonders of the World.

A Some facts about Rio

Main service industries are banking, finance and insurance.

Stunning natural surroundings and amazing beaches make it one of the most visited cities in the southern hemisphere.

Guanabara Bay

Main manufacturing industries are chemicals, pharmaceuticals, clothing, furniture and processed foods.

Rio hosted matches during the 2014 World Cup and will host the 2016 Olympic Games.

Rio has become a 'global city' because of its importance in the global economy as an industrial and financial centre. It is a major regional, national and international centre for many important companies and industries. It is an important international hub, with five ports and three airports.

How and why has Rio de Janeiro grown?

Rio de Janeiro is the second largest city in Brazil (the largest is São Paulo). In 2014 Rio had a population of 6.5 million people in the city itself and 12.5 million in the surrounding area (the population of Greater London is about 8 million).

Rio has grown rapidly in the last 50 years to become a major industrial, administrative, commercial and tourist centre. These economic activities have attracted many migrants from Brazil and other countries to swell the population of the city. These migrants have contributed to Rio's continuing economic development. As a result Rio has a racially mixed population. Migrants have come to Rio from many different places.

- From other parts of Brazil such as the Amazon Basin.
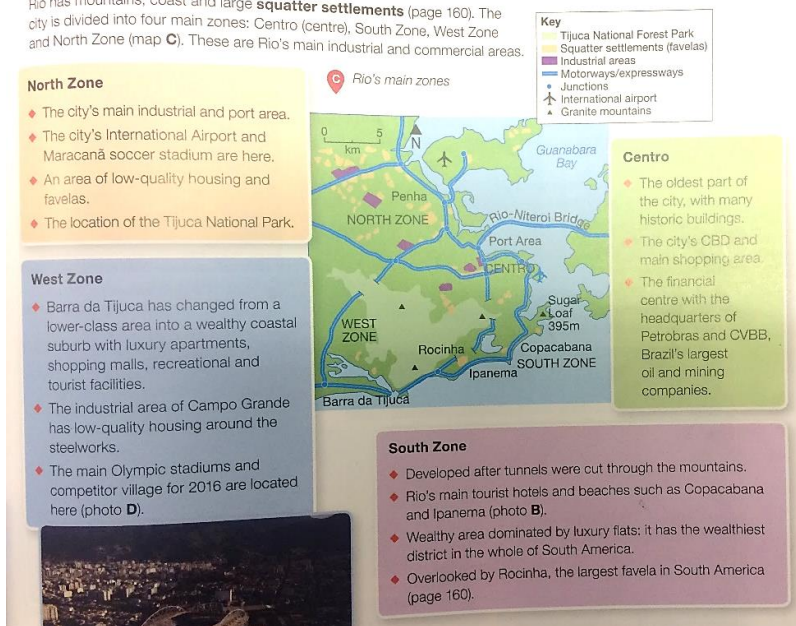- From other countries in South America, such as Argentina and Bolivia.
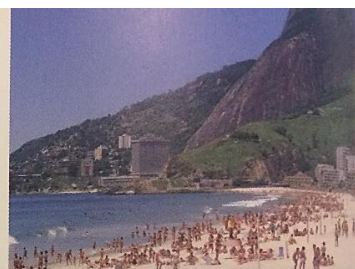
B Ipanema Beach

- More recent migrants have come from South Korea and China seeking new business opportunities.
- The common language still attracts migrants from Portugal, Brazil's former colonial power.
- Rio's industry attracts skilled workers from the USA and UK.

Land uses in Rio de Janeiro

Rio has mountains, coast and large **squatter settlements** (page 160). The city is divided into four main zones: Centro (centre), South Zone, West Zone and North Zone (map **C**). These are Rio's main industrial and commercial areas.

North Zone
- The city's main industrial and port area.
- The city's International Airport and Maracanã soccer stadium are here.
- An area of low-quality housing and favelas.
- The location of the Tijuca National Park.

West Zone
- Barra da Tijuca has changed from a lower-class area into a wealthy coastal suburb with luxury apartments, shopping malls, recreational and tourist facilities.
- The industrial area of Campo Grande has low-quality housing around the steelworks.
- The main Olympic stadiums and competitor village for 2016 are located here (photo **D**).

Key
- Tijuca National Forest Park
- Squatter settlements (favelas)
- Industrial areas
- Motorways/expressways
- Junctions
- International airport
- Granite mountains

Centro
- The oldest part of the city, with many historic buildings.
- The city's CBD and main shopping area.
- The financial centre with the headquarters of Petrobras and CVBB, Brazil's largest oil and mining companies.

South Zone
- Developed after tunnels were cut through the mountains.
- Rio's main tourist hotels and beaches such as Copacabana and Ipanema (photo **B**).
- Wealthy area dominated by luxury flats: it has the wealthiest district in the whole of South America.
- Overlooked by Rocinha, the largest favela in South America (page 160).

Lesson 5 – NEE/LIC Case Study (Rio de Janeiro)

LI: To understand the challenges facing a city in a LIC/NEE

Task 1: Watch the two videos about Rio's favelas and the Olympics

https://www.youtube.com/watch?v=1W_zM7koJy8 (Part 1)

https://www.youtube.com/watch?v=c3BRTlHFpBU (Part 2)

Task 2: Read through the challenges that face Rio. Sort into SOCIAL, ECONOMIC and ENVIRONMENTAL
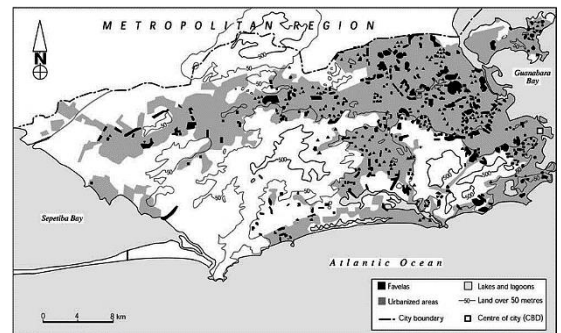
- Life expectancy is as low as 56 years in Rio's favelas
- An estimated 200 tons of raw sewage pour into Guanabara Bay.
- Rapid urban population growth has caused an increase in informal settlements – favelas
- Rio de Janeiro possesses high rates of violent crimes such as murder and armed robberies
- Only 50% of children continue in education after 14. Many go to work to earn money for their families
- There is a shortage of housing which has led to overcrowding
- Rio currently has around 1000 favelas
- Power cuts are frequent in rear this is because electric supplies are overloaded
- Rates of unemployment in favelas are high, while those who are working typically earn a low wage.
- The informal sector makes up around 60% of the work force in Rio
- In the first 9 months of 2017 there were around 5000 murders in Rio
- Droughts have increased the pressure on supplying freshwater as reservoirs have dried up.
- The informal sector is unregulated and unsupported by the government
- Due to poor sewage treatment there is a high risk of water-borne diseases in the favelas
- The Red Command is the largest and most violent drug gang that operates in Rio's favelas
- Following heavy rain in 2010 one slides destroyed thousands of homes and 200 people were killed.
- Millions of people have been forced to build their own homes due to the lack of affordable housing.
- In the poorest areas, 10% of people do not have access to fresh piped water
- 50% lack proper sanitation which means human waste can follow through the streets.
- 30% of people have no electricity.
- 3.1 million tons of waste is generated in Rio every year. Most of this is taken to landfill.

Lesson 6 – NEE/LIC Case Study (Rio de Janeiro)

LI: To explore what opportunities can be found in a major city in a LIC/NEE

Task 1: Read through the opportunities

Ethnic and cultural diversity - providing a huge mix of different religions, foods and customs. 51 per cent of Rio's population is white (including the largest Portuguese population outside of Lisbon), 36 per cent is multi-racial, 12 per cent is black, 1 per cent Asian, and 0.1 per cent Amerindian. Rio is an attractive location for internal and international migrants which contributes to its rich cultural diversity. This cultural mix of Rio de Janeiro also contributes to the sense of the community that is felt in the city. This is particularly strong in the favelas where they favelas demonstrate tremendous community spirit, co-operation and recycling of materials. Furthermore, Rio is famous for its annual carnival, samba schools, and sporting events. The Maracanas Stadium is one of the largest football stadiums in the world. The football World Cup was hosted there in 2014, and the Olympic Games were held there in 2016.

Rio has several universities and higher education institutions. It is the second largest centre for research and development in the country. This provides a high level of schooling for those people who have access to the schools and universities which can then lead to more job opportunities.

Rio is a major trading port, with important oil refining and ship-building industries. The main exports from Rio are crude petroleum and semi-finished iron and steel products. Headquarters of major industries are located here, including Petrobras (energy company), Vale (mining company) and Grupo Globa (telecommunications). Favelas create their own economies, and recent improvements have allowed shops and restaurants to develop.

Another big industry in Rio is tourism. It is one of the most visited cities in the southern hemisphere. Major attractions include the beaches (e.g. Copacabana and Ipanema), the statue of Christ the Redeemer (on Corcovado peak), and Sugar Loaf Mountain. These iconic and crowded beaches of Copacabana, Ipanema and Leblon face the Atlantic and are flanked by mountains in the background. This area, known as the 'Carioca' is listed as a World Heritage Site. There are also urban forests which include the Tijuca National Park and White Rock Forests are two of the largest urban forests in the world.

Task 2: Make a list or mind map of all the opportunities (keep this a brief summary – no more than 4 words each)

Opportunities of urban growth in Rio

Task 3: Answer the question: *Using a named example of a city in an LIC or NEE, discuss the challenges and opportunities created by urban growth (9 marks + 3 SPG)*

Lesson 7 – Urban Planning and Management (Rio de Janeiro)

LI: To examine how urban planning can be used to improve the quality of life in a major LIC/NEE city

Task 1: Read through the DART about urban planning to improve life in Rio de Janeiro

In the 1990s, the Favela Bairro Project was set up to help improve life in the favelas and upgrade them rather than demolish them, as has happened in other locations. This work has been carried out with government funding to provide facilities like electricity, sewage systems, rubbish collection and public transport.

Self-help schemes have also been supported. Here, residents are provided with building materials like concrete blocks and cement in order to replace home-made shelters with permanent dwellings. These are often three or four storeys high, and with water, electricity and sewage systems installed. Legal rights such as granting the favela residents rights to own their own properties. Low rents have also been offered.

Transport systems have been extended to include the favelas to give residents the opportunity to travel to work in the city centre and industrial areas.

Law and order have been improved in the favelas by trying to rid these areas of crime and drug abuse. Several large favelas have been improved in this way through federal 'Pacification Programmes'.

New towns like Barra da Tijuca, built 20 kilometres along the coastline, have been built to relocate some residents from city favelas.

Task 2: Answer the questions

1. When was the Favela Bairro Project set up?
2. What were the aims?
3. How have the favela been improved?
4. Why are self-help schemes sustainable? (why will they have a lasting effect?)
5. What are the benefits of improved transport systems?
6. What's the name of the law and order scheme?
7. Can you remember the name of any of the favelas where it has been successful?
8. Why do you think new towns have been built?

Task 3: Read through the information about Rio's traffic management. Write down 3 reasons why traffic management is hard in Rio.

Due to its physical geography with steep slopes and mountains, Rio is one of the most congested locations in South America. This has led to high levels of air pollution and commuters spending a lot of time travelling.
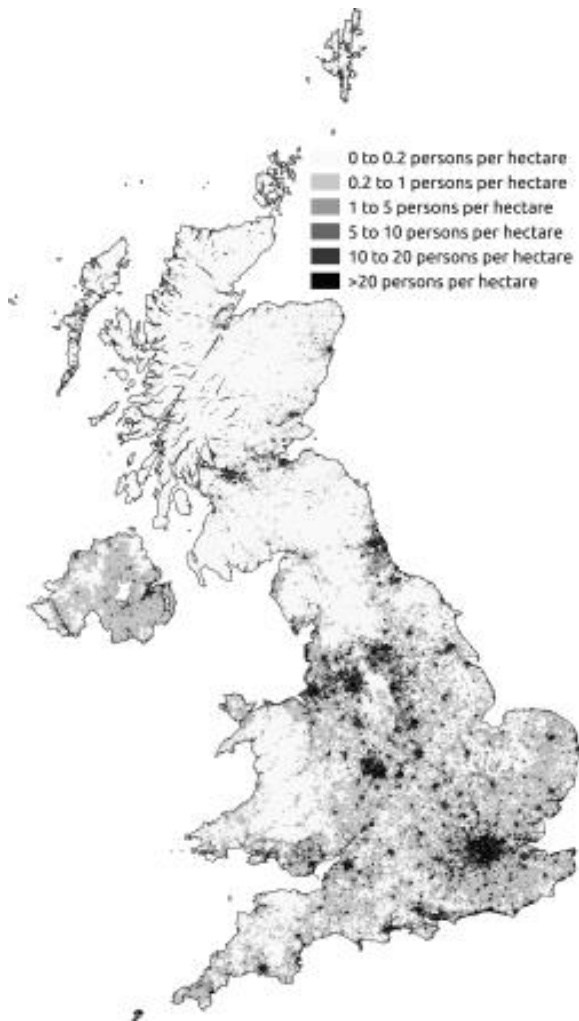
The metro system is being extended to address this problem. Also, road tolls in the city centre are being introduced.

Tunnels through mountains have also been constructed to improve transport links across the city.

Lesson 1 – UK Population

LI: To understand the UK population distribution and the location of major UK urban areas

0 to 0.2 persons per hectare
0.2 to 1 persons per hectare
1 to 5 persons per hectare
5 to 10 persons per hectare
10 to 20 persons per hectare
>20 persons per hectare

London	Glasgow	Liverpool	Bradford
Manchester	Newcastle	Leeds	Dublin
Birmingham	Sheffield	Bristol	Edinburgh

Task 1: Label the UK's major cities of the blank map of the UK

Task 2: Describe and explain the UK population distribution

Lesson 2 – London

LI: To describe the location and importance of a UK city on a regional and global scale

Task 1: Describe the location of London using the map below

Task 2: Colour code the facts to show how London is either globally or nationally important

London is the UK's capital city.	London is by far the UK's largest and wealthiest city.	Earnings and house prices in London have risen faster, widening the gap between London and the rest of the UK.
London's modern day importance is its status as a world city.	Along with New York London is one of the most financial centres in the world.	The headquarters of many large international and British companies are based in London.
London is a national and international centre for media and communication networks.	London's school are in the top 10% of all UK schools. London contains some of the top universities and research centres such as the UCL and Imperial College.	The city attracts investment and people from all around the world.
Many of London's iconic buildings such as the Shard (not to mention football teams), are owned by foreign investors.	London is a centre for tourism. In 2015 the city welcomed 17.4 million international visitors.	392,400 people are employed in the City of London.
841,000 private sector businesses were based in London at the start of 2013, more than in any other region or country in the UK.	Canary Wharf includes the global headquarters of two of the world's largest banks, HSBC and Barclays.	London is a major retail centre in and 2010 had the highest non-food retail sales of any city in the world, with a total spend of around £64.2 billion.
6 international airports such as Gatwick, Heathrow and Stansted serve London.	London has an integrated public transport system operated by Transport for London under a single ticketing system, the Oyster card.	Once the largest port in the world, the Port of London is today the second largest in the United Kingdom, handling 48 million tonnes of cargo each year.
529 foreign companies listed in London, representing 20% of the global foreign equity listings.	London is the most populous region in the UK with 8,615,246 residents in 2015.	London generates approximately 22% of the UK's GDP.
The West End is famous for its theatres and musical likes Les Misérables and The Lion King	London is the 2nd more important city for finance and banking in the world with only the USA being more important	It is the world's most visited city by people from abroad: 16 million people visited in 2014

Lesson 3 – London and migration

LI: To evaluate the impacts of national and international migration in a UK city

Task 1: watch the video about multiculturalism in London

https://timeforgeography.co.uk/videos_list/cities/multiculturalism-london/

Task 2: Read through the impacts that migration has on London

**The Impacts of national and international migration on the growth and character of the city**

The population is higher than it has ever been. In 2015, London's population reached 8.6 million

London's population has been climbing again since 1991, it is likely to continue to grown and is predicted to reach 10 million by 2030 – which will make London one of the world's megacities.

National Migration	International Migration
For most of the past 200 years, the population has been growing. In 1801, with just over a million people, it was already the largest city in the world. During the industrial revolution, it grew as it attracted more migrants from other parts of the UK.	Migrants from all around the world add to London's population. The balance between people leaving and people arriving is called net migration.
London has a much **younger population** than the UK as a whole which helps to explain why it is growing so rapidly. Younger people are likely to have children, which leads to a higher rate of natural increase.	London is the most **diverse** city in the UK. Less than half of London's population are white British origin, while 37% were born outside the UK.

Most immigrants into London are **young,** whilst most people leaving are older. |
| Young people in their 20s and 30s, especially **university graduates**, move to London, they are attracted by more job opportunities, higher pay and the expectation of an exciting social life in London. | Today, London's population comes from every part of the world. The largest numbers are from countries like **India, Nigeria and Jamaica**. Since 2007, more migrants have come from **Eastern Europe,** with the free movement of people in the European Union. |

Task 3: With references to the Figure, explain why London is considered a global city. (4 marks)

Population by country of birth (2013) non-UK

Population by country of birth (thousands)
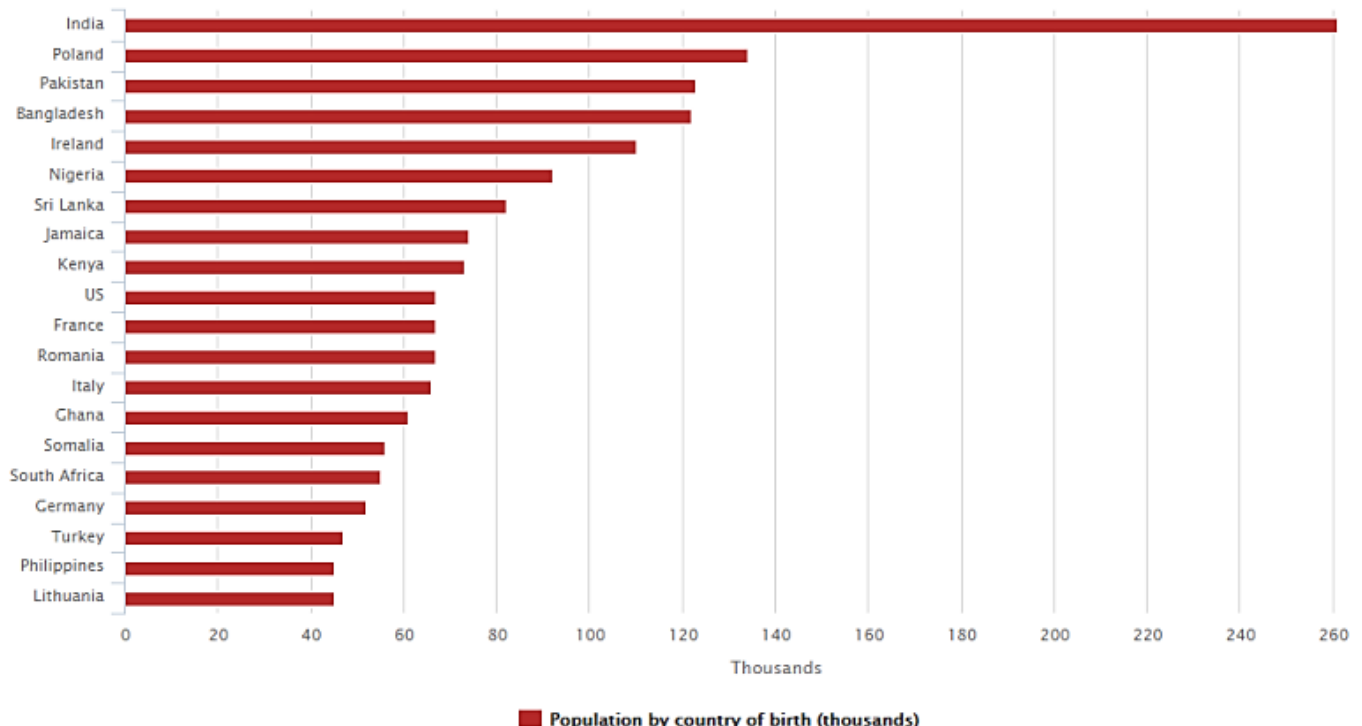
Lesson 4 – London: opportunities

To explore how urban change has created social and economic opportunities in a UK city

Task 1: Using the information provided, make a summary poster about opportunities in London

Cultural Mix

The cultural mix or multiculturalism basically refers to a country or place that has more than one culture living together in close proximity. The UK has huge numbers of cultures and races, as well as white British people. This enriches huge areas of London cultural life, from the amazing array of food that is available to the music variety we have. Other advantages include the great exposure people get to other religions, languages and cultural parties. The Notting Hill Carnival takes place every year over August Bank Holiday. It is led by members of the British West Indian community, and is a significant event in Black British culture

Recreation and entertainment

It has a huge number of cultural attractions such as the British Museum, the National Gallery and the Natural History Museum. It has the West End where a huge number of shows can be seen and tourist attractions such as Buckingham Palace and the Houses of Parliament. London has a huge number of concert and cinema venues and lots of sporting events such as the Oxford-Cambridge Boat race, the Wimbledon Tennis Open, many big name football teams and even hosted the Olympics. Add to that the usual mix of bars, restaurants and street entertainment common of most large cities then London has a great select of recreation and entertainment.

Employment

London's economy is different to the rest of the UK as it is dominated by finance and insurance businesses. These are mainly located in The City and Canary Wharf. Productivity in London is 40% higher than the UK average. The average UK salary is £27,531 but in The City of London it is £48,023. London residents (aged 16 to 64 and working) are more likely to be employed in managerial, professional or associate professional and technical occupations, compared with the UK. However, unemployment rate is one of the highest. London's unemployment was 7.6% in June 2020 compared to 6.3% nationally

Integrated transport system

London has a really developed integrated transport system which means that all the different forms of transport can link to one another. Public transport accounts for 25% of London's journeys. London Commuters can travel on most forms of transport using the electronic contactless card payments or the Oyster card. The networks include the underground, overground, national rail, buses, cycling and taxis. The newest development in London is CrossRail which is a railway from east to west London. This will decrease travel times and cut congestion as more people use public transport.

Task 2: Pick one of the Figures, explain how it shows opportunity of urban change London

A Choropleth map of % non white population across London 2011

People entering central London in the weekday morning peak - road traffic by main mode of transport
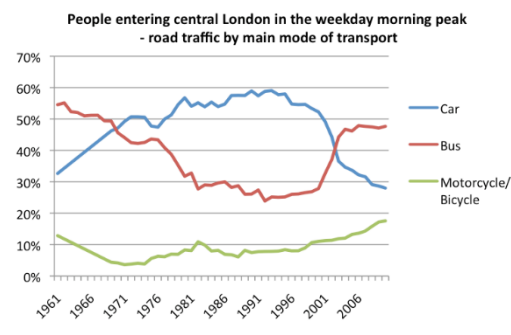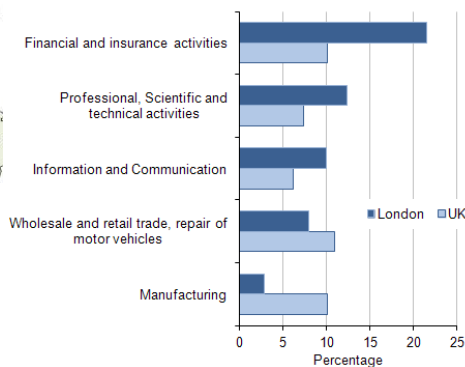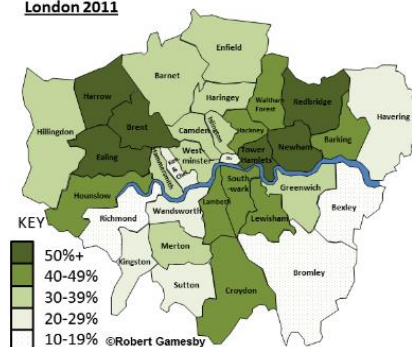
Lesson 5 – London: challenges

LI: To assess the challenges created by social and economic change in a UK urban area

Task 1: Simplify the image that shows the process of urban decline

CYCLE OF URBAN DECLINE FOLLOWING DEINDUSTRIALISATION
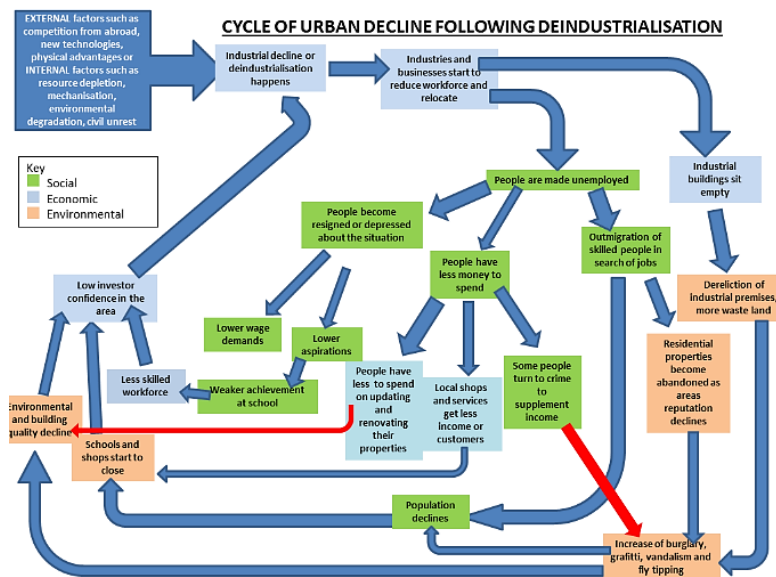
Task 2: Read through the DARTs on Wealth Inequalities and Health Inequalities

DART: The vast gap between rich and poor in our capital is a crisis for us all!

The cliché of London as a tale of two cities is well-worn. Striking new figures show that the proportion of households classified as either poor or wealthy has grown across the country in recent decades, leaving a shrinking middle. But it is in London that the trend is by far the most pronounced.

London is now a city of contradictions. It is the richest part of the country, but also its most unequal, with the highest levels of poverty. It is home to some of the world's most expensive real estate but has the highest proportion of renters of any area of the country, many of whom are locked out of home ownership. It has some of the world's best teaching hospitals but suffers from profound health inequalities.

In this city of contradictions Londoners of different means live utterly separate lives. The wealthiest live in multimillion-pound houses, barely using the city's public services, opting for private schools and hospitals. They enjoy one of the finest restaurants and theatre scenes in the world, and live international lives, travelling abroad more frequently than outside the M25.

The contrast with the lives of poor Londoners could not be starker. Most of London's poor have jobs, many of which do not pay the minimum wage thanks to unscrupulous companies using tricks like keeping tips to top up wages. They don't bat an eyelid at commuting over two hours on three buses to get to their office-cleaning jobs because they can't afford the tube, or because they need to start at 4am so they can clear out by the time the office workers arrive. They live with the fear their teenage children will get caught up in the gang violence that barely touches the professionals who walk the same streets in Peckham, Ladbroke Grove and King's Cross. Yes, London has wonderful free museums and parks – but who has time to visit them when you're trying to hold down two or three jobs?

It would take an average Londoner couple with one child more than 20 years to save for a deposit on a first-time home. Parents of average means find they are barely better off both going out to work when the cost of childcare is factored in.
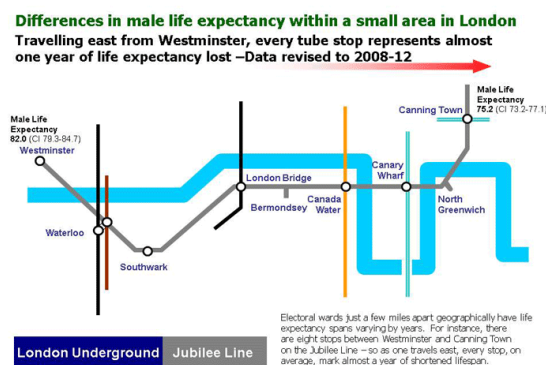
London has had some successes in closing the gap. Thanks to a relentless capital-wide focus on school improvement, London is now the best place in the country to go to school if you are poor. The citizen-led campaign for the London living wage has boosted wages for employees of the 400 or so organisations that have become London living -wage employers.

But more is needed if London is to avoid becoming a place of two halves. Its housing market is completely dysfunctional. International investors offered the chance to buy off-plan before Londoners get a look in, now account for a staggering three-quarters of new homes sales. Many of these flats lie dormant as empty cash cows for owners who live on the other side of the world. A mansion tax is a symbolic step in the right direction. But rather than house-building targets that pale into insignificance in the context of demand, an effective package of measures must include properly taxing undeveloped land with planning permission, punitive taxes on empty homes, and a long-overdue revaluation of council tax bands.

Second, London needs a higher minimum wage. It is impossible to have even the most basic quality of life on the national minimum wage in what is one of the world's most expensive cities. Third, what is happening within London raises wider questions about redistribution from richer to poorer councils. London is home to some of the country's poorest and richest wards; and inequality between boroughs has grown. It cannot be right that it is the poorest areas of the country that have faced the sharpest cuts to local services. Cuts to mental health and family services seriously jeopardise the progress made by London's schools in closing the gap. This must be addressed nationally through the local government funding formula.

DART: Health Inequalities

- Life expectancy decreases as you move east from Westminster (which is where the Houses of Parliament are) towards the Tower Hamlets and the East End.
- Males in Tower Hamlets (E London) were more than twice as likely to die of lung disease as those in Brent (N London) in 2012.
- Those areas with lowest life expectancies are also the poorest areas of London, where there are high numbers of unemployed – for example, male life expectancy in parts of Lewisham is 76 – much lower than the London average of 79. This is likely due to the lack of high-paid jobs in the borough. Solving poverty is therefore the key to solving health inequalities.
- Health can be linked to lifestyle choices as well (smoking/drinking/drugs).
- London is the MOST unequal city for wage inequality in the UK as jobs are divided into high and low-skilled jobs, depending on the borough in which you are based.
- London has the LARGEST gap between rich and poor in the developed world.
- London has the highest average wage in the UK at £35,000 per year and is heavily reliant on financial services. This compares to cities like Manchester and Birmingham where the average wage is £27,000 per year.

Differences in male life expectancy within a small area in London
Travelling east from Westminster, every tube stop represents almost one year of life expectancy lost –Data revised to 2008-12

Task 2: Answer the questions

1. Why is London a city of contradictions?
2. Describe what life is like for poorer Londoners.
3. How long would it take an average Londoner couple with one child to save for a first-time house deposit?
4. How has London started to close the rich and poor gap?
5. Suggest what else could be done to address wealth inequalities.
6. Why is the mansion tax significant?
7. What are the impacts of having a low minimum wage?
8. Describe the pattern of life expectancy across London.
9. What is a cause of health inequality?
10. Wealth inequality is the cause of all challenges facing people in London. Do you agree? Justify your opinion.

Lesson 6 – London: environmental issues

LI: To examine the environmental challenges which are found in a UK city

Task 1: Read the DART and answer the key questions

DART: Revealed: every Londoner breathing dangerous levels of toxic air particle

The scale of London's air pollution crisis was laid bare on Wednesday, with new figures showing that every person in the capital is breathing air that exceeds global guidelines for one of the most dangerous toxic particles.

The research shows that every area in the capital exceeds World Health Organisation (WHO) limits for a damaging type of particle known as PM2.5. It also found that 7.9 million Londoners – nearly 95% of the capital's population – live in areas that exceed the limit by 50% or more.

The findings, described as "sickening" by London's mayor, Sadiq Khan, have serious health implications – especially for children – with both short- and long-term exposure to these particulates increasing the likelihood of respiratory and cardiovascular diseases. Health experts say that young people exposed to these toxic pollutants are more likely to grow up with reduced lung function and develop asthma.

London is widely recognised as the worst area for air pollution in the UK, although there is growing evidence that dangerously polluted air is damaging people's health in towns and cities across the country.

Khan added: "We should be ashamed that our young people – the next generation of Londoners – are being exposed to these tiny particles of toxic dust that are seriously damaging their lungs and shortening their life expectancy. I understand this is really difficult for Londoners, but that's why I felt it was so important that I made this information public, so people really understand the scale of the challenge we face in London."

Last week Khan unveiled plans to limit the use of wood-burning stoves in the capital from 2025 and tighten up regulations to make sure all new stoves from 2022 are as clean as possible.

He has also set out a range of plans to tackle pollution from diesel cars in the capital. The first stage, the new T-Charge, which will charge older, more polluting vehicles entering central London, starts later this month.

Clean air campaigners criticised the government's inaction and welcomed Khan's plans, which include the introduction of an ultra-low emission zone in 2019.

But they called on the mayor to take more urgent, immediate action in light of the scale of the crisis. Paul Morozzo, a clean air campaigner at Greenpeace, said: "London air isn't safe to breathe. Every person in London is affected by this crisis – old or young, healthy or ill. The air you breathe in London is putting your health at risk now and in the future, whether you realise it or not.

"Restricting diesel will make a big difference to both PM and nitrogen oxide air pollution in London, which is why the mayor has no choice but to get tough on cleaning up our roads."

Dr Penny Woods, chief executive of the British Lung Foundation, said: "Toxic air is poisoning our children, making existing lung conditions worse, such as asthma. The mayor cannot solve this public health crisis without government support. We urgently need changes to taxation for new diesel vehicles and a diesel scrappage scheme."

The mayor released the latest findings on Wednesday morning as he signed London up to the Breathe Life coalition organised by the WHO, the body UN Environment and the Climate & Clean Air Coalition, at the Child Health Initiative conference at City Hall.

The initiative aims to connect similar world cities, combine expertise, share best practice and work together to improve air quality.

Key Questions

1. Suggest some of the causes of air pollution in London.
2. Describe the impacts of air pollution on people's health.
3. Why do you think it is important that people are aware of the pollution problems and risks?
4. What measures have already been taken? What is planned for the future?
5. Suggest what other strategies could be used to improve environmental quality?

Evaluating environmental challenges. (Assess the extent…, To what extent…, However…, Environmental opportunities are…)

Environmental Opportunities: Urban greening

- London is one of the world's greenest cities! 47% of the city is green space, including parks, woodlands, cemeteries and gardens.
- Central London Parks: London has more big parks than many cities e.g. Hyde Park.
- Local Parks: these are run by the council.
- Many new homes are built on farmland, providing millions of new homes with gardens (suburban growth)

Trees produce oxygen. There are 8.1 million trees in London – almost 1 per person and green space reduces the risk of flooding.
They are a great habitat for wildlife. There are 13,000 wildlife species in London.
People enjoy open spaces and they keep us healthy as they are used for walked, running, cycling and for sport.
Growing food: there are 30,000 allotments in London.

Lesson 7 – Impacts of urban sprawl

LI: To evaluate the impact of urban sprawl on the rural-urban fringe in the UK

Urban sprawl is the growth of urban areas into surrounding rural areas. As the population grows, the demand for housing increases, causing the city to expand and 'sprawl' out

Task 1: Colour code the impacts of urban sprawl for positive and negative

Better transport links for more remote areas	Higher demand for housing which increases house prices	Loss of habitats	People who can move out of London might have a better quality of life
Community tensions as new people move into the area	Facilities in rural areas are improved to support growing populations	Longer commutes cause more pollution	Issues such as crime might be spread into rural places (e.g. County Lines)
Electrification of railway lines to improve services	Commuting may cause people stress and health problems	POSITIVE	NEGATIVE

DART: Fourteen garden villages to be built in England totalling 48,000 homes

Proposed garden villages and garden towns

■ Garden villages ■ Garden towns

Sites for new villages include green belt land and spread from Cornwall to Cumbria, but local opposition is strong in some areas

Fourteen garden villages are to be built across England on sites including a former airfield and green belt land, ministers have said. The villages, totalling 48,000 homes, will not be extensions of existing small towns or villages, but "distinct new places with their own community facilities", the government said.

Sites from Cornwall to Cumbria have been identified in the first round of approved locations, making them eligible for a share of a £6m government technical and financial support fund. After completion, the villages may vary in size from 1,500 homes up to 10,000. The housing minister, Gavin Barwell, said the development of the villages would be locally led by communities rather than central government. "New communities not only deliver homes, they also bring new jobs and facilities and a big boost to local economies," he said.

 "The government talks about it being a locally led development, but the reality is that this is only happening because it was a government top-down initiative," he told the Guardian. "They say it is a brownfield site, but many of the houses are on fields. It has been one of those projects that seems to have a momentum of its own, despite what local people say."

North Cheshire garden village, which will sit on the eastern edge of Handforth, has development plans that include 2,000 homes, a nursery and a care home, as well as architect-designed "one-off" homes. However, locals are worried that a new village of several thousand homes may put pressure on infrastructure such as the congested A34.

The garden village initiative was announced by the then chancellor George Osborne last year. Conditions for building villages or market towns stated that the developments must be "a new discrete settlement and not an extension of an existing town or village". Shaun Spiers, the chief executive of the Campaign to Protect Rural England (CPRE), said it would carefully examine the proposals to see whether they were locally led and respected the green belt.

"Done well with genuine local consent, garden villages and towns can help tackle the housing crisis," he said. "They can certainly be preferable to what is currently happening in too many parts of the country: poor quality developments plonked on the countryside, in the teeth of local opposition and in defiance of good planning principles." But areas that absorbed the new garden villages should have guarantees that they would be "protected from speculative planning applications for a long time to come", he added.

The Department for Communities and Local Government said there had been high levels of interest in building more villages in the coming years and it would make an additional £1m available this year to further development other proposals. Three new garden towns have also been announced near Aylesbury in Buckinghamshire, Taunton in Somerset and Harlow and Gilston in Hertfordshire, with £1.4m of funding to support the delivery of about 50,000 homes. Local CPRE members strongly object to the Hertfordshire plans, under which the village of Gilston and neighbouring hamlet of Eastwick would disappear.

Kevin FitzGerald, the honorary director of CPRE Hertfordshire, said: "These plans herald the death of the rural character. Beautiful villages, supposedly protected by green belt, look set to be swallowed up by the urban sprawl of neighbouring towns. "Housing targets are putting immense pressure on our area and marginalising the basic purposes of the green belt, which the government has pledged to protect."

Lesson 8 – Urban regeneration in the UK

LI: To discuss a major urban redevelopment project in the UK

Task 1: Watch time-lapse of Stratford regeneration: https://www.youtube.com/watch?v=F_kXvjMu9K8

Task 2: Read through info about Stratford

Stratford in East London was an area of dereliction. Urban regeneration was needed to deal with the problem of brownfield sites, industrial outmigration, lack of jobs and extreme social inequality.
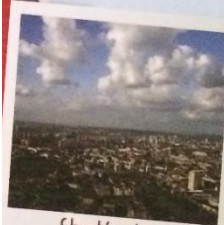
Stratford Fact File
- Stratford is located in the London Borough of Newham.
- It is in a part of the Lower Lea Valley, where the River Lea was once heavily polluted.
- After the London docks closed in the 1960s, the area deindustrialised.
- It was part of the area chosen as the site of the 2012 Olympics.

**Why the Area Needed Regeneration**

Stratford had high levels of deprivation, with Newham having some of the highest levels of poverty in London. There were lots of brownfield sites, industrialisation and employment were in rapid decline, exam results were low and there was a significant lack of investment in the area.
Stratford was ideal as a site for regeneration for the following reasons:

✓ There were plenty of people looking for work.

✓ GCSE performance in the area was generally low and schools were in need of investment.

✓ With its international rail terminal, Stratford had potential for good transport links.

✓ The many brownfield sites were ideal for building on.

The Main Features of Stratford's Regeneration

The government used the 2012 Olympics as an engine for change in Stratford. It aimed to do the following:

Improve infrastructure. Transport improvements included new high-speed trains with a wider range of connections.

Increase affordable housing. More than 2,800 good-quality homes were built to accommodate lower-income families.

Tackle unemployment. The International Quarter Technology Centre and Westfield complex helped to create thousands of jobs.

Boost the economy. The park brought over £9 billion of investment to the area and attracted over 8.5 million visitors over the Games period alone. This resulted in £2.1 billion of additional spending by 2016.

Improve the environment. As part of the environmentally friendly development for the 2012 Olympics, contaminated land and brownfield sites were reclaimed to create new wildlife habitats and parks.

The London Legacy Development Corporation has plans to continue improvements until 2030.

Task 3: Answer the question - For an HIC city studied, outline the strategy used to regenerate the area and improve the quality of life. To what extent has this strategy been successful? 9 marks + 3 SPaG

Lesson 9 – Sustainable urban living

LI: To evaluate sustainable urban living in the UK

Task 1: Read through the key features of a sustainable city

- Resources and services in the city are accessible to all.
- Public transport is seen as a viable alternative to cars as it is safe and reliable.
- Areas of open space are safe, accessible and enjoyable.
- Renewable resources are used instead of non-renewable resources. New homes are energy efficient.
- Waste is seen as a resource and is recycled wherever possible.
- There is access to affordable housing.
- Community links are strong, and communities work together to deal with issues such as crime and security.
- Cultural and social amenities are accessible to all.

Task 2: Using the Figure, identify features of urban sustainability on the BedZED building in Croydon

Task 3: Watch the video about BedZED in Croydon: https://www.youtube.com/watch?v=60es4dTm8Q4

Task 4: Read through the information about how BedZED is an example of sustainable urban living.

The Beddington Zero Energy Development (BedZED) near Croydon is the largest eco-community in the UK. They are aiming to be a carbon zero community.		
Water and energy conservation	Waste recycling	Creating green space
Energy efficient—*The houses face south to take advantage of solar gain, are triple glazed, and have high thermal insulation.* Water efficient —*Most rainwater falling on the site is collected and reused. Appliances are chosen to be water-efficient and use recycled water when possible.* Low-impact materials—*selected from renewable or recycled sources within 35 miles, to minimize transportation.* Renewable energy – *used with solar panels on the roof*	*Refuse-collection facilities are designed to support recycling by separating out the rubbish. Compost is used in the allotments*	*Even though BedZED is, by suburban standards, a high density development, most homes have private outdoor space and many have small gardens. The whole development shares a square and a large playing field.*

In your own words, explain why BedZED is considered to be sustainable. Use examples from the case study as well as your own understanding

Task 5: Watch the video about Dubai's Sustainable City: https://www.youtube.com/watch?v=WCKz8ykyI2E

Write down 3 similarities and 3 differences between BedZED and the Sustainable City.

Lesson 10 – Traffic management in UK cities

LI: To explain how urban transport strategies are used to reduce traffic congestion

Task 1: Read through the DART and answer the questions about traffic issues

London, Manchester and Liverpool were among the most congested cities in Europe. London's unhappy status as a city with some of the worst road traffic congestion in the world is now the new mayor's to try to change.

It is a problem that substantially arises from London's rapid economic and population growth, which generate more pressure on road space, which means more and more people spending more and more time sitting in jams. This is bad for business, bad for air quality and bad for people's tempers too. No wonder there's so much rage on the capital's roads these days.

Traffic in East London has resulted in nitrogen dioxide emissions exceeding EU levels by 50% - dangerously high air pollution. It is estimated that air pollution kills over 4000 people a year in London, mostly due to breathing problems such as asthma. If the expansion of City airport and the creation of a new Thames crossing go ahead in East London, traffic could massively increase. This would worsen air pollution in East London.

New research from Imperial College London has suggested that road traffic noise can be linked to deaths and increased strokes as well as reducing levels of sleep. Over 1.6 million people in London live above the safety threshold relating to traffic noise. Traffic congestion needs detailed and carefully thought out solutions.

In the longer term, installing dedicated cycling infrastructure may help alleviate congestion if it encourages people to cycle and not use their cars. However, people may resist a significant enough "modal shift" away from private cars and taxis. London's transport chief Leon Daniels said that the number of cyclists using the routes where 'cycle superhighways' have been installed has risen by an average of 60% compared with before they were put in, which looks like a good sign.

Questions

1.   How does traffic congestion in London compare to many other European cities?
2.   What are the major problems caused by traffic in London?
3.   What is the total number of people killed by air pollution each year in London? How might this get worse?
4.   Why should we care about traffic problems in London?
5.   How might you go about trying to provide solutions to these problems?

Task 2: Read through the

strategies which can be used

to tackle traffic congestion.

Pick which strategy you think

would be most effective in

London, justify your decision.

Charging more for the use of roads

Congestion charges, higher parking fees and penalties for overstaying time limits in restricted parking areas may encourage people to use public transport instead of cars.

Creating fast, efficient and reliable services, including more frequent services and designated bus lanes, will encourage people to use public transport over cars.

Improving public transport

Creating pedestrianised shopping areas

Pedestrianising main shopping areas in city centres can reduce congestion around these busy areas and make roads safer for pedestrians.

Encouraging people to drive to a large car park outside the city and take a short bus ride in can reduce the level of congestion in the city centre. This is particularly useful during busy events, such as football games and concerts.

P + R

Promoting park-and-ride services

Past paper questions: Urban Issues and Challenges

(1, 2, 3 markers)

1. Outline one way that national migration has led to change in the character of a named UK city. (2 marks)
2. Explain one economic problem caused by traffic congestion. (2 marks)
3. Explain how natural increase contributes to urbanisation. (3 marks)
4. Describe two environmental challenges caused by urban growth in an LIC or NEE. (2 marks)
5. For a UK city that you have studied, outline two ways in which migration into the city has affected its character. (2 marks)
6. Explain one environmental opportunity that has resulted from urban change in a UK city that you have studied. (2 marks)
7. What is meant by the term 'urban deprivation'? (1 mark)
8. Give one reason why rates of natural increase are high in many cities in LIC/NEEs. (2 marks)

(4 markers)

1. Explain how an urban planning scheme in an LIC or NEE has had a positive effect on people living in the area. (4 marks)
2. Using an example of a UK urban regeneration project you have studied, explain how the area has been improved. (4 marks)
3. Using a named example, explain how rural-urban fringe has been affected by urban sprawl. (4 marks)
4. Explain how the sustainability of urban areas can be improved through energy conservation schemes. (4 marks)
5. Explain why urban growth in LICs and NEEs often leads to serious challenges for the city. (4 marks)
6. Explain how regeneration can help to solve urban problems. (4 marks)

(6 & 9 markers)

1. Using a case study of a city in a LIC or NEE, suggest why managing traffic congestion and air pollution may be challenging. (6 marks)
2. To what extent has urban change created environmental challenges in a UK city you have studied? (9 marks)
3. To what extent do urban areas in LICs or NEEs provide social and economic opportunities for people? (6 marks)
4. Discuss the effects of urban sprawl on people and the environment. Use a case study of a major city in the UK. (6 marks)
5. Evaluate the effectiveness of an urban transport scheme you have studied. (9 marks)
6. Using a named example of a city in a LIC or NEE, discuss the challenges created by urban growth. (9 marks)
7. 'Urban change presents more challenges than opportunities.' Using a case study of a UK city, discuss the extent to which you agree with this statement. (9 marks)
8. Using your case study of a major city in the UK, assess the challenges faced because of social and economic inequalities in different parts of the city. (9 marks)
9. Use a case study of a major UK city to assess the extent to which urban change has created social and economic opportunities for the city. (9 marks)