Urban issues and challenges

Lesson:	The very key idea:
Urbanisation	**Urbanisation** means more people are living in towns and cities. It happens faster in poorer countries (LICs and NEEs) than in richer ones (HICs) because in HICs urbanisation peaked during the Industrial Revolution; now low growth. Many people in HICs also start to move away from cities due to pollution, noise and lack of green space – **counter urbanisation**. **NEEs**: Rapid urbanisation; fastest growth in Africa and Asia (China, India...) **Causes of urbanisation**: Migration: Push factors (e.g. disasters, unemployment), Pull factors (e.g. better jobs, healthcare). Natural Increase: Birth rate > death rate, especially in NEEs due to improved health and diet. **Megacities** are cities with over 10 million people – most are in LICs and NEEs.
Lagos, Nigeria (NEE)	Importance: • **Regional**: Major university, airport – 80% of flights to West Africa go through Lagos, rail. • **National**: 27% of GDP, 50% of factory jobs, $90bn/year. • **International**: Oil trade hub, Nollywood, top university.
Why is Lagos growing?	**Natural increase**: More births than deaths. **Migration**: People move from the countryside to the city for jobs, schools, and healthcare. **Push factors**: Problems in rural areas (e.g. drought, unemployment, farm mechanisation, Boko Haram – terror group). **Pull factors**: Better services (health and education) in Lagos, more and better paid jobs. **Growth rate**: 0.3m (1970) → 23m (2021). A lot of people moved to Lagos due to the oil boom = lots of jobs in the oil sector.
Opportunities in Lagos	**Social**: Better access to water, electricity, education (68% attend high school, compared to 40% in the countryside). **Economic**: Informal jobs (40%), factories, markets, and recycling. Lagos is building a new business area called Eko Atlantic (a new financial centre for banks in Nigeria) = jobs.
Challenges in Lagos:	**Overcrowding**: Slums (e.g. Makoko), poor sanitation (95% of household there don't have access to clean water, 15 people can share a toilet), limited schools. **Services**: Apart from water, there are electricity cuts out due to illegal hook ups. **Crime**: High rates, lack of policing, so the gang called the 'Area Boys' control the area. **Transport**: Traffic jams lasting 2 hours are common; the Lagos Metropolitan Area Transport Authority (LMATA) is improving public transit - Bus Rapid Transit as example, encourages people to use public transport. **Environment**: Only 40% of waste collected, air pollution 5× safe levels.
Urban Planning example	**Makoko Floating School:** Solar-powered, flood-resistant (floating so it can go up with rising water levels), but limited reach – spaces for only 60 people (two classes). It also collapsed during a storm. Other than this, using water ferries and taxis to ease traffic.
Manchester, UK (HIC)	Location: Manchester is in Northwest England. Importance: • **National**: Historic trading hub, Metrolink, 3rd largest airport (flights to 200 destinations). Russell Group (top) university attracts 1000s students. • **Global**: Foreign company offices - e.g. Coop bank, direct flights from Manchester Airport, linking to over 200 destinations, Premier League teams watched globally.
Migration	**Growth**: Irish migrations during the Industrial Revolution for work, Jewish people in the 1940 to escape prosecution, Indian and Pakistani migrants in the 1950s; 120,000 students, with many often coming from London as Manchester is cheaper to live in.

	Character: Multicultural, studentification, diverse food and culture. Examples are China town, European food markets, part of the city is dominated by student halls, bars and clubs.
Opportunities in Manchester	**Social**: Social: Cultural mix (e.g. Chinatown, LGBTQ+ village), recreation (Media City, Lowry Centre). Tourists encouraged. People feel welcome. **Economic**: Post-industrial redevelopment, transport links, airport connectivity – 3rd biggest airport in UK – handles 19 million passengers every year, over 60 airlines. **Environmental**: Zero Carbon plan – 90% journeys by foot/public transport by 2040.
Challenges in Manchester	**Urban deprivation**: An area where the standard of living is lower than everyone else. Some areas lack good housing, jobs, and schools, following deindustrialisation. Social and economic challenges as a result: Unemployment spray - only 53% of over 16s are employed in Manchester. **Inequality**: Poorer areas have worse health and education (inner city). Inequalities in housing Poorer quality housing in inner city -> higher unemployment and more rented/council housing. Some inner-city areas like Salford Quays have been redeveloped → house prices rise → original residents forced out. House prices in the suburbs of Manchester, Didsbury have increased by 8% in the last two years. Education: Hard to attract teachers and low aspirations due to unemployment -> GCSE results with distance from the CBD. Health: poor people are 3x more likely to suffer from health issues. **Environmental**: Old buildings, waste problems, and urban sprawl (building on greenbelt). Manchester does NOT recycle 57% of its waste.
Urban Regeneration	**Salford Quays** was redeveloped with new homes, offices, and arts centres. It was a brownfield site, good to build on again as it does NOT cause habitat destruction. This improved the area and created jobs – BBC and ITV studios (skilled workers), cafes, bars and restaurants, Lowry centre – jobs in hospitality.
Sustainable Cities	**Sustainable urban living** – it means it does NOT damage the environment and supports locals in a way that can last into the future. **Example**: Curitiba, Brazil **Water & energy saving:** Water meters, recycling – 2/3 of all waste in the city is recycled. **Green spaces**: Parks help with flooding – 28 parks used for this. <u>How to reduce traffic congestion:</u> **UK Examples**: London: Congestion charge, bike hire, Oyster card. **Cambridge**: Park and ride, cycle lanes. **Other examples in NEEs:** Curitiba - Bus Rapid Transport System – used by 70% of commuters, everyone lives within 400m of a bus stop, so easy to use. Green exchange programme – recycling for free bus tickets – encourages them to recycle.

The changing economic world

What is Development?	**Development** means a country is improving – people live longer, earn more money, and have better access to services (education and healthcare).
Measuring Development	**Economic measures**: Gross National Income - **GNI** (total money made), **GDP** - Gross Domestic Product – total value of goods and services that a country produces in a year. **GNI per person** - The GNI divided by the population of a country. **Social measures**: Birth rate, death rate, literacy (read and write), life expectancy (how long is a person expected to live), access to clean water.

	HDI: Human development index: Combines life expectancy, education, and income into one score (0 = poor, 1 = rich).
Types of Countries	HICs: High income - rich countries (e.g. UK, France). LICs: Low-income countries (e.g. Chad, Nepal). NEEs: Newly Emerging Economies = Getting richer quickly (e.g. Nigeria, India, Brazil).
DTM – Demographic Transition Model	Level 1: High birth and Death rates = low population. There are no countries on Level 1. Level 2: High birth rate but lower death rate = population remains high (e.g. Bolivia). Level 3: Birth rates begin to slow down; death rate remains low (e.g. Mexico). Level 4: Low birth and death rates = population begins to slow (UK, USA). Level 5: Birth rate starts to be lower than death rate = population declines. (Japan)
Why Some Countries Are Poorer?	**Physical**: Bad climate (fewer crops -> low food supplies -> less to sell -> less income), poor soil (steep relief or impacts of climate change, again low food supply), natural disasters (flooding, hurricanes, earthquakes... means it takes money and time to rebuild instead of investing in development – e.g. Haiti). Fewer raw materials (e.g. oil) -> fewer things to sell. **Historical**: Colonisation and wars (again, takes time and money to build it back up). European countries colonised many African countries e.g. UK in Nigeria, taking slaves and raw materials which made them wealthier, while the African countries didn't benefit, they are still poorer today as a result of this. Conflict/war - money needed for weapons, destruction of houses, hospitals, schools... all means less money on development. Lower GNI as a result. **Economic**: Poor trade links, lots of debt, relying on farming. All means less money in spent on development.
Effects of Uneven Development	**Wealth**: Rich countries earn more. (e.g. GNI per head in the UK is 40 times higher than in Chad). This leads to the multiplier effect -> higher income – more money to spend of improving quality of life. **Health**: People in poor countries live shorter lives (poor diets, lack of medicine). e.g. the UK's life expectancy is 81, but in Chad it's only 51. Infant mortality (children under 1 dying) is much higher in LICs. e.g. it is 85 per 1000 births in Chad, compared to 4 per 1000 births in the UK. **Migration**: People move from poorer to richer countries (e.g. Mexico to USA).
Reducing the Development Gap – how can we do it?	**Aid**: Money or help from other countries (e.g. mosquito nets in Nigeria). **Fair Trade**: Farmers get a fair price for their produce (this means they have a stable income). The buyers also pay extra that goes to help the area where the goods game from e.g. funding a new health centre. **Debt Relief**: Cancelling debt so countries can spend on schools and hospitals (e.g. Zambia had $4 million of debt cancelled in 2005, the following year it had enough money to start a free healthcare scheme for millions of people). FDI – Foreign Direct Investment – when companies in one country buy property or infrastructure in another country. FDI helps poorer countries get better infrastructure and technology as well creating jobs. E.g. Shell buying land and setting up oil refineries in Nigeria. **Industrial Development:** Building factories and businesses – creates jobs. E.g. Proton Car Industrial Development in rural Malaysia, new city (Proton City) for workers. **Microfinance**: Small loans to help people start businesses (e.g. farmer can buy cattle), as they may not be able to get it from traditional banks. E.g. Grameen Bank in Bangladesh lending to women to set up businesses e.g. a Rickshaw taxi. **Tourism**: Visitors bring money (e.g. Tunisia). Nice beaches on the Mediterranean, Star Wars set, cheap, guaranteed sunshine, short distance from Europe, Roman and Arabic Historical

	sites. Since expanding the tourism sector – girls' education improved, more women go to university, GDP has doubled since 1970s. 4% of income now spent on healthcare. Literacy went from 66% to 79% in 1997. BUT: **Negatives**: economic leakage – only a small proportion of the money earned goes to locals. Profits are mainly going to the big companies (e.g. Hilton Hotels). Risk of terror attacks has increased (example the 2015 one), loss of culture as westerners bring theirs, tourism is seasonal and subject to decline, so income is not secure, often low skilled and part time.
Case Study: Nigeria (NEE)	**Location & Importance**: West Africa, largest economy in Africa, big oil exporter. Many different ethnic groups. The north east is wealthiest, the south east is poorest. **Economic Growth:** Gained independence from the UK in 1960, since then (following civil war) life expectancy has grown to 52 years, literacy rate – 61%. More people working in factories and services. Companies like Shell bring jobs and build roads. But oil spills and pollution are problems. **Improvements**: Life expectancy and access to clean water have increased. More money from taxes helps improve schools and hospitals. **The changing trading relationship with the wider world:** Globally important due to large population and economy – leader in Africa (21st largest economy) and 12th largest oil exporter. Exports mainly to EU, USA and India. Imports manufactured goods mainly from China and EU. Fastest growing import = phones from China. Increasingly taking a leading role in Africa – 5th largest contributor of UN peacekeepers. Member of the African Union an OPEC (Organisation of Petroleum Exporting Countries). **The changing industrial structure:** 65% of Nigerians world in the primary sector. 25% work in oil extraction. Those working in secondary is increasing. Employment in manufacturing -> higher and more reliable income than a farmer -? Can afford to buy things for better quality of life, such as food and medicine. Multiplier effect too. Also, more factories, more tax paid to the gov, which can be invested in healthcare and schools, boosting literacy levels and life expectancy. **TNCs in Nigeria:** Shell – British-Dutch oil company, employing 65,000 people in Nigeria. Positives: more money for infrastructure (e.g. roads), other businesses set to help supply Shell with parts create 250,000 jobs. More taxes -> better services. Negatives: Some oil refineries and pipelines are not well maintained, oil spills reduce fish yields and make farmland infertile, oil flares (fires) release harmful fumes. Boko Haram target oil pipelines causing conflict and more oil spills. Shell also keep the majority of the profits. **Environmental impacts from development:** Air pollution – 5,000 factories. Gases such as sulphur dioxide. Oil flares releasing toxic fumes. Traffic fumes. Deforestation – loss of 70-80% of forests, habitats for animals are destroyed. Waste – more rubbish and sewage in urban areas, e.g. Lagos. **Types of aid Nigeria receives:** 63% spent on improving health, 6% spent on education. Most aid is multi-lateral (from an organisation involving many countries) e.g. the World Bank funding medical supplies. The USA and UK are major donors. If more people are healthy they can work -> income increases -> people can afford better quality of life. BUT there are some problems with aid: corruption (aid money can be spent on other things - some think it has been spent on the navy). **The effects of economic development**: GDP of Nigeria has risen, access to safe water rose from 46% to 64%. Literacy improved.
Case Study: United Kingdom (HIC)	**Economic Change**: Fewer people work in factories. More work in services (shops, banks) and research (science, IT).

	Rural Changes: Some areas (e.g. Cornwall) are losing people and jobs. Others (e.g. Warwickshire) are growing but house prices are rising. **Transport Improvements**: New motorways, railways (HS2), ports, and airports help trade and travel. **North–South Divide**: The south (e.g. London) is richer than the north. Plans like the Northern Powerhouse aim to fix this.
UK in the World	**Trade**: Mostly with EU, USA, and China. **Culture**: TV, music, and festivals shared globally. **Transport**: Channel Tunnel and Heathrow connect the UK to the world. **Commonwealth**: Group of 53 countries working together.

Energy resources: Energy

Why Are Resources Important?	Resources like food, water, and energy are essential for: **Economic wellbeing:** earning money, working, and living well. **Social wellbeing:** staying healthy, happy, and educated. **Surplus** – means you have more than enough of something. **Deficit** – means you don't not have enough of something.
Food	**Malnourishment** (not enough healthy food) leads to poor health, bad school results, and low income. Food security means having enough affordable food. Food insecurity – the opposite. Rich countries use **technology** and **imports** to stay food secure. Poor countries may struggle due to bad farming conditions or expensive imports.
Water	Clean water is needed for health, farming, and education. Dirty water causes diseases like cholera (social factor). Illness from dirty water means people cannot work and lose income. **Water surplus**: more water than needed (e.g. Wales). **Water deficit**: not enough water (e.g. London). **Solutions**: transfer water from wet areas to dry ones, store water in reservoirs.
Energy	Needed for homes, transport, and factories. Energy security: having reliable and affordable energy. Rich countries often have more energy or can afford to import it (energy surplus). Poor countries may rely on unreliable sources = energy insecurity or energy deficit.
UK Resource Challenges	
Water	More people and homes = more water needed. Pollution from farms (fertilisers) and factories (chemical spills) affects water quality. Oil spills can also contaminate groundwater. **Water Transfers Schemes** - move from wet areas (northwest) to dry areas (southeast) help balance supply. There is a surplus of rain/water in the north and west of UK, and not enough in the south east, where demand is the highest (e.g. London and surrounding areas).
Energy	UK used to rely on coal and oil, now moving to renewables like wind and solar. This is because fossil fuels are running out and pollute the air (linked to climate change). All coal power said to close by 2025. Renewable energy is cleaner but can be expensive and needs investment. The UK pays to import some energy as it can't generate enough from renewable sources all of the time. How our energy mix has changed: 1970 = 91% of energy from coal and oil 1980 = 22% from gas, over 75% from coal and oil

	2014 = 19% from renewable sources, over half of this is from wind farms. Use of gas to replace coal continues to increase. 42% comes from coal 2025 - all coal power stations due to close Our main oil and gas reserves are in the North Sea but are rapidly decreasing. New supplies are possible from fracking, but this is not good for the environment and can pollute groundwater. Nuclear has risk of accidents which could release radioactive material into environment.
Food	Demand for food is growing. People want high-value foods (e.g. coffee, exotic fruits) and seasonal foods (e.g. strawberries) all year. This is because we have more disposable income, so we can afford more high value food. We also have better transport developments = food is imported more easily. This increases **food miles** (distance food travels) and carbon footprints. Buying local food helps reduce pollution. **Organic product** means no chemicals used in farming, tastes better but more expensive. More of this is wanted as people worry about the impact on their health from the chemicals. Production and transportation create large carbon footprint: due to greenhouse gasses (such as methane), which are released while growing, packaging and transporting food. **Agribusiness** means big farms with machines and chemicals – fewer workers (replaced by more machines and automation). Controlled by large companies who control all stages in production from seeds and fertilizers to packaging. Environmental impacts from agribusiness = reduced biodiversity as hedgerows are removed and pesticides are used. Soil erosion and air pollution from the heavy machinery.
Energy – global trends	
Global Energy Issues	**Surplus vs Deficit: Surplus**: countries like Russia, Saudi Arabia, USA and Cannada have lots of oil and gas. **Deficit**: countries like those in Africa have less energy and rely on imports. USA, Western Europe, China and Japan use most energy. **Why Energy Use Is Rising**: More people and more technology (TVs, cars, phones). Developing countries and NEEs use more energy for **industry** and better living standards (they also have a higher and faster rising population than HICs). **Problems with Energy Supply:** Climate and land affect what energy can be used (rainfall levels – e.g. hydro cannot be used in the Sahara). Technology helps (e.g. solar panels, fracking). Politics and conflict can stop energy sharing (e.g. Russia and Ukraine war – Russia cut of gas supplies to East Europe, which caused problems or when prices increased due to conflict during the Gulf War). Oil spills too – some companies damage nature and have to play to clean up, e.g. Chevron. There is also a cost of exploitation – some energy is too expensive to extract, e.g. oil in deep seas and workers in HICs who want higher pay.
Impacts of Energy Insecurity	**Environment**: oil spills, pollution, damage to nature or drilling in environmentally sensitive areas such as the tundra or Alaska – ANWR. **Economy**: countries pay more if they import energy. China uses lots of coal, so it does not have to import but this creates smog problems. Meanwhile, those who rely on others (such as Japan and France) have to pay a higher price. **Industry**: factories need energy to work = that costs more. E.g. Iceland has an aluminium plant that uses 70% of the whole country's energy - they produce cheap geothermal and hydro electric energy. **Conflict**: dams and pipelines can cause arguments between countries. E.g. - Ethiopia wants to build a dam on the Blue Nile so their people have access to electricity. This would reduce river levels downstream on Egypt and Sudan.

Increasing Energy Supply	**Renewable Energy**: **Wind** (wind turbines convert air movements into electricity, this is good option for UK due to consistent winds), **solar** (solar panels can be fitted on buildings or fields, the UK wants to increase our use but they depend on sun output), **Hydroelectric power** (HEP – when river water is trapped behind a dam and used to turn turbines. The UK generates 1.5% of its electricity this way. Most suitable locations have already been used), **tidal** (energy harnesses the power of small movements on the surface of the sea. The technology is new and currently expensive. We use very little, the Swansea tidal lagoon not built), **geothermal** (uses heat within the Earth to generate electricity. Easier where geothermal heat is more accessible, e.g. Iceland. There are few suitable locations, so it is rare in many countries), **biomass (**burns recently formed material from living things, e.g. chicken droppings waste to make electricity). **Non-Renewable Energy**: Fossil fuels: coal, oil, gas – pollute and are running out. Nuclear: reuses fuel but has risks and issues with storage of radioactive material. Example: Gannet Oilfield (Scotland) - 180km east of Aberdeen. **Pros**: jobs, money, less need to import. **Cons**: oil spills, pollution (1300 barrels leaked in 2011), running out.
Sustainable Future	**Carbon footprints:** measure pollution from our actions. Smart tech: helps us use less energy. Energy conservation: insulation, LED lights (use less electricity), cycling. Demand reduction: using less when demand is high. Carbon capture: stores pollution underground. Companies like Kiwi Power pay people to be allowed to turn off devices like air conditioning. This means less has to be made when demand rises. Example of local renewable energy in an LIC: **Nepal Microhydro**: Small water-powered stations give electricity to villages. How it works – takes water from rivers flowing on steep slows – the river turns a turbine, hooked to a generator, which produces electricity. **Impacts**: Helps with health (store vaccines in refrigerator), education, safety, and jobs, improves standard of living. But small scale – cannot be made bigger if there is more need for electricity.