URBAN
Case Studies

URBAN ENVIRONMENTAL ISSUES
Pollution and dereliction
- ★ **Detroit** has issues with dereliction because the city lacks investment so large areas remain derelict.
- ★ **Manchester**
  - ↳ reducing car use by improving bus services and building cycle paths
  - ↳ local government installing SUDS to reduce water pollution e.g. green areas and pourous pavements at Salford Quays
  - ↳ large-scale redevelopment began in 1996 to combat dereliction, e.g. converting factories and funding for new businesses

URBAN AIR QUALITY
Reducing traffic
- ★ **Mexico City** ban drivers one weekday per week
- ★ **London**, **Bristol** and **Birmingham** have council-run, car-sharing schemes

Legislation
- ★ **UK Clean Air Act** (1956) reduced industrial pollution by introducing the use of tall chimneys
- ★ **Road Vehicles Regulations** reduce car exhaust emissions by ensuring cars pass an emission test on the MOT

Alternative fuels

URBAN ISSUES
Economic inequality
- ★ In Mumbai, there is a 27 storey home worth $21 billion, right by a slum which is home to 9 million living off $2 a day
- ★ London Living Wage increased to £9.75 per hour, which should increase income and social mobility in deprived areas
- ★ In Sao Paulo, the richest 10% of households earn 40 times more than the poorest 10%

Social segregation
- ★ Hate crime based on race and religion is a problem in London, e.g. there were 800 anti-Muslim incidents in 12 months
- ★ Many charities are calling for better English language classes for immigrants
- ★ In Sao Paulo, the majority of the wealthiest residents are white immigrants, who gain better access to healthcare and amenities

URBANISATION
- ★ In 2018, over 50% of the world's population lived in towns or cities
- ★ China's urban population increased by 20 million between 1970 and 2015
- ★ More than 2/3 of megacities are in developing nations
- ★ The service sector contributes 78% of the UK's GDP
- ★ Silicon Roundabout is the 3rd largest tech hub in the world

URBAN FORMS
Physical factors
- ★ Topography - Rio
- ★ Water - Sydney, London, New York
- ★ Natural resources - Middle Eastern cities

Human factors
- ★ Amenities and services
- ★ Regulations e.g. tax - Channel Islands

Fortress developments e.g. **Beverley Hills**

URBAN CHANGE
- ★ **British government schemes** since 1979
  - ↳ Urban development coorporations e.g. London Docklands
  - ↳ Enterprise zones established in areas with high unemployment to encourage start-ups
  - ↳ City Challenge programme - local authorities competed for government funding to regenerate deprived areas

Gentrification
- ★ **Liverpool** - 20 houses sold for £1
- ★ **Notting Hill** - house on Portland road bought for £11,750 in 1968 and now worth over £2 million

URBAN CLIMATE
Urban Heat Island Effect is stronger at night
- ↳ daytime temperatures around 0.6°C warmer than surrounding rural areas, but 3-4°C warmer at night

- ★ 'Airpocalypse' in **Beijing** caused by industry led to schools, nurseries and businesses to shut down for three days due to high photochemical smog levels

URBAN WASTE
- ★ **Staten Island Waste management scheme**
  - ↳ **Fresh Kills** landfill site was closed in 2001, and a scheme was developed to transform the basin into a park, which reduced air pollution and health risks in the area

- ★ In the late 1970's, **Singapore** started using incineration with energy recovery
  - ↳ four incineration plants provide 3% of Singapore's energy
  - ↳ in 2015, 60% of waste was recycled and only 2% sent to landfill sites

URBAN DRAINAGE
- ★ **Cheonggyecheon river restoration project, Seoul** (2003)
  - ↳ dismantled elevated freeway and built 22 bridges
  - ↳ water pumped from Hanang river
  - ↳ reduced water+air pollution and city temperature decreased by 2.5°C
  - ↳ 18 million visitors by 2008 and increased use of public transport
  - ↳ increased land value by 30-50% within 50m of project
  - ↳ 3.5% increase in number of businesses

SUSTAINABLE URBAN DEVELOPMENT
- ★ **Copenhagen, Denmark**
  - ↳ European Green Capital award in 2014

- Social sustainability
  - ↳ only 2% work more than 40 hours a week
  - ↳ 249 miles of cycle lanes
- Economic sustainability
  - ↳ economic + financial centre of Denmark
  - ↳ low unemployment rates (around 4.1%)
- Environmental sustainability
  - ↳ target to be carbon neutral by 2025
  - ↳ large offshore wind farm (at Middelgrunden) provides 4% of the city's energy
- Urban governance
  - ↳ high tax rates provide generous welfare system which reduces inequality
  - ↳ high income and gender equality