

Scheme of work

Human geography: Contemporary urban environments

This resource is a scheme of work for our accredited AS and A-level Geography specifications (7036, 7037). This scheme of work is not exhaustive or prescriptive, it is designed to suggest activities and resources that you might find useful in your teaching.

3.2 Human geography

Optional topic

3.2.3 Contemporary urban environments

Specification content Week Number	Subject-specific skills development	Learning outcomes	Suggested Learning activities (including ref to differentiation and extension activities)	Resources
 Global patterns of urbanisation since 1945. Economic, social, technological, political and 	Use of key subject specific and technical terminology. Online research.	Students will have a clear understanding of the terms urbanisation and urban growth. Students will be able to	To introduce the topic of Contemporary urban environments, you could show the students the first few minutes of <i>Andrew Marr's Megacities</i> which outlines some of the key issues facing the 21 st	Good general reference books: Hall and Barrett (2011) <i>Urban Geography</i> (Routledge) Pacione M, (2009) <i>Urban geography: a global perspective</i>

demographic processes associated with urbanisation and urban growth.

- The emergence of megacities and world cities and their role in global and regional economies.
- Contemporary characteristics or mega/world cities.

Collect, analyse and interpret a range of qualitative and quantitative data from a range of primary and secondary sources – this could include discussive/creative.

describe and explain the changing global patterns of urbanisation since 1945.

Students will be able to discuss the economic, social, technological, political and demographic processes associated with urbanisation and urban growth.

Students will be able to explain the emergence of megacities and world cities, describe their characteristics and discuss their role in global and regional economies.

century. Alternatively, you could select a small section from *Slumdog Millionaire* or *Kolkata with Sue Perkins* highlighting issues of informal settlements. You might also collect together a number of newspaper articles highlighting current issues such as housing shortages, air pollution and flooding. Get students to think about their local urban areas or cities they are familiar with and discuss the issues that face these cities.

Give students a range of maps and data which illustrate changing urban trends since 1945. Students to describe and explain the data (exam style) and discuss the impacts of urbanisation in HICs, MICs and LICs.

Extension: You can draw links with the Changing Places topic here, with discussion on homogenisation, clone towns and placelessness.

Students can work in groups to research and produce presentations on different world cities and megacities. Examples might include:

See also Drake, G. and Lee, C. (2000) The Urban challenge (Hodder)

The United Nations publishes a number of useful annual reports on cities, including The World Population Prospects: 2015 Revision.

The Urban Geography Research Group (UGRG) of the Royal Geographical Society/Institute of British Geographers has a useful website with links and resources to many urban issues. There are further RGS urban geography resources and lectures on the 21st Century challenges page.

Topic Eye, Geography Review and GeoFile/GeoActive regularly have urban geography related articles. The Guardian newspaper also does a regular feature on cities @guardiancities

Read the excellent article on mega and meta cities by Mark Rowe (2014) 'Growing pains' in Geographical magazine. (Sept, 2014)

Mark 2			MUMBAI Wraight, P. (Sept 2013) 'Mumbai: case study of a megacity' GeoFile 696 LAGOS Rutter, J. (Sept 2011) 'Lagos: case study of a world city' GeoFile 650 SHANGHAI Guinness, P. (2014) 'Urban issues in Shanghai' GeoFile 511 BEIJING Guinness, P. (Sept 2010) 'Beijing a global city' GeoFile 627 There is also a huge amount of material about London which is classified as a world city.	There are a lot of good resources on informal settlements in cities such as Mumbai (Dharavi), Nairobi (Kibera) and Rio (Rocinha). You could use Comic Relief clips/ documentaries (Kibera) O'Donoghue, R. (2011) 'Squattor redevelopment in Rio de Janiero: an update' GeoActive 458 The Andrew Marr's Megacities documentaries (2011) have some excellent material on the issues facing cities including London, Shanghai, Dhaka and Mexico City Episode 1: Living in the city Episode 2: Cities on the Edge Episode 3: Sustaining the City Watch BBC documentary Supersized Earth: A place to live
 Suburbanisation, counter-urbanisation, urban resurgence. Urban change: deindustrialisation, 	Use of key subject specific and technical terminology. Map skills. Interpretation and evaluation of a	Students will be able to discuss the causes and consequences of suburbanisation, counterurbanisation and urban resurgence. Students will be able to describe and explain the	Define and distinguish between suburbanisation, counterurbanisation and urban resurgence. Use OS maps to identify urban areas which have experienced suburbanisation, counterurbanisation or urban resurgence.	Stiff, P. (2010-2011) Suburbs part 1 and 2 in <i>Geography Review</i> , 24:2 and 24:4. Garrington, S. (April 2008) 'A case study of village suburbanisation' <i>GeoFile 570</i> Burton, S. (April 2005) 'Melbourne

decentralisation, range of source processes of There are good links wit	th the managing urban growth and
rise of service material including deindustrialisation, Changing Places topic he	ere – you change' <i>GeoFile 498</i>
 economy. Urban policy and regeneration in textual and visual sources. decentralisation and rise of service economy. demographic, cultural, sources. economic characteristic 	s of GeoFile 394
Britain since 1979. Online research and presentation skills. Students will understand the term urban policy and be able to outline a range of regeneration strategies in Britain since 1979. Students should also appreciate that regeneration also occurred because of wider social, economic and demographic processes. Students to work in groor research and present the relating to urban regenessements adopted in the 1979. These presentation include a description of an example of where it adopted and an evaluat impact. Extended writing task: E other wider social, economic and demographic processes led to regeneration in redecades Link to suburbanisation, urbanisation and urban example of deindustrialisatio decentralisation and the impact. Students will understand the term urban policy and be able to outline a range of regeneration strategies in Britain since 1979. Students will understand the term urban policy and be able to outline a range of regeneration and the service economy and discourse. Students to work in groor research and present the relating to urban regene schemes adopted in the 1979. These presentation include a description of an example of where it adopted and an evaluat impact. Extended writing task: E other wider social, economic and the impact of deconomic and the impact of deconomic and the impact of deindustrialisation and the service economy and discourse. Students vow in groor research and present the relating to urban regene schemes adopted in the 1979. These presentation include a description of an example of where it adopted and an evaluat impact. Extended writing task: E other wider social, economic and the regeneration in redecades. Link to suburbanisation, or many the processes.	Burton, S. (Jan 2002) 'Pressures on the greenbelt from UK counter-urbanisation' <i>GeoFile 414</i> Punnett, N. (Sept 2001) 'UK rural issues' <i>GeoFile 408</i> Warbuton, P. (April 2002) 'Issues relating to greenfield and brownfield sites' <i>GeoFile 421</i> Bayliss, T. and Collins, L. (Jan 2005) 'Urban improvement: renewal and evolution' <i>GeoFile 490</i> Cathy Newman looks at the impact of the Olympics on East London in <i>National Geographic</i> (Aug 2012) Warbuton, P. (Sept 2012) 'Planning issues in today's MEDC cities' <i>GeoFile 675</i> Dunn, C. (2012/3) 'Redevelop, regenerate, rebrand' in relation to Greater Manchester in <i>Topic</i>

			Discuss changing gender roles in the UK as a result of deindustrialisation and the rise of service economy.	stadium: a case study of urban regeneration' in <i>Geography Review</i> , 27:2. Essex, S. and Ford, P. (2015) 'Coastal Urban Regeneration: Thirty Years of Change on Plymouth's Waterfront.' Transactions of the Devonshire Association (evaluates the success of the New Deal Programme in Plymouth) Tallon, A. 2010. <i>Urban Regeneration in the UK</i> . (Routledge, London). Pumpkin interactive dvd Regenerating a city: the rebranding of Glasgow. Pumpkin dvd The 2012 Olympics and East London's regeneration.
Week 3				
 Urban characteristics in contrasting settings. Physical and human factors in urban 	Opportunities to develop skills such as drawing, labelling and annotating	Students will be able to discuss the contrasting characteristics of cities across the world but recognise that both	Look at a range of OS maps to consider the relevance of physical geography in the siting of towns and cities (could use old OS exam map extracts) Discuss which	Melbourne, B. (September 2001) 'The socio-demographic structure of UK cities' <i>GeoFile 405</i> The excellent book by Cheshire, J. and Uberti, O. (2014) <i>London: the</i>

forms.

- Spatial patterns of land use and the factors that influence them.
- New urban land uses: town centre mixed developments, cultural and heritage quarters, fortress landscapes, gentrified inner areas and edge cities.
- The concept of the post-modern western city.

diagrams.

Collect, analyse and interpret a range of qualitative and quantitative data from a range of primary and secondary sources.

Fieldwork potential here.

physical and human factors are important.

Students will be able to describe patterns of spatial land use in contrasting urban settings.

Students will be able to describe and discuss the most recent changes in the urban landscapes, such as town centre mixed developments, cultural and heritage quarters, fortress landscapes, gentrified inner areas and edge cities. Students will also be able to describe the concept of a postmodern western city.

physical factors were important and whether they are still important today. Could link here with urban climate issues.

Have human factors such as land prices become more relevant? London, Mexico City and Los Angeles worth discussing here. You could also discuss the fact that informal settlements still tend to occupy sites with physical disadvantages, eg (Rocinha on the steep hill sides of Rio).

Urban fieldwork potential here investigating evidence of new urban landscapes in local city.

Discuss reasons why urban areas have experienced a resurgence in recent years. What examples can the students think of? Link back to ideas of rebranding/reimaging places from Changing Places topic.

Watch the RGS online lecture on gentrification and discuss media coverage and articles about the 2015 anti-gentrification protests in East London
For a more active learning approach students could research gentrification from the point of

information capital considers the growth of London over time and considers physical and human factors

Melbourne, B. (Jan 2002) 'Los Angeles: a multiple hazard area' *GeoFile 419* considers the physical geography of LA and the impact of this on its inhabitants.

Boot, J. (April 2005) 'The gentrification of the inner city: processes and fieldwork' *GeoFile* 496

View the RGS <u>online lecture on</u> gentrification

Read article and watch clip about gentrification in Notting Hill, London

See footage and discussion of anti-gentrification protests in London in September 2015

			view of different stakeholders. Feedback could then take the form of a debate/role play, or construction of SWOT analysis in groups etc. Link back to notion of insiders and outsiders from Changing Places topic. Fortress Cities: Discuss how and why security has become more of an issue in cities? Extension 1: link back to the notion of insiders and outsiders from Changing Places topic. Issues of segregation can also be discussed here. What are the ethical issues surrounding certain groups being excluded from particular places? Why has this happened? Extension 2: what is postmodernism? What evidence of postmodernism exists in UK cities or is it just an "American" thing?	Fortress Cities: American Mike Davis has written extensively about Los Angeles In UK, read about strategies to design out crime. See also BBC Bitesize: Designing out crime
 Spatial patterns of economic inequality, social segregation and cultural diversity in contrasting urban areas and the factors that 	Collect, analyse and interpret a range of qualitative and quantitative data from a range of primary and secondary sources. Fieldwork and GIS	Students will be able to define the terms economic inequality, social segregation and cultural diversity. Students will be able to describe and explain patterns of economic	This is an excellent opportunity to use a range of GIS resources to investigate spatial patterns in economic inequality and cultural diversity. Primary data can be collected through urban fieldwork. Secondary data also available from	Bennett, P. (2011) 'Multiculturalism in urban areas' GeoActive 462 Cowling, D. (April 2014) 'Multicultural UK: ethnic enclaves in the UK' GeoFile 715 Brighty, P. (Sept 2014) 'Understanding the multi-

influence them.
Issues associated
with these processes
and strategies to
manage them.

potential here.

An ability to collect and use digital and geo-located data, and understand a range of approaches to use and analyse such data.

Understanding of the ethical and socio-political implications of collecting, studying and representing geographical data about human communities. inequality, social segregation and cultural diversity in contrasting urban areas and discuss the factors that influence them.

Students will be able to discuss issues relating to economic inequality, social segregation and cultural diversity and outline the strategies adopted to manage these.

a number of sources:

The Office for National Statistics provides a range of data for different wards within urban areas. These statistics can be used alongside primary data on housing, land-use, provision of services and environmental quality to compare different parts of an urban area. The Field Studies Council (FSC) has numerous useful documents and resources on their website to help you investigate the quality of urban areas and inequalities. It is also worth looking at the 2015 Index of Multiple Deprivation data which measures relative deprivation. This can be viewed at The Consumer Data Research

Extension: Discuss the ethical and socio-political implications of collecting, studying and representing geographical data about human communities.

Centre or IMD explorer

dimensional nature of urban poverty' *GeoFile 720*

Adams, Chamberlain and Lockheart, (Jan 2013) 'The riots of 2011 and the role of multiculturalism' *GeoFile 680*

Melbourne, B. (September 2001) 'The socio-demographic structure of UK cities' *GeoFile 405*

To look at inequality in London, go to London's Poverty Profile: Key facts. Also, London Mayor and Assembly and London Mapper: A social atlas of London. Go also to The Information Capital or get hold of the excellent book by Cheshire, J. and Uberti, O. (2014) London: the information capital with fabulous examples of G.I.S. for London.

See also Oliver O'Brien's new map of diversity in London (2016)

Turner, S. (2013) 'Housing issues in London' in Geography Review, 27:2.

Danny Dorling has written and spoken extensively about inequality, particularly in London. (*The 32 stops: The Central Line*) It

Week E				is worth looking too at his other resources on his webpage. For inequality in another country, you could look at Bangalore in India (Pumpkin Interactive dvd) or Johannesburg . Read the article by Paul Webber (2011) 'Johannesburg: changing patterns in the city' in <i>Geography Review</i> : 24, 4.
 The impact of urban forms and processes on local climate and weather. Urban temperatures: the urban heat island effect. Precipitation: frequency and intensity. Fogs and thunderstorms in urban environments. Wind: the effects of urban structures and layout on wind speed, direction and frequency. 	Opportunities to develop skills such as drawing, labelling and annotating diagrams. Collect, analyse and interpret a range of qualitative data from a range of primary and secondary sources. Maps showing spatial patterns — isoline maps. Fieldwork and GIS potential here.	Students will be able to describe and explain how urban areas affect temperature, precipitation, fogs, thunderstorms and wind. Students will be familiar with terms such as the urban heat island, channeling and the venturi effect.	There are great opportunities for fieldwork here: • Changes in temperature and/or pollution levels can be measured and mapped across an urban area. Traffic counts at strategic points may show a correlation with such data. • Measure the impact of buildings on wind. Get students to produce isotherm maps using primary or secondary data. Extension: what are the implications of climate change on urban climatic events? Why is there particular concern regarding the	Parsons, G. (Sept 2003) 'Urban microclimates' GeoFile 457 An excellent source of information and video clips about urban climate can be found here at The British Geographer. For an excellent range of urban heat island resources, go to MetLink: Urban heat islands and US Environmental Protection Agency: Heat island effect

			urban heat island effect?	
Marala C				
Week 6				
 Urban precipitation, surfaces and catchment characteristics; impacts on drainage basin storage areas; urban water cycle, water movement through urban catchments as measured by hydrographs. Issues associated with catchment management in urban areas. The development of sustainable urban drainage systems (SUDS) River restoration and conservation in damaged urban catchments with reference to a specific project. Reasons for and aims of the project; attitudes and contributions of 	Collect, analyse and interpret a range of qualitative and quantitative data from a range of primary and secondary sources — this could include discussive/creative. Fieldwork and GIS potential here.	Students will be able to describe and explain the effect of urban surfaces on the water cycle. Students will be able to analyse a hydrograph for an urban area. Students will be able to define the term sustainable urban drainage systems (SUDS) and describe different SUDS strategies. Students will be able to describe and evaluate a specific urban river restoration project, outlining the reasons for its restoration and the attitudes and contributions of the stakeholders involved.	Discuss the impacts of urbanisation on water movement through urban areas. This could be demonstrated simply by observing and comparing rain falling on hard surfaces and vegetated surfaces. Annotate and analyse an urban hydrograph Online research for a case study of river restoration Extension 1: A lot has been written about the fact that increasing numbers of people are replacing lawns and gardens with impermeable surfaces — what impact is this having? How could people be persuaded to reverse this trend? The RHS are running a campaign to encourage people to green up urban areas. For more information, go to: RHS: Why greening grey Britain is important Extension 2: Look at the proposals (by a former Geography teacher) to make London the first National Park	The Thames Estuary 2100 (TE2100) project is one response to the risk of flooding in London but other strategies are being adopted. Go to London Climate Change Partnership for more information on these. See information on the Thames Tideway Tunnel. The RHS are running a campaign to encourage people to green up urban areas. For more information and to look at the benefits, go to: RHS: Why greening grey Britain is important. See The British Geographer for an excellent source of information and video clips about urban climate. Dove, J. (April 2009) 'Urban ecosystems' GeoFile 590 Details about the Cheonggyecheon river restoration project can be found at WWF Global and Inhabitat

parties involved; project activities and evaluation of project outcomes.			City. What would be the costs and benefits for London and the rest of the UK? (Link here with issues such as the urban heat island, air and water pollution and sustainability)	See also section on Cheonggyecheon river in 'Environmental issues in a world city' by Nick Middleton in Geography Review volume 27, number 1 (Sept 2013) See also case study in Abbiss et al (2016) AQA A-level Geography Fourth edition (Hodder)
Week 7 • Urban physical	Collect, analyse	Students will be able to	What are the different sources of	The World Bank is a useful source
waste generation:	and interpret information, and	describe the different sources of urban waste	urban waste? Discuss how and why waste production varies across the	for information on global waste.
industrial and	demonstrate the ability to	and recognize that both quantities of waste	world.	Smith, J. (2012/3) 'Managing urban waste' in <i>Topic Eye</i>
commercial activity, personal	understand and	produced and waste	Investigate and evaluate the	changing cities.
consumption. • Relation of waste	apply suitable analytical	disposal methods vary according to economic	different strategies for dealing with urban waste. Students could	See the excellent article on waste disposal in Taiwan by Chris Fitch
components and	approaches for the	development.	research waste from the point of	entitled 'A new lease of life' (June
waste streams to economic	different information types	Students will be able to	view of different stakeholders. Feedback could then take the form	2015) in <i>Geographical</i> magazine. Wheeler, P. (April 2016)
characteristics,	imormation types	describe and evaluate a	of a debate/role play, or	'Recycling costs and benefits'
lifestyles and		range of waste disposal methods.	construction of SWOT analysis in	GeoFile 752
attitudes.The environmental		methous.	groups etc.	Bennett, P. (2013) 'Sustainable waste management in the West
impacts of		Students will be able to	Online research of case study which	Midlands' GeoActive 496
alternative		compare and contrast incineration and landfill	allows the comparison of	Eddis, T. (2007) 'Managament of waste in cities: a DME' GeoFile
approaches to waste disposal:		approaches to waste in a	incineration and landfill approaches to waste disposal in relation to a	548
unregulated,		specified urban area.	specified urban area	There are lots of resources about the world's first offshore landfill in

Singapore called **Semakau landfill**. recycling, recovery, Many urban waste centres now offer educational visits - it is worth reduction (incineration), looking at this option. Plymouth Energy from Waste case burial, study submergence, trade. Comparison of The NGO Practical Action has some useful resources on Urban incineration and landfill approaches waste management. to waste disposal in relation to a specified urban area. Week 8 An ability to collect Students will be able to Investigate the different causes and Warbuton, P. (April 2013) Air quality: and use digital and describe and distinguish impacts of air pollution. 'Environmental issues in urban particulate and geo-located data, between particulate and London said to have 9.400 areas today' *GeoFile 692* photo-chemical photo-chemical pollution. premature deaths annually due to Parson, G. (Jan 2012) 'Air quality and understand a pollution. range of air pollution. Could also look at issues' GeoFile 656 Pollution reduction Students will be aware of approaches to use concept of "Airpocalypse" (Beijing) Nagle, G. (Sept 2000) 'Air policies. the range of strategies and analyse such What are the main causes? What is pollution in Beijing' GeoFile 383 Other being used to combat air being done to tackle this problem? data. environmental pollution in urban areas. An excellent source of information problems in Collect, analyse Get students to produce isoline and video clips about urban contrasting urban and interpret Students will be able to maps using (primary or) secondary climate can be found here at The areas: water information, and describe and explain the air pollution data. Look for patterns British Geographer. pollution and demonstrate the causes of air pollution, and get students to describe and dereliction. ability to water pollution and City pollution levels are monitored explain their findings. Strategies to understand and dereliction and outline continuously and you can use this manage these apply suitable strategies used to manage Detroit would be a useful case data to examine geographical problems. analytical these problems. study to look at the impacts of patterns. Go to London Air for a Impact of urban approaches for the "nowcast", which is a service to deindustrialisation and dereliction. areas on local and different Ford has just announced new show current pollution levels in global information types. investment in the city which also detail across London in

environments.	Maps showing		makes it a useful case study for	comparison with the
	spatial patterns – isoline maps.		regeneration.	Government's Air Pollution Index.
	Fieldwork and GIS potential here.		Extension : weigh up the pros and cons of different strategies to manage problems of dereliction and pollution.	Warbuton, P. (April 2002) 'Issues relating to greenfield and brownfield sites' <i>GeoFile 421</i> Dove, J. (April 2009) 'Urban ecosystems' <i>GeoFile 590</i> The <u>Derelict London</u> website includes over 3000 photographs
				of London sights not normally seen by tourists.
Week 9				
 Ecological footprint of major urban areas. Dimensions of sustainability: natural, physical, social and economic. Nature and features of sustainable cities. Concept of liveability. Contemporary opportunities and 	An ability to collect and use digital and geo-located data, and understand a range of approaches to use and analyse such data. Collect, analyse and interpret information, and demonstrate the ability to	Students will be able to define the terms ecological footprint, sustainability and liveability. Students will be able to describe the features of a sustainable city. Students will be able to recognize the opportunities and challenges for developing more sustainable cities. Students will be able to	As a starter and for context, students could work out their own ecological footprint. UN Habitat — an organisation concerned with global urban issues has published a number of reports entitled The State of the World's Cities which focus on sustainability issues. A new World Cities Report is due to be published by the UN in 2015/2016. See also the report of the UN World economic and social survey.	Look at the latest WWF Living Planet report which considers the impacts of urbanisation. Frost, L. (2012) 'Greening the city' GeoActive 481 Rawlings Smith, E. (2012) 'Abu Dhabi goes green?' in Geography Review. Evans, L. (Jan 2006) 'Sustainable cities' GeoFile 515 Nagle, G. (Jan 2009) 'Ecotowns' GeoFile 581
challenges in developing more sustainable cities. • Strategies for developing more	understand and apply suitable analytical approaches for the different	describe and evaluate different methods used to create more sustainable cities.	Discuss the concepts of liveability and sustainability. Emphasise the need to look beyond simply environmental issues. Students to research different	Singapore - the 'City in a garden' is known for its green credentials. View details of the proposal to make London the first National Park City.

sustainable cities.	information types.		strategies adopted by cities to	
			become more sustainable. There is	A good article on greening London
			lots going on in London but other	by Chris Fitch can be found in
			well-documented cities include	Geographical magazine, May 2016
			Curitiba, Freiburg and Singapore.	entitled 'A walk in the park.' See
				also the Greener London report
			Extension: Why does liveability	by a consortium of environmental
			mean different things to different	organisations.
			people? Students could research	Research the construction of the
			and evaluate the Global liveability	London garden bridge. For more
			rankings.	information and useful video clips,
			The 2015 rankings can be found at	go to <u>Garden Bridge London.</u>
			The Economist: The world's most	
			<u>liveable cities</u>	The RHS are running a campaign
			Extension 2 : Discuss the issue or	to encourage people to green up
			urban resilience. What does it	urban areas. For more
			mean? Why are cities increasingly	information, go to: RHS: Why
			considering resilience? Go to 100	greening grey Britain is important
			Resilient Cities.	
			Examples include Rotterdam's 2016	TED Talk by Jaime Lerner, former
			Resilience strategy	Mayor of Curitiba.
				Matak (Falls Charred)
				Watch "Fully Charged"
				documentary on Masdar City (two
Week 10				parts).
	Callagt augeburg	Church make will be a section of the	Chudanta ta callact (miman man 1)	Data is weed the security lets for any of
Case study development –	Collect, analyse	Students will have time to	Students to collect (primary and)	Data is readily available for most
this could be left to the end	and interpret a	build up their two	secondary data to produce two	cities in some form or another.
or built up over the course	range of qualitative	contrasting place studies	contrasting urban case studies.	For census data and social and
of the topic. Students are expected to	and quantitative data from a range	to illustrate and analyse the key themes set out in	Particular attention should be given	economic characteristics of places
•		•	to:	in the UK, go to: Office for National Statistics
study two contrasting urban areas to illustrate and	of primary and	the specification.	patterns of economic and social well-being and	ivational Statistics
areas to illustrate and			Social Well-being and	

analyse key themes set out in the specification, to include: • patterns of economic and social well-being and • the nature and impact of physical environmental conditions with reference to the implications for environmental sustainability, the character of the study areas and the experience and attitudes of their populations	An ability to collect and use digital and geo-located data, and understand a range of approaches to use and analyse such data Understanding of the ethical and socio-political implications of collecting, studying and representing geographical data about human communities Fieldwork and GIS potential here Links back to Changing Places topic	2. the nature and impact of physical environmental conditions	Data Research Centre provide interactive visualisation of census data. Local Government Association UK Local Area and Check My Area can provide localised data on information such as house prices, school results, council tax and crime. For health-related data, go to Public Health Outcomes Framework. All of these can be used to show inequality. The Guardian newspaper does some good features on cities around the world.
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