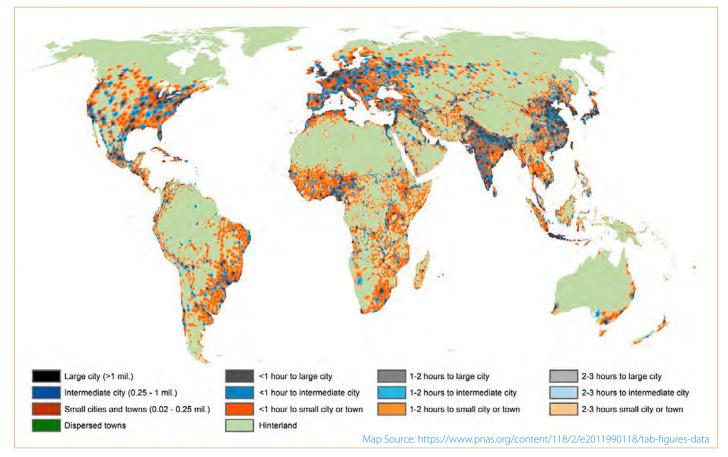


Global map of URCA's in 2015 at a spatial resolution of 1km<sup>2</sup>, showing catchment areas of cities of different population sizes



### The NSW Geography Stage 5 Syllabus

Students: investigate differences in urban settlement patterns between Australia and another country, for example:

- examination of urban settlements to determine patterns of concentration
- explanation of factors influencing urban concentration e.g. climate and topography, transportation networks, land use or perceptions of liveability
- assessment of the consequences of urban concentrations on the characteristics, liveability and sustainability of places

The following resources worksheets 1–3 look specifically at:

- 1. The differences between settlements in the USA in comparison to Europe (Worksheet 1)
- 2. By observing past and present settlement patterns, we can observe the impacts of change on different Australian communities (Worksheet 2)
- 3. Considering the population densities and urban concentrations of Sydney suburbs to their liveability and sustainability (Worksheet 3).

Three EXIT slips are also provided for students to complete after every lesson.

Image source: https://3.bp.blogspot.com/-xYJvLoEmFqA/Uexps1Cm8dl/AAAAAAAAAAKE/sJF5QrZC27o/s1600/exit+slip.jpg

### EXIT SLIP: Urban Settlement Patterns – Worksheet 1 (USA v Europe)

	Things I learned today
3	
2	Things I found interesting
1	Question I still have

#### EXIT SLIP: Urban Settlement Patterns – Worksheet 2

3	Things I learned today
2	Things I found interesting
1	Question I still have

#### EXIT SLIP: Urban Settlement Patterns – Worksheet 3

3	Things I learned today
2	Things I found interesting
1	Question I still have



## Worksheet 1: Urban Settlement Patterns

**Urban Concentrations: USA and European comparisons** 



Paris (France) – Urban Geographers, Why we live where we do? Image source: https://www.youtube.com/watch?v=aQSxPzafO\_k

### TASK

#### Whilst watching the video Urban Concentrations: USA and European answer the questions below on this worksheet.

- 1. What is the population density of New York and Paris (in people per square km):
- 2. Looking at the factors that affect population density (urban concentration):
  - a. Describe the pattern of settlement in and around New York:
  - b. Describe the pattern of settlement in and around Paris:
- 3. Name TWO differences between where the 'rich people' live between Paris and New York:
- 4. What is the most commonly factored reason for these patterns?
- 5. How does the age of a city reflect its urban concentration?
- 6. In the middle ages, what was the population of Paris?
- 7. How long did it take to walk across Paris?
- 8. Explain why this had an impact on where people chose to live.
- 9. Why were small villages in Europe always the same size?
- 10. How large would they become and why?
- 11. Explain how "Decentralising Technologies = transport" affected the rise of rapid growth in America?
- 12. What was established in the mid 19th century?
- 13. Railroad suburbs what are they?

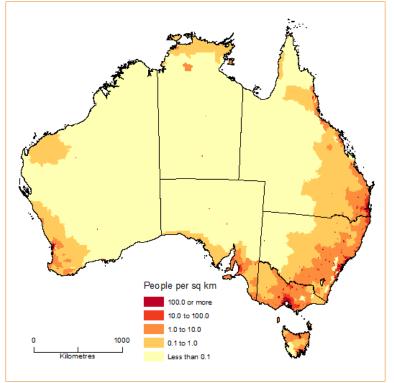
- 14. What became an instrumental part of the American commute?
- 15. What type of communities were created by Street Cars?
- 16. What was influenced by Geography?
- 17. Explain how walking distance created the patterns seen around railroad stations?
- 18. What happened after WWII to increase distance travelled by Americans?
- 19. How did this differ from European cities like Germany?
- 20. What is the difference between the average metropolitan population density in Germany compared to the US?
- 21. Crime rates in New York in 1990 were **higher** or **lower** than in the whole of the 90s in London?
- 22. Crime rates in the US are statistically higher in what regions: cities or suburbs?
- 23. Why does land have an impact on the different settlement patterns between America and Europe?
- 24. Describe how the price of energy (Petrol/Gas) differ between the US and Europe and how does this create patterns of concentration?
- 25. Commuting from home to work what are the consequences of living in the urban sprawl? Identify both positive and negative.

## Worksheet 2: Urban Settlement Patterns

### (Settlement Patterns text source unknown)

### TASK

- 1. Read the text 'Settlement Patterns text' document attached'
- 2. Answer the following questions on this worksheet:
  - 2.1. Briefly outline the impacts of European settlement as outlined in the text:
  - 2.2. Name the series of migration waves since the colonisation of Australia. (Hint, you should be able to determine 5 broad waves found under the heading 'Settlement Patterns')
  - 2.3 The population densities of Sydney and Mumbai (India) are mentioned in the text. Using your own research skills, research and state the current population densities of these two cities. Provide at least TWO reasons for the differences in densities. Think of the geographical factors and migration patterns of these two cities. So you can compare both and easily set this out in a table like below – create your own headings in the first column and add more rows.



Australia Population Density - Image Source: https://www.abs.gov.au/ausstats/abs@.nsf/0/c147e9 6a334460e0ca2583c9000dfb10/Body/0.7BA!OpenElement&FieldElemFormat=gif

#### Sydney and Mumbai Population Density

Sydney	Mumbai

### Settlement Patterns text source unknown

#### Introduction

When we discuss settlement patterns, we look at the historical flows and migration patterns of the population over time. We also observe population growth rates and density rates in particular areas. By observing past and present settlement patterns, we can observe the impacts of change on different Australian communities.

#### **European landing and its impact**

Terra nullius was the official settlement claim made by Europeans when they arrived in Australia in 1788. Terra nullius or 'empty land' has now been legally removed from our Constitution, because between 300 000 to 1 000 000 Indigenous peoples were settled here many thousands of years prior. The impact of European settlement on the Indigenous peoples was disastrous; genocide and disease had wiped out Indigenous peoples in Tasmania by 1876. Racism and intolerance was exhibited by settlers, pastoralists and the like for most of the 19<sup>th</sup> century. Pastoralists had forcefully occupied indigenous-occupied land. Reserves were created on town fringes, leading to further dispossession. Indigenous peoples (Aborigines and Torres Strait Islanders) had enjoyed thousands of years of sustainable and harmonious life on the land. There were 18 broad language regions, based on water catchments and contrasting indigenous groups.

## Worksheet 2: Urban Settlement Patterns

#### Geographical factors affecting early settlement

The impact of the Australian climate and geography on the settlers was generally harsh. The settlers were not accustomed to the harsh and unforgiving Australian climate and conditions. They encountered low levels of rainfall, poor soils and faced topography (land forms such as mountains) and vegetation which were hard to travel through and manage. The settlers found that the Australian continent was too large to travel in, leading to high financial costs for the colony. The early settlers and communities found the Australian environment ideal for agricultural methods. Around 70 per cent of woodland and forests were cleared for crops and housing. Settlement and agricultural practices, together with destruction of the indigenous way of life and culture, were indeed negative impacts on the ecology and geography. Soil was consistently degraded, pollution of the natural environment and destruction of various species of animals and plants were other negative impacts.

#### **Settlement patterns**

Colonisation of Australia featured a series of migration waves around the south and south-east regions of Australia. Between 1788 and 1868 about 150 000 convicts arrived in Australia from the United Kingdom. During the 1850s and the gold rushes, the population of NSW doubled and the population of Victoria increased six-fold. By the 1830s there were over 100 000 settlers in the Australian colonies. By the 1850s over half a million migrants were added to the existing population. Railways were built and expanded inland for farming. Eventually the railway network allowed relatively easy internal migration of the population. The 1880s featured more intensive agriculture, which led to the development of prosperous towns, rural communities and regional centres (a large town or city of over 1000 people, with many surrounding villages). After World War II there was a large European wave of migration to Australia. In the 1970s there was an influx of Vietnam War refugees. Through the 1980s and 1990s there was a mix of cultural arrivals (21 per cent were overseas-born in the mid 1980s. In 2006, it is 25 per cent). There were essentially two types of human settlement by the turn of the 20<sup>th</sup> century:

rural settlements (featuring primary industries such as farming, mining and fishing) and urban settlements (secondary industries, such as manufacturing of raw materials and tertiary industry, such as professional services and government). Sydney is an example of an urban settlement. It has become our largest city, with a settlement population of over five million people. Sydney is not a large city by world standards, yet it features a vast urban or suburban sprawl that spreads around 100 kilometres in three directions (north, south and west). This large sprawl of suburbs gives Sydney one of the world's lowest population densities (even though Sydney is far more densely populated than most other Australian cities). To illustrate this point, Mumbai in India has a population of over 14 million, which would fit within the area of Sydney's eastern suburbs.

## Changing settlement patterns: urban growth and decline, and the rural-urban drift

While Sydney has grown and renewed to the point of overdevelopment, other urban areas in Australia have both grown and declined. There has been development growth of 75 per cent in cities over 10 000 people. Overall, more than half of Australia's population live in the capital cities of Sydney, Melbourne, Brisbane, Perth and Adelaide; 6.7 million reside in the Greater Metropolitan Region of NSW (Sydney, Newcastle, Wollongong and the Central Coast); 85 per cent of NSW live in urban areas.

We can track growth of areas in relation to natural population increases, internal migration and overseas migration. In 2012, the largest population increases occurred in Melbourne (increase of 52 500) and Sydney (increase of 42 700). In the same year, Brisbane's population increased the fastest at 2.3 per cent, whilst Melbourne and Perth both increased significantly at 1.5 per cent. In 2013, Queensland's Gold Coast recorded a large increase of 3.4 per cent. 'Sun belt' growth has been significant (retirement, tourism, young people), where people pursue lower costs, less crime and cleaner living (big increases were recorded in coastal NSW cities like Shoalhaven, Tweed Heads and Hastings Point).

Source: Unknown

## Worksheet 3: Urban Settlement Patterns

### Top Sydney Suburbs: Population Density Heat Map

The number of residents per square kilometre. Shaded by suburb.

Click on the suburb to view its	report
Elizabeth Bay	20165
Rushcutters Bay	15221
Ultimo	12734
Pyrmont	12458
Darlinghurst	11738
Milsons Point	11701
Surry Hills	11651
Potts Point	11128
Haymarket	10169
Millers Point	9739
Chippendale	8761
Woolloomooloo	8553
Edgecutt	8217
Kimpal	7708
Paddington (NSW)	7531
Neutral Bay	7421
St Leonards (NSW)	6717
McMahons Point	6659
Kurrába Point	6602
Clebe (NSW)	6589
Cremorne (NSW)	6534
Balmain East	6454
Balmain	6422
Wolistonecraft	6383
Ashfield (NSW)	6348



Image source: https://www.microburbs.com.au/heat-map/population-density#151.17067399999996:-33.840703:13

### TASK

- 1. Using this link Microburbs, do your own research on the Sydney suburb that has the highest population density. Make sure you provide the following:
  - a. Name the suburb and;
  - b. State the population density of the suburb
- 2. Using the same link as above do your own research on the Sydney suburb that has the lowest population density. Make sure you provide the following:
  - a. Name the suburb and;
  - b. State the population density of the suburb

- 3. Using the 'Urban Living Index' link\_Urban Living Index, Describe the FIVE categories of research sources that provide information on the liveability of a place.
- 4. What liveability and sustainability issues face the suburb you found in question 1?
- 5. What liveability and sustainability issues face the suburb you found in question 2?
- 6. Compare these suburbs to the population density, liveability and sustainability of your home suburb.



## Worksheet 3: Urban Settlement Patterns (Sydney)

7. In your own words write a PEEL paragraph assessing the consequences of urban concentrations on the characteristics, liveability and sustainability of places.

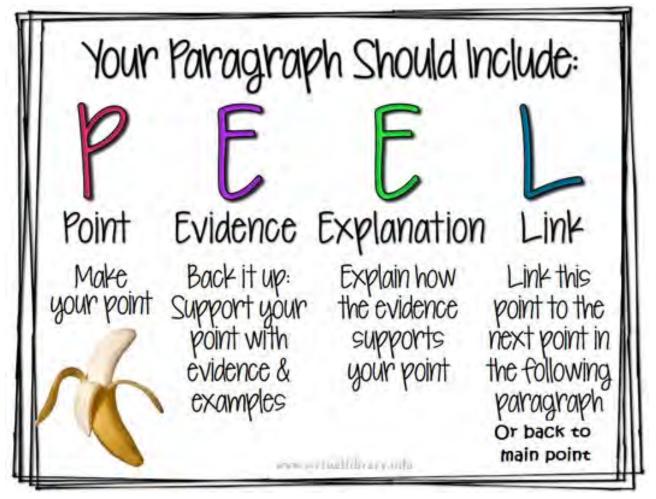


Image Source: https://www.virtuallibrary.info/peel-paragraph-writing.html