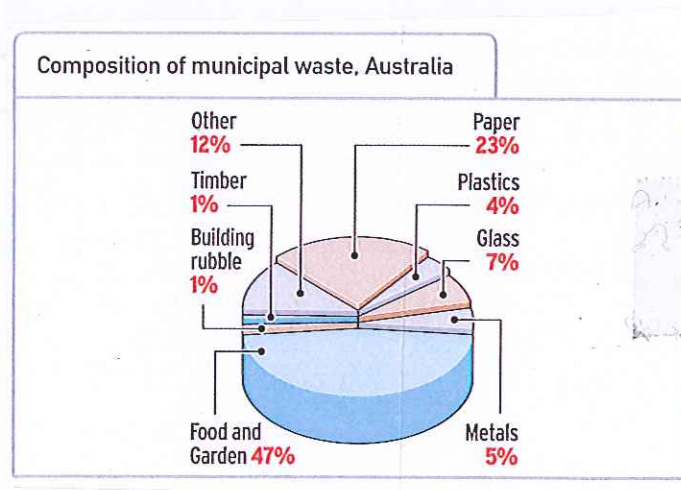


Study the sources and answer the questions which follow. TOTAL\_\_/27

**Source 1 "composition of municipal waste, Australia"**

(4)



1. Which 2 areas create the most waste?

i) \_\_\_\_\_ (1/2)

ii) \_\_\_\_\_ (1/2)

2. What percentage does timber contribute? \_\_\_\_\_ (1/2)

3. What proportion of waste is accounted for by paper? \_\_\_\_\_ (1/2)

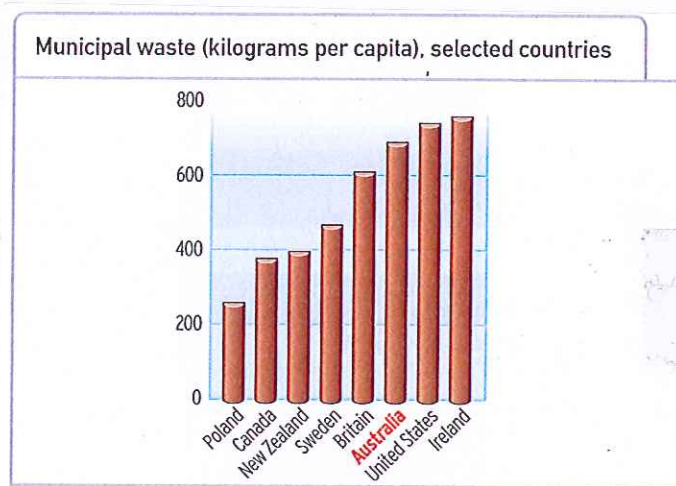
4. Suggest one reason why this might be so. (2)

\_\_\_\_\_

\_\_\_\_\_

**Source 2**

(3)



1. Which country generates most waste? \_\_\_\_\_ (1)

2. Compare Australia's per capita municipal waste with the other countries shown? (2)

### Source 3 (Major Atmospheric Pollutants)

(10)

Major atmospheric pollutants and their impacts on people's health		
Pollutant	Principal sources	Impacts on health
Carbon monoxide (CO)	Motor vehicles and the combustion (burning) of fossil fuels	Carbon monoxide is a toxic gas with no odour or colour. Exposures can affect the central nervous system and heart. Symptoms of mild poisoning include headaches and dizziness.
Sulphur dioxide (SO <sub>2</sub> )	Coal-burning power stations. Some manufacturing processes	Sulphur dioxide acts as an acid. Inhalation results in laboured breathing, coughing, and/or a sore throat and may cause permanent pulmonary damage. When it makes contact with eyes, redness and pain will occur.
Volatile organic compounds (VOCs)	Motor vehicles and the combustion (burning) of fossil fuels	VOCs can irritate people's eyes and skin. They can cause headaches and nausea. Some are known cancer-causing agents.
Particulates	Motor vehicles and the burning of plant material (especially bushfires)	Particulates irritate existing respiratory diseases. Some are known causes of cancer.
Lead (Pb)	Motor vehicle exhausts (prior to the introduction of unleaded petrol)	Lead is a poisonous metal compound that can be absorbed through the lungs. It can damage nerve connections (especially in young children) and cause blood and brain disorders.
Ozone (O <sub>3</sub> )	Motor vehicles and industry	High concentrations of ozone can harm lung function and irritate the respiratory system
Nitrogen dioxide (NO <sub>2</sub> )	Fuel combustion	Nitrogen dioxide irritates people's lungs and throats.

#### 6.6.01 Atmospheric pollutants have a range of impacts on people's health.

1. What is carbon dioxide?

(1)

2. List the pollutants from motor vehicles.

(2 ½)

3. (2 1/2)

- i) \_\_\_\_\_
- ii) \_\_\_\_\_
- iii) \_\_\_\_\_
- (iv) \_\_\_\_\_
- v) \_\_\_\_\_

4. List the pollutants which affect the lungs/respiratory system (2 ½)

- i) \_\_\_\_\_
- ii) \_\_\_\_\_
- iii) \_\_\_\_\_
- iv) \_\_\_\_\_

v) \_\_\_\_\_

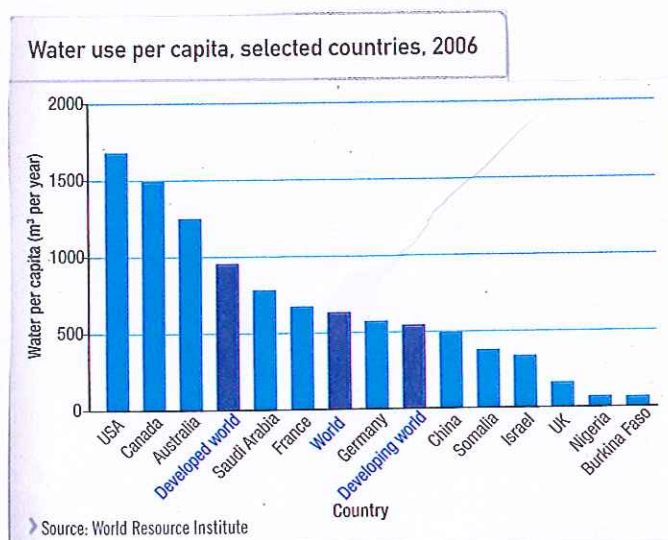
5. Identify 4 other health issues which can arise from atmospheric pollution: (4)

i) \_\_\_\_\_ iii) \_\_\_\_\_

ii) \_\_\_\_\_ iv) \_\_\_\_\_

#### Source 4

(5)



1. Which countries are the biggest consumers of water? Developed or less developed countries? \_\_\_\_\_ (1)

2. Suggest one reason why this is the case. (2)

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3. Compare Australia's per capita consumption with the average for the developed and developing world. (2)

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**Source 5**

**6.7.32** Countries of the developed world have high per capita levels of water use.

(2)

Water use by sector, Australia, 2004–05

Sector	Amount used (gigalitres)	Percentage of total
Agriculture	12 191	65
Household	2 108	11
Water supply industry	2 108	11
Other industries	1 059	6
Manufacturing	589	3
Mining	413	2
Electricity and gas	271	1

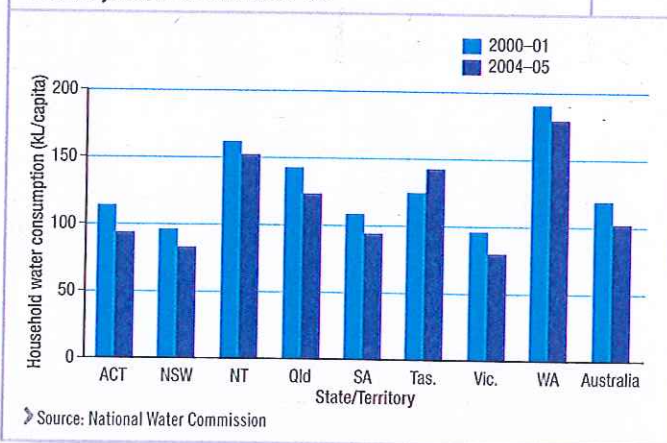
Source: Australia's water resources, 2005

1. Which sector is the biggest consumer of water?  
\_\_\_\_\_
2. How many gigalitres of water did households use in 2005? \_\_\_\_\_

**Source 6**

(3)

Per capita household water consumption by state and territory, 2000–01 and 2004–05



1. Which states or territories use the most water?  
\_\_\_\_\_
2. Which states or territories use the least?  
\_\_\_\_\_
3. Name the only state to experience an increase in per capita water consumption between 200-01 and 2004-5. \_\_\_\_\_