Ready-Ed Publications

STUDENT WORKBOOK Name:

Australian Geography Series
STUDENT WORKBOOK

Year 7 - Unit 1: Resources In The World

Section 1: Using And Classifying Environmental Resources

Section 2: Water

Section 3: Environmental Hazards

Section 4: Non-Renewable Resources

CURRICULUM LINKED

By Fiona Back

Contents

Renewable And Non-Renewable Resources 2

❑ **Use the information on page 6 to complete the tasks.**

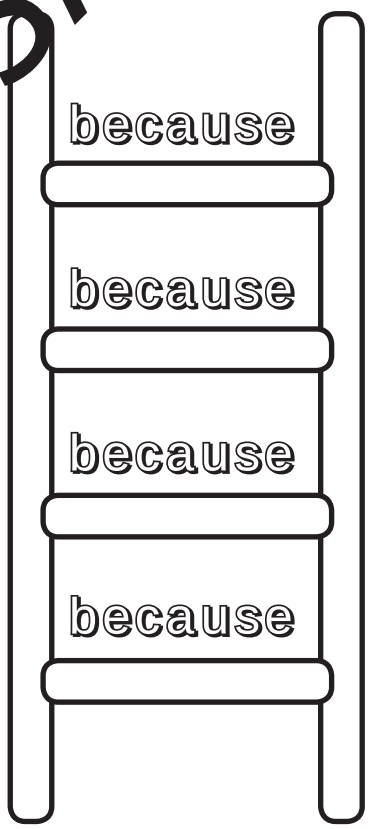
A. List nine key words used in the information on page 6.

1.	4.	7.
2.	5.	8.
3.	6.	9.

B. Write a paragraph (5-7 sentences) which summarises the information on page 6.

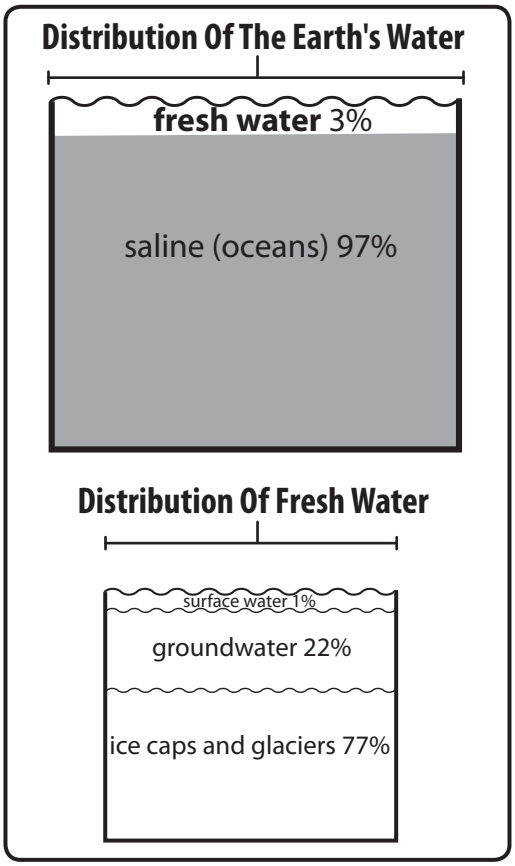
C. Complete the ladder.

1. Continuous resources are different to non-renewable resources...
2. Unlimited resources such as air, sunlight and trees are important...
3. People need to be careful about their use of non-renewable resources...
4. Scientists are exploring the resources from outer space …



Using And Accessing Water

❑ **Read the information and complete the tasks.**



A. Record the information left as a pie graph and a bar graph.

The Distribution Of The Earth's Water

The Distribution Of Fresh Water

B. Think about your family's daily water usage. Estimate how much water you use for each activity listed in the table right. You could choose from the percentages below to complete the table.

2% 25% 9% 39% 1% 4% 7% 6%

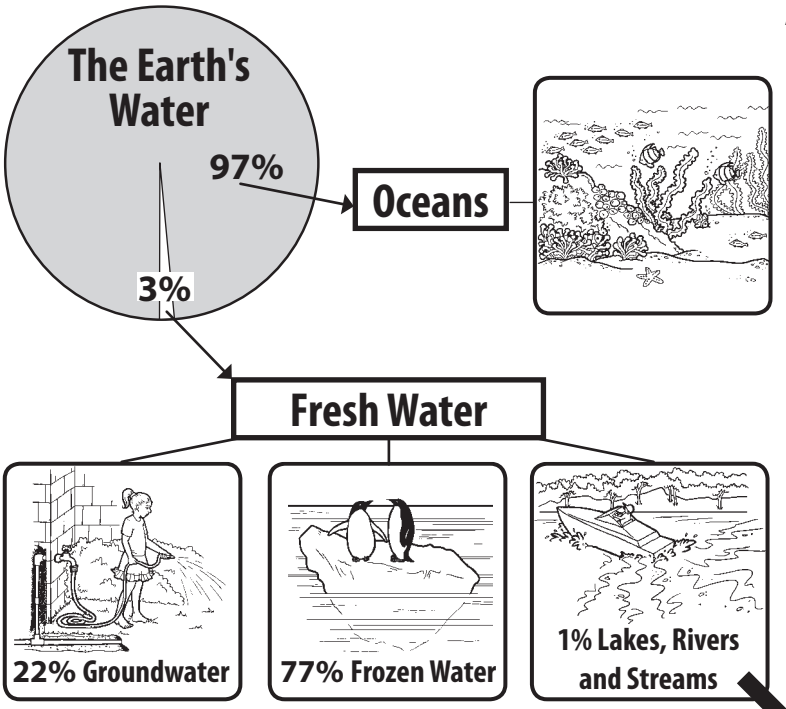
Water Use	Estimated Percentage
1. showers and baths	
2. toilets	
3. washing machines	
4. taps – brushing teeth, washing hands, glasses of water	
5. evaporative air conditioners	
6. dishwashers	
7. watering gardens	
8. pool and/or spa	

Did You Know?

Businesses and industries in Australia use less scheme water in total than private users. To ensure that businesses achieve this they are required to submit a Water Efficiency Management Plan.

Limited Stocks Of Water 2

❑ **The information on this page and on page 20 will help you to complete the tasks below.**



A. Use the information in the diagram to explain the current status of fresh water available in the world.

B. List the nine countries in the world that hold the most water.

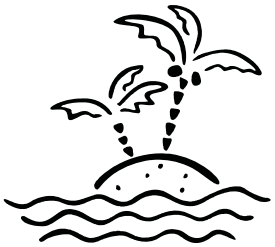
1.	4.	7.
2.	5.	8.
3.	6.	9.

C. What Am I? Solve the riddles.

1. I hold 77% of the Earth's fresh water but nobody can drink from me.
2. I am under the ground but not everyone knows that I am there for them to drink.
3. I currently have six billion inhabitants but that will double in the next 40 years.
4. I flow on the Earth's surface for all to see but I hold only 1% of the world's fresh water.
5. I hold 97% of the world's water but no matter how thirsty you are you can't drink me.

Challenge

D. A group of islands known as the Maldives have already been affected by rising sea levels. Find out how this group of islands has been affected. In your workbook write down what they have done to adjust to this situation.

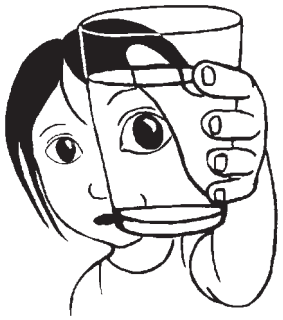


Water Management Strategies 2

❑ **Read the following case studies about how Australia and overseas countries are managing their water. Complete the Find-A-Fact tables.**

CASE STUDY 4: RECLAIMED WATER FOR DRINKING

In 2006 the town of Toowoomba in Queensland faced severe water restrictions due to long term drought conditions. The community was encouraged to back a plan to pump purified sewage water back into their dams for drinking. There was so much public outcry that a referendum took place. The scheme failed with 62% of the residents rejecting the proposal. The project had an estimated cost of $73 million and would have put Australia onto the worldwide map of countries using the scheme to generate fresh water.

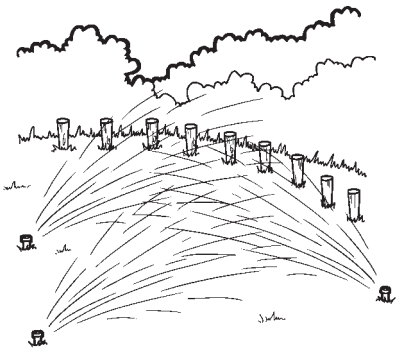


Find-A-Fact

1. What needs to be removed from reclaimed water before it reaches the public?	
2. The WHO has approved reclaimed water. What does WHO stand for?	

CASE STUDY 5: RECYCLING TREATED WASTEWATER

By 2015, the New South Wales Government aims to recycle about 70 billion litres of water a year to reuse in homes, industry and irrigation. Nearly 50 billion litres of recycled water was used in Sydney and the Illawarra between 2010-2011. This water would have been used previously in bathrooms, laundries, kitchens, and in businesses. It is treated to a high standard so that it is safe to use. Recycled water can be used for the following purposes: for the irrigation of sports grounds, golf courses and public open spaces; industrial processing; groundwater replenishment; toilet flushing; clothes washing; garden watering; maintaining wetlands; irrigation for food crops; irrigation for trees, flowers, turfs, building construction; dust suppression and fire fighting.



Find-A-Fact

1. Look up your local council and find out what facilities in your area use recycled water.	
2. Find out how many billions of litres of recycled water have been used by your council.	

Floods 3

❑ **Complete the tasks.**

A. Imagine that you are living in an area at risk of flooding. Fill in the Flood Safety Plan below which has been modelled on the South Australian State Emergency Services Flood Plan.

PHASE 2: IMMEDIATELY BEFORE AND DURING THE FLOOD …

Step 1: Switch off electricity at the switchboard.

Location of switchboard: _____

Step 2: Turn off gas at the meter.

Location of gas meter:_____

Step 3: Turn off water at the meter.

Location of water meter:_____

Step 4: Block toilet bowls with a strong plastic bag filled with earth or sand. Cover drains in showers, baths, laundries, etc. with a strong plastic bag filled with earth or sand.

Drain locations: _____

Step 5: Shelter in the highest part of the building. If you evacuate be sure to tell a neighbour or friend where you are going.

Step 6: Continue to monitor the Bureau of Meteorology forecasts and warnings.

Step 7: If you become separated from the people you are with, you will meet at:

_____

Never drive, ride or walk in flood water – this is the main cause of death during floods as water may be deeper or faster flowing than you think and contain hidden snags and debris.

B. List five major floods that have occurred in Australia during the last five years in the table below. Say what type they were and where they were located.

MAJOR FLOODS IN AUSTRALIA		
YEAR OF FLOOD	**LOCATION**	**TYPE**
2011	Toowoomba	flash flood

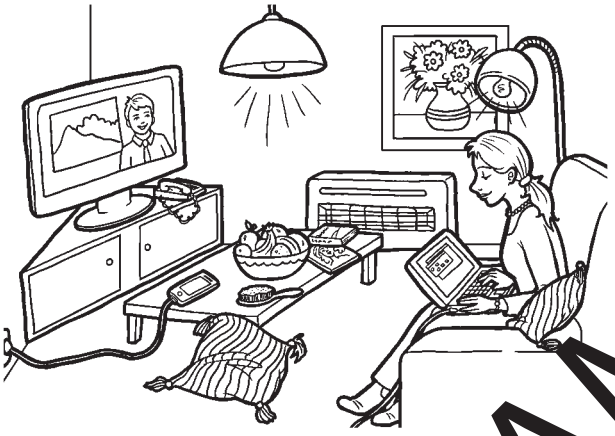
Coal Creates Electricity 2

❑ **Complete the tasks on this page after reading the information on page 43.**

A. Make a list of all the items in your home which use electricity. If you have more than one item write how many you have next to it, i.e. TV (3).

1.	6.	11.
2.	7.	12.
3.	8.	13.
4.	9.	14.
5.	10.	15.

B. Look at this picture of a lounge room. Circle all of the items which use electricity.



List five of the items that you have circled.

1. _____
2. _____
3. _____
4. _____
5. _____

What else could be found in a lounge room which uses electricity?

_____

Creating Energy Efficient Homes

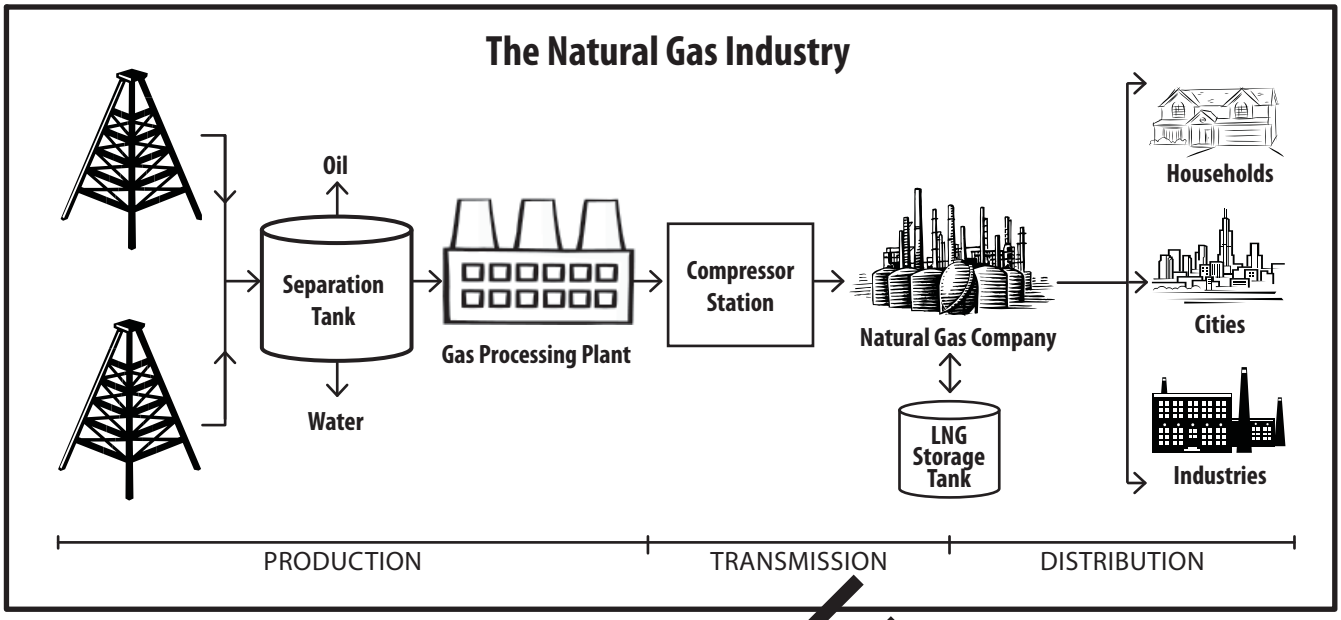
C. There are many ways to reduce the use of energy in homes which results in using less electricity and produces lower energy bills. Find out how the following items/procedures contribute to creating an energy efficient home, then complete the table.

Ways To Reduce Energy Use	What Is It?	Source Of Information
efficient refrigeration		
efficient warming		
replace incandescent bulbs with CFLs		
install lighting controls		
purchase green electronics		
efficient cooling		
efficient drying		
efficient washing		

D. In groups of two or three prepare a presentation for the class demonstrating how to create an energy efficient house. Presentation ideas: role play, PowerPoint, movie, poster or advertisement.

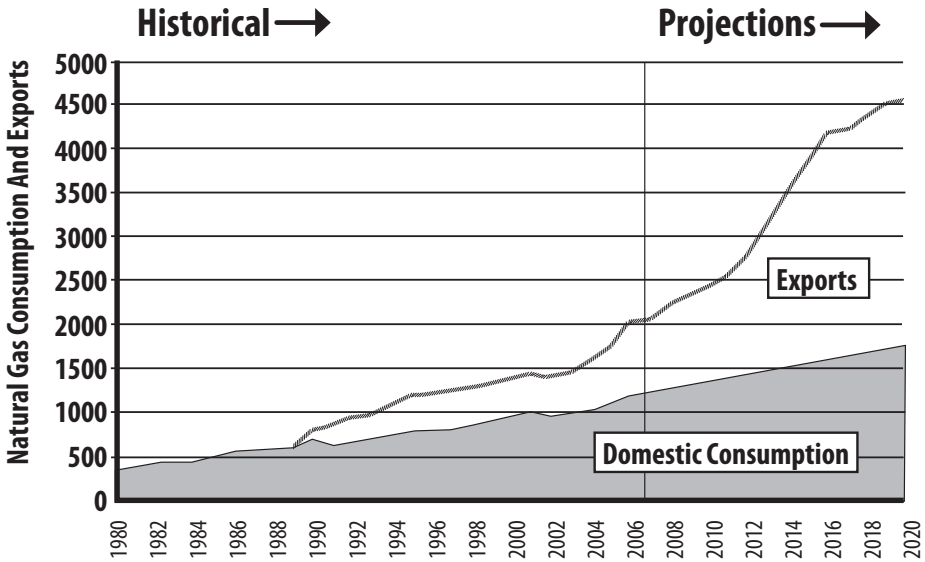
Non-Renewable Resources 2

❑ **After reading the information on pages 43, 45 and 47 complete the tasks on this page.**



A. Study the diagram which shows what happens to natural gas before it is distributed. Write a paragraph explaining the process from start to finish.

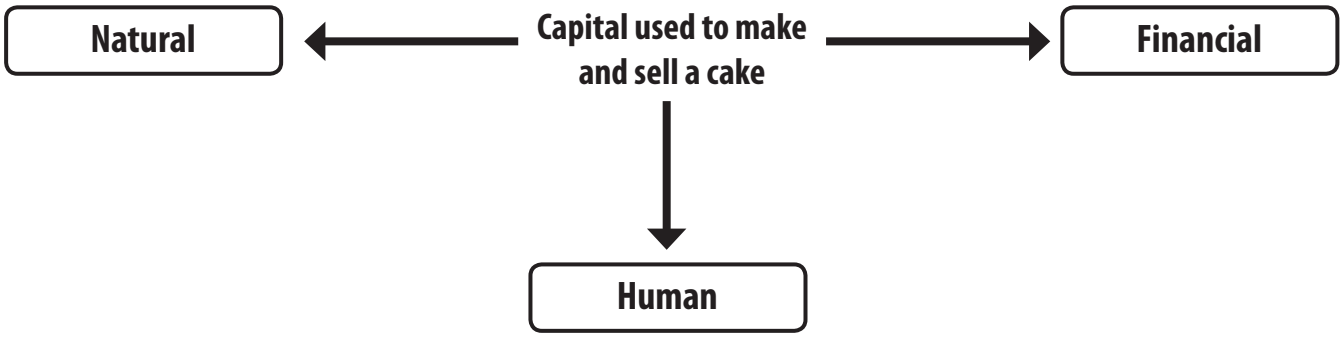
B. The line graph below shows how natural gas production has greatly increased in Australia since 1990. Write down in your own words why you think domestic consumption has increased as well as exports to foreign countries. Use your workbook to record your response.



Natural And Financial Capital 2

❑ **Read the information then complete the tasks.**

A. Cakes for sale! Imagine that you are having a cake stall to raise money for your school to buy new equipment. Think about the process involved in making and selling them, as well as the ingredients that is needed. Complete the mind map below to show how the three types of capital go in to making and selling a cake.



B. Complete the flow chart below to show the process of making and selling a cake from start to finish. Think about how and where the ingredients were grown, transport, packaging, purchasing, the people involved, equipment involved, and the final sale.

C. Summarise in your own words how all three forms of capital (natural, financial and human) are used in the process of producing and selling a cake.

_____

_____

_____

_____