Unit 9 Every drop counts



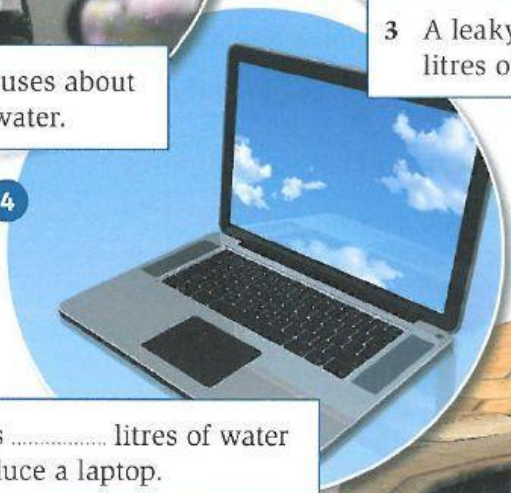
1 It takes ..... litres of water to grow enough coffee beans to make one cup of coffee.



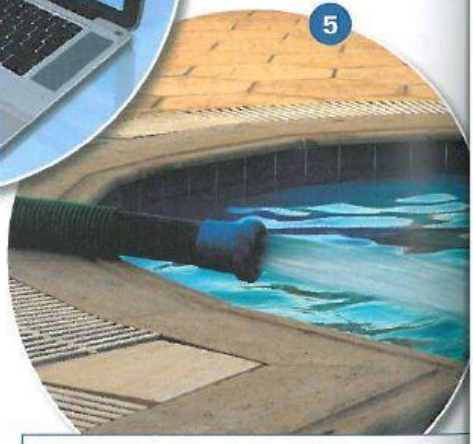
2 Washing the car uses about ..... litres of water.



3 A leaky tap accounts for ..... litres of water loss per day.



4 It takes ..... litres of water to produce a laptop.



5 It takes ..... litres of water to fill a swimming pool.



6 ..... litres of water are used to recycle a newspaper.

Starting off

1 Work in small groups. Each of the things in the photos uses an amount of water. Complete the sentences (1–6) by choosing a number from the box (a–f).

Approximate number of litres
a 15 **b** 45 **c** 250 **d** 675 **e** 6,300 **f** 99,000

2 Check your answers to Exercise 1 on page 175. Which figures surprised you, and which figures did you expect?

3 Do people use a lot of water where you live? Why? / Why not?

Listening

Matching, Flow-chart completion

1 Work in pairs. You are going to hear a student talking to a tutor about a talk he is preparing on 'desalination' – the process of making fresh water from seawater.

1 Why do you think desalination is important?
2 Have you ever given a talk to a group of people? What was it about?
3 How did you prepare for it?
4 How did you feel about it before and afterwards?

LIVEWORKSHEETS

2 **Read the task below. Underline the key ideas in the opening question and the box of options (A–C).**

Questions 1–5

What comment does the tutor make about each part of the presentation?

*Write the correct letter, **A–C**, next to Questions **1–5**.*

***NB** You may use any letter more than once.*

Parts of Presentation

1 the introduction
2 the background
3 the description of the process
4 the advantages/disadvantages
5 the conclusion

Comments

A It needs to be shorter.
B The ideas are difficult to follow.
C Some information should be added.

3 **Now listen to the first part of the conversation and answer Questions 1–5.**

Exam advice *Matching*

- You may have to use the same option more than once.
- Use the key ideas in each question to help you listen for the answers.

4 **Work in pairs. Match these words (1–5) with their correct definition from the *CLD* (a–e).**

1 filter *(v)*
2 canal *(n)*
3 pressure *(n)*
4 substance *(n)*
5 marine *(adj)*

a an artificial river built for boats to travel along or to take water where it is needed
b a solid, liquid or gas
c to pass a liquid or gas through a piece of equipment in order to remove solid pieces or other substances
d found in the sea or relating to the sea
e the force that you produce when you push something

5 **Work in pairs. Read the flow chart below and decide what type of word you need for each gap.**

Questions 6–10

Complete the flow chart below.

*Write **NO MORE THAN TWO WORDS** for each answer.*

The desalination process

Introductory point: a **6** ..... can desalinate sea water using its throat.

Collection: sea water passes through a canal into the **7** ..... .

↓

Treatment: rubbish is removed.

↓

Salt removal: sea water passes through a membrane under high pressure; a very **8** ..... process.

↓

Produces fresh water and salty brine – can harm **9** ..... .

↓

Use: human consumption and irrigating **10** ..... .

6 **Now listen and answer Questions 6–10.**

Exam advice *Flow-chart completion*

- Read through the flow chart to understand the process.
- Read around the gaps to predict the missing information.

7 **Work in small groups.**

1 What disadvantages of desalination were mentioned in the recording? Can you think of any others?
2 Which parts of the world have problems getting fresh water?

LIVEWORKSHEETS

Reading

Matching headings, Sentence completion, Pick from a list

1 Work in pairs. Discuss these questions about the Reading test.

1 How long is the test?
2 How many sections are there?
3 How much time should you spend on each section?
4 How many questions are there in total in the test?
5 How many marks do you get for each question?
6 Where do you write your answers?
7 What should you check when you write down answers from the passage?

2 Work in pairs. You are going to read a passage about getting clean water.

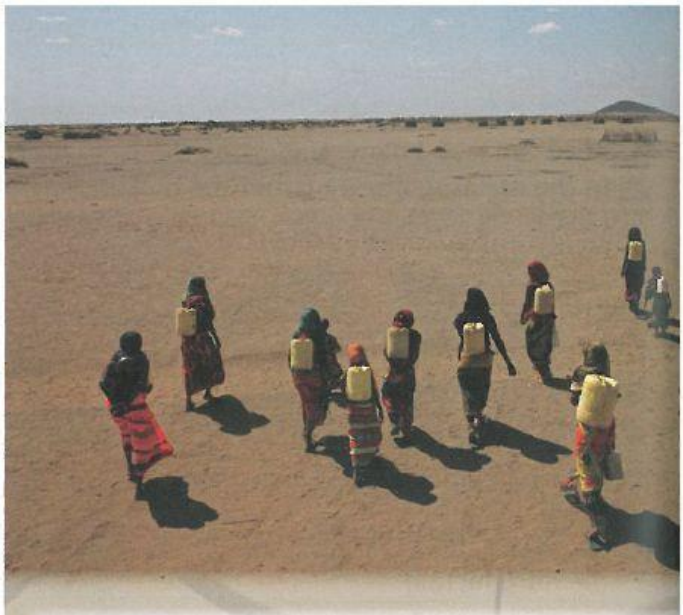
1 What problems are there if you don't have running water in your house?
2 What problems are there if you don't have access to clean water?

3 Quickly read the title and subheading of the passage on your own.

1 What do you think *burden* and *transformed* mean?
2 Which TWO of these topics do you expect to read about?
   a the causes of floods
   b the difficulties of collecting water
   c industrial uses of water
   d building water supplies

4 Find these words (1–6) in the passage and say what type of word (e.g. noun, verb, etc.) they are. Then match them with their correct definition from the *CLD* (a–f).

1 drought	a a strong wall built across a river to stop the water
2 well	b an artificial lake where water is stored before it goes to people's houses
3 dam	c a long period when there is no rain
4 pump	d a piece of equipment which forces liquid or gas to move somewhere
5 reservoir	e a long tube which liquid or gas can move through
6 pipe	f a deep hole in the ground from which you can get water, oil or gas



The burden of thirst

Millions of women carry water long distances. If they had a tap by their door, whole societies would be transformed.

by Tina Rosenberg

A Aylito Binayo's feet know the mountain. Even at four in the morning, she can run down the rocks to the river by starlight alone and climb the steep mountain back up to her village with a container of water on her back. She has made this journey three times a day since she was a small child. So has every other woman in her village of Foro, in the Konso district of south-western Ethiopia in Africa. Binayo left school when she was eight years old, in part because she had to help her mother fetch water from the Toiro River. The water is unsafe to drink; every year that the drought continues, the river carries less water, and its flow is reduced. But it is the only water Foro has ever had.

B In developed parts of the world, people turn on a tap and out pours abundant, clean water. Yet nearly 900 million people in the world have no access to clean water. Furthermore, 2.5 billion people have no safe way to get rid of human waste. Polluted water and lack of proper hygiene cause disease and kill 3.3 million people around the world annually, most of them children. In southern Ethiopia and in northern Kenya, a lack of rain over the past few years has made even dirty water hard to find. But soon, for the first time, things are going to change.

LIVEWORKSHEETS

C Bringing clean water close to villagers' homes is the key to the problem. Communities where clean water becomes accessible and plentiful are transformed. All the hours previously spent hauling water can be used to cultivate more crops, raise more animals or even start a business. Families spend less time sick or caring for family members who are unwell. Most important, not having to collect water means girls can go to school and get jobs. The need to fetch water for the family, or to take care of younger siblings while their mother goes, usually prevents them ever having this experience.

D But the challenges of bringing water to remote villages like those in Konso are overwhelming. Locating water underground and then reaching it by means of deep wells requires geological expertise and expensive, heavy machines. Abandoned wells and water projects litter the villages of Konso. In similar villages around the developing world, the biggest problem with water schemes is that about half of them break down soon after the groups that built them move on. Sometimes technology is used that can't be repaired locally, or spare parts are available only in the capital.

E Today, a UK-based international non-profit organisation called WaterAid is tackling the job of bringing water to the most remote villages of Konso. Their approach combines technologies proven to last – such as building a sand dam to capture and filter rainwater that would otherwise drain away. But the real innovation is that WaterAid believes technology is only part of the solution. Just as important is involving the local community in designing, building and maintaining new water projects. Before beginning any project, WaterAid asks the community to create a WASH (water, sanitation, hygiene) committee of seven people. The committee works with WaterAid to plan projects and involve the village in construction. Then it maintains and runs the project.

F The people of Konso, who grow their crops on terraces they have dug into the sides of mountains, are famous for hard work. In the village of Orbesho, residents even constructed a road themselves so that drilling machinery could come in. Last summer, their pump, installed by the river, was being motorised to push its water to a newly built reservoir on top of a nearby mountain. From there, gravity will carry it down in pipes to villages on the other side of the mountain. Residents of those villages have each given some money to help fund the project. They have made concrete and collected stones for the structures. Now they are digging trenches to lay pipes. If all goes well, Aylito Binayo will have a tap with safe water just a three-minute walk from her front door.

adapted from *National Geographic* magazine

5 Look at Questions 1–6. Read paragraph headings i–viii and underline the key ideas in each. Then read each paragraph carefully and match it to the correct heading.

Questions 1–6

The reading passage has six paragraphs, **A–F**.

Choose the correct heading for each paragraph from the list of headings below.

List of Headings

i	Why some plans have failed
ii	A rural and urban problem
iii	A possible success
iv	Explaining a new management style
v	Some relevant statistics
vi	A regular trip for some people
vii	Treating people for disease
viii	How water can change people's lives

1 Paragraph A ..... 4 Paragraph D .....

2 Paragraph B ..... 5 Paragraph E .....

3 Paragraph C ..... 6 Paragraph F .....

Exam advice *Matching headings*

- Read the headings very carefully, underlining the key ideas.
- Each paragraph heading will cover the main idea of the paragraph.
- Write your answer clearly or you will be marked wrong.

LIVEWORKSHEETS

6 **Read Questions 7–11. Underline the key ideas and decide what type of information is missing. Then answer Questions 7–11.**

Questions 7–11

Complete the sentences below.

*Choose **NO MORE THAN ONE WORD AND/OR A NUMBER** from the passage for each answer.*

7 The water levels in the Toiro River are falling because of ..... .

8 Globally, the number of people who die each year as a result of using dirty water is ..... .

9 When families have clean water, they can spend more time growing ..... .

10 Specialist knowledge and equipment are needed to dig ..... .

11 WaterAid uses a dam made of ..... to capture rainwater.

Exam advice *Sentence completion*

- Check how many words (or numbers) you can use for each gap.
- You will find the answers in the passage in the same order as the questions.
- Copy the words onto the answer sheet exactly.

7 **Underline the key ideas in Questions 12–13 and use these to find the right place in the passage. Then answer Questions 12–13.**

Questions 12–13

*Choose **TWO** letters, **A–E**.*

*Which **TWO** of these activities were performed by the villagers of Orbesho?*

A building a transport route

B digging a reservoir

C gathering building materials

D making pipes

E fitting taps

Exam advice *Pick from a list*

- The answers may come from one section of the passage or from several paragraphs.
- It does not matter which order you write the two answers in.

8 **Work in small groups.**

1 Aylito's village needs running water. What other things do you think her village needs? Why?

2 Do you think people should stay in villages without running water, or should they move to cities?

3 What are the good things about living in a village like Aylito's?

Spelling

Some common mistakes

1 **IELTS candidates often make mistakes when spelling these words from the reading passage. Correct the mistakes.**

1	becaus	because	6	mashines	.....
2	furthemor	.....	7	availble	.....
3	diseas	.....	8	belive	.....
4	busyness	.....	9	creat	.....
5	experince	.....	10	involv	.....

2 **When you have finished, check your answers in the passage.**

Vocabulary

effect, benefit, advantage and *disadvantage*

IELTS candidates often make mistakes using the nouns *effect, benefit, advantage* and *disadvantage* in a phrase.

1 **Read these sentences (a–d), then complete sentences (1–5) below by writing one word in each gap.**

a Village life has **many advantages** for people.

b Access to running water **has huge benefits** for everyone.

c The article about Foro **had a powerful effect on** its readers.

d **The main disadvantage** of living in a modern city is the noise.

1 Living by the sea ..has.. many advantages.

2 A lack of running water can ..... a serious effect ..... people's health.

3 The most significant disadvantage ..... desalination is the cost of the plant.

4 The projects that were run by WaterAid had numerous benefits ..... local people.

5 Some people say that recycling water ..... a negative effect ..... people's health.

LIVEWORKSHEETS

2 **These sentences contain a mistake made by IELTS candidates. Find and correct the mistakes. One sentence is correct.**

1 Technology ~~hands us~~ many benefits. has/brings
2 One advantage for tourism is that it improves a country's economy.
3 Air travel has the greatest effect to air pollution.
4 The benefits of drinking water every day are well known.
5 International tourism has not given a bad effect on the environment.
6 The advantages and disadvantages in the water supply are easy to see.
7 In conclusion, there is a major effect quality of life.
8 To sum up, computers give a lot of advantages to us.

Speaking
Parts 2 and 3

1 **Work in pairs. What do you remember about Speaking Parts 2 and 3? Circle the correct answer for each statement.**

1 You have *one minute / two minutes* to prepare your talk.
2 Your talk should last up to *two / three* minutes.
3 The examiner *will / will not* tell you when to stop talking.
4 You *can / cannot* look at the task as you talk.
5 Part 3 questions are about *personal / general* topics.
6 You *can / cannot* ask the examiner to repeat a question.

2 **Work alone. Read this Speaking Part 2 task, then think of an activity that you would find easy to talk about and make notes.**

Describe an activity that you enjoy that takes place in or near water.

You should say:

how you prepare for the activity

where it takes place

what the activity involves

and explain why you enjoy this activity.

3 23 **Listen to Carlos doing the Speaking task in Exercise 2 and complete the phrases he uses by writing one word in each gap.**

1 I'm going to ..talk.. about …
2 So how do I ..... ready?
3 There are lots of ..... where you can go fishing.
4 Fishing is really quite ..... .
5 All in ....., it's a wonderful activity.

4 23 **Listen again and check your answers. What is the purpose of each phrase?**

5 **Work in pairs. Take turns to give your talks and speak for two minutes.**

page 94 Pronunciation: *Intonation 2*

6 **Work in pairs. Look at these Speaking Part 3 questions.**

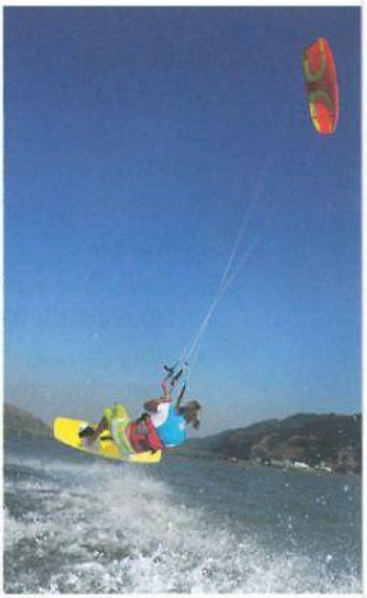
Water sports

1 What water sports are popular among young people?
2 How are sports like surfing and swimming different?
3 Why do some people not enjoy water sports?

Which question is asking the candidate to:
a compare some water sports?
b name some water sports?
c explain something about water sports?







LIVEWORKSHEETS

7 (24) **Listen to Carlos and complete his answers by writing one word in each gap.**



A I think there are **1** *many* water sports that are popular. Near beach resorts, for example, the popular sports **2** ..... things like surfing, sailing, waterskiing ... **3** ..... sports that young people enjoy are – let me think – canoeing, rowing, perhaps, and, well, the **4** ..... one's swimming because you can do that in a pool anywhere.

B Well, there are several ways. For a start, you need a lot of waves to surf, **5** ..... swimmers usually prefer calm water. Also, you need **6** ..... equipment to surf – you know, a board and maybe a wet suit. Yeah, and lastly, swimming's **7** ..... than surfing!

C I think it **8** ..... on the person, but, um, the most important **9** ..... is probably that they can't swim! They don't like it if it's deep and their feet don't touch the bottom. Even some people who can swim are afraid of water. Another **10** ..... is that, these days, the sea can be very polluted, and they may be afraid of getting ill.

8 **Work in pairs. Take turns to ask and answer the questions in Exercise 6 using some of the words and phrases in this section.**

9 **Work alone. Prepare some ideas for these questions, then ask and answer them in pairs.**

Attitudes to water

1 What activities do children enjoy in or around water?
2 How does a child's attitude to water differ from an adult's?
3 Why do some adults take part in dangerous water sports?

Pronunciation

Intonation 2

Speakers' voices rise to show that information is new or interesting, but fall to show that they are finishing their point.

1 (25) **Listen to this sentence from Carlos's answer. Notice how the speaker's voice changes on the words with arrows above them. In pairs, take turn to repeat what he says.**

... the main one's swimming, because you can do that in a pool anywhere.

2 **Look at these sentences. Mark with arrows where you think Carlos's voice should rise and fall.**

1 For a start, you need a lot of waves to surf, whereas swimmers usually prefer calm water.
2 Yeah, and lastly, swimming's cheaper than surfing!
3 Even some people who can swim are afraid of water.
4 Another possibility is that, these days, the sea can be very polluted, and they may be afraid of getting ill.

3 (26) **Listen to the sentences and check your answers**

4 **Take turns to read the sentences to each other using the same intonation.**

5 **Write three sentences you could use to answer the questions in Speaking Exercise 9. Mark the intonation in your sentences with arrows and then read them to your partner.**

Writing

Task 1

1 **Work in pairs. Read the Writing task on page 95 and look at the diagram. Then discuss these questions.**

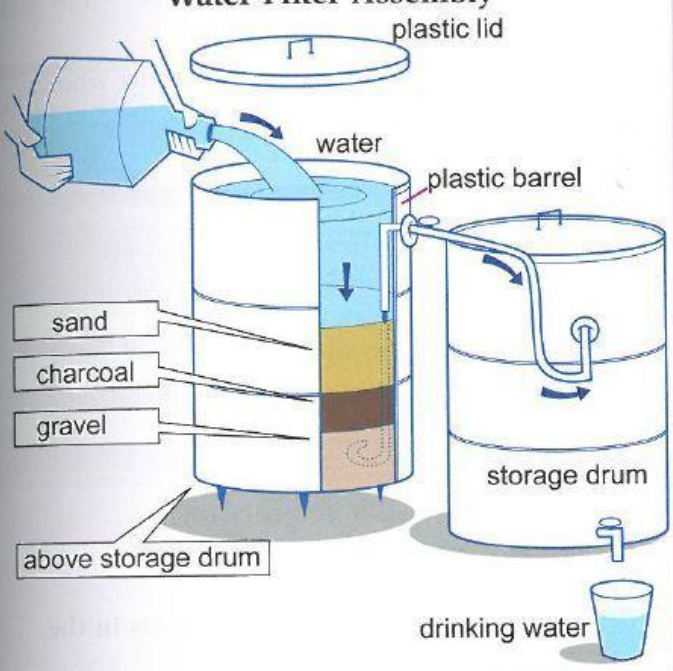
1 What equipment is needed for the water filter?
2 What materials are used in the filter?
3 Where does the dirty water enter the system?
4 Where does the clean water come out?
5 What is the pipe used for?

LIVEWORKSHEETS

The diagram below shows a simple system that turns dirty water into clean water.

Summarise the information by selecting and reporting the main features, and make comparisons where relevant.

Water-Filter Assembly



2 Read this sample answer to the Writing task above, then complete the plan in the next column by writing a word from the box in each gap.

The diagram shows a method for filtering dirty water using a barrel and a drum, a pipe and two taps.

First, the drum and barrel are placed next to each other so that the top of the barrel is higher than the drum. These items are linked by a pipe that runs from the bottom of the barrel into the side of the drum. Next, the filter is made by adding sand, charcoal and gravel to the barrel. Finally, a tap is fixed to the bottom of the drum and the top of the pipe.

The process begins when dirty water is poured into the barrel. After that, the water goes through the filter and up the pipe into the drum, where it is stored. Then, when the tap in the drum is turned on, clean drinking water comes out.

The system shows how natural materials and basic equipment can be used to produce drinking water in just a few simple stages.

build list operate overview

para. 1	Explain what the diagram shows and a ..... the equipment.
para. 2	Explain how to b ..... the water-filter system.
para. 3	Explain how to c ..... the system.
para. 4	Write an d ..... of the diagram.

page 96 Key grammar: *The passive*

3 The writer uses words and phrases to mark the order in which things happen.

1 Circle the words/phrases that he uses to do this.
2 Which of these words/phrases are used to mark:
   a the start?
   b the end?
   c two things that happen together?
   d one thing that follows another?

page 129 *Sequencers*

4 Find and correct the mistakes made by IELTS candidates in these sentences.

1 The first, they build the filter.
2 Than we add the dirty water.
3 Finaly, the clean water comes out.
4 At last, there is clean water to drink.
5 If they don't raise the barrel, it is too low, when the water goes in, it doesn't go anywhere.

5 Work in pairs. Look at the Writing task on page 96 and for each picture, A and B, discuss these questions.

1 How deep is the water source?
2 Who or what is collecting the water?
3 What equipment is used?
4 What is the water being used for?

6 Work in pairs. Each describe briefly how one of the systems works.

7 Work in pairs. Decide how you should write your answer. You should think about:

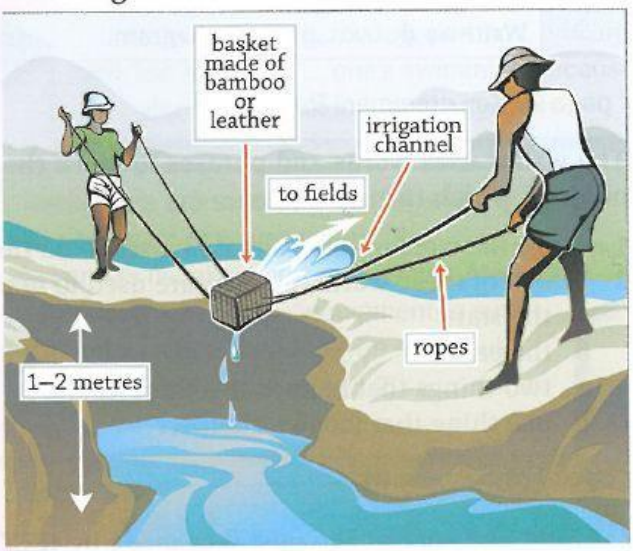
1 what to describe and compare in the two diagrams;
2 how many paragraphs you will write, and what you will write in each one;
3 how you will begin and end your answer, and what you will include in the overview.

LIVEWORKSHEETS

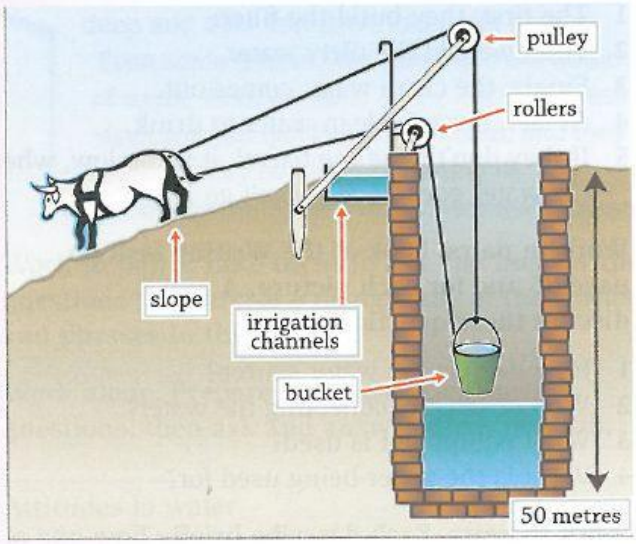
The diagrams below show two methods of collecting water for irrigation purposes.

Summarise the information by selecting and reporting the main features, and make comparisons where relevant.

A Swing basket



B Rope and bucket



8 Now work alone and write your answer. Write at least 150 words.

Exam advice *Writing Task 1*

- Look carefully at the diagram(s) and decide what is included and how it works.
- Decide what you will write in each paragraph.
- Remember to make comparisons (if relevant) and include an overview.

Key grammar

The passive

1 Work in pairs. Read the information in the box, then answer questions 1–3 about examples a–d.

The passive is formed by the verb *to be* + the past participle (*collected*, *eaten*, *done*, etc.).

We use the passive when we don't know who or what does/did the action or we don't need to say who does/did it.

a Villagers pour dirty water into the barrel.
b Dirty water is poured into the barrel.
c People built the water filter.
d The water filter was built.

1 Which two sentences are passive?
2 Which two sentences do not say who does/did the action?
3 Which tense is each sentence in?

page 129 *The passive*

2 Underline the eight passive verb forms in the sample answer on page 95.

3 Complete these sentences with a suitable form of the verb in brackets.

1 Salt *is removed* (*remove*) from seawater in a desalination plant.
2 The wells ..... (*dig*) ten years ago.
3 Over the past ten years, local people ..... (*involve*) in WaterAid projects.
4 Last summer, a reservoir ..... (*construct*).
5 Aylito Binayo ..... (*believe*) she will have safe water soon.

4 IELTS candidates often make mistakes with the passive. Find and correct the mistakes in these sentences.

1 ~~Water used~~ mostly in agriculture in Australia.
Water is used
2 From the information which shows in the charts, water use has increased.
3 We did not affect by the water shortage last year.
4 A substantial increase in rainfall was occurred during the year.
5 Safe water should be provide for everyone.
6 Water that is came from the dam is reused.

LIVEWORKSHEETS