

- ▷ with **double object verbs** like give and get:
 - We gave five pounds **to the woman on the corner**.
 - They got a drink **for me**.
- ▷ after certain verbs, nouns and adjectives:
 - The book belongs **to me**.
 - I had an argument **with my brother**.
 - I feel sorry **for you**.

Some of the most common prepositions that begin prepositional phrases are **to, of, about, at, before, after, by, behind, during, for, from, in, over, under, and with**.

Example:

- He arrived **in time**.
- Is he really going out with his friend?

Complete the following sentences choosing the appropriate prepositional phrases.

1. _____ Jameel, they all seemed pretty cordial.
 - a. Except for b. Except with c. Except from d. Except to
2. _____, cancer is curable.
 - a. To a great extent b. For a great extent
 - c. In a great extent d. From a great extent
3. The train was late. _____, I managed to get to the meeting in time.
 - a. In spite of this b. In spite this c. In spite to d. In spite in
4. _____ the starter, I thought the meal was excellent.
 - a. Apart with b. Apart from c. Apart for d. Apart to
5. What is the _____ you?
 - a. matter of b. matter with c. matter on d. matter to

Unit 10

Water Scarcity in Pakistan

Students Learning Outcomes

After reading the lesson the students will be able to:

- use critical thinking to respond orally and in writing to the text (post-reading) to explore causes and consequences of a problem or an issue and propose various solutions.
- use summary skills to extract salient points and develop a mind map to summarize a text.
- write a unified paragraph on a given topic to show
 - clear topic sentence using specific words, vivid verbs, modifiers, etc.
 - adequate supporting detail (example, illustration, definition, evidence, comparison, contrast, cause and effect, clarification, explanation) to develop the main idea.
 - appropriate pronoun-antecedent relationship and transitional devices within a paragraph.
 - chronological / sequential / spatial order of arranging detail.
 - order of importance (most important to least important and vice versa, general to specific and vice versa).
- demonstrate heightened awareness of conventions and dynamics of group discussion and interaction to summarize the main points of discussion for the benefit of the whole group.
- analyze sentences for clauses and phrases. Identify and differentiate between main, subordinate and relative clause.
- utilize appropriate informational sources including encyclopedias and internet sources.

Pre-reading

- Look at the pictures and predict what the lesson is about.

**Reading**

Pakistan is a land gifted with lavish resources of water. It is a land where crystalline glacial water rolls down the mighty Himalayas and Karakorum peaks to the fertile plains and break into intricate web of canal system that irrigates over 16 million hectares of land, out of 34 million hectares of cultivable land available. The other sources of water available in Pakistan are rainfall, surface water available in rivers and underground water.

In surface water we have three river drainage basins:

- the Indus Basin River
- closed basin Kharan desert
- Makran coastal basin.

The Indus Basin River

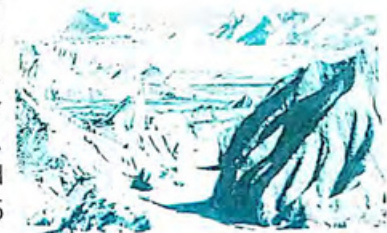
The Indus River system is one of the most important water systems in Asia. It originates near the Kailash range in Tibet. The river flows to the west and eventually falls into Arabian Sea. The total area of the Indus basin is about 3,65,000 square miles. The river Indus has tributaries at both Western and Eastern sides. Its eastern tributaries are the Ravi, the Beas, the Chenab, the Sutlej and the Jhelum. These five rivers meet at Panjnad. Its western tributaries are the river Swat, the Kabul, the Kurram, the Tochi, the Gomal and the Zhob. These rivers join Indus in Khyber Pakhtunkhwa. The Indus River System is



considered as the lifeblood of Pakistan. Its sources of water are snowing, glacier melting, and rainfall. From Indus River system 141.67 million square feet of water is being received. In 1960, Pakistan signed with India a water treaty called, 'Indus Water Treaty' which brought major changes in the sources of water for Pakistan. This Treaty gave the right of three eastern rivers, Beas, Satluj and Ravi to India whereas the water of Indus Jhelum and Chenab is to be used by Pakistan.

Closed basin Kharan desert

It consists of areas of mountain basins of Quetta and basins of tributaries draining into Kharan desert. Its main rivers are Pishin Lora, Baddo Rakhshan, Mashkel and many other streams. It covers an area of 120,100 sq. km. Its main sources of water are rainfall and snow. Here we are getting approximately 4.5 million acre feet of water.

**Makran coastal basin**

The Makran coastal basin consists of streams of Malir, Hub, Porali, Kud, Hingol, Nai, Mashhai, Dasht, Nihing and Kech. It covers an area of 122,400 sq. km and its main source of water is rainfall. From this basin we get 0.78 million acre feet of water.

The construction of dams and barrages by India over the River Chenab and the River

Jhelum created the problem of water shortage for Pakistan. This shortage is becoming more and more severe with the passage of time. According to the UNO Report, Pakistan ranks at the 7th position in the list of countries facing water crisis. Presently, Pakistan has surface water of 153 million acre feet and underground water resources of only 24 million acre feet. Pakistan may face water shortage by 2025 AD.

The population of Pakistan is increasing at a rate of 3.2%. Presently, we have to feed more than 200 million people and if the rate of increase in population



remains the same, then it will be almost double by the year 2025, leading to add pressure on the underground water resources. Factors such as global warming and climate change will further aggravate the problem of the water scarcity. According to a research study on water resources of Pakistan, water of economic values of \$70 billion is being thrown into sea every year due to non-construction of water reservoirs. Being water starved country, which has the foreign reserve of only \$20 billion, we cannot afford throwing water of the economic value of \$70 billion every year into sea.

Study of Pakistan Counsel of Research on the Water Resources of Pakistan (PCRWR) revealed that rapid depletion of ground water may soon worsen the water crisis in Pakistan's major cities, causing a drought-like situation. Such crisis needs to be taken on war footings; otherwise, a large section of Pakistan's population, especially those living in big cities, will be facing severe shortage of water.

Due to excessive pumping of underground water, the quality of water is being contaminated rapidly with heavy metals like Copper, Nickel and Cobalt etc, which can pose some serious health hazards and can cause the spread of lethal diseases in the population, especially in the big cities.

The problem of water shortage in Pakistan has gained the momentum as our water storage capacity is only for 30 days, and Pakistan has the 4th highest rate of water use in the world.

To overcome this horrible water scarcity we should take these remedial measures immediately:

- › Strict implementation of National Water Policy 2018.
- › Formulation of National Action Plan for judicious use of available water.
- › Construction of water reservoirs.
- › Control on over pumping of underground water and its wastage.
- › Increase the use of water efficient crops.
- › Switch over from conventional agriculture to conservative agriculture.
- › Adopting water efficient method of irrigation like Sprinkler and Drip irrigation.

Activity

Ask the students to utilize appropriate informational sources including encyclopedias and internet sources to find more about causes, effects and solutions of water scarcity.

The problems faced by the water sector in the country are many, acute and serious. Therefore, building of more reservoirs and effective management strategy are the needs of the hour. The implementation of these recommendations will enable the country to overcome the challenges, and achieve the objectives of sustainable development and management of water resources. It is said that the wars of the twenty-first century will be fought for water. We should therefore save now to prevent war.

Sources: daily the Nation, December 11, 2017

<http://www.pakistan.com/>

Water Policy, 2018

Glossary

Words	Meaning
scarcity	the state of being scarce or in short supply
bounty	something given or occurring in generous amounts
alluvial	a deposit of clay, silt, and sand left by flowing floodwater in a river valley or delta, typically producing fertile soil
diversion	the taking of water from a stream or other body of water into a canal, pipe, or other conduit
basin	an area of land that is lower at the centre than at the edges, especially one from which water runs down into a river
tributaries	a river or stream flowing into a larger river or lake
depletion	reduction in the number or quantity of something
drought	prolonged period of abnormally low rainfall, leading to a shortage of water
contaminated	having been made impure by exposure to or addition of a poisonous or polluting substance

conservative agriculture	the process of soil management practices that minimize the disruption of the soil's structure, composition and natural biodiversity
sprinkler	sprinkler irrigation is a method of applying irrigation water which is similar to natural rainfall; water is distributed through a system of pipes usually by pumping, it is then sprayed into the air through sprinklers so that it breaks up into small water drops which fall to the ground
drip irrigation	drip irrigation is a technique in which water flows through a filter into special drip pipes, with emitters located at different spacing water is distributed through the emitters directly into the soil near the roots through a special slow release device

Exercise

Comprehension

A. Answer the following questions.

1. What are the main sources of water in Pakistan?
2. What are the river drainage systems of Pakistan? Describe them briefly.
3. What are the main causes of water shortage in Pakistan? Discuss in detail.
4. What measures can we take to overcome water shortage in Pakistani?
5. What can you do on your own to contribute to conservation of water in your home and surrounding?
6. What is the importance of building national reservoirs? Can you point out a spot in your area where small reservoirs can be built to benefit the local population?

B. Choose the correct option for the following statements.

1. Pakistan is a land where crystalline glacial water rolls down the mighty Himalaya and Karakorum peaks to the fertile land. In this sentence the phrase 'rolls down' is used as _____
 a) simile
 b) metaphor
 c) personification
 d) alliteration

2. Pakistan is a land gifted with lavish resources of water. By using contextual clues, the word opposite in meaning to "gifted with" is _____.
 a) blessed with
 b) deprived of
 c) bestowed with
 d) banned upon
3. Which of the following sentences best describe the lesson 'Water Scarcity' _____
 a) Conserve water and reduce its wastage
 b) Control on over pumping of underground water and its wastage
 c) Switch over from conventional agriculture to conservative agriculture.
 d) Use water liberally but construct water reservoirs first.
4. According to UNO Report, Pakistan is at _____ position in the list of countries which are facing water crisis.
 a) eleventh
 b) fifth
 c) sixteenth
 d) seventh
5. After careful reading of the text, we can say that the central idea is _____
 a) don't make nature cry, keep your water clean
 b) you never know the worth of water until the well runs dry
 c) to a thirsty man, a drop of water is worth more than a sack of gold
 d) save water to secure your future

Vocabulary

A. The following words, taken from the text, belong to the same word class. Use dictionary to find out its word class and meaning.

abundant severe marvellous starved judicious excessive

B. Change the above words into adverb and use them in your own sentences to make its meaning clear.

Teacher's guidelines

Activity: Devise a strategy for efficient and effective use of water in your school.

Writing

- A. Organize the main points of the lesson graphically with the help of mind-map and write a summary of the lesson, 'Water Scarcity in Pakistan'.
- B. Write a unified paragraph on the topic, 'Save a Drop Today and Reap an Ocean Tomorrow', using:
 - ▷ examples, definition, evidence, comparison, contrast, cause and effect, clarification, explanation to develop the main idea.
 - ▷ use appropriate pronoun-antecedent relationship and transitional devices within a paragraph.
 - ▷ arrange paragraphs in correct order.

Listening and speaking

Arrange a group discussion on conservation of water in your area and after conclusion of the discussion, the group leader should summarize the main points of the discussion for the benefit of the whole group.

Grammar

Infinitives and Infinitive Phrases

The Infinitive

An infinitive is a verb form that can be used as a noun, an adjective, or an adverb. Most infinitives begin with to.

Infinitive used as a noun

To heal was the athlete's first priority.

Infinitive used as an adjective

The player to watch this season is Afridi.

Infinitive used as an adverb

This speech will be easy to memorize.

A. Locate the infinitives in each sentence. Identify each as an adverb, an adjective, or a noun.

1. More than anything else, I wanted some time alone to read.
2. My grandmother told me that we have been put on earth to share, to care, to give, and to receive.
3. The right to vote is very valuable.
4. I tried to call but the line was busy.
5. To finish will be a relief.
6. Do you agree with the decision to go?
7. The case will not be easy to solve.
8. To fly, the wings must create more lift.

The Infinitive Phrase

An infinitive phrase consists of an infinitive together with its modifiers and complements. The entire phrase may be used as a noun, an adjective, or an adverb.

Noun

To heal in shape requires dedication and discipline.

Adjective

The thing to do first is an activity you enjoy.

Adverb

I came to Swat to see the art exhibition.

B. Underline the infinitive phrases in the following sentences and tell whether these infinitive phrases have been used as noun, adjective or adverb.

1. Sending her roses is a way to win her friendship.
2. The day to sleep in is Saturday.
3. Javed is coming to discuss the problem with the boss.
4. It is also possible to bring cookies rather than a cake.
5. Please write the numbers to win the lottery on this form.
6. The museum is fun to visit on a cold day.
7. The captain of the ship is the authority to obey at all times.
8. Samia offered to think over the argument.

Gerunds and Gerund Phrases

Gerunds

A **gerund** is a "verb + ing" used as a noun.

Example:

- ▷ Swimming is good exercise. (**subject**)
- ▷ The girls enjoy swimming. (**direct object**)
- ▷ The best exercise is swimming. (**predicate nominative**)
- ▷ She was scolded for swimming. (**object of a preposition**)

Gerund Phrases

A gerund phrase consists of a gerund and related words.

Example:

- ▷ **Swimming** in the lake is good exercise.
Swimming in the lake is the subject on the verb is.
- ▷ **Blowing** bubbles on a windy day is a fun activity for children.
Blowing bubbles on a windy day is the subject of the verb is.
- ▷ **Piling** too much laundry into a washing machine will cause it to malfunction.
Piling too much laundry into a washing machine is the subject of the verb will cause.

A. Use gerunds in the following sentences. The first one has been done.

1. Always check the oil, before you start the car.
Always check the oil, before starting the car.
2. The house was decorated with lights. It looked beautiful.
3. To praise all alike is to praise none.
4. I cannot go on to do nothing.
5. To collect wealth ruins health.
6. To see is to believe.
7. To give is better than to receive.
8. To talk like this is foolish.
9. She loves to read books.

B. Underline the gerund phrases in the sentences below. The first one has been done.

1. Brisk walking is Danial's favorite exercise.
2. Mrs. Noman enjoys playing bridge.
3. I remember promising Sami my old bike.
4. Standing during a two-hour train trip is not my idea of fun.
5. Do you like sailing on the lake?
6. Volunteering at the hospital is just one of Haleema's activities.
7. Mrs. Basheer enjoys watching quiz shows on television.
8. Taking out the garbage is not my favorite job around the house.

Review Unit 6 - 10

A. Underline the adjective phrases in the following sentences.

1. The main character in the story is a young boy.
2. He is a visitor from another planet.
3. Part of the treasure map is missing.
4. The road along the coastline has the best views.
5. Several of the eggs are cracked.

B. Find the adjective clause in the following sentences and tell which word it modifies.

1. I like a leader who listens to his men.
2. The dog which I loved dearly was hit by a truck last night.
3. Rulon is a person who takes responsibility well.
4. All individuals who purchased tickets will be admitted.
5. The shirt that you bought me doesn't fit well.

C. Do as directed.

1. What is the adjective phrase in this sentence?

The cabin beside the lake was already occupied when we arrived.

- | | |
|-------------------------|---------------------|
| a. when we arrived | b. beside the lake |
| c. was already occupied | d. the cabin beside |

2. What is the adjective clause in this sentence?

Summer, which is my favorite season, will be here in another week.

- | | |
|--------------------------------|---------------------------------|
| a. summer | b. will be here in another week |
| c. which is my favorite season | d. will be there |

3. What is the adjective phrase in this sentence?

He finished the dish of ice cream very quickly.

- | | | | |
|-----------------|----------------|-----------------|-------------|
| a. of ice cream | b. he finished | c. very quickly | d. the dish |
|-----------------|----------------|-----------------|-------------|

4. Choose the correct option to best complete the sentence.

I always remember the times _____ my cousins and I spent vacations together.

- | | | | |
|---------|----------|--------|---------|
| a. when | b. where | c. who | d. that |
|---------|----------|--------|---------|

5. Identify the phrase type in the sentence below.

Houses are unbelievably expensive these days.

- | | |
|---------------------|-------------------------|
| a. adjective phrase | b. adverb phrase |
| c. noun phrase | d. prepositional phrase |

D. Underline the adverb phrases in the following sentences.

1. She lives in a luxurious home.
2. Is there water on the moon?
3. She ran into her room.
4. They chatted for a while.
5. She performed the task with great skill.

E. Combine each set of simple sentence into one sentence containing an adverb clause.

1. I waited for my friend. I waited till he arrived.
2. You are intelligent. I am intelligent.
3. He was not there. I left a message with his mother.
4. We wish to live. We eat for that purpose.
5. She was very tired. She could barely stand.

F. Fill in the blanks with the correct preposition.

I'm Palwasha and I live _____ Peshawar. _____ summer I like to travel _____ Swat, because _____ the weather and the people there. Last summer I took a bus _____ Peshawar to Swat. _____ the bus stop we went to our hotel _____ taxi. We stopped _____ a small restaurant for a quick meal. The driver parked the taxi _____ the restaurant. Nobody could find the taxi and the driver, so we waited _____ the restaurant _____ one hour. The driver was walking _____ the small park _____ the restaurant which we did not know. So we were very angry _____ him. But my holidays were great. We sat _____ campfires and went tracking _____ the early mornings.

G. Choose the correct option.

- Determine how the infinitive phrase is being used in the sentence.
To have a balanced diet, keep the food triangle in mind.
a. adverb b. noun c. adjective d. pronoun
- What is the infinitive phrase in this sentence?
To surprise his family, Asad dressed up in a funny costume.
a. to surprise
b. Asad dressed up
c. in a funny costume
d. to surprise his family
- Which sentence contains an infinitive phrase?
a. Tahir hated to leave the party so soon.
b. Tahir was going to a meeting.
c. Tahir enjoys partying with his friends.
d. Tahir ate cake.
- Determine how the underlined infinitive phrase is being used in the following sentence.
It is also possible to bring biscuits rather than a cake.
a. noun b. adjective c. adverb d. pronoun
- Determine how the underlined infinitive phrase is being used in the following sentence.
The day to sleep in is Sunday.
a. noun b. adjective c. adverb d. pronoun

H. Below are incomplete sentences. After each sentence are two choices to complete the sentences. One is an infinitive, and one is a gerund. Write the correct verbal in the blank.

- She enjoyed _____ to you. (speaking / to speak)
- He agreed _____ the book. (reading / to read)
- The lawyer argued for _____ the case. (dismissing / to dismiss)
- When they finish _____ the test, they will leave. (taking / to take)
- Are you planning _____ to the picnic? (going / to go)

I. Underline the appropriate prepositional phrase in each sentence.

- There are lots of birds nesting under the leaves.
- After school, the children played tag at the park.
- Come into the store with me.
- For one hundred years the chair sat moldering in the attic.
- I gave the children eggs instead of cakes for breakfast today.

J. Complete the sentences with appropriate model verb.

- You really _____ watch TV this much.
- She _____ be at work, she always works at this time.
- Speak up, I _____ hear you!
- Amir _____ call his father urgently.
- Thank you for calling sir, how _____ I help you?
- If I go to Peshawar, I _____ see the Bala Hisar Fort.

K. Change the regular / irregular verbs in parenthesis into the past simple.

- At the age of 23, she _____ (become) a doctor.
- On Saturday I _____ (play) computer games with my cousins.
- I _____ (know) the answer yesterday.
- He _____ (tell) me that he lived in China.
- My mum _____ (not cook) dinner last night.