

What will I learn?**4.1 Reading Comprehension**

- Use pre-reading strategies to predict the content of a text from topic/picture, title/headings, key words and visuals etc. by using prior knowledge, asking questions and contextual clues.
- Read silently and apply critical thinking to interact with the text, using intensive reading strategies (while-reading) to:
 - locate an opinion.
 - make simple inferences using context of the text and prior knowledge.
 - distinguish between what is clearly stated and what is implied.
 - deduce meaning of difficult/new words/phrases from context.
 - comprehend/interpret text by applying critical thinking.
- Respond orally and in writing to the text to:
 - give a personal opinion and justify stance related to viewpoints/ ideas and issues in the text read.
 - relate what is read to his or her own feelings and experiences.
 - explore causes and consequences of a problem or an issue and propose various solutions.
 - evaluate the material read.

4.2 Writing

- Write Précis according to the Précis writing rules.

4.3 Oral Communication

- Present and explain one's point of view clearly.

4.4 Grammar

- Illustrate the use of prepositions of position, time, and movement and direction in texts.
- Use knowledge of roots and affixes (prefixes and suffixes) to determine the meaning of new words, and to form standard words.

Technological Revolution

In this new global economy, technology is the major driving force of both economic growth and improved quality of life. It is now the “technological revolution” that is driving innovation and enabling billions of people to live better and safer lives. Technology is the key enabler of better education, health care, efficient environment, safer and secure communities and nations. Many advances in the technology depend on hardware innovations made possible by continued advancement in materials technology. Advancements in technologies have occurred throughout history—from Guttenberg’s invention of moveable type to the telephone and mobile phone — making it easier and cheaper to develop, manipulate, organize, transmit, store, and act on. And with these breakthroughs, optimists heralded a new era. Many innovations arose after the World War II but information remained scarce and hard to use and transmit. The reason was that the processing of information relied on “atoms” to record or transmit information in analog form rather than the ‘bits’ (binary digits of ‘1s’ for on and ‘0s’ for off) used to record or transmit information in digital form. New generation Tele-pointers have offset pen and pencil and old models, while copier and printers recorded information on paper. Telephones translated voices into electric waves that could be played back on speakers. As the materials revolution brought with it a host of amazing new ‘things’: automobiles, planes, appliances, and telecom system, etc.

Technology & Disaster Risk Reduction

Presently technology can be used for an effective emergency response in time of accidents and natural disasters and creating public safety networks including cellular, wireless, satellite and existing analog television spectrum. Communities have used the Internet during an emergency to coordinate recovery efforts. Disasters forecasting and predictions, monitoring, risk assessment and damage are the open grounds for integrating technology and to respond and to manage natural phenomena such as hurricanes, wildfires, tsunamis, and landslides using satellite images, aerial photographs, and on-the-ground inspections. Progress in the technology has made possible over the past years to introduce significant changes in the integrated approach to the problems of natural disasters. Technology has helped to understand the mechanism of natural hazards of atmospherical, geological, hydrological, and biological origins and to analyse the transformation of these hazards into disasters.

**Technology & Entertainment**

For the adults, and youngest students, pre-schoolers, toddler's technology is interactive and engaging. Toys have integrated circuits in them to enable children to interact with them. It is technology that is introducing high-quality smart visuals, graphic apps, systems and devices in the mass market, gained such rapid and widespread adoption ever before. The benefits and promises of these ever time technologies are immense and central to improvements in our lives.

Technology & public safety

Technology has enabled a host of products to be safer. It is enabling vehicles to be safer by letting drivers know in real time of impending problems. It is enabling cars to be more energy efficient through new renewable energy like wind power and solar system. Telepresence is possible option to work in any extreme condition.

Technology in Education& Health

Technology is putting a variety of information at people's finger tips, whether they are students in providing course materials online through teleschool without leaving homes. People get information through telemedicine to help them better understand a medical condition. Flexible online classes give people access to education that would never have been possible before the Internet. Parents now use e-learning via Internet to follow their child's school assignments and academic progress through Web portals and innovative applications. Companies use technology to save on workforce development costs. Games for children designed to double as learning tools have proliferated. Technology has helped improve medical care by making it easier for doctors to provide evidence-based medicine.

Technology & Commerce

Today, technological revolution is giving people a wide variety of choices, enabling them to get the kinds of products and services that fit their needs. Tele work and telemarketing have given people the chance to move beyond the limits. E-commerce lets people buy a vast array of goods and services that previously might have been difficult to find at local stores.

Technology during Epidemics and Pandemics

Epidemics, pandemics or other hazards have threatened the human race time and again. The outbreaks of these calamities left enormous burdens on our lives, economies, and societies at large. In such a scenario, technologies enable secure access to data, enterprise applications, virtual meetings and cloud conferencing. Smart cities could be made and equipped with some sorts of devices which include sensors, processors, wearables, electronics, software, actuators, vehicles, cell phones and computers. The remote sensing technology could monitor environmental changes and disease predictions. The satellite images, aerial photographs, and on-the-ground inspections, can be used to locate populations in dangerous or environmentally unstable places and determine how to respond after disaster strikes. Though technology cannot prevent the onset of the pandemics; however, it can help prevent the spread, educate, warn, and empower those on the ground to be aware of the situation, and noticeably lessen the impact.

Source: Adapted from "Digital Quality of Life" Understanding the Personal & Social Benefits of the Information Technology Revolution Robert D. Atkinson & Daniel D. Castro.

While-reading

Exercise 1

Work in pairs and deduce the meaning of words given in column A and write their contextual meaning in column B. Share with your partner once you have completed.

No.	Column A	Column B
1	innovation	
2	optimists	
3	manipulate	
4	heralded	
5	hazards	
6	hurricanes	
7	proliferated	
8	impending	
9	calamities	
10	lessen	

**Exercise 2**

Read the text carefully. There are certain words that are related to word 'Tele' means 'far'. First, underline these words in the texts and then write description of these words. An example has been given for you.

Example: Tele+phone: Telephone.

A device used for speaking to distant places by means of electrical signals.

Exercise 3

Read the statements and encircle the correct option.

1. Digital revolution mainly depends on _____.
a) physical nature b) improved life
c) hardware innovations d) integrated Circuit
2. During World War-II, transmission of information was in _____ form:
a) material b) analogue
c) electric d) catalogue
3. _____ is the technological option to work in dangerous situation.
a) Telephone b) Telecom
c) Telepresence d) Television
4. It is technology that people get things better according to their _____.
a) market demand b) environment
c) needs d) work
5. E-learning can only be possible through _____.
a) portals b) internet
c) smart adaptation d) innovative system
6. People get information through _____ to help them better understand a medical condition.
a) internet b) integrated apps
c) telemedicine d) visual images
7. Bits used to record or transmit information in _____ form.
a) binary b) digital
c) analogue d) logical

8. _____ is an example of hydrological disaster.
 a) earthquake b) hurricane
 c) floods d) wildfire
9. _____ technology assesses environmental changes and disease predictions.
 a) remote sensing b) satellite
 c) circuit d) visual images
10. A bulk of population at disaster risks may be located by _____.
 a) telecom b) satellite images
 c) actuators d) smart phones

Exercise 4

Work individually. Read the text again and mark (√) for true, and (X) for false against each statement given below.

No.	Statement	Answer
1	Use of technology can be harmful for our environment.	
2	First use of technology was related to waves.	
3	During World War II, the use of technology was not familiar.	
4	All tele devices may function with traditional type.	
5	An e-learning can only be possible without internet.	
6	People can also purchase and sell things via internet.	
7	Renewable things are those which cannot be utilized again.	
8	Telework and telepresence are the internet ways to work in hazardous situation.	

**Post-reading****Exercise 5**

Read the text and answer the following questions.

1. What do you mean by technological revolution?
2. Why did innovation information remain scarce at the time of World War-II?
3. How is the technology boon for students?
4. What are the benefits of E-commerce in today's world?
5. How does technology work in environmentally risk areas?
6. How has technology greatly supported doctors & medical practitioners?
7. How does technology secure humans from calamities?
8. Some people have opinion that youngsters are not safe in the technological era? Give reasons for your agreement or disagreement.
9. Which technology innovation has impacted you profoundly and how?
10. How did technology contribute in keeping peoples' lives safe during the recent pandemic or disaster?

Exercise 6

Though use of technology has many advantages to ease living, it has some disadvantages too. Now, work in groups. First make outlines related to only disadvantages of technology, and then expand each outline in short paragraphs.

4.2 WRITING

Précis Writing

The word **Précis** is a French word which means a summary and *précis writing* means summarizing a lengthy passage in limited words without affecting the main idea or theme of the passage. The following steps will help you to make a standard précis.

Steps

1. Read the entire passage carefully to know the central idea.
2. Underline or highlight important points.
3. Irrelevant points should be excluded.
4. Use your own words in writing the précis.
5. Do not use idioms and phrases.
6. Check spellings and grammatical errors.
7. Length of précis should be one-third of the original passage.
8. Do not copy the same text.
9. Make a final draft.
10. Suggest an appropriate title.

Sample of Précis

Passage	Précis
Dolphins are regarded as the friendliest creatures in the sea and stories of them helping drowning sailors have been common since Roman times. The more we learn about dolphins, the more we realize that their society is more complex than people previously imagined. They look after other dolphins when they are ill, care for expecting mothers, and protect the weakest in the community, as we do. Some scientists have suggested that dolphins have a language but it is much more probable that they communicate with each other without needing	Title: Dolphins: the Compassionate Beings Dolphins' friendliness has always excelled that of humanity. They are supposed to be more intelligent and helpful than mankind, but they lack behind due to physical weakness. Further, their benevolent character can be witnessed through communicative gestures in distress towards their community. Man's superiority is shown in killing those kind

words. **Could any of these mammals be more intelligent than man? Certainly, the most common argument in favour of man's superiority over them that we can kill them more easily than they can kill us is the least satisfactory.** On the contrary, the more we discover about these remarkable creatures, the less we appear superior when we destroy them.

creatures. The more man knows about them, the more he loves them.

Exercise 1

Work in pairs. Write the précis of the following paragraph and suggest a suitable title. Remember to use steps given above. After completing, share the précis with your partner.

Trees give shade for the benefit of others, and while they themselves stand in the sun and endure the heat, they produce the fruit of which others profit. The character of good human is like that of trees. Sandalwood, the more it is rubbed, the more scent does it yield. Sugarcane, the more it is peeled and cut up into pieces, the more juice does it produce. What matters whether other people praise them or not? What difference does it make whether they die at this moment or whether lives are prolonged? Happen what may, those who tread in the right path will not set foot in any other. Life itself is unprofitable to a human being who does not live for others. To live for the mere sake of living one's life is to live the life with no purpose.

Note for teacher: Explain each step of précis writing in the class. Next, divide the class in different pairs for completing Exercise 1. Walk around the class and assist students who need your help. Ask them to share your work with their partners so that they may check each other's work. Then, tell them to incorporate the suggestions of their partners.

4.3 ORAL COMMUNICATION

Presentation and Explanation of One's Point of View

Here are some possible ways to present and explain one's point of view clearly.

Some ways of expressing one's point of view

- | | |
|---|---|
| <ul style="list-style-type: none"> • In my opinion... • I think that... • I would say that... • I consider / find / believe / suppose that... • I have the feeling that... | <ul style="list-style-type: none"> • As far as I'm concerned... • It is my impression that... • Speaking personally... • My own / personal opinion on the subject is that... • I am of the opinion that... |
|---|---|

Exercise 1

Practise the following dialogue in groups of three. Three friends, Babar, Akmal and Zeeshan, were discussing about their future plan after completing intermediate. One dialogue has been left blank for each of the character. Each one should think of one more dialogue related to situation and say it; the others can agree or state another view point.

Babar: Medical is a nice field to join after intermediate.

Akmal: I think that engineering is a perfect one.

Zeeshan: I neither like medical nor engineering. Speaking personally, I would like to go for legal studies.

Babar: In my opinion, there are many diseases by which people get sick and die ultimately. Hence, we should opt for medical to help to recover poor and needy people.

Akmal: I agree with Babar. The service of humanity can only be possible by joining medical field.

Zeeshan: You are right Akmal. But, I am of the opinion that if we don't have legal consultants, the rights of people would be violated everywhere.

Exercise 2

Two dialogue activities should be presented in the class. The topics must be of any common interest like:

1. Personal Business and Employment
2. Manual Book Readings and Digital Readings

Note for teacher: Divide the students in groups of 3. Ask each one to take the role of one character. Tell them to first read the dialogue silently and to think of one dialogue that they would like to say. Then, they should role play by not reading the dialogue but speaking to each other and ask them to respect each other's point of view. Afterwards, ask some of the groups to come and speak their dialogues in front of the class.

4.4 GRAMMAR

Preposition

A preposition of time allows discussing a specific time period such as day, date, on the calendar, one of the days of the week, or the actual time something takes place. Such as *on, in, at, since, for, ago, before, to, past, to, from, till / until, by*

Example: My friend lives **at** Saddar **in** Karachi.

While the preposition of movement or direction shows movement from one place to another place. Such as *above, across, after, against, along, around, behind, below, beside, between, by, down, from, in front of, inside, into, near, next to, onto, out of, outside, over, past, round, through, to, towards, under, up*

Example: Shireen is coming **from** Japan.

Exercise 1

Work in pairs. Look at the picture below and illustrate the use of prepositions of place and time and fill in the blanks. After completing, share your work with your partner.

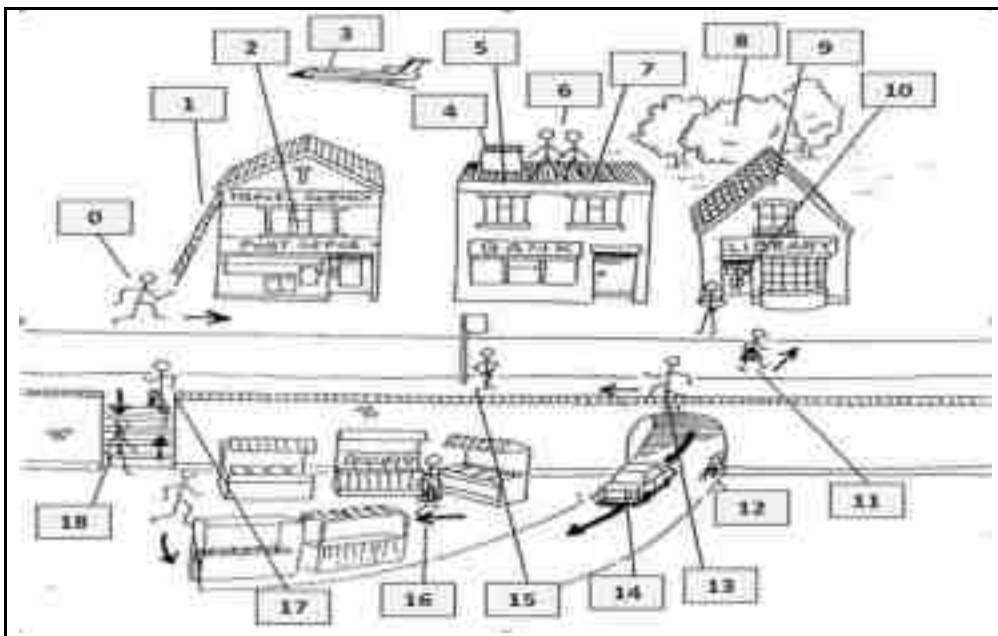


1. There is a doll _____ the sofa that was purchased _____ Monday last.
2. There is a ball _____ the table. It will be taken to play _____ half an hour.
3. There is a cat _____ the armchair.
4. There is an apple _____ the table.
5. There is a dog _____ the table.
6. There is an umbrella _____ the sofa.

7. There is a picture _____ the wall.
8. There is a vase _____ the table.
9. There a robot _____ the floor.
10. There is a car _____ the armchair.
11. There is a lamp _____ the sofa and will be lit _____ 10 pm.
12. There is a teddy _____ the armchair. It will go to sleep _____ 11 pm.

Exercise 2

Work in pairs. Look at the picture below and illustrate the use of prepositions of place & movement and fill in the blanks. After completing, share your work with your partner.



0. He is walking _____ the post office _____ the bank.
1. The ladder is standing _____ the wall.
2. The post office is _____ the travel agency.
3. The aeroplane is flying _____ the town.
4. The bank is _____ the post office and the library.
5. My flat is _____ the bank.
6. They are standing _____ the building.
7. The flat is _____ the park.

8. The park is _____ the library.
9. The library is _____ the bank.
10. He is standing _____ the library.
11. She is walking _____ the road.
12. They are sitting _____ the bridge.
13. He is walking _____ the road.
14. He is driving _____ the bridge.
15. The bus stop is _____ the bank.
16. She is walking _____ the market.
17. She is walking _____ the stairs.
18. He is walking _____ the steps.

The table below describes some of the prepositions most commonly used with verbs: *for*, *to*, *about*, *with*, *of*, *in*, *at*, *on*, and *from*.

Verb + Preposition	Usage	Example
Verb + <i>for</i>	Often used to emphasize purpose or reason.	beg for ask for
Verb + <i>to</i>	Usually refers to direction (literal or metaphorical) or connections between people or things.	belong to travel to
Verb + <i>about</i>	When referring to things, events, or gerunds.	ask about write about
Verb + <i>with</i>	Usually point to connections and relationships between people or things.	agree with compare with
Verb + <i>in</i>	Tends to point out involvement or connections between people or things.	believe in result in
Verb + <i>at</i>	Used to indicate places, skills, and reactions.	arrive at look at
Verb + <i>on</i> / <i>of</i>	Used with a number of different verbs.	agree on comment on
Verb + <i>from</i>	Used to identify a point of origin or a connection or disconnection between people or things.	differ from suffer from

Prepositional verbs always take a *direct object* (either a *noun* or *gerund*) after the *preposition* and cannot be separated by it. For example:

- i. "He **listens to** classical music every night." (Correct — the prepositional verb is not separated, and the object comes directly after the preposition.)
- ii. "He **listens** classical music every night." (Incorrect — the verb *listens* requires a preposition to connect to its object, *classical music*.)
- iii. "He **listens** classical music **to** every night." (Incorrect — *listens* and its preposition *to* cannot be separated by the object, *classical music*.)

Exercise 3

Now, work individually and fill in the gaps with the verbs followed by appropriate prepositions to complete the sentences given below. You can choose from the above given table.

- i. Since Sara is arrogant, she never _____ her rude behaviour.
- ii. The luggage _____ the man in black hat.
- iii. She _____ the second chance to rectify her mistake.
- iv. Last year, Moiz _____ Mirpur Khas and stayed at his home town for a month.
- v. In today's session, he _____ the current situation of Pakistan.
- vi. The committee _____ Mr. Ali Miral, Mr. Zohair Anees, and Ms. Saima Huq.
- vii. The nation _____ the inflation and poverty.
- viii. The Prime Minister did not _____ his cabinet's opinions.
- ix. When she participates in races, she only _____ the time.
- x. Now, it is the time _____ as many companies as possible.

Prefix

A prefix is actually an *affix* which is placed before the *root* word. Adding it to the beginning of the *root* changes it into another word.

For example, when the *prefix* **un** is added to the word **happy**, it creates the word **unhappy**.

Here are few examples to demonstrate how placing a prefix before a root word develops a word with a new meaning, which is synthesis of the both words - prefix and root.

Prefix	meaning	root word	meaning of root word	compound word after synthesis	meaning of compound word
bi-	twice	Polar	taking extreme position	bipolar	maniac
		Function	activity, purpose	bifunction	having two functions
		Annual	yearly	biannual	twice in a year
de-	opposite of	Pose	assume a position	depose	Remove
		Tour	journey	detour	deviation from a course
		hydrate	give water	dehydrate	loose water
dia-	thoroughly	meter	a specific measure	diameter	width of a circle
		gnosis	knowledge	diagnosis	identification nature of illness
inter-	among, between	national	relating to nation	international	between nations
		mingle	mix	intermingle	Mixed
		Face	surface of a thing	interface	connecting two things
en, em	cause to	Joy	happy	enjoy	cause to be happy
		pathy	of feelings	empathy	sharing of feelings
		lighten	cheers, brighten	enlighten	to have light or be cheerful
Sub	under	marine	sea	submarine	
		standard	a benchmark	substandard	below a benchmark
		Text	written material		unwritten meaning

Some more examples of formation of words by synthesis of prefix and root word are also given in the following matrix:

dis-	Opposite	disapprove, disinfect, disbelieve.
fore-	Before	foreshadow, foregoing, forecast.
in-	into, not	invade, inaccurate, incapable.
im-	into, not	implant, imperfect, improvisation.
mis-	Wrongly	misjudge, miscalculate, mismatch.
semi-	Half	semicircle, semiformal, semicolon.
pre-	Before	pretext, prevent, pre-plan.
super-	Above	supersonic, superstar, superstore.
re-	again, back	revolutionary, reinforcement, rejoice.
non-	Not	nonsense, nonverbal, non-stick.
over-	too much	overload, overdose, overwhelming.
trans-	Across	transcend, transport, transfer.

Exercise 4

Now, work individually and fill in the blanks with the appropriate words in the box below. After you have completed, share your work with your partner.

forecast, disinfect, semiformal, nonverbal, biannual, rejoice, substandard

1. The cleaning staff _____ the area to avoid the spread of Corona Virus.
2. The problem is that he expected you to understand his _____ communication.
3. Her wedding was _____, so everyone just dressed neat and tidy.
4. Living conditions such as _____ housing have a major impact on health.



5. You have just _____ how quickly people would accept this information and how supportive they would be while learning to accept this "change."
6. The _____ dental and medical check-ups are offered if you take total coverage medical policy.
7. His victory was _____ by the political analyst due to his commitment and promises with the nation.

Exercise 5

Work in pairs and identify the words which have prefixes in any news from a newspaper which is provided by the teacher. After completing, share your work with your partner.

Note for teacher: Explain the difference between prefix, root-word, and suffix by giving more examples. Moreover, divide students in different pairs. News or any information which has such stuff can be collected from a newspaper or a magazine. Then, distribute it randomly among the students. Ask them to underline prefixes, root-words, and suffixes, and share with their partners after completing Exercise 5.