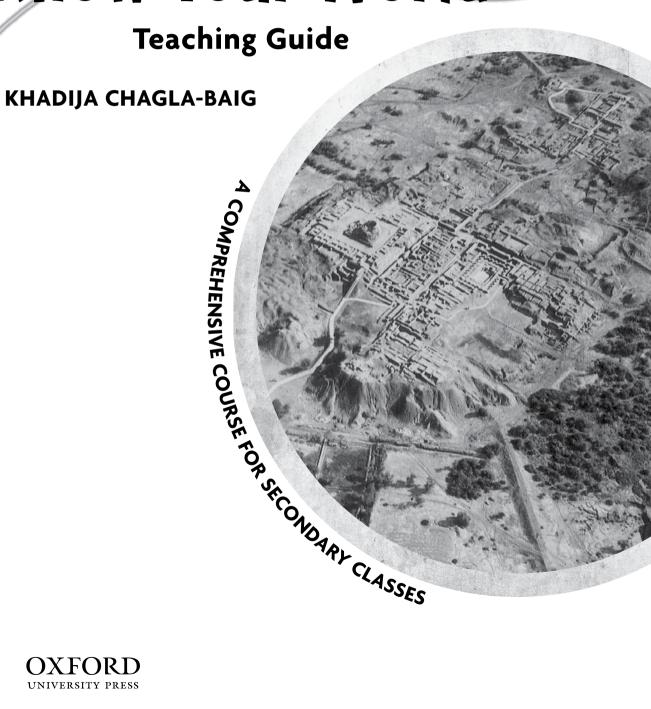


Know Your World





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Civilizations and Empires of South Asia

Discussion points

The Indian subcontinent is one of the most significant landmasses on Earth. It has appeared in historical accounts since ancient times. The subcontinent has always played host to people from outside who settled down here. The main attraction for most of the arriving people and invading groups has been the availability and abundance of natural resources. The subcontinent has always been a fertile landscape. Its fertile plains and numerous rivers support agriculture and hence, an abundance of food supports a large population.

It is important for everyone to know that the modern countries on the subcontinent share a history, and that one part has influenced another to shape the overall culture and traditions of the present.

The map of South Asia is to be used as a guide. Familiarity with the region will be helpful throughout the course. Use an atlas to show north, south, east, west, and central Asia.

Pakistan shares borders with Iran, Afghanistan, China, and India. These modern countries are all centers of civilization and history. Their influences can be seen in various parts of Pakistan.

ANSWER KEY

Content review

- 1. Pakistan, India, Bangladesh, Sri Lanka, Nepal, and Bhutan
- 2. Because basic resources for survival were available in abundance—water, flat land for farming; natural resources like coastlines, mountains, etc.
- 3. It helps us to:
 - i. understand how people, countries, and systems have evolved.
 - ii. know about the past of our own nation.
 - iii. find out how culture and traditions have developed.
 - iv. plan our future by learning from history.

Going further

a. Urdu, Sindhi, Punjabi, Pashto, Balochi, Brahvi, Gujrati, Hindko, Kashmiri, Seraiki, Afghani. There is a variety because people have come from different places and settled here.



Lesson Plans

Number of lessons: 3

Duration: 40 minutes each

Teaching Objective:

 To familiarize students with South Asia and its importance from ancient times to present

Learning Outcomes:

Students should be able to:

- identify the subcontinent with its modern divisions
- explain why the subcontinent played host to arrivals

Resources: Textbook and atlas

Lesson 1—South Asia, the subcontinent, and Pakistan

Introduction and vocabulary (10 minutes):

Introduce the topic by asking students what they know about Pakistan and its neighbours. Ask them what they know about or if they have visited any of the neighbouring countries. Give them a brief synopsis of what they will be studying in the next 25 minutes. Read and explain the new vocabulary.

Explanation (25 minutes):

Read from the text and give parallel explanation. Ask students to open to the map of South Asia and locate Pakistan. Point out the neighbours. Tell them that the old name of Iran was Persia, while Myanmar was previously known as Burma. Trace out the routes and connections between north, south, central, east, and west Asia. Ask students to mark them on the map for easy reference later on.

Draw a cauldron on the board and explain how gold and other metals are melted in a cauldron or pot and then shaped into desired pieces of jewelry. The metals once melted and mixed, take on a new look—appearance, shape, colour, and texture.

In the same way, different cultures in one place mix together, and after many years, they form a single culture or way of life that has absorbed all others. This is what happened in the subcontinent as well. A variety of arrivals brought with them many new ways of life. In addition, the arriving people also adopted the local customs. This is how many cultures have evolved through time and the process continues.

Conclusion (5 minutes): Recap and review the lesson highlighting the main ideas. Answer student queries, if any.

Homework: Questions 1-3 of *Content review*.

Lesson 2—Timeline of arrivals

Teaching Objective:

• To provide an overview of all the arrivals in the subcontinent from the earliest known times

Learning Outcome:

Student should be able to explain why there is a diversity of religions and cultures in this part of the world

Introduction and explanation (10 minutes):

Discuss the timeline spread on pages 2 and 3 with students. Read the names of all the arrivals with students and refer to the map to look at the routes they may have taken. It would be a good idea to make students write the names of these groups of arrivals on the map to show which ones came from outside the subcontinent.

Conclusion (5 minutes):

Preparatory talk for the next lesson–People of the Indus. They are the first of the known settlers in this region. This is why we study about them. This civilization is shared by Pakistan and India, and the influences of this civilization can be seen in both countries. Many artifacts from this civilization are part of both Pakistani and Indian national museums.

Class work: Explain the format and questions to the students.

Instructions: 5 mins

Task: 20 minutes

Resources: Worksheet (blank map.) Use your atlas.

- (a) Mark the following: Pakistan, India, Nepal, Bangladesh, Sri Lanka, and Bhutan.
- (b) Colour the Arabian Sea blue.
- (c) Highlight the subcontinent with a yellow colour pencil.
- (d) Mark the directions from where different arriving groups came.

Project/activity

Make a bookmark with the timeline of the subcontinent. Write the names and years of all the groups of people you will be studying about in this book. You can keep it in your textbook throughout the term.

This project can be done in the class or at home, depending on time availability and constraints. Let the students be creative but emphasize on the importance of using correct information. They can make the bookmark in the conventional rectangular shape or cutout other shapes, but keep them to a manageable size. They should preferably work with recycled raw material like cardboard





from shoeboxes or used cartons, washed tetrapak milk cartons, etc. Alternatively, they can get chart paper. Similarly, for strings they can reuse ribbons or strings from gifts and parcels.

Lesson 3—Worksheet/assessment sheet

Teaching Objective:

• To assess students' understanding and retention of key concepts through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries

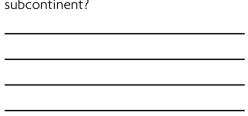
Class work (35 minutes): Use worksheet on next page.

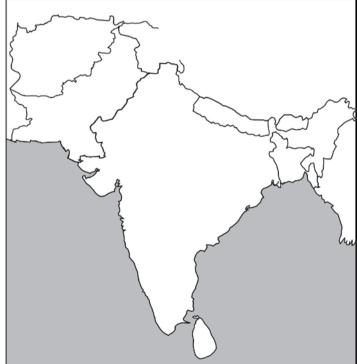
WORKSHEET

Name: ____ Date: _____ 1. Fill in the blanks. A ______ is a distinctive mass of land that makes up a large part of a continent. The Indian subcontinent is a region with _____ resources. b) c) The subcontinent was always able to support large ______. China is located in the ______ of the subcontinent. d) An environment in which different people, cultures, and lifestyles are mixed together, is called a _ Underline the true statements. 2. Arabian Sea is in the south-west of the subcontinent. The subcontinent was always a poor region with no natural resources. b) One of the reasons for studying the ancient history of the subcontinent is to know c) how we link to the past and how it has affected the modern world. CE stands for Common East. d) Aini and Goloo were scared by the frightening scenes they saw around them. 3. Give short answers. Why was the subcontinent able to a)

support large populations?

Why did people settle on the b) subcontinent?





People of the Indus and the Aryans

Discussion points

The People of the Indus settled on the subcontinent around 7000 BCE. Their first known settlement is at Mehergarh in Balochistan. Some of the artifacts discovered point towards their link to the rest of the civilization.

Mohenjo-Daro and Kot Diji in Sindh and Harappa in Punjab are estimated to be from around 2500 BCE. These were flourishing urban centers. Evidence includes ruins and artifacts recovered from these sites. The civilization is considered highly developed and prosperous.

Striking features of the civilization are (a) its unusual writing and (b) town planning. Archeologists are also wondering how the civilization came to an end. There are many theories regarding the end. Some say a disease wiped them out, others say invading Aryans drove them out but no evidence of fighting or war has been discovered.

Some archeologists believe environmental factors were responsible. As monsoons failed for an extended period, the River Saraswati dried up, and slowly the people were forced to abandon these cities and look for places that were more fertile. Another school of archeologists believed the cities underwent a cycle of progress and development and slowly died out as population spread to other parts of the subcontinent. So these cities were left behind and were slowly forgotten.

At present, these sites are internationally recognized as common heritage and important archeological sites.

The Aryans were a nomadic tribe living in Ural Mountains in modern day Russia. They were fierce by nature.

ANSWER KEY

Content review

I. Answer the following questions.

- Mehergarh
- 2. No weapons or drawings of battle scenes have been found.
- 3. What the writing means and how the civilization ended.
- 4. Where they came from, what they introduced to the IVC, how they treated the locals, what the modern Hindu religion owes to them.
- 5. Through their religious literature
- 6. Farming



- 1. The Aryans came from the Ural Mountains. **True**
- 2. They were basically traders who came to buy and sell goods. False
- 3. The Aryans introduced chariots and the use of bow and arrow to this region. **True**
- 4. The language of the Aryans was Urdu. False
- 5. The Aryans did not encourage religion. False

Going further

- a) Open ended question—judge answers with reference to text.
- b) Refer to points given on pages 3 and 4.

Challenge

because the civilization died out and was never revived.

Lesson Plans

Number of lessons: 5

Duration: 40 minutes each

Teaching Objectives:

To introduce students to

- the earliest traces of civilization in the subcontinent
- the beginning and development of the Indus Valley Civilisation, its salient features and its decline
- the arrival of the Aryans, how they influenced the lifestyle of the locals and what they introduced to the region
- the beginning of the Caste system, early form of Hinduism, and Aryan influence on the subcontinent, especially on modern India

Learning Outcome:

Students should be able to describe the Aryans and explain how they influence or connect to the present.

Resources: Textbook, text, map, illustrations/drawings

Additional resources If the school has a computer lab or multimedia facilities, the following documentaries would enhance learning and understanding. It could be done as an activity or part of classroom teaching. Students should be shown the videos and then asked questions about what they saw. Reading from the text and explanation would reinforce the documentaries.

http://www.pbs.org/thestoryofindia/timeline/1/

http://www.youtube.com/watch?v=Bq5Mu-SGsVc

http://www.youtube.com/watch?v=46vlmIZl8Xk&feature=related



Lesson 1—People of the Indus

Teaching Objective:

 To introduce students to the beginning and development of the Indus Valley Civilization (IVC), its salient features, and its decline

Learning Outcome:

Students should know about the IVC and how it influences or connects to the present.

Introduction (10 minutes):

A brief summary/background telling the students that they will be learning about the IVC and Aryans as they are the first known civilization and arriving group respectively. Vocabulary words from Glossary/Chapter 2/page 120, should be used to explain the key concepts. A recap from the previous lesson's conclusion can be used as introduction.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Create interest by asking students to look at the pictures in the book and discuss it with them. Discuss the map and make them realize that they are parts of a great heritage. Talk about how the people of the Indus have contributed a lot to the modern subcontinent in terms of farming methods and planning of towns and cities. The artifacts and remains found in all Indus Valley sites are evidence that it was a flourishing civilization with a high level of development in town planning, art, craft, architecture, and trade. This meant that there were many professions and skills involved. Let them know it was a peaceful civilization with no signs of wars and battles, probably because they were involved in constructive work and professions.

Conclusion (5 minutes):

Discuss the end of the civilization. Ask the students to ponder on why they think the IVC came to an end. Ask them what they think would have happened had this civilization continued to flourish. Make them think of answers to stimulate learning. There should be no right or wrong answers here.

Homework: Read the topic. Mark difficulties, if any.

Lesson 2—Written work

Teaching Objective:

To reinforce concepts about the Indus Valley Civilization through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries

Class work (35 minutes): Questions 1, 2, and 3 from *Content Review* Exercise a from *Going Further*

Homework: Complete class work

Lesson 3—The Aryans

Teaching Objectives:

To introduce students to

- the arrival of the Aryans, how they influenced the lifestyle of the locals, and what they introduced to the region
- the beginning of the caste system, early form of Hinduism, and Aryan influence on the subcontinent, especially on modern India

Learning Outcome:

Students should be able to describe the Aryans and explain how they influence or connect to the present

Introduction (10 minutes):

One theory among archeologists is that the people of the Indus may have been attacked and destroyed by a group of stronger people, the Aryans. Give a brief summary/background telling the students what and why they will be learning about the Aryans. They were a fierce group of people who came down from the Ural Mountains in Russia. Ask the students look at the map of Russia and locate Ural Mountains and the Hindukush, chalking out the route of the Aryans.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Living on mountains is tougher than living on flat land and there are lesser resources available on mountains. The Aryans were basically nomads, i.e. people who wander from place to place in search of food and shelter, just like campers. This lifestyle had made them harsh and aggressive.

When they came down to the Indus valley, they realized that this was the perfect place to settle and they did not have to go any further for food and shelter. They killed many of the people of the Indus and enslaved others. The word Aryan means 'of high descent.' Because they were taller and fairer than the locals, they thought they were superior to the locals, whom they called 'dasa' or enemy.

Gradually, the Aryans adapted themselves to living in one place. They adopted local farming methods and introduced: (a) religion, which is the basis of modern day Hinduism in India, (b) the caste system in which the stronger Aryans were at the top of the ladder. They called themselves Brahmins. Next in line were the Kshatriyas or the defenders. The third group were Vaishiyas who were craftsmen, traders, and farmers. The Shudras or the outcasts were the last and the most inferior group. They comprised of the locals.

Conclusion (5 minutes):

End on the merging of the ancient Aryan religion into modern day Hinduism. Tell students about the existence of the caste system in parts of India. Question them about how they would feel if they were born a Shudra. At this point, also mention Buddhism briefly. It will serve as a link to the next chapter.

Homework: Read the topic. Mark difficulties, if any.



Lesson 4—Written work

Teaching Objective:

• To reinforce concepts about the Aryans through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions: 5 minutes

Written work: 35 minutes

Class work: Questions 2, 3, and 4 from Content Review Exercise b from Going Further

Homework: Complete class work

Lesson 5-Worksheet/assessment sheet

Teaching Objectives:

 To assess students' understanding and retention of key concepts about the IVC and the Aryans

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries

Class work (35 minutes): Use worksheet on next page.

Project/Activity:

Role-play: Aini's notes on page 11 of the text book can be used as an activity for role-play. The scene can be depicted as it is. Old cartons and news papers can be painted and used to show the surroundings and houses. Blue crepe paper or cloth can be used to show the river. Boys can wear robes (they can improvise on their parents' kameezes) girls can wear skirts and jewelry. Show farmers, different craftsmen, and other workers carrying on their daily chores. Each character can come forward and describe her/himself and explain a bit about the civilization.

WORKSHEET

Date: 👝	Name:
Q 1. Giv	e short answers.
a)	What does the word Mohenjo-Daro mean?
Ь)	Which was the most superior group within the caste system?
c)	What did the Aryans introduce to the people of the Indus Valley?
d)	What is 'Veda'?
e)	Name the important cities or urban centers of the Indus Valley Civilization.
Q 2. (a)	Write down any three important features of the Indus Valley Civilization.
(b)	Why do you think these features are important?

HISTORY

- Q 3. Fill in the blanks:
 - a) The people of Harappa were _____
 - b) Much of the present day culture in India and Hinduism can be traced back to the
 - c) The Aryans came down to the Indus Valley region through the _____ Mountains.
 - d) The Ural Mountains are located near modern ______.
 - e) The People of the Indus earned through trade and ______.
- Q 4. Choose the correct answer and write it in the blank:
 - a) Anything that gives people reason to believe something _____ (evidence, trust, faith)
 - b) Income from taxes _____ (gift, revenue, budget)
 - c) Worked out the meaning of something written in code or unusual language _____ (help, struggle, decipher)
 - d) To grow or develop strongly _____ (permit, flourish, perish)
 - e) Bring back to life _____ (revive, invite, refuse)
- Q 5. Label the pictures below.









Buddha and Buddhism

Discussion points

Buddhism began in the 5th century BCE. The story of Siddharth in the textbook serves as the foundation for explaining the concept of Buddhism. The suppression of the Shudras in the caste system served as a means of popularizing Buddhism in the subcontinent. Buddha's personality and sincerity was the other main factor that encouraged people to enter it in great numbers.

Students should be told that Buddhism is actually a way of life, peace being its main objective. It is not a divine religion, and it came much before the arrival of Islam. It would be wise to point out that Islam is the most recent of all religions. With a book, a Prophet (PBUH), and complete tenets, it is a complete religion. Islam also stresses on peace and harmony among mankind. This is important because some students ask questions that call for comparisons between religions.

Siddharth was destined to be a holy man and despite King Suddhodhana's efforts to keep him away from the misfortunes of the world, he managed to see life in four forms: old age, illness, death, and asceticism. All these sights affected him and he became restless because he could not accept the inequality between what went on inside the palace and outside of it. He wanted to find out the reason for this disparity as well as the reason for people being in misery, both physical and mental. He started deep meditation and wandered around with bare minimum possessions seeking answers.

He finally found the answer to his question while meditating under the Bodhi tree (this kind of tree came to be known as a Bodhi tree or the tree of wisdom.) After many years of asceticism and enquiry, Buddha finally came up with his eight-fold path guiding people towards contentment and peace—both inner and outer. A great number of people, especially the Shudras, welcomed his message. Even after Buddha's death, Buddhism continued to spread far and wide.

ANSWER KEY

Content review

- 1. Siddharth
- 2. Answer should mention Siddharth's lineage, events at his birth, and early life in brief; this should link to what happened when he went outside the palace.
- 3. Dharma means the eternal law which the universe follows. Good actions which support the universal law are also known as Dharma. Karma means all those actions of a person which affect his fate in this life and the next.



Going further

a. Open ended question; answers may vary. Key ideas should include respect, inner peace, position in society, happiness.

Challenge

Open ended question. Use to generate discussion. Maybe because they were proud and arrogant, and wanted (a) to be famous and (b) to impress their people and other rulers.

Lesson Plans

Lessons: 3

Duration: 40 minutes each

Lessons 1 and 2—The story of Prince Siddharth and the beginning of Buddhism Teaching Objectives:

To introduce students to

- Buddhism-who started it and how it began
- teachings of Buddhism, reasons for its acceptance and popularity
- major Buddhist centers of the world

Learning Outcomes:

Students should be able to:

- describe Buddha-his life (in the palace and afterwards), and his teachings through Buddhism
- identify reasons for the spread of Buddhism and its popularity

Resources: textbook—text, map, illustrations/drawings

Introduction (10 minutes):

Show a picture or statue of Buddha and ask students if they have heard of Buddha and /or Buddhism. Then give them a brief summary/background about Siddharth and Buddha. Vocabulary words from Glossary/Chapter 3/page 140, can be used to explain the key concepts.

Explanation (25 minutes):

Read the story. It is self-explanatory as far as the facts are concerned.

Prince Siddharth grew up in the palace amid comfort and luxury. He was surrounded by court doctors who had the strictest orders not to let him fall and in case he had a minor problem, to treat him immediately without letting him suffer. He was not allowed to see any sick patient or poor people. All kinds of material blessings surrounded him–food, clothes, entertainment. Yet there were times when Prince Siddharth would feel sad but he could not understand why. Can you imagine he did not know that there was life and people outside his palace?

His life changed when he went outside the palace for the first time. That is when he realized what had been missing from his life—the feelings of loss, poverty, illness, self-sacrifice, etc. This event changed him completely. He left his young wife and newly born son in the palace and departed with a trusted companion. For many years, he wandered barefoot in the forest, eating once in a day or two—a simple meal with little water. He was on the search for peace within oneself. He would meditate or think a lot. During one such meditation under a tree, he came up with the answer—one can only attain complete peace or *nirvana* by doing good to others and giving up selfish material desires.

Conclusion (5 minutes):

Ask students to close their eyes for two minutes, forget everything, and relax. At the end of the two minutes, ask each of them how it felt. Did they concentrate on any idea? Did they feel peace? Did ideas come flooding in? Tell them that our daily prayers are also meditation—a highly effective form. Meditation helps in clearing one's mind and achieving inner peace. It calms people down.

Homework:

- a) Read the topic. Mark difficulties, if any.
- b) Practice five-minute meditation at home—after waking up in the morning or before going to sleep.

Lesson 3-The eight-fold path, spread of Buddhism and Buddha's death

Teaching Objectives:

- To introduce students to Buddha's teachings—the eight-fold path
- To make them aware of how Buddhism spread, where are the major Buddhist centers of the world and
- Explain the death of Buddha.

Learning Outcome:

Students should be able to describe key concepts in Buddhism and trace its spread

Resources: Textbook, text, map, illustrations/drawings

Introduction (10 minutes):

Ask students about their meditation exercise. Ask how they felt. What kind of ideas came to their minds? Did they think about their past actions? Did they think about their future? Were the thoughts negative or positive? Give students five minutes to read the flow diagram of the eight-fold path on their own. Ask them what they can make out of it and discuss it with them. Give a brief summary of the eight-fold path.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. During one such meditation under the Bodhi tree, Buddha came up with the answer—one can only attain complete peace or nirvana by doing good to others and by giving up selfish material desires.



In due time, he came up with his eight-fold path which teaches eight ways to achieve peace. Buddha also believed that all men and women were created equal and had equal rights. As Buddhism grew popular, more and more Shudras became Buddhists because they were fed-up and disheartened by the way members of the higher castes treated them. Hence, they all willingly entered the fold of Buddhism.

Tell students how each of these eight points are important to mankind as a whole and not just part of any one religion. *Karma, dharma, nirvana,* and *samsara* are the key ideas or philosophy of Buddhism. They emphasize the consequences of human actions. If you do good, it comes back to you, either in this life or the hereafter.

Conclusion (5 minutes):

End with this quote to emphasize on how correct thoughts can influence our lives:

"Watch your thoughts, they become words.

Watch your words, they become actions.

Watch your actions, they become habits.

Watch your habits, they become your character.

Watch your character, it becomes your destiny."—Anonymous

Homework: Questions 1, 2, and 3 of Content review. Exercise from Going further.

Lesson 4—Worksheet/assessment sheet

Teaching Objective:

 To assess students' understanding and retention of key concepts about Buddha and Buddhism

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries

Class work (35 minutes): Use worksheet on the next page.

WORKSHEET

Date	e:	Name:		
Q 1.	1. Fill in the blanks.			
	a)	Buddha was born in BCE.		
	b)	King and Queen were Buddha's parents.		
	c)	Siddharth was the prince of		
	d)	Siddharth realized that humans suffered because of their		
	e)	Buddha died in BCE.		
Q 2.	Cho	ose the correct answer.		
	a)	Samsara means		
		i. Deathii. Rebirthiii. Popularity		
	b)	Good actions that support universal law are called		
		i. Nirvanaii. Dharmaiii. Moksha		
	c)	The word Buddha means		
		i. The enlightened oneii. The great oneiii. The peaceful one		
	d)	One of the reasons for the popularity of Buddhism was		
		i. Unpopularity of Buddhaii. Popularity of Hinduismiii. Unpopularity of the caste system		
Q 3.	Whi	ch countries have been the main centers for Buddhism in ancient and present times?		

HISTORY

Q 4. (a)	What did astrologers predict at Siddharth's birth?
(b)	Why did King Suddhodhana fear this prediction?
(c)	What measures did he take to protect Siddharth?

Q 5. Find 10 words from the text in the exercise below. You may find more than one word in a line.

Word Search

WEKXIXNDCIOMKARMANDEDN

BYTSHPROFOUNDDWUTRSKPKN

AOKISMEDITATIONSDETIDERSP

ARCPOENCOUNTERMEDIALRTIC

TAHNSKSYADHARMAPSIQTAOL

NIRVANAUTSJKAP BUDDHALEO

BODHISUDDHODHANAMAYAOALA



CHAPTER 4

Persian Rule Under the Achaemenid Dynasty

Discussion points

The Persians ruled the area comprising modern day Iran, Afghanistan, parts of Central Asia, and the western parts of Pakistan. They were only able to conquer the western part because the fierce tribes (early Hindu /Aryan kingdoms) further east made invasion difficult, if not entirely impossible. Persian influences are still found in the north-western part of Pakistan, especially Baluchistan and Khyber Pukhtunkhwa.

Persian rule was consolidated by Cyrus the Great, who founded the Achaemenid dynasty. Although he made the effort to bring the subcontinent under his rule by sending small groups of people from his empire, he remained unsuccessful in his attempts. After his death, his son Cambyses inherited the kingdom but his focus was more towards the west of Persia and he managed to conquer Egypt and annex it to the Persian Empire. It was Cambyses' son-in-law, Darius the Great, who finally managed to conquer parts of Baluchistan and bring it under Persian rule.

The area that comprises modern day Peshawar (Purushapure), Charsadda (Pushkalavati), Taxila (Takhshashila) ,and some parts of Afghanistan, was known as Gandhara province. It was the most flourishing region of that time in terms of prosperity, learning, education, arts, crafts, trade, and good governance. Situated on a trade route between India (east) and Persia (west), it became the melting pot of ideas from the east and west.

ANSWER KEY Content Review

I. Answer the following questions.

- 1. Taxila. Peshawar. Charsadda.
- 2. Key words: center for trade and learning; on the trade route; university; part of the postal system.
- 3. They were conquered by the Greeks.

II. Fill in the blanks to complete the sentences below.

- 1. The Achaemenid Dynasty was founded by Cyrus the Great.
- 2. The capital of Gandhara was Taxila.
- 3. Darius divided his empire into provinces called satrapies.



Going further

 a. Open ended question. Advantages include learning, flow of new ideas, improvements, exchange of cultures. Disadvantages include adopting negative traits from cultures, changes in value systems, some people may develop prejudices.

Lesson Plans

No of lessons: 3

Duration: 40 minutes each

Lesson 1—The Persian Empire and the Achaemenids

Teaching Objectives:

To introduce students to

- the Persian Empire
- the contribution of the Achaemenid Dynasty to Persia and subsequently to the subcontinent

Learning Outcome:

Students should be able to know about the importance of Persia and its influences on the subcontinent.

Resources: Textbook, text, atlas, map, illustrations/drawings

Introduction (10 minutes):

Show students the map of the Middle East in the atlas and locate Iran. Discuss the location with reference to the subcontinent, especially Pakistan. Find Peshawar, Charsadda, and Taxila. Briefly explain the need to study this empire. Iran shares a border with the subcontinent. The Persians came as far and this region was the farthest, yet the most prosperous province of the glorious Persian Empire.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. The Persian Empire is probably the first recorded/known empire in History. An empire is a group of countries or states or lands under a single ruler. It is usually created when a ruler or group of rulers conquer other countries and annexe or join it to their own kingdoms. There may have been other empires earlier, but Cyrus the Great's Achaemenid Dynasty is believed to be the first significant empire.

The Persian Empire consisted of modern Iran, Afghanistan, and Central Asia. Pakistan and Iran meet at Pakistan's western borders in Baluchistan. This is why it was easy for Persian rulers to conquer these areas as compared to other parts of modern day Pakistan.

The Achaemenid Dynasty was instrumental in bringing about progress and development in its areas, largely under the rule of their most important king, Darius.

Darius was a wise and astute ruler who believed that his kingdom was a gift to him by Ahura Mazda, the god of the Persians. Hence that made him god's representative on land and he made great efforts to bring peace and prosperity to the regions. He constructed roads and started a postal service that greatly enhanced trade.

The Persian Empire is also noted for its respect for local customs and cultures as well as for human rights. It was the largest ever empire in the world until then and the Persian rulers kept it together by allowing distant satrapies to follow their own religion and culture. They did not impose their religion on any area they conquered.

Conclusion (5 minutes):

Review the chapter, highlighting key points like why are the Persians important for the subcontinent, even though they were here for a short while, and only in a small area in the western part of Pakistan. Discuss why Khyber Pakhtunkhwa was most influenced by the Persian Empire.

Greeks defeated the Persians under their leader Alexander the Great. Alexander conquered all areas under the Persian Empire. He entered the subcontinent from the west and went as far north as Swat. He conquered Jhelum and Taxila in the center and Hyderabad in the south of Pakistan. We will discover more about him in the next chapter. Create excitement and motivation for students to learn more about the subcontinent.

Activity: Aini's notes can be adapted as a short play and used as introduction or conclusion.

Homework: Read the topic. Mark difficulties, if any.

Lesson 2-Written work

Teaching Objective:

• To reinforce key concepts about the Persian Empire through written work

Learning Outcome:

Students should be able to comprehend questions and find the answers.

Instructions (5 minutes): Explain the questions to students. Address any queries.

Class work (35 minutes): Question 1 of Content review and exercise from Going further

Homework: Question 2 of Content review

Lesson 3—Worksheet/assessment sheet

Teaching Objective:

To assess students' understanding of key concepts about the Persian Empire

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries

Class work (35 minutes): Use worksheet on next page.

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WORKSHEET

Date	e:	Name:
Q 1.	Fill i	n the blanks
	a)	The Persian Empire stretched from the Sea in the west to parts of Pakistan as far east as the region.
	b)	Zoroaster was a who was believed to be a prophet by the Zoroastrians.
	c)	The area around Peshawar, Afghanistan, and north-west Pakistan was called
	d)	Darius built a magnificent palace in, his capital city.
	e)	The Persians prayed to their god
Q 2.	(a)	How did Peshawar, Charsadda, and Taxila become part of the Persian Empire?
	(b)	Why was it easier for these parts to be conquered?
Q 3.	Wha	at were some major reforms carried out by Darius?
Q 4.	Why	did the Persian Empire:
	(a)	start weakening?

	(b)	come to an end?		
Q 5.	Cho	ose the correct answer:		
	a)	The Achaemenids were		
		Assyrians Persians Turkish		
	Ь)	Zoroaster was a		
		king magus prophet		
	c)	Persian rule started to after a series of wars with the Greeks.		
		decline strengthen flourish		
	d)	Alexander burnt down		
		Persia Persians Persepolis		
	e)	e) The most popular religion of the early Persians was		
	Buddhism Zoroastrianism Jainism			
Q.6.	e.6. Mark the following places on the map (Map at the beginning of the chapter to be inserted here)			
	Pesh	Peshawar, Charsadda, and Taxila		
	Out	line the boundaries of:		
	the Persian Empire with red, the Indus Valley region with green, the Gandhara region with yellow.			

Project/Activity:

Debate:

Base debate on students' answers to the Exercise in *Going further* regarding many cultures in one place. Divide class into groups for and against the topic. Number of students and organization at teacher's discretion.

Alexander the Great

Discussion points

Alexander was the son of Philip, the King of Macedonia. Both father and son shared the same dream—going east till they came to the end of the world, achieving conquests upon conquests, and be known as the king of the world. In those times, it was still thought that the world was flat and ended east in India.

King Philip was assassinated before he could achieve his dream. However, he had conquered Greece by then. Alexander inherited his father's kingdom and his dream, and thus began his 12-year journey in which he conquered as far east as north-west Pakistan—Jehlum, Taxila, and Multan in the Punjab region, and Hyderabad and Karachi in Sindh. However, he was unable to go any further because of resistance by fierce tribes. His army was also tired and weakened by the long campaign. The brave and valiant Alexander was broken and disappointed because he could not conquer India. His partial conquest of the subcontinent was his last significant achievement. He died on his return from the subcontinent to his capital.

His generals fought for his empire, which was finally divided into three parts. Seleucus got the bulk of Alexander's land which included the Indus Valley region.

ANSWER KEY

Content review

- 1. King Philip, Aristotle
- 2. His kingdom and dream to be the king of the world
- 3. He met resistance from local tribes and his army was tired and weakened.
- 4. It was divided among his generals.
- 5. (i) become influenced by Greek culture and customs

Going further

a. Open ended question—students will come up with their own ideas. Judge their answers for their relevance to Alexander's personality and other facts. Discuss them in class.

Lesson Plans

No of lessons: 3

Duration: 40 minutes each



Lessons 1 and 2—Alexander the Great

Teaching Objective:

• To introduce students to the arrival of Alexander in the subcontinent and its effects

Learning Outcomes:

Students should be able to:

- describe the reasons for Alexander's invasion of the subcontinent
- explain how he made way for later Europeans to enter India

Resources: Textbook, text, map, illustrations/drawings

Introduction (10 minutes):

Recap the last chapter. Explain that the Greeks were responsible for the downfall of the Persians after a decade of war on land and sea. Give a brief introduction of Alexander. Ask students if they know the local version of his name. Use the map to show Alexander's journey. Show students the map of Europe and locate Greece and Macedonia. Vocabulary words in Glossary/chapter 5/page 120 to be discussed.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Alexander was the son of King Philip of Macedonia. Both father and son possessed military intelligence and a passion to rule the world. King Philip annexed Greece to Macedonia and laid the foundation for the great Greek empire. After his death, Alexander became king and he carried out his father's mission of uniting the world in one great empire. He conquered Egypt, other parts of Europe and the Persian Empire.

In those days, it was widely believed and accepted that the entire world meant Europe, Africa, and Asia—upto modern day India and China. No explorer, discoverer, or conqueror had gone beyond western Asia. Alexander believed that if he kept moving eastwards from Greece, he would ultimately reach India and therefore, be called the conqueror of the entire world.

He and his men had also heard of the dangers of this regions—large, frightening animals with long noses which could kill people (elephants), fierce, aggressive tribesmen, and terrible heat and humidity. However, fearless Alexander marched eastwards with his army to conquer India after having conquered the Persian Empire. If you look at the map from Greece to India, you can see how far apart both countries are, and that too with contrasting landscape and climate.

Alexander arrived in India and continued going inwards. He made friends and allies with the local kings or rajas, who gave him tributes (gifts to rulers) of gold, silver, cattle, and other gifts. The most notable of them was Raja Ambhi. One strong king Porus rejected his rule and refused to give him tributes. Instead, he challenged him to a fight.

In the battle between Porus and Alexander, Porus had many advantages—he knew his land, he knew how to battle during monsoon rains, his army consisted of elephants and chariots. Alexander, on the other hand, had a weak and tired army, disheartened



because of continuous rains, floods, and the alien conditions. They had been on a campaign for months. Yet, they managed to defeat Porus and his army with clever planning by Alexander. He made a surprise attack on Porus's army camp on a night of terrible monsoon rain. He won this battle but was unable to go further because his men refused to go on.

Conclusion (5 minutes):

Alexander returned to his empire. He died in Babylon two years later. Some people suggest he was poisoned but nothing is proven. Archeologists are still looking for his burial place. Alexander's kingdom was divided between his generals as his son was to be born a few months after his death.

Homework:

- a) Read the topic. Mark difficulties, if any.
- b) Imagine you are a soldier in King Porus's army. Write an account of what happened on the night when Alexander's army attacked your camp.

Project/activity:

Role-play

Aini's note can be used for role-play. This can be used as either an introductory or a concluding activity to the chapter.

Lesson 3—Worksheet/assessment sheet

Teaching Objective:

 To assess students' understanding and retention of key concepts about Alexander in the subcontinent

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries

Class work (35 minutes): Use worksheet on next page.

Students can also be marked/assessed on Content review and Going further.

WORKSHEET

Date	e:	Name:	
Q 1. State whether true or false. If false, give the correct answer.			
	a)	Alexandria Bucephalus is a city Alexander founded in the memory of his father.	
	Ь)	King Porus ruled the Hellenic people in Greece.	
	c)	Aristotle had trained Alexander in military warfare and his father King Philip had educated him.	
	d)	After Alexander's death, his kingdom was divided among his three generals.	
	e)	Alexander conquered the Persians.	
Q.2	Wri	te the meanings of	
	a)	Inherited:	
	b)	Succumbed:	
	c)	Formation:	
	d)	Revolt:	

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Q 3. Give brief answers.				
a)	What is a phalanx?			
Ь)	How did Alexander spread Hellenism?			
c)	Why did Alexander have to go back to his capital after the battle with King Porus?			

Seleucus and the Mauryans

Discussion points

When Alexander came to the Punjab, he met a young, ambitious man called Chandragupta. Chandragupta—already inspired by the stories he had heard about Alexander's ambition, bravery, and military conquests—was thrilled at having met his hero. He wanted to have an empire of his own and started making plans. He had studied at the famous university of Taxila (constructed by Darius.) There, he met a tutor Kautilya who had walked out of the Nanda court of Magadha (present day Bihar) because the Nanda King had insulted him. Since that day, Kautilya had sworn to avenge his insult by the Nandas.

When Kautilya met Chandragupta at the university and learnt of his ambition to have an empire of his own, he became Chandragupta's advisor. They thought of many strategies and finally overthrew the Nandas and conquered Magadha.

Chandragupta wanted to gain control of more surrounding lands. Seleucus, Alexander's general in charge of the Indus Valley, felt greatly threatened as Chandragupta wanted his territory too. They moved towards a battle. Finally, they reached an agreement in which Chandragupta received not only land from Seleucus but also his daughter as a wife. Seleucus received a large number of war elephants, which were a sign of power and might in the subcontinent and a novelty for the Greeks. This deal benefitted both the leaders and there was peace and prosperity in the region for many years. The region became prosperous under Chandragupta's strict rule in which the spy system prevailed, and anyone found complaining about the emperor would be tortured or put to death.

After Chandragupta's death, his son Bindusara became the next emperor. However, he died after a brief rule and his son. Ashoka sat on the throne.

Ashoka was an ambitious and valiant king who wanted to extend his empire. However, his conquest of the kingdom of Kalinga (modern day Orissa) changed him. There was a lot of destruction and bloodshed during that war. Hundreds of thousands of people had died. Ashoka was moved by the suffering war had inflicted upon people and their families and regretted the bloodshed and violence. As atonement, he converted to Buddhism and spread the message of peace.

Despite his leniency, Ashoka was a very effective emperor who did a lot of good work for his people. He was tolerant, forgiving, and cared for his people. This made him very different from many rulers before and after him.

However, after his death, none of his successors were able to control the empire and it went into decline.

ANSWER KEY

Content review

- 1. Alexander the Great
- 2. Patna
- 3. Initially, Kautilya was a member of the Nanda court; he left after being insulted. He was Chandragupta's tutor at the university of Taxila. He guided Chandragupta on how to overthrow the Nandas and takeover Magadha. Without his help, the Mauryan Empire may never have been founded.
- 4. It went into a decline because his successors could not look after it.
- 5. Complete the following table.

	Chandragupta	Ashoka
Religion	Hinduism	Hinduism—later converted to Buddhism. Encouraged the spread of Buddhism
Attitude towards people	Strict, laws were harsh but fair; Killed or tortured anyone who went or spoke against him. People were made to work hard.	Was kind to his people; wanted to give them the best; Did a lot of good for his people.
Development in the empire	Lived a luxurious life, spent a lot on himself; Kept a huge army.	Welfare projects; lived a simple life; well trained army and navy.
Taxes	Taxed people heavily	Kept the rate of taxes very low
Name of successor	Died in 278 BCE and kingdom passed down to his son Bindusara.	Died circa 240 BCE and kingdom passed on to his grandson Dasaratha Maurya.

Going further

a. Students should be able to compare and contrast the two rulers with respect to their attitude towards people and development works.

Challenge

Chandragupta got land and Seleucus's daughter which strengthened his empire and control. Seleucus got 500 elephants and an emperor for a son-in-law. So each remained powerful, supported the other, and stopped feeling threatened.

Lesson Plans

Lessons: 3

Duration: 40 minutes each

Lesson 1—Seleucus and Chandragupta

Teaching Objectives:

To introduce students to

 the beginning of the Mauryan Empire—its link to the Greeks and how it was founded



Chandragupta's rule and its effects on the subcontinent

Learning Outcomes:

Students should be able to describe

- the founding of the Mauryan Empire
- Chandragupta's rule and personality

Resources: Textbook, text, map, illustrations/drawings

Introduction (10 minutes):

Study the map. Point out Magadha. Give a brief account of the creation of the Mauryan Empire and its ties to the Greeks. Link to the last chapter on Alexander. Remind the students that after Alexander's death, his empire was divided among three of his generals and Seleucus got the largest share. His territories included parts of Turkey, the Persian Empire, Afghanistan, and the Indus Valley.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Chandragupta was a wise and brave young man who was inspired by Alexander and his success. He aspired to become like him. With help from his tutor Kautilya, Chandragupta managed to overthrow the last of the Nanda kings of Magadha and installed himself as the new king—the founder of a new ruling dynasty called the Mauryans.

Chandragupta set the stage for development and progress in the subcontinent. Modern Hinduism grew stronger under his reign, as did Jainism. He was a strict ruler who set up harsh punishments in order to control people. He charged heavy taxes from the people and kept a large police force. Severe punishments were given to law breakers. The state owned all land, horses, and elephants. He brought new lands under cultivation and made people work harder. Despite the heavy taxes and strict police rule, the people and the empire prospered because the government encouraged trade by building roads and maintaining law and order.

Chandragupta practiced Jainism and starved himself to death in 278 BCE according to Jain custom. It is considered the best form of death in Jainism as it causes no harm to any living thing by being used as food.

Conclusion (5 minutes):

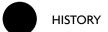
Bindusara succeeded him as the next Mauryan king but died within five years. His son Ashoka became the next king and it was under Ashoka's unique style of ruling that the subcontinent saw progress in terms of peace, learning, and state welfare. Conclude the lesson by telling students they will learn about Ashoka in the next lesson.

Homework: Questions. 1, 2, and 3 of Content review

Lesson 2—Ashoka and the end of the Mauryan rule in the subcontinent

Teaching Objective:

- To introduce students to Ashoka's rule in the subcontinent and his contribution to the spread of Buddhism
- To make them aware of the reasons for the downfall of the Mauryan Empire



Learning Outcome:

Students should be able to describe the Mauryan Empire and its significance

Resources: textbook, text, map, illustrations/drawings

Introduction (10 minutes):

Start by asking students to recall a time when they did something mean to a person and felt ashamed afterwards. Did they do anything to make up for this meanness? What did they do to make up? Did it make them feel better? Did it stop them from repeating their mistake? Introduce the story of Ashoka and his guilt at what he had done to the people of Kalinga and how it changed him for the rest of his life.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Ashoka was a brave and ambitious warrior. When he became emperor, he went to war against the Kalinga kingdom because it was a rich state. He killed and imprisoned hundreds of men, women, and children and captured all their treasures. However, he realized the enormity of what he had done and decided never to fight again. He became a compassionate ruler, yet retained his power and control over people.

He lowered taxes, stayed well informed about the happenings in his empire so that he could make things better for people, and introduced many reforms and welfare projects. He considered his people as his children. His other way of atoning for his sins was that he converted to Buddhism and encouraged its spread everywhere. Ashoka wrote edicts about character building and peace, sent missionaries to preach Buddhism, built stupas for meditation and worship, and monasteries for living. All these factors helped in strengthening Buddhism.

He had hoped that his descendants would rule fairly and peacefully as well but unfortunately none of them could keep up to Ashoka's or even Chandragupta's standards. Eventually the empire went into a decline and came to an end.

Conclusion (5 minutes):

Recap the main points of the chapter. Compare Chandragupta and Ashoka as rulers.

Class work: Question 4 of Content review

Homework: Question 2 of *Content review* and Exercise from *Going further*.

Lesson 3—Worksheet/assessment

Teaching Objectives:

 To assess students' understanding and retention of key concepts about the Mauryan Empire

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries

Class work (35 minutes): Use worksheet on next page.

WORKSHEET

Date	e:	Name:		
Q 1.	Who	o am I?		
Stud	ly the	e clues and write the correct names.		
	a)	a) I was a minister at the Nanda court. I was insulted by the king after which I left the court and swore revenge. Chandragupta was my student		
	b)	My father founded the Mauryan Empire. I ruled for a very short time; however, I conquered the Deccan part of India and annexed it to my father's vast empire.		
	c)	I studied at the famous university of Taxila. I couldn't believe my good luck at getting to meet Alexander in the Punjab. That is when I seriously decided to have an empire of my own with a well-trained army. I was lucky to find a tutor who helped me carry out my plans		
	d)	I was eager to conquer the rich Kalinga kingdom. I didn't care what it took to achieve my purpose. I killed many people, imprisoned some, and tortured many more. Seeing the destruction, I realized what I had done and regretted my actions.		
	e)	Chandragupta wanted to take away my lands. I decided I would fight him with all my might. We were equally matched. However, we decided to have a peace agreement instead of a senseless battle.		
Q 2.	Cho	ose the correct answer.		
	e)	e) Anatolia is in modern		
		i. Pakistanii. Turkeyiii. Iran		
	f)	Chandragupta founded the		
		i. Mauryan Dynastyii. Seleucid Dynastyiii. Bactrian Dynasty		

Photocopiable material

i.

ii.

g)

Chandragupta was Seleucus's

Father-in-law

Son in law

iii. General

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h) The last Mauryan emperor was		last Mauryan emperor was	
		i. ii. iii.	Bindusara Brihadratha Balwinder Singh
	i)	The	old name for the province of Balkh in Afghanistan is
		i. ii. iii.	Anatolia Bactria Persia
Q 3.	How	/ did	Ashoka spread his message of peace, good ruling, and kindness to people?
Q 4.	(a)	Why	y did the Mauryan Empire weaken?
	(b)	Why	y and when did the Mauryan rule come to an end?

HISTORY

CHAPTER 7

The Kushans

Discussion points

Many Greek soldiers from Alexander's army had stayed behind and settled in different parts of Asia, including the modern province of Balkh in Afghanistan (named Bactria by the Greeks) and Central Asia. As the Mauryans weakend, the Bactrian Greeks began to attack south Asia and set up their own rule as independent kingdoms. Soon, Central Asian people also followed suit; each group invaded and drove the previous one out. The Bactrian Greeks were driven out by the Shakas; the Shakas were driven out by the Kushans. The Kushans set up their empire, ruled for two centuries and brought about a lot of progress in the region.

Their rule started with their arrival under King Kadphises I; his son Kadphises II finally got rid of the Shakas and created the Kushan Empire. Emperor Kanishka took the empire to its peak. He made Peshawar his capital city and it became the center for learning, trade, and development.

ANSWER KEY

Content review

- 1. Central Asia
- 2. 200 years
- 3. Trade, art and architecture, new form of art: Greco-Buddhist, tolerance towards all religions, peace
- 4. Kanishka did not have capable successors

Going further

a. Open ended question. Some answers can be: peace in the region, less money spent on army, less taxes on people, money spent on welfare, sharing and spreading of ideas and culture, trade. Give a reflective question as clue/guideline: What do you think would have happened if Kanishka was a quarrelling/warring leader and neighbour?

Lesson Plans

Number of lessons: 2

Duration: 40 minutes each

Lesson 1—The Kushans and Kanishka



Teaching Objective:

To introduce students to the influx of Central Asians in the subcontinent

Learning Outcome

Students should be able to identify the influence of the Central Asians in the subcontinent

Resources: Textbook, text, map, illustrations/drawings

Introduction (10 minutes):

Give a brief introduction about Central Asians. Use the map to show Central Asia. After the Mauryan Empire, many hostile tribes attacked the subcontinent, most of whom had come from Central Asia. The reason was that the news of the fertile landscape, wealth, development, and progress of the subcontinent had spread far and wide and other groups wanted to obtain the riches of this regions. The first of such tribes were the Kushans.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation.

Kadphises I was the first Kushan ruler under whom this group of Central Asians entered the subcontinent. He laid the foundation for the Kushan Empire which was strengthened by his son Kadphises II. Kanishka was the most significant emperor under whom the Kushan Empire reached its peak.

Conclusion (5 minutes):

Talk about peace under Kanishka. Discuss what would have happened had he not maintained peaceful relations with his neighbours and trading partners like China, Rome, and Greece. Wars and battles would have been fought which would have resulted in death and destruction. No progress would have been made. But because of peace and good relationship, money was not wasted on going to wars. Borders were safe. There was exchange of ideas. Trade improved because of ease of movement through various territories.

Homework: Questions 1-4 of Content review, Exercise from Going further.

Lesson 2—Worksheet/assessment sheet

Teaching Objective:

To reinforce key concepts about the Kushans through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries

Class work (35 minutes): Use worksheet on next page.

Students can also be marked/assessed on Content review and Going further.

WORKSHEET

Date	e:	Name:			
Q 1.	Fill i	n the blanks.			
	a)	The were the first people from Central Asia to set up their own empire in the subcontinent.			
	Ь)	The Kushans entered the subcontinent through the mountains.			
	c)	The Shakas were defeated by			
	d)	The Kushan Empire lasted for only a after Kanishka's death.			
Q 2.	Q 2. Which of the following statements are false? Underline them.				
	a)	Kanishka was a cruel ruler.			
	Ь)	Kadphises I brought the Central Asians to the subcontinent.			
	c)	There was no development in the arts and architecture during Kanishka's times.			
	d)	People started worshipping Buddha as god during Kanishka's times.			
Q 3.	Ansv	wer the following questions.			
	a)	Why is Kanishka called 'second Ashoka'?			
	b)	What are stupas?			
	c)	Where was the tallest stupa of the world found?			
	d)	How did the Indian and Buddhist monks differ in their opinion about Buddha?			

The Guptas

Discussion points

The Guptas ruled from 321 to 500 ce and marked a distinctive era in History. Chandragupta I founded this empire. He, like Chandragupta Maurya, belonged to the kingdom of Magadha. The Guptas were visionary rulers. Their rule is said to be the Golden Age of India.

It is believed that they were from the Vaishya caste and wanted to assert their rule and power as a reaction towards the Brahmins and other cruel rulers.

ANSWER KEY

Content Review

- 1. Pakistan, India, Nepal, Myanmar, and Bangladesh
- 2. Chandragupta Gupta I
- 3. A Chinese traveler; ten years
- 4. Attacks by two major enemies—the Malwas and the Huns

Going further

a. (This table can also be used as a worksheet)

	Chandragupta I	Samudragupta II	Chandragupta II
Religion	Hinduism	Hinduism	Hinduism main religion, Buddhism next in popularity
Reforms, development, strengthening of state	Extended his empire to include Pakistan, India, Nepal, Myanmar, and Bangladesh.	Visionary leader, excellent military skills, let smaller rajas keep their states after conquering them, earned him respect	Focused on development instead of wars, trade encouraged, low taxes
Learning and education, art, and architecture	Mathematics, astronomy, literature, art	Mathematics, astronomy, literature, art, sculpting, medicine, surgery	Carvings in the caves of Ajanta and Ellora; poets Kalidas and Harisen
Successors	Samudragupta	Chandragupta II	Kumaragupta
Titles	King of Kings	Napoleon of Asia	Vikramaditya

Lesson Plans

No. of Lessons: 3

Duration: 40 minutes each

Lesson 1—The Guptas—background and Samudragupta

Teaching Objectives:

To introduce students to the Gupta rule in the subcontinent

Learning Outcomes:

Students should be able to:

- describe who the Guptas were and how their empire began
- describe the rule of Samudragupta

Resources: Textbook, text, map, illustrations/drawings

Introduction (10 minutes):

Talk about Chandragupta Maurya and Magadha to build up the link between the Mauryans and Guptas. The Guptas were not a tribe from outside the subcontinent. They also belonged to Magadha just like Changragupta. However, they were a clan of warriors interested in ruling the subcontinent. Emphasize that these two Chandraguptas were not related.

Explanation (25 minutes):

Explain that the Gupta Dynasty was founded by Chandragupta I, and was fortunate to have capable rulers. They all possessed the foresight and ambition needed to keep an empire in order, and brought in progress and stability. All of them focused on good governance and encouraged learning of traditional and new ideas. Various forms of art were encouraged.

Chandragupta's son Samudragupta added many new lands to his father's vast empire. Though many wars were fought in Samudragupta's times, they were less destructive as the ones fought in other rulers' times. Samudragupta was kind to the people of conquered lands and this earned him their respect and cooperation. Discuss what makes leaders popular with the masses and what do the people expect from their rulers. Emphasize on the agricultural nature of the economy in India during those days and describe how important it was for the peasants to have low taxes, good roads, peace, and security in the land.

Conclusion (5 minutes):

End of Samudragupta's rule and introduction to the next emperor—Chandragupta II. After Samudragupta's death, his son Chandragupta II (named after his grandfather) carried on his father and grandfather's legacies of good ruling.



Lesson 2—Chandragupta II, later Guptas and decline of the Guptas

Teaching Objectives:

- To introduce students to Chandragupta's rule in the subcontinent and its effects and influences
- To inform students about the reasons for the decline of the Gupta empire

Learning Outcome:

Students should know about who the Guptas were and how their empire began, developed, and ended

Resources:

Textbook, text, map, illustrations/drawings

Introduction (5 minutes):

Talk about Chandragupta II and his contribution to the subcontinent. Mention Fa Hien and what the Guptas owe to him for their popularity.

Explanation (30 minutes):

Text is short and self-explanatory. Discuss the illustrations and recreate scenes of the Gupta court. Talk about how education and learning benefits nations and civilizations. Chandragupta II strengthened trade ties with neighbouring states, made taxes and punishments less severe, and introduced many kinds of projects for public welfare. Scientists and artists were especially encouraged and popularized.

Among the many travellers who passed through the subcontinent was Fa Hien, a Chinese pilgrim. He stayed in this part of the world during Chandragupta II's rule. It is through his travelogue that we know details about the Gupta's time. According to him, it was a prosperous reign with 'mild administration.' During Chandragupta's rule, notable scholars like Aryabhata and Kalidas rose to prominence and their contributions to learning were acknowledged and appreciated. They were encouraged to share, discuss, and demonstrate their ideas at court and with the public.

Kumaragupta inherited his father's empire. He ruled for 40 years, and though he too carried on his ancestors' mission of good ruling, much of his time was spent in keeping his enemies in check—the Huns and the Malwas. Kumaragupta's son Skandagupta made great attempts to protect the Gupta empire from external attacks but finally they lost it to the Huns in 510 BCE.

Conclusion (5 minutes):

Discuss the reason for the decline of the Gupta Empire. Ask students to give their views on this dynasty; their opinion and suggestions. Compare it with the other ruling dynasties read so far. Make a list of all the positive aspects of Gupta rule. Bring their attention to the importance of good governance, public cooperation, and education in a society; even though rulers and empires come and go, their good work lives on. Have a discussion of what they liked the most about the Guptas.

Homework: Questions 1 and 2 of *Content review*. Read the topic. Mark difficulties, if any.



Lesson 3—Worksheet/assessment sheet

Teaching Objective:

 To assess students' understanding and retention of key concepts about the Guptas

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries

Class work (35 minutes): Use worksheet on next page.

Students can also be marked/assessed on completing *Content review* and *Going further*.



WORKSHEET

Date:	Name:
Q. 1 Giv	e short answers.
f)	Who founded the Gupta Dynasty?
g)	What do Chandragupta Maurya and Chandragupta I share in common?
h)	What was Samudragupta known as and why?
i)	By what other name was Vikramaditya known?
j)	Who was Aryabhata? List his achievements in the fields of learning and knowledge.
Q. 2 (a)	Who was Fa Hien?
(b)	Mention some of the positive and negative ideas he had about the Gupta empire?
Q. 3 Fill	in the blanks:
f)	The Guptas ruled from to BCE.
g)	Samudragupta was Chandragupta I's
h)	Fa Hien was disturbed by the mistreatment of the
i)	The cave temples at and are famous for their remarkable stone carvings.

	rite two sentences about each of the following people stating who they were and their portance:
f)	Chandragupta I
g)	Samudragupta
h)	Harisena
i)	Kalidas
:\	
j)	Chandragupta II

Q 5. Copy and complete the following table.

	Chandragupta I	Samudragupta II	Chandragupta II
Religion			
Reforms, development, strengthening of state			
Learning and education, art and architecture			
Successors			
Titles			

The Subcontinent in the Eighth Century CE

Discussion points

In the Eighth century, the subcontinent was divided into many scattered small kingdoms. Harsha was the only exceptional ruler who became famous for his good governance and tolerant attitude. He became the ruler after he defeated the Huns who had defeated the Guptas earlier. His empire broke into several small kingdoms after his death. He left behind no heir.

Amongst other significant rulers in this era was the Brahmins who ruled Sindh with an iron hand. They were powerful but extremely unpopular because of their cruelty towards the masses and inclination towards many crimes and vices. They also protected brigands and pirates. This resulted in (a) their downfall and (b) the arrival of Muslims in the subcontinent.

ANSWER KEY

Content review

- 1. Because of his good governance.
- 2. 41 years
- 3. It broke into several small kingdoms.
- 4. They were cruel and they patronized criminals.

Going further

- a. Peace and security, education, religious tolerance
- b. Open-ended question

Lesson Plans

Lessons: 2

Duration: 40 minutes each

Lesson 1—The subcontinent in the eighth century

Teaching Objective:

 To introduce students to the scattered kingdoms of the subcontinent and how they led to the beginning of Muslim rule

Learning Outcome:

Students should be able to describe the significance of these seemingly unimportant kingdoms and the result of their policies.

Resources: Textbook, text, map, illustrations/drawings

Explanation (40 minutes):

It is a small chapter and does not need a separate introduction and conclusion. Reading aloud from text and parallel explanation will be sufficient. Tell students about how India at this time was divided into several independent kingdoms. It was quite a contrast to the India in the Mauryan times when it was one united kingdom. This is why the law and order situation and the quality of life went down. Each small kingdom looked after its own interests. There was hardly any progress and development after Harsha.

Moreover, the rulers of the Brahmin dynasty, which ruled Sindh, were cruel and corrupt. Their excesses went unchecked and they became overconfident of their power. They made a major mistake—they supported and protected pirates and would get their share in the loot. This is what led to their downfall.

End on the question—how do you think Islam reached the subcontinent?

Lesson 2—Written work

Teaching Objectives:

- To reinforce key concepts about the subcontinent in the eighth century through written work
- To assess students' understanding and retention of key concepts about the subcontinent in the eighth century

Learning Outcome:

Students should be able to answer correctly.

Class work: Questions 1-4 of Content review

Teachers can make use of the Exercise in Going further as:

- (a) an assessment
- (b) an activity in the classroom, asking each student their opinion for both questions with a brainstorm chart drawn on the board.

The Arrival of Islam— Mohammad Bin Qasim

Discussion points:

Rulers of the Brahmin dynasty protected pirates along the trade route between Arabia and South Asia in the Arabian Sea. Raja Dahir was one such ruler under whom these sea brigands thrived and prospered. No one could stand up or protest against this act.

A ship carrying gifts for the Muslim caliph in Damascus was hijacked by these pirates. In addition to the gifts, the widows and orphans of the soldiers of the Muslim army were also on board. Upon receiving news of this hijack, the governor of Iraq, Hajjaj bin Yousuf, complained to Raja Dahir and requested him for help. Raja Dahir refused, and this enraged Hajjaj. He made arrangements to wage an attack on the subcontinent to punish Raja Dahir and rescue the passengers and cargo on board the ship.

He selected his young nephew Mohammad bin Qasim who was only 17 years old at the time. With his valour and strategies, Qasim managed to accomplish this purpose and eventually disposed of the Hindu rulers in Sindh. This was the beginning of a new era—Muslim rule in a part of the subcontinent.

ANSWER KEY

Content review

- 1. Hindu rulers, the Brahmin dynasty, Raja Dahir
- 2. They were protected by Raja Dahir.
- 3. The roles of the following people in the Muslim conquest of Sindh
 - i. Hajjaj bin Yousuf—he was the governor of the eastern provinces of Arabia. He sent the expedition to punish Raja Dahir and establish peace and security in the region. This led to the arrival of Mohammad bin Qasim and the Muslim rule.
 - ii. Raja Dahir—he protected pirates and refused to cooperate with Hajjaj in restraining them. This resulted in Hajjaj sending his men to India to punish him. Had Raja Dahir cooperated, maybe Hajjaj wouldn't have had the need to send his men.
 - iii. Mohammad bin Qasim—his capablility and wise policies encouraged people to enter into the folds of Islam and spread Muslim rule.

Going further

Should be a combination of facts, creativity, and emotions.

Challenge

He was brave, foresighted, trustworthy, organized, fair—each of these qualities helped him achieve success in Sindh.

Lesson Plans

Lessons: 3

Duration: 40 minutes each

Lesson 1: Arrival of Islam in the subcontinent

Teaching Objective:

• To introduce students to the arrival of Islam in the subcontinent

Learning Outcomes:

Students should be able to:

- describe the reasons for Mohamamd Bin Qasim's arrival in the subcontinent
- explain how he made way for later Muslims to consolidate their rule in India

Resources: Textbook, text, atlas, map, illustrations/drawings

Introduction:

Ask students when they hear the azan, have they ever wondered about the first time azan was heard in the subcontinent. Tell them that they will be reading a story about a young boy—not much older than themselves—who changed the history of the subcontinent through his feat of bravery and ambition. It is due to him that we hear azans from every nook and corner of Pakistan. This should spark their interest.

Explanation (30 minutes):

Read aloud from the text and give parallel explanation. The Brahmin rulers of Sindh went about making life miserable for their people by extorting money and resorting to other ways of oppression.

At around the same time, Hajjaj bin Yousuf was the governor of the eastern provinces of Arabia. Use the map to emphasize on the location of the eastern provinces of Arabia and India and the trade route between the two.

Trading between the two regions had become unsafe because pirates were robbing ships without any fear as the Brahmin ruler of Sindh Raja Dahir was protecting them. Hajjaj bin Yousuf decided to put an end to these atrocities himelf after the Raja's lack of interest to help when pirates captured a ship carrying women and children. He sent his 17-year-old nephew Mohammad bin Qasim to invade Sindh and restore peace to the region.

Conclusion:

Mohammad bin Qasim's invasion brought Muslim rule to India. It gained popularity and acceptance because of his good governance, and that of subsequent rulers. After him, Muslims from other parts of the world, especially Central Asia, Persia, and other parts of India strengthened and consolidated Muslim rule in India. The students should look forward to learning more about them in the next year.

Homework: Read the topic. Mark difficulties, if any.



Lesson 2-Written work

Teaching Objective:

 To reinforce key concepts about Mohammad bin Qasim's conquest of India and the arrival of Muslims in the subcontinent

Learning Outcome:

Students should be able to comprehend questions and find the answers, expressing well.

Resources: Textbook, text, atlas, map, illustrations/drawings

Class work: Questions 1–3 of Content review

Lesson 3—Worksheet/assessment sheet

Teaching Objective:

 To assess students' understanding and retention of key concepts about the conquest of Mohammad bin Qasim and the arrival of Islam in the subcontinent.

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries

Class work (35 minutes): Use worksheet on next page.

WORKSHEET

Date	Date: Name:					
Q 1.	Fill i	n the blanks.				
	a)	Muslim rulers sent out with peace messages.				
	Ь)	The pirates on the trade route between Arabia and the subcontinent were protected by				
	c)	Mohammad bin Qasim was Hajjaj bin Yousuf's				
	d)	Ruins from the times of Mohammad bin Qasim are found in				
	e) Daibul was a					
Q 2.	Ans	wer the following questions.				
	a)	Why did the pirates go about looting ships fearlessly?				
	b)	Who was Hajjaj bin Yousuf?				
	c)	Why did he send an expedition to the subcontinent?				
	d)	What were the outcomes of the battle with Raja Dahir?				



e)	Make a list of Mohammad bin Qasim's achievements.
f)	What was the impact of Mohammad bin Qasim's conquests in the subcontinent?
Q 3. Sta	te whether True or False.
a)	Raja Dahir was a cruel and unpopular ruler.
Ь)	Pirates seized a ship carrying arms and ammunition.
c)	Mohammad bin Qasim was a man of 65 years.
d)	Mohammad bin Qasim's actions made Islam an unpopular religion.
e)	Trade between Arabia and the subcontinent began for the first time after Mohammad bin Qasim's arrival.

From Rise to Fall: Reasons for the Success and Collapse of Empires

Discussion points

All empires, strong or weak, good or bad have to come to an end. There are many reasons which lead to their rise, strengthening/weakening, and finally downfall.

ANSWER KEY

Content review

Write down the reasons for the rise and fall of each of the listed rulers/empires.

Civilization/Ruler/Empire	Rise	Fall
Indus Valley	Good town planning,	Lack of defence, environmental factors
Aryans	Military training	Gave up nomadic ways, blended into the population
Alexander	Military strategy, strong army, ambition	Adverse conditions, long campaign, tired army
Chandragupta Maurya	Trade and development, roads, schools	Police state, heavy taxes, cruel punishments
Ashoka	Trade, development, welfare state, lower taxes, roads, schools, hospitals	No capable heir
The Kushans	Art, religion, trade, good relations with neighbouring and trading countries	No capable heir
The Guptas	Knowledge, learning, art, literature, medicine, surgery, trade, agriculture, low taxes, roads, basic facilities	Weak defence. Defeated by the Huns.
Mohammad bin Qasim	Trade, fair governance, system of justice, law and order	Recalled by the governor

Going further

a. Open-ended question. Mark answers for facts and sound justification.



Lesson Plans

Lessons: 3

Duration: 40 minutes each

Lesson 1-Reasons for rise and strengthening of empires

Teaching Objective:

To get students to think critically and analyze why empires rise and fall

Learning Outcomes:

Students should be able to:

• describe the reasons for the rise, strengthening, and fall of empires

• identify these reasons for individual empires

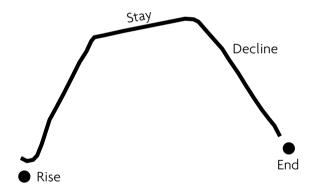
Resources: Textbook, text, map, illustrations/drawings

Introduction (5 minutes):

Ask students what they have noticed about the rise and fall of all empires. Talk to them about how all empires have a rise to power, a stay in power, and finally their power ends. There are reasons for all three.

Explanation (30 minutes):

Draw a graph on the map similar to this.



Explain how each empire or civilization grew. Each had a reason for rising, staying in power, and then ending. Read the reasons from the text. Ask students to recall which reasons hold true for the various empires they have studied. Discuss them.

Conclusion (5 minutes):

Conclude with a small activity. Assign empires/rulers to students individually or in groups. Ask them to plot the reasons for the rise and fall for the assigned ruler/empire. They can use colour codes.

Homework: Read the topic. Mark difficulties, if any.

Lesson 2—Written work

Teaching Objective:

To reinforce key concepts about the rise and fall of empires.

Learning Outcome:

Students should be able to comprehend questions and find the answers, expressing themselves well.

Class work: Question 1 of Content review.

Homework: Exercise from Going further

Lesson 3—Worksheet/assessment sheet

Teaching Objectives:

 To assess students' understanding and retention of key concepts about the rise and fall of empires

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Use worksheet on next page.

Students can also be marked or assessed on Content review/Going further

Project/activity:

- a) Do a short play/skit on the rise and fall of civilizations, empires, and rulers. It would be a good reinforcement of all the topics covered so far. Have students dress up like different rulers and people from their times and talk about why they rose to power, why they declined, why their rule came to an end, and what were some of the problems they faced. The text including *Aini's notes* are substantial to carry out this play.
- b) Ask students to make their own board game, like Snakes and Ladders, showing the strengths and weaknesses/negatives and positives/ reasons for the rise and fall of rulers and empires. Give them the basic concept and see what ideas they come up with. They can do it as a project in groups. Teachers can help organize the groups and arrange for material. Again, it would be a good idea to encourage them to recycle material.



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WORKSHEET

Date:	Name:
Date	Name.

Civilization/Ruler/ Empire	Rise	Fall
Indus Valley	Good town planning,	
Aryans		
Alexander		
Chandragupta Maurya		
Ashoka		
The Kushans		
The Guptas		
Mohammad bin Qasim		

CHAPTER 12

GEOGRAPHY

The Universe, the Solar System and the Earth

Discussion points

- The concept of universe, what is the Solar System and what is the position and importance of Earth in space, as well as part of the Solar System
- Distances in space
- What stars are and what they are made of
- The Earth's distance from the Sun, its orbit
- Forces-gravity and centrifugal force
- The Big Bang Theory and its success/failure

ANSWER KEY

Content review

- I. Answer the following questions:
 - a) 2006; because it does not fulfill the conditions for being classified as a planet
 - b) 9 trillion km
 - c) A cluster of stars
- II. Explain the following terms
 - a) Light year—distance travelled by light in a year
 - b) Meteoroid—rocky or metallic objects from space that collide with the Earth's outer layer of gas
 - c) Comet—small, icy celestial bodies
 - d) The Solar System—the Sun with its group of planets
- III. Explain the difference between:
 - a) a planet and a satellite—planet: orbits around a star; satellite: smaller body that orbits around a planet
 - b) a meteorite and a shooting star—meteorite: meteoroids that reach the Earth; shooting star: a briefly lit up path of a meteorite just before it hits the ground



- IV. Give one-word answers for the following:
 - a) A dwarf planet-Pluto
 - b) A snowball-like celestial body with a "head and tail"—comet
 - c) Another name for our galaxy—The Milky Way
 - d) The force that pulls objects away from the centre—centrifugal

Going Further

a. Open-ended question. Accept any answers that relate to floating and collision of objects due to floating. Appreciate creativity.

Lesson Plans

No. of lessons: 4

Duration: 40 minutes each

Resources: Textbook, text, map, illustrations/drawings

Lesson 1—The Universe and the Solar System

Teaching Objectives:

- To introduce and familiarize students with the concepts of space, Universe and Solar System; how they are different from each other, and how they are related
- To describe the components of the Universe and the Solar System

Learning Outcome:

Students should be able to describe the Universe and the Solar System and the position of the Earth within them.

Introduction (10 minutes):

Begin with the vocabulary words for this chapter in the Glossary given on page 120 in the textbook. Explain their meanings. Ask students what they think exists beyond the sky. Ask them if they have ever looked at the sky at night and wondered what is beyond. Then introduce the Universe and the Solar System as a summary using vocabulary words. Another way is to introduce the Big Bang theory and ask students their opinion. Build up on that.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. It is important to study the Universe and the Solar System because we have to understand why the Earth is as we see it and how it looks when viewed from space. It also helps us to understand how life exists on the Earth.

Emphasize on the position of the Earth in relation to the Sun. Talk to students about how in the olden times, stars were used in finding directions, calculation of dates, and fortune telling. Discuss the text.



Conclusion (5 minutes):

Ask students to look at the sky at night, and share what they feel. This could be an informal home assignment.

Homework: Read the topic. Mark difficulties, if any.

Lesson 2—The Earth and its forces

Teaching objectives:

- To introduce the Earth as part of the Solar System
- To familiarize students with the characteristics of the Earth as a planet
- To understand the forces exerted by the Earth

Learning Outcomes:

Students should be able to:

- describe basic facts about the Earth as a planet and its position in the Solar System
- explain why Earth is a sustainable planet as compared to others

Introduction (10 minutes):

Recap and review of work done in previous class. Discuss the home activity. Have a brief discussion about the night sky.

Start by asking students if they have noticed that when something falls to the ground, it stays there, whereas when something is thrown upwards, it comes down? Before introducing the forces of the Earth, do a two-minute activity. Ask them to throw an eraser or a small pencil in the air (not too high and with care so that it doesn't hit anyone). Ask them:

- (a) Why did it not stay in the air?
- (b) Why did it go up straight and without deviation from its path?

Now bring in the force of gravity and the centrifugal force.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Ask students to look at the pictures in the textbook. Talk to them about the Earth. Tell them that there are forces that cause things to get pulled towards the center of the Earth, as well as away from it in a straight line. Both forces work in harmony with each other to keep things in balance.

Conclusion (5 minutes):

Summarize the topic, focusing on the key concepts. The question in *Going further* can also be used as the concluding question on forces: Imagine life without gravity. What would it be like?

Homework: Read the topic. Mark difficulties, if any.



Lesson 3—Written work

Teaching Objective:

To reinforce concepts about the universe through written work.

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the guestions to students. Answer any gueries.

Class work (35 minutes): Content Review Questions. 1-4

Homework: Content Review Question 5

Lesson 4—Worksheet/assessment sheet

Students can also be marked/assessed on Content review and Going further.

Teaching Objectives:

- To assess students' understanding and retention of key concepts about the Universe, the Solar System, and the Earth
- To reinforce key concepts through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Use worksheet on next page.

Project/activity-Modelling

Ask students to make models of meteors, meteoroids, meteorites, and shooting stars using rocks or brown paper bags or newspapers. They can paint and label them and have a display. It helps when students make these models and give a short presentation to a teacher or other students. They can also make a model Universe with the Solar System and Earth.

WORKSHEET

Date:		Name:
Q 1. Complete the following.		nplete the following.
	a)	Expanse:
	Ь)	: of or relating to the sky
	c)	Impact :
	d)	Colliding:
	e)	: something that causes feelings of wonder
Q 2.	Give	e reasons for the following:
	a)	Stars are huge heavenly bodies but they appear small.
	b)	The Earth is a suitable planet for life.
		¬
	c)	When we throw something up in the air, it comes down.
		·
		·
Q 3.	Fill	in the blanks.
	a)	The Big Bang Theory was presented by
	b)	Pluto has now been reduced to the status of a planet.
	c)	The Earth is in line from the sun.

Photocopiable material

GEOGRAPHY

	d)	The Sun and all the planets and other celestial bodies revolving around it are collectively known as the System.				
	e)	The force that makes things go away from us in a straight line is called force.				
Q 4.	Q 4. Answer the following.					
	i.	What does the Big Bang theory say?				
	ii.	How do we measure distances in space?				
	iii.	What is 'moonlight'?				

CHAPTER 13

GEOGRAPHY

Features and Movements of the Earth and their Effects

Discussion points

- The Earth has three characteristics: tilt, bulge, and movements
- Because of the tilt, the two poles face the Sun or face away from the Sun alternately, i.e. if the North Pole faces the Sun, the South Pole faces away from it.
- Because of the bulge, the center of the Earth is closest to the sun and therefore, receives direct sunlight throughout the year.
- A combination of rotation and revolution gives us different lengths of days, nights, and seasons.

ANSWER KEY

Content review

- I. Give short answers:
 - i. Tilt, bulge, movements
 - ii. Axis
 - iii. 24 hours
 - iv. Revolution—365 days
 - v. 21st /22nd June
- 2. Fill in the blanks.
 - i. In summer, we have long days and short nights.
 - ii. The equator is the hottest region of the Earth.
 - iii. The word equinox means equal night.
 - iv. When the North Pole is leaning towards the Sun, the South Pole is tilted away from it.
 - v. The northern and southern hemispheres experience <u>opposite</u> seasons at any given time.
- 3. State whether the following statements are true or false. Correct those that are false.
 - i. True
 - ii. False. It rotates and revolves.
 - iii. False. They have opposite seasons.



- iv. True
- v. False. It gives us seasons. Rotation gives us day and night.
- vi. False. It experiences day.
- In your notebook, draw and label a diagram showing the solstices and equinoxes.

Going further

a. Give them research homework. They should find out about the festivals associated with solstices and equinoxes around the world from the Internet or the library or ask elders in the house. The most popular festivals are in Iran (a) Navroz on the 21st of March to celebrate the arrival of spring and spring equinox. (b) Mehergan on 21st December to celebrate winter solstice. Give them this to get started and then ask them to research other countries and their festivals as well.

Challenge

Tropic of Cancer—northern hemisphere

Tropic of Capricorn—southern hemisphere

Lesson Plans

Teaching Objective:

• To introduce students to the shape, position, and movements of the Earth and how they affect us

Learning Outcome:

Students should be able to explain why we have varying amounts of light and heat throughout the year and why some places on the Earth are hotter or cooler.

No. of lessons: 4

Duration: 40 minutes each

Resources: Textbook, text, map, illustrations/drawings

Lesson 1—Shape, tilt (position) and movements

Introduction (10 minutes):

Use the diagrams to demonstrate tilt and bulge. Ask a student to stand in the center with both hands on the waist, next to a door, window or desk, or another student. Explain that the hands on the waist will reach the door or window first because they stick out.

Similarly ask another or the same student to lean on one side. Again ask which part is closest to the door /window. Explain that this is true for the poles too.

Explanation (25 minutes):

Select students who can turn in slow circles as well as move around a table or a pile of bags. This gets the students interested and clarifies the idea of simultaneous rotation and revolution. It is up to the teacher to make it interactive and interesting, using this basic idea to explain day and night, etc.

Get two tennis balls or a globe representing the Earth and a torch representing the Sun. Explain that this does not indicate the true position and size of the Sun in relation to the Earth. On a chart paper, put a dot on the clock positions: 3, 6, 9, and 12 o'clock. Position 3 would be winter solstice, 6 would be autumn equinox, 9 would be summer solstice, and 12 will represent spring equinox. These are for the northern hemisphere. Place the torch in the center.

Keep the tennis ball or globe in front of the torch and rotate it to demonstrate day and night. Next, keep the torch in the center and move the ball or globe around it in an anticlockwise direction, keeping it tilted at all times. Point out the areas receiving or cut-off from sunlight, especially at the poles and the Equator.

Read and explain concept from textbook.

Conclusion (5 minutes):

Ask students if they have noticed the difference in the duration of day/night from summer to winter months, and if they can guess why it happens. Ask a student to record/copy the responses on a sheet of paper. This will be the introduction for the next lesson.

Homework: Read the topic. Mark difficulties, if any.

Lesson 2—Solstices and Equinoxes

Introduction (10 minutes): Address student queries, if any.

Write down student responses from the end of the previous lesson on the board. Discuss the answers. Introduce the words 'solstices' and 'equinoxes' with their meanings.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. A good way to explain this topic would be using a globe and a bulb on a circuit. The bulb will represent the Sun. On a chart paper, make markings on the 3, 6, 9, and 12 positions on a clock face. Place the globe on any one position. Ask students to see which parts of the globe are facing the bulb and which parts are away. Students should write down the details. Move the globe in an anticlockwise direction to the next spot. Ensure that the tilt remains in the same direction. Also rotate the globe on its axis. Ask students to observe and write down the details. Do the same for the remaining two spots. Once the experiment is over, go over the readings with students, and explain text from the book.

Conclusion (5 minutes):

End on *Going further*. Discuss how some countries have festivals based on equinoxes. Iran celebrates Navroze in March (spring equinox), Russians celebrate Kupalo (summer solstice).

Homework: Content review Q 1.



Lesson 3—Solstices and Equinoxes

Teaching Objective:

To reinforce concepts about solstices and equinoxes through written work

Learning Outcome:

Students should be able to answer correctly.

Instruction (5 minutes):

Explain the written work to be done in class. Read the questions aloud and talk about time allocation for each question.

Written work (35 minutes):

Questions. 2 and 4 from Content review. Question from Going further.

Homework: Complete classwork.

Lesson 4 Worksheet/assessment sheet

Teaching Objectives:

- To assess students' understanding and retention of key concepts about the features of the Earth
- To reinforce key concepts through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Use worksheet on next page.

Students can also be marked/assessed on Content review and Going further.

WORKSHEET

Date	e:		Name:			
Q 1.	1. Fill in the blanks					
	a)	Hem	ni means and sphere means			
	b)	Trop	oic of is in the northern hemisphere.			
	c)	Аре	eriod of equal day and night is called an			
	d)	Pakistan is located in the hemisphere.				
	e)	The	Earth at the Equator.			
Q 2.	Ansv	Answer the following questions.				
	(a)	(i)	What four factors are responsible for unequal amounts of heat and sunlight on the Earth?			
			,, and			
		(ii)	How is the Earth affected by each of these?			
	(b)	(i)	On what dates does the southern hemisphere have			
			winter solstice summer solstice			
		(ii)	What solstices will the northern hemisphere have on these dates and why?			
	(c)	Wha	at are equinoxes and why do they occur?			

The Layers of the Earth

Discussion points

It is important to study the Earth's layers because they cause changes on the Earth's surface. The Earth is made of three layers; the innermost layer is subdivided into two. The thickness and consistency of each layer varies because of its components and depth. The crust is a thin, biscuit like layer. It is the outermost layer that we live on. It carries oceans and continents. The second layer, mantle, is like custard or jelly—the broken crust floats on the mantle which is wrapped around the innermost layer, the core. The core is divided into outer core and inner core. The outer core is also molten rock. The inner core, the hottest is a solid ball. It is not possible to reach these layers because of high temperatures.

ANSWER KEY

Content review

- 1. Plates move because they are floating on a molten layer of rock.
- 2. By the collision of two convergent plates that pushed into each other, forming folds on the surface.

Going further

a. This can be done as an activity as well.

Challenge

Page 59-Continental crust

Page 61-Option 2

Lesson Plans

Number of lessons: 4

Duration: 40 minutes

Resources: Textbook, text, map, illustrations/drawings

Lesson 1-Layers of the Earth

Teaching Objective:

 To familiarize students with the Earth's layers and plate tectonics and their effect on the Earth



Learning Outcome:

Students should be able to describe why there is activity/movement below the Earth's surface and what happens as a result.

Introduction (10 minutes):

Using the diagram for reference, explain that the Earth is like a ball made of many layers. Build up on this idea. A good way of introducing this topic is by way of a delightful, hands-on activity in groups of four. Students can be asked to bring playdough or plasticine of one of the colours each—red/orange, yellow, brown and blue. Start off by making a small ball with red/orange. This will be the solid inner core. Then wrap it with a ½ inch thick layer of yellow, followed by brown and then finally a thin layer of blue. Cut through the Earth with a knife. Each layer will clearly show.

Explanation (25 minutes):

The activity can continue into explanation as well, supplemented by reading aloud from text and parallel explanation.

Conclusion (5 minutes):

Recap the main idea from lesson. Address student queries, if any.

Homework: Read the topic. Mark difficulties, if any.

Worksheets: Map showing tectonic plates for *Going further* can be used as a worksheet.

Refer to the map on page 59 for the names of the plates.

Lesson 2 and 3—The lithosphere, tectonic plates, and plate movements

Teaching Objectives:

- To explain that there is movement beneath the Earth because of its layers
- To introduce students to plate tectonics and their effects

Learning Outcomes:

Students should be able to understand:

- the nature of the Earth's layers and why they move
- the movements below the Earth's crust and its effects

Introduction (10 minutes):

Start with the example of the Earth's crust being cracked into pieces like an eggshell. Ask students what they think would happen if these plates were to float on something squishy like jelly or pudding or custard, etc.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Demonstrate each of the plate movements with the help of any two objects, like two dusters or pencil cases or notebooks. Point out at the edges to show faults and cracks and that most movement occurs around these places. You can use a cardboard or top of a shoe box and tear or cut it into parts with uneven edges. Make the parts collide, move away, or slide past one another to show how jagged edges can lead the plates to jerk and shake while



moving. You can explain that tectonic plates can become locked while moving and thus produce an earthquake as they attempt to break free from each other. The entire unit should be covered in two lessons of 40 minutes each.

Conclusion (5 minutes):

Address student queries, if any. Review and recap of text, highlighting key concepts.

Homework: Read the topic. Mark difficulties, if any. Questions 1 and 2 of *Content review*.

Worksheets: Draw the layers of the Earth and describe each of them.

Lesson 4—Worksheet/assessment sheet

Teaching Objectives:

- To assess students' understanding and retention of key concepts about layers of the Earth and plate tectonics
- To reinforce key concepts through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Use worksheet on next page.

Students can also be marked/assessed on Content review and Going further.

Date	e:	Name:	
Q 1.	Stat	e whether True or False. Correct those that are false.	
	a)	The Earth is a solid layer of rock.	
	Ь)	The crust is the outermost layer of the Earth.	
	c)	The crust is broken into many pieces called plates.	
Q 2.	Give	e one-word answers.	
	a)	The second layer of the Earth from outside	
	b)	The innermost layer of the Earth	
	c)	Plate edges and boundaries or cracks between plates	
	d)	Layer that carries oceans and continents	
	e)	Plates that push or collide into each other	
Q 3.		w a labelled diagram to show the following plate movements and explain what pens in each movement.	
	Convergent Plates		

Photocopiable material



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Divergent Plates		
Conservative Plates		

Weathering and Erosion

Discussion points

All things on Earth undergo change. These changes can be constructive or destructive. Constructive changes mean when these changes are useful or beneficial for humankind. Destructive changes bring about devastation for the Earth, in the long or the short run. Weather conditions play an important role in bringing about these changes. Changes include wear and tear of mountains and rocks into smaller pieces. Rusting is also a form of weathering that usually takes place in the coastal areas. Buildings and structures also undergo weathering and erosion. Exposure to salty air and moisture without any care causes damage to surfaces.

ANSWER KEY

Content review

- Weathering is the natural wearing down of rock. Erosion means transportation and deposition of rock, debris and other material from one place to another.
- 2. Physical, chemical, and biological weathering. See page 62 for details.
- 3. Wind, moving water, ice

Going further

a. Answers may vary.

Challenge

Because all parts of a plant are living.

Lesson Plans

No. of lessons: 3

Duration: 40 minutes each

Resources:

Textbook, text, map, illustrations/drawings



Lesson 1—Weathering

Teaching Objective:

 To introduce and clarify the concepts of weathering and erosion to students

Learning Outcome:

Students should be able to understand and comprehend why weathering and erosion take place, their effects, and the difference between the two.

Introduction (10 minutes):

Read the definition of weathering from the text. Discuss it with the students and ask them what they can make out of it. Ask them if they have seen broken rocks/cliffs at beaches or other places, and if they can think of reasons that may have happened.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Ask students if they have seen any worn down buildings or rusted nails. Tell them why it happens. Talk about how weathering can be stopped from occurring but there can be measures taken to slow it down or repair the damages it causes.

Conclusion (5 minute):

Address student queries, if any. Review and recap the topic.

Homework: Read the topic, especially glossary words.

Lesson 2 Erosion

Teaching Objective:

• To explain the concept of erosion and its effect on Earth

Learning Outcome:

Students should be able to understand what erosion is, why it takes place, agents of erosion, and what are the effects of erosion.

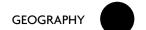
Introduction (10 minutes):

Start the topic by reading the definition of erosion and discussing how it differs from weathering. Talk about how erosion creates new land surfaces and breaks down old ones.

Explanation (25 minutes):

Ask students if they have been to the beach or coastal area and seen rocks, cliffs, and boulders? Or the sand and pebbles on seashores? Or cracks in the riverbanks? These are all results of erosion and weathering.

Explain the concepts with the help of an activity. On a plastic tray or other sturdy base, make a mountain of sand and soil. Fix some rocks and pebbles, some loosely and some fixed well. Pour water with a jug or cup. Ask students what they notice about material being eroded.



Use a pile of crumpled newspapers and blow with a fan to show wind erosion.

Read aloud from the text and give parallel explanation.

Conclusion (5 minutes):

Address student queries, if any. Ask them how they think weathering and erosion are helpful to people. Make a list of answers on the board. Ask students to note them down.

Homework: Exercise 'a' of *Going further*. Also available on the worksheet on next page.

Lesson 3—Written work

Teaching Objective:

• To reinforce key concepts about erosion

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Use worksheet on page 75.

Students can also be marked/assessed on Content review and Going further.



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WORKSHEET

'New land surfaces are created, old ones are broken down, as a result of erosion.' Discuss the advantages and disadvantages of erosion with some adults. Note down the points on the worksheet.

EROSION	
Advantages	Disadvantages
	-

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Date: Name		Name:
Q 1. Wh		at is the difference between:
	a)	Weathering and erosion
	Ь)	Chemical and biological weathering
	c)	Sediment and debris
	d)	Glaciers and rivers

GEOGRAPHY

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\cap 2	c:ll :	in the blanks choosing the correct answer from the given choices.		
Q 2.				
	a)	All rocks are made of(stones, sand, minerals)		
	Ь)	Wearing down of rock or rock surfaces into smaller pieces is called (weathering, solubility, crumbling)		
	c)	Glaciers createshaped valleys. (v, s, u)		
	d)	Wind, moving water, and ice are called of erosion. (agents, parents, wonders)		
	e)	Many v-shaped valleys and waterfalls are created by the action of fast flowing water in a (dam, canal, river)		
	f)	Some animals make in the ground, which cause soil to loosen. (burrow, harrow, furrow)		
	g)	During the day, rocks because of heat and high temperatures. (contract, expand, shrink)		
	h)	Wearing away of rock by high-speed whirling winds is called (sand dune, sandblasting, sandstone)		
	i) The study of the Earth's surface and the changes on it is called (geography, geology, topography)			
	j)	Minerals that dissolve in water are said to be (soluble, solvent, solution)		
Q 3.	Q 3. Complete the following:			
	Wearing down:			
	: break or fall apart into fragments			
	: able to be dissolved			
	Crevice:			
	Canyon:			
	Carr	: a narrow valley with steep sides		
	C 1	, '		
		ment:		
	Debris:			

CHAPTER 16

GEOGRAPHY

Landforms-Mountains and Other Land Features

Discussion points

- Landforms are important features on the Earth's surface. They not only add beauty but have many uses that help in sustaining life on the Earth.
- Mountains are the most majestic of all land features found on the Earth.
 They are found in all continents. Mountains are formed due to volcanic
 activity, plate tectonics, and land rifting or separating. Hills are similar to
 mountains but lesser in altitude and softer in shape.
- Plains and plateaus are vast stretches of flat lands. Plains are flat land on ground level. Plateaus are flat land on elevation. They are important because of agricultural uses.
- Deserts are also vast stretches of flat land but dry, hot, and barren.

ANSWER KEY

Content review

- 1. Answer the following questions.
 - i. Plateaus are classified by their surroundings and the method of formation: Intermontanne, piedmont, volcanic, continental, wind, and water erosion.
 - ii. Some major plateaus of the world are the Tibetan Plateau, the Antarctic Plateau, the Andes Plateau in South America, the Colorado Plateau in North America, the Columbia Plateau in the USA, and the Deccan Plateau of west-central India.
 - iii. High temperature, little or no rainfall, sandy, and rocky landscape
 - iv. It provides water in a hot, barren, dry place.
- 2. Look at the physical map of the world in your atlas. On the map given below,
 - Activity-based question. Consult atlas for answers.

Going further

- a. Scenic beauty, form boundaries between countries, good for growing crops, rich in minerals, support rivers, and forests.
- b. Key ideas include comfort, clothing, food, water, shelter, entertainment, safety.



Challenge

Page 68-Balochistan plateau in Balochistan

Page 71-b: Himalayas, Hindukush, Karakoram

Lesson Plans

No. of lessons: 5

Duration: 40 minutes each

Resources:

Textbook, text, map, illustrations/drawings

Lesson 1—Mountains and hills

Teaching Objectives:

- To introduce and familiarize students with different landforms on the Earth
- To emphasize on the importance of landforms

Learning Outcome:

Students should be able to understand how landforms are created and why they are so important for life on Earth

Introduction (10 minutes):

Begin with vocabulary words and explain their meanings. Recap plate movements, weathering, and erosion. Make it the background/link to mountains and subsequently other land formations.

Ask students if they have been to a mountain resort, and if they know the names of famous mountains and mountain resorts of Pakistan. Have a discussion about how different the terrain is from flat land. What have they noticed (or what they know) about the weather and people's lifestyles there? Have they wondered how mountains are formed? Take guesses.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Text is very simple and self-explanatory.

Discuss the illustration on page 67 and explain how each kind of mountain is formed. Demonstrate each formation using simple resources. For example, wads of cloth or paper or fingertips pressed together to show how pressure causes land to rise up in folds. Ask children to think of ways in which they can demonstrate the reasons.

Conclusion (5 minutes):

Address student queries, if any. Recap the topic by going over key points. Discuss modeling activity and project and ask students to come up with more ideas and suggestions for making models out of recyclable material.



Homework: Review topic. Mark difficulties, if any.

Worksheets: Content review map can be used as worksheet for this topic.

Lesson 2—Plateaus and plains

Teaching Objective:

To introduce and familiarize students with plateaus and plains

Learning Outcome:

Students should be able to describe how plateaus and plains are created and why they are so important for life on Earth.

Introduction (10 minutes):

Recap and review of work done in the previous class. Ask students if they have heard of or seen flat land with mountains on one or more sides, and large stretches of flat land that seem never ending. This will build up the base for plateaus and plains, bringing out the difference.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. The text is simple and the pictures self-explanatory and interesting. Ask students to look at the pictures and discuss what they can see and observe. Discuss the formation of each plateau one by one and emphasize on how each is different. Make students look up the places on the atlas and share how geographical location justifies the type of plateau, e.g. Deccan and plateaus of Spain and Australia are close to the coast, etc.

Conclusion (5 minutes):

Summarize the topic, focusing on the key concepts. Have a short recap quiz.

Homework: Questions 2 and 3 of Content review.

Lesson 3—Written work

Teaching Objective:

• To reinforce key concepts about landforms.

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes):

- Q 1. (a) Name the three ways in which mountains are formed.
 - (b) Briefly explain each type.
 - (c) Draw labelled diagrams to support your explanation.
- Q 2. (a) Name some famous hills of Pakistan.
 - (b) What is the difference between mountains and hills?



Homework: Worksheet on mountains and hills.

Use your atlas to find out in which countries the following mountains are located. Some of them may be located in more than one country. You may write the names of all the countries.

(i) Kilimanjaro (ii) Mont Blanc (iii) Etna (iv) Hindukush

(v) Fuji (vi) Kenya (vii) Himalayas (viii) Alps

(ix) Rockies (x) Andes

Lesson 4—Plains and Deserts

Teaching Objective:

To introduce and familiarize students with plains and deserts

Learning Outcome:

Students should be able to describe how plains and deserts are created and why they are so important for life on Earth.

Introduction (10 minutes):

Recap and review plateaus and plains. Introduce deserts by comparing it with plains. Compare and contrast. Write the names of Pakistan's deserts (Thar, Thal, Cholistan) Talk about how Thar desert is shared with India and forms a boundary.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Text is simple and self-explanatory. Discuss the description of deserts and how different it is in terms of vegetation, temperatures, quantity of rainfall, and lifestyle. Use the atlas to locate the countries in which the named deserts are located.

Conclusion (5 minutes):

Address student queries, if any. Provide a blank world map to students and ask them to show the major deserts with brown and make a number key to identify them.

Homework: Review topic. Mark difficulties, if any.

Worksheets: Content review map can be used for this topic.

Lesson 5—Written work

Teaching Objective:

To reinforce key concepts about different landforms and their importance

Learning Outcome:

Students should be able to comprehend questions and find the answers, expressing well.

Instructions (5 minutes): Explain the questions to students. Answer any queries

Class work (35 minutes): Questions 4 and 5 from *Content review.* You can also use the worksheet on the next page.

Homework: Exercise (a) of Going further



Project /activity-Model landforms

- 1. Students can be asked to make landforms. They should be encouraged to recycle discarded items and use them to create models. Old cartons, newspapers, trays, tins, tetrapak cartons, etc. can be used creatively to make effective models. They can have an open-day or display day to show their work and give small presentations.
- 2. Research—Deserts of Pakistan

Make a booklet on the deserts of Pakistan. Your content must include: names, location (province, cities close to), kind of desert (sandy, rocky, cold), vegetation, lifestyle (clothes, food, houses, education, entertainment, customs, and rituals etc.) facilities, advantages and disadvantages of living there and any other interesting/useful information. Compare your life with the life of desert dwellers.

Date:		Name:		
Q 1.	Fill i	in the blanks.		
a) Mountains are the of the Earth's landfor		Mountains are the of the Earth's landforms.		
	Ь)	Chaghai and Bugti Hills are located in		
	c)	The highest plateaus of the world are plateaus.		
	d)	The plateau of Pakistan was created by wind erosion.		
	e)	Plains are lowlands.		
	f)	Deserts are dry and tracts of land with little or no vegetation.		
	g)	Coarse and grass grows in deserts.		
	h)	Alps, Himalayas, Andes, Rockies are all examples of mountains.		
	i)	The fertile spot in a desert is called an		
	j)	Camels are known as ' of the desert'.		
Q 2.	Give	e two examples/names each for the following:		
	Μοι	untain range,		
	Hills	Hills,		
	Lone mountain,			
	Intermontanne plateau,			
	Desert,			
Q 3.	(a)	Explain the following:		
		Intermontanne plateau		



	Piedmont plateau		
	Continental plateau		
Ъ)	Give one example for each of the following types of plateaus.		
	Intermontanne		
	Piedmont		
	Continental		
	Volcanic		
	Wind/water erosion		

GEOGRAPHY Weather and Climate

Discussion points

- Condition of the atmosphere on a daily basis is weather.
- Climate refers to such recorded observations for a period of 30 years; the general weather conditions of a place for a long period of time. For example, we say that the weather in Karachi is cool today, but Karachi's climate is hot and humid.
- Weather and climate influence the lifestyles of people, the kinds of plants and vegetation, and the kind of animals that exist in a particular surrounding.

ANSWER KEY

Content review

- 1. Weather is the condition of the atmosphere for any day including the temperature, winds, clouds, and rainfall. The weather can be sunny, windy, rainy, or stormy in one day. Climate is the average condition of the weather in a place over a longer period, usually thirty years.
- The degree of heat in the atmosphere 2.
- 3. Distance from the Equator, distance from the sea, rainfall, wind direction and altitude.

Going further

- 1. Distance from the sea, rainfall, wind direction
- Moving away from the sea. Cooler sea breeze doesn't reach inland. The 2. land is hotter and heats up the air around it.
- No. Mangoes need proper soil, sunlight, and warmth to grow. North Pole will not provide the right combination of factors for growing mangoes.

Lesson Plans

No. of lessons: 3

Duration: 40 minutes each

Resources: Textbook, text, map, illustrations/drawings



Lessons 1 and 2—Weather and Climate

Teaching Objectives:

- To introduce and clarify the difference between weather and climate
- Explain the factors that influence the climate of a place
- Explain why different places in the world have different climates

Learning Outcome:

Students should be able to describe why there are changes in temperature and the cause and effect of these temperature changes.

Introduction (10 minutes):

Start by talking about the weather conditions on the day of the lesson, and compare it to the general climatic conditions of your city. Ask the students if the weather is generally like this, or is this kind of weather occasional or rare.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Discuss what the general climate of your city is. Ask students to compare it to any other place they might have visited. Did they see any difference in clothes that people wear? Or their food? Or the crops and plants? Any unusual animals?

Ask students to open their atlas and look at climate and rainfall maps. Play a guessing game to find names of places with high-low temperatures, most rainfall, etc.

Conclusion (5 minute):

Address student queries, if any.

Homework: Read the topic, especially the glossary words.

Lesson 3—Written work

Teaching Objective:

To reinforce key concepts about weather and climate through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Questions 1, 2, and 3 of *Content review* and *Going further.* You can also use worksheet on next page.

Homework: Complete classwork.



Name:
n words how each of the following factors affects the temperature of a
Equator
sea

CHAPTER 18

GEOGRAPHY

Agriculture and Livestock

Discussion points

- Agriculture is the basis of survival and the backbone of economies, irrespective of how industrialized or developed they are.
- Agriculture includes not only the cultivation of crops but also the rearing of livestock—cattle, poultry, and fish.
- Agriculture requires proper care and attention so that best quality and maximum quantity of crops can be obtained at the lowest possible costs. This is why all countries of the world, including Pakistan focus on agricultural development.

ANSWER KEY

Content review

- 1. Answer the following questions.
 - i. For food and raw material
 - ii. Water does not run down slopes, absorption is easier
 - iii. Rainfall, glaciers, springs, rivers
 - iv. May cause poisoning or other damages to human, animal, and plant lives
 - v. So that new crops are not deprived of nutrients
- 2. Choose the correct answer.
 - i. Natural or artificial lakes which store fresh water are called reservoirs.
 - ii. Chemicals used to kill disease-causing organisms in plants are called pesticides.
 - iii. The most suitable place for growing crops is the flood plains.

Going further

The 2010 floods in Sindh and the Punjab destroyed most of the crops growing in the fields. What do you think must have happened to the:

- (a) quantity of crops—decreased
- (b) quality of crops—spoilt, poor quality
- (c) people who were depending on them—shortage of food and loss of livelihood for them
- (d) price and availability in the market—available with difficulty, at very high prices



Lesson Plans

No. of lessons: 3-4

Duration: 40 minutes each

Resources: Textbook, text, map, illustrations/drawings

Lesson 1—Agriculture and its problems—till pests

Teaching Objective:

• To introduce and familiarize students with the concept, process, and problems of agriculture and livestock.

Learning Outcome:

Students should be able to understand the importance of agriculture and its various aspects.

Introduction (10 minutes):

Talk to students about food and its sources. Discuss what it would be like without food. Ask them if they know where food comes from, even fast food and junk food. What are the sources? Build up on the text from this point.

Explanation (25 minutes):

Ask students to look at the pictures. Talk to them about their home gardens or potted plants that they may have in their houses. Have they tried growing fruits or vegetable or herb plants like coriander and mint in their houses? Ask them how they look after them. What would happen if they neglected to look after them?

Read aloud from the text and give parallel explanation. The pictures are interesting and text simple and self-explanatory. Discuss them.

Conclusion (5 minutes):

End at pests and sum up the topic up to this point.

Homework: Read the topic. Mark difficulties, if any.

Lesson 2—Factors affecting agriculture and livestock, poultry and fish farming Teaching Objective:

• To educate students about the different kinds of problems in agriculture and their solutions

Learning Outcome:

Students should be able to describe the problems and suggest solutions.

Introduction (5 minutes):

Recap and review of work done in previous class.

Explanation (30 minutes):

Read aloud from the text and give parallel explanation. Cover from soil management to natural disasters. The pictures are interesting and text simple and self-explanatory. Explain the reason for soil management and the names of important nutrients that are



most commonly used. Talk about how humans can't breathe for too long in water and salt water is unfit for drinking; in the same way too much water and too much salt in the soil damages the life and quality of crops. In addition, disasters like floods and earthquakes can destroy entire harvests instantly.

Conclusion (5 minutes): Summarize the topic, focusing on the key concepts. Discuss *Going further* on page 81. Recap topic, get student feedback and write answers on the board to sum it up.

Homework: Read the topic. Mark difficulties, if any.

Lesson 3—Written work

Teaching Objective:

To reinforce key concepts about agriculture and livestock

Learning Outcome:

Students should be able to comprehend questions and find the answers.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Content review Questions. 1–5. You can also use the worksheet on the next page.

Homework: Exercise (a) of Going further

Project/activity—Container gardening for classroom

Ask students to get terracotta/clay pots or any other containers like old cups, mugs, cane baskets, glasses, etc. which will allow water to drain through. They can plant different seeds, stem cuttings, etc. They can choose fruits, vegetables, flowers, simple grass. Allot a time during the day for watering and checking on the progress. They can maintain charts for weekly observation. They can make checklists for daily monitoring.



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Date: 🗕	Name:		
Q 1. Hc	w do the following factors affect agriculture?		
a)	Suitable climate		
b)	Adequate water supply		
c)	Natural disasters		
Q 2. Fil	in the blanks.		
a) Cultivation of plants and animals to obtain food is called			
Ь)	Growing crops is easier on flat land than on		
c)	Living organisms that cause damage to agricultural produce are called		
d)	Energy giving components of the soil are called		
e)	Soil that remains wet throughout the year is said to be		

CHAPTER 19

GEOGRAPHY

Agriculture in Pakistan

Discussion points

- Agriculture is the backbone of Pakistan's economy. Not only does the country produce food for its own people but also exports surplus crops and earns revenue.
- Pakistan's self-sufficiency and its benefits.
- Exports of surplus.

ANSWER KEY

Content review

Food crops are grown for food. Cash crops are grown to be sold in local and international markets to earn money.

Activity

Ask your teacher to divide the class into groups, and pretend you all are farmers. Based on what you have learnt so far, plan a model farm. You can add details about the climate, farming methods used, water supply arrangements, and crops that will provide food and earn revenue.

Going further

a. Open-ended question. Evaluate answers on the basis of their reasoning and justifications.

Challenge

Page 85-Punjab

Lesson Plans

No. of lessons: 5

Duration: 40 minutes each

Lesson 1—Factors supporting agriculture in Pakistan (upto rivers and irrigation)

Teaching Objective:

• To introduce and familiarize students with the concept, process, and problems of agriculture and livestock—specifically in Pakistan.



Learning Outcome:

Students should be able to understand the importance of agriculture and its various aspects

Introduction (10 minutes):

Talk about the importance of food and agriculture in Pakistan. Ask students about the kinds of fruit, vegetables, and grains they like to have. Ask what would happen if these were not grown locally.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation—from land use to climate. Pakistan has been blessed with suitable, arable land for farming, conducive climatic conditions, and an irrigation system that supplies water to plantations and fields. These are the main factors that affect the agriculture of any place. Discuss the diagram showing land distribution and explain that it is important to study land distribution because all land is not arable and agricultural targets have to be set and planned accordingly to ensure a smooth production of crops. The nation's economy depends on it. Land has to be utilized to the maximum. Similarly, climate also must be considered because crops have different requirement of heat and moisture.

Conclusion (5 minutes): End at climate and sum up the topic to this point.

Homework: Read the topic. Mark difficulties, if any.

Lesson 2-Methods of Irrigation in Pakistan

Teaching Objectives:

- To make students aware of the importance of water sources for agriculture
- To educate students about how to channelize water from different sources to facilitate agriculture

Learning Outcome:

Students should be able to name the major water sources for any country and explain the ways in which water is channelized and distributed.

Introduction (10 minutes):

Address student queries from previous lesson. Recap and review of work done in previous class and link to current topic. Ask them if they know where the water in their taps comes from. Talk about water shortages, tankers, and water pumps. Why are they needed? Build up from here.

Explanation (30 minutes):

Read aloud from the text and give parallel explanation. Irrigation basically means bringing water from rivers or other far-off sources to agricultural fields to facilitate agriculture. There are a few effective methods of irrigation which include making dams and barrages. The irrigation system of Pakistan uses water from rainfall

and River Indus and its tributaries. This water is stored in dams and reservoirs and supplied through a network of canals. Other sources include karez wells, tube wells and Persian wells. Altitude and physical features determine the kind of irrigation method suitable for an area. As an activity, students should be encouraged to make models. Canals are simple water channels through which water passes to fields. The water in canals may come from rivers, glaciers, lakes, dams and reservoirs and tubewells. Explain that these wells could be powered by electricity or by a lever like the Persian wheel. In the karez system, first a water source or aquifer is identified. Then a main well or mother well is dug on high ground, and many straight ones above the ground. These are connected to an underground channel which comes out of the ground at the emerging point. From here it is supplied to farmland.

Conclusion (5 minutes):

Summarize the topic, focusing on the key concepts.

Homework: Review the topic thoroughly. Mark difficulties, if any.

Lesson 3—Important crops of Pakistan

Teaching Objective:

• To familiarize students with the names of Pakistan's most important crops and the reasons for their importance

Learning Outcome:

Students should know the most important food and cash crops of Pakistan.

Introduction (10 minutes):

Ask students about the staple diet in their houses, and their favourite fruits and vegetables. Discuss whether they are chapatti eaters or rice eaters. Bring in the concept of staple food at this point. Ask them if they know that the pizza that is eaten so rarely in Pakistan is actually the main diet of the Italian people. Go on to the main topic.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Ask students the names and varieties of grains, lentils, rice, fruits, and vegetables they see in the market. Discuss what would happen if these were not grown locally. Explain the importance of each crop as food crop or cash crop, and which are staple crops. Brief students how cash crops bring in money. Stress on the importance of self-sufficiency in agriculture—what would happen to costs, supply and quality control if we imported them.

Conclusion (5 minutes):

Summarize the topic, focusing on the key concepts. Ask students how they felt about knowing that Pakistan was self-sufficient in growing all these commodities? Instill a sense of pride.



Lesson 4-5 Worksheets/assessment sheets

Teaching Objective:

To reinforce key concepts about agriculture in Pakistan through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Use worksheet on next page.

Date	e: Name:
Q 1.	Name the three factors that greatly support agriculture in Pakistan.
Q 2.	How much of Pakistan's land is farmland?
Q 3.	What are scrubs and wastelands?
Q 4.	How good are scrubs and wastelands for farming? Why?
Q 5.	How does rainfall help in agriculture?



Date	e: Name:				
Q 1.	Name the main river of Pakistan and its tributaries				
Q 2.	At which place does the river join its tributaries?				
Q 3.	Name the methods of irrigation used in Pakistan and briefly describe each.				



Date:	Name:	Name:		
Q 1.	2 1. What is the difference between cash crops and food crops?			
Q 2.	Complete the table.			
	Food crops (general)	Cash crops		
	Grain crops	Important staple crops		

The activity in *Content review* can also be modified as an individual activity and used as an assessment tool to gauge the level of understanding.



Date:	Name:
Planning	My Model Farm
Name of	Student:
What do	I want to grow on my farm?
	I want to grow them?
What fac	ctors should I consider before buying land?
What sh	ould I keep in mind while planting and harvesting?
What ste	eps should I take to manage water?
(a)	to ensure regular supply
(b)	in case there is shortage of water
(c)	in case of flooding

GEOGRAPHY

Minerals and Natural Energy resources

Discussion points

- Agricultural produce is the natural treasure on the Earth's surface. Similarly, there is treasure beneath the Earth's surface as well. These treasures are called minerals.
- These minerals consist of metals, natural energy resources, and non-metallic minerals. All three groups of resources have their utility.

ANSWER KEY

Content review

- 1. A mine can be above or below the ground, whereas a quarry is always above the ground.
- 2. i. metallic minerals—gold, silver, uranium, zinc, copper
 - ii. non-metallic minerals—chromite, dolomite, gypsum, limestone
 - iii. natural energy resources—coal, crude oil, natural gas
- 3. For industrial and commercial purposes, economic development, self-sufficiency
- 4. Cut down on imports, bring in foreign exchange, economic development, and prosperity

Going further

Key points in the answer should include fewer imports, cheaper than having to buy from international markets, self-sufficiency, and industrial development.

Challenge

Page 90—CNG in automobiles and other forms of transport, cylinders and gas connections to stoves for cooking, in gas generators, gaslights

Lesson Plans

No. of lessons: 2

Duration: 40 minutes each

Resources: Textbook, text, map, illustrations/drawings



Lesson 1-Minerals and Natural Energy resources

Teaching Objective:

 To introduce and familiarize students with the concept of mining and its uses; what are minerals and natural energy resources; and what is their importance

Learning Outcome:

Students should be able to understand the importance of mining and its various aspects.

Introduction (10 minutes):

Ask students about marble and precious stones like emeralds. Do they know how these stones are obtained? What makes them precious? You can also talk about the marble used to build the Taj Mahal at Agra.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Talk to students about precious stones like diamonds, emeralds, rubies, turquoise, etc. and metals like gold and iron. Non-precious non-metallic minerals include marble, onyx, jade, and tourmaline. All these are formed by the action and reaction of the layers of the Earth. This why they are found below the Earth's surface. Some energy resources like coal and natural gas are also mined. How valuable are they?

Conclusion (5 minutes):

Ask students why minerals and natural energy resources are important for the development of any country, especially Pakistan. Talk about foreign exchange, industrialization, economic development, self-sufficiency, respect in the world. Discuss the rising prices of gold. For research, ask them to find out which countries Pakistan imports gold from. Are there any gold reserves in Pakistan?

Homework: Read the topic. Mark difficulties, if any.

Lesson 2—Written work

Teaching Objective:

 To reinforce concepts about minerals and natural energy resources through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Questions 1–4 of *Content review.* Use worksheet on next page.

Homework: Exercise from *Going further*.



Date:	Name:	Name:		
Q 1. Oil and petrol What makes tl	eum products are often called "bl hem a precious natural energy res	lack gold" because they are very precious. ource?		
Q 2. Complete the	table.			
Precious met	als	Natural energy resources		
Precious stor	nes	Minerals mined in Pakistan		

GEOGRAPHY

Cities: the Jewels of Pakistan

Discussion points

Pakistan's cities are some of the most amazing places on Earth. On a trip to any of these cities, you can gather knowledge of history, culture, natural features, landmarks, people, and architecture.

ANSWER KEY

Content review

- 1. Quetta—has the most variety and abundance of fruit
- 2. Karachi

Going further

Open-ended question. Evaluate answers on facts, reasoning, and justification.

Challenge

Page 94-King Faisal of Saudi Arabia, Pakistan's friend and well wisher.

Lesson Plans

No. of lessons: 3

Duration: 40 minutes each

Resources: Textbook, text, map, illustrations/drawings

Lessons 1 and 2

Teaching Objective:

• To familiarize students with the names and highlights of some important cities of Pakistan

Learning Outcome:

Students should be able to retain the names and important features of Pakistan's major cities. They should also be able to compare and contrast the salient features.

Introduction (10 minutes):

Ask students to share their idea of what makes cities different from villages. What places have they visited? How are cities similar to and different from each other?



Have them share their observations about the cities they have visited outside their own and then compare the cities. Talk to them about how important it is to live in or close to a city. Ask them to develop criteria for judging cities—weather and climate, sanitation, transport, law and order, crime rate, economy, education, recreation facilities, pollution, etc. are some areas in which to compare cities. Ask them to prepare a chart to compare different cities based on these and other criteria the students have identified.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation.

Conclusion (5 minutes):

There are other big cities in Pakistan as well, however, these are the ones which contribute the most to Pakistan's growth and development. Instill a sense of pride, belonging, and ownership of our cities. Put up a pledge chart in the classroom with the name of each student with a suggestion/promise as to how they will look after their city.

Lesson 3—Written work

Worksheet/assessment sheet

Teaching Objectives:

- To assess students' knowledge about the key cities of Pakistan
- To reinforce key concepts through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Use worksheet on next page.

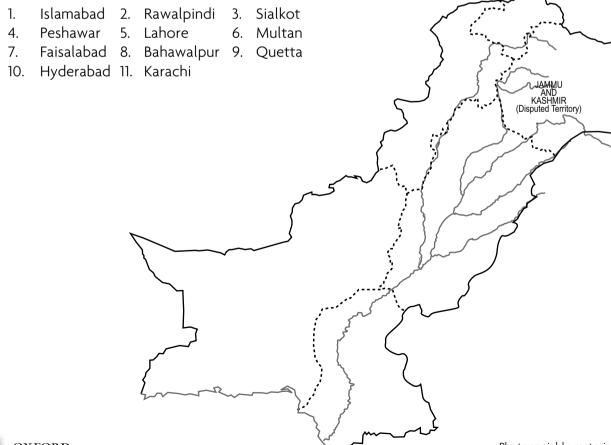
Homework: Questions 1 and 2 of *Content review*, exercise from *Going further*.

Date:	Name:
Date	Name.

Write the names of the provinces each of the following cities is located in:

	City	Province
1.	Islamabad	
2.	Rawalpindi	
3.	Sialkot	
4.	Peshawar	
5.	Lahore	
6.	Multan	
7.	Faisalabad	
8.	Bahawalpur	
9.	Quetta	
10.	Hyderabad	
11.	Karachi	

(b) Use your atlas and mark the numbers of the following cities on the map.



WORKSHEET

Date	e:	Name:
Q 1.	Stuc	dy the clues and name the city.
	a)	Capital city, home to embassies and envoys, Margalla Hills, located in Potohar Plateau, Presidency
	Ь)	Garrison city, shopping heaven for tourists to Kashmir, Pakistan Army Museum, one of the twin cities
	c)	Provincial capital of Punjab, Paris of the East, Badshahi Masjid, Gaddhafi Stadium, food street
	d)	Located on the banks of the Sutlej river and outskirts of Cholistan desert, a princely Rajput state, Cholistan Car Rally, palaces
	e)	Provincial capital of Baluchistan, fruit garden of Pakistan, Hanna Lake, located at 6,000 feet above sea level
Q 2.	Writ	te down three salient features each for the following cities:
	a)	Sialkot
	Ь)	Peshawar
	c)	Multan
	d)	Faisalabad
	e)	Hyderabad

GEOGRAPHY

f)	Karachi

Q 3. Complete the table.

Cities	Similarities	Differences
Karachi and Islamabad		
Lahore and Quetta		
Bahawalpur and Hyderabad		
Sialkot and Peshawar		
Islamabad and Lahore		
Faisalabad and Rawalpindi		

CHAPTER 22

GEOGRAPHY

Electricity and Power Plants

Discussion points

- Power resources are invaluable in the present times. Our lifestyles are dependent on them.
- We need to run maximum appliances and devices on power. That is why there is a need to have cost effective power generation.
- Pakistan's main power resource is electricity, which is generated through power plants. This is a non-renewable source.
- Renewable sources of power include wind and solar energy. However, we still do not have enough facilities and technology to use these on a mass scale.

ANSWER KEY

Content review

1. Hydel, nuclear, solar, wind

Going further

- Key ideas should include simpler lifestyles, candles and kerosene lamps, primitive ways of keeping cool like hand fans, no air conditioners and generators, etc.
- b. Open-ended question. Accept answers that are justified according to class level.

Challenge

Page 98—Hydro means water. Hydroelectric means electric power created by water.

Lesson Plans

No. of lessons: 3

Duration: 40 minutes each

Resources: Textbook, text, map, illustrations/drawings

Lesson 1—Power Resources in Pakistan

To be completed in two lessons of 40 minutes each. Cut-off time will vary from class to class, but the entire unit should not take more than two classes.



Teaching Objective:

To educate students about (a) the meaning of power resources (b)
electricity being the main source of power and (c) the modes of power
generation

Learning Outcome:

Students should be able to describe how electricity is generated.

Introduction (20 minutes):

Exercise a of *Going further* can be an introductory activity for students. Give them 10 minutes to think of what life was like when there was no electricity and write down their opinion. Also bring in the question about how different life was for people in 'pre-electricity' times. Compare and contrast ideas and put them on the board.

Explanation (15 minutes):

Part of introduction can continue into explanation. Read aloud from the text and give parallel explanation.

Recap of previous session can be the introduction for the next lesson.

Conclusion (5 minutes):

Provide a recap of the day's lesson.

Homework: Read the topic. Mark difficulties, if any.

Lesson 2—Power resources in Pakistan

Introduction (10 minutes):

Address student queries. Recap and review of work done in previous class and link to current topic.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. The pictures are interesting and text simple and self-explanatory. Explain the working and importance of each kind of power plant and study the illustrations to reinforce the concepts. Talk about the important parts of each plant and their purpose. Explain technical words.

Conclusion (5 minutes):

Summarize the topic, focusing on the key concepts. Address student queries, if any. Review the meanings of any words that they find difficult to understand.

Homework: Review topic thoroughly.

Lesson 3—Written work

Teaching Objective:

 To reinforce key concepts about power resources of Pakistan through written work



Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Answer the following questions. You can also use worksheet on next page.

- 1. Why is electricity the most important power resource?
- 2. What is the purpose of power plants?
- 3. How many types of power plants are there?
- 4. Describe the power generation process of a hydel power plant.
- 5. What is the difference between renewable and non-renewable sources? Name one renewable and non-renewable source each.
- 6. What is another name for renewable energy?
- 7. How can some natural, renewable sources of energy be used for power production?



WORKSHEET

Date	e:		Name:				
Q 1.	Fill	in th	e blanks.				
	a)	Elec	ctricity is produced by a machine called a				
	b)	Dynamos are moved by machines called					
	c)	Thermal power plants burn fuel in huge					
	d)	Нус	del power plants are usually located on				
	e)	Ene	rgy that is transmitted in the form of rays or waves is called				
Q 2.	Cho	ose	the correct answer.				
	a)	Fan	-like structures on rooftops and balconies are called				
		i.	Powermills				
		ii.	Solar power				
		iii.	Windmills				
	b)	Ger	nerating solar energy is not an easy task because				
		i.	The equipment is expensive				
		ii.	People are not interested				
		iii.	It is not effective				
	c)	Αg	roup of windmills placed close together to produce electricity are called				
		i.	Wind mails				
		ii.	Wind forests				
		iii.	Wind farms				
	d)		ong smelling gas and smoke released during power production or any such process called				
		i.	Dunes				
		ii.	Fumes				

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iii.

Carbon dioxide



	e)	Pakistan's nuclear power plants are located at				
		i.	Ghazi Barotha and Chashma			
		ii.	Karachi and Tarbela			
		iii.	Chashma and Karachi			
Q 3. Pakistan is currently going through an energy crisis. Among other factors is also that people waste electricity. Give suggestions as to how individuals can save electricity.						

CHAPTER 23

Visiting Public Places

CIVICS

CIVICS

Teaching suggestion

All topics covered under this chapter are self-explanatory and simple to understand. The lessons can be made interactive by adapting situations to role-play and by sharing experiences and opinions. These can also be reinforced during school field trips and other school activities and programmes. Let students know they will be observed during the activities. A classroom chart can be put up to encourage good etiquette with stars for students who behave. It would make the lessons more meaningful. However, emphasize that rewards or praise should not be reason alone for good behavior.

Activities and assignments in the textbook and guide can be used interchangeably as class, home, and assessment tasks, in notebooks or as worksheets.

Discussion points

- Visiting public places is routine for most people. With increasing populations and changing values, it has become necessary to stress on observing basic etiquettes for visiting places and respecting people as well as property.
- Every person present in a public place is important. These rules help to respect the rights of all those present. It would only be fair to adhere to them.

ANSWER KEY

Content review

- Q 1. Earning respect from others, creating a good social environment, having fewer problems from people.
- Q 2. (a) They are a different kind of public place because only those who are associated with educational institutions, like teachers, staff, and students, can enter here and we meet the same people daily. Yes, we need to follow rules of behavior in schools too.
 - (b) being punctual, queuing up, asking for teacher's permission before entering or leaving class, avoid making noise, obeying the teacher.
- Q 3. They cause chaos, confusion, unpopularity, damage, embarrassment to oneself and one's parents.

Going further

a. Open-ended question. Can be written or done orally.

Lesson Plans

No. of lessons: 6

Duration: 40 minutes each

Resources: Textbook, text, map, illustrations/drawings

Lesson 1—Public places and the 3 A's

Teaching Objectives:

• To describe the correct behaviour in public places

 To demonstrate how individual actions can affect people and property positively and negatively

Learning Outcomes:

Students should be able to:

- explain the importance of each individual's contribution to a peaceful public environment
- show willingness and motivation to adopt good etiquettes and make them part of their personalities

Introduction (10 minutes):

Read and explain the glossary words and their significance. Ask students about some public places that they visit and how they behave there. Have they seen any behavior that they found unacceptable? How did they feel towards that person? What did they do? Have they ever misbehaved in public? Do you think that was acceptable to others? Build up from here.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Text is simple and self-explanatory. Explain the need to develop the attitude to conduct oneself with propriety and as per protocol when among people. Stress on restraining from hooliganism or vandalism or selfishness as it affects many people. In addition, damage to life and property is not acceptable from anyone. Shared resources must be looked after and others' right to use them equally should respected. Generate a discussion to listen to student views.

Conclusion (5 minutes):

Ask students to make a conscious effort to restrain themselves from demonstrating unacceptable behavior in public places.

Homework: Read the topic. Mark difficulties, if any.

Lesson 2-Mosques and Museums

Teaching Objective:

 To familiarize students with special etiquettes required while visiting mosques and museums

Learning Outcomes:

Students should be:

- aware of what is required of them
- willing to make these etiquettes part of their nature/habit

Resources:

Textbook, text, map, illustrations/drawings

Introduction (5 minutes):

Remind students of the discussion from previous class about visiting public places. Bring in the names of the public places to be covered in this unit. Link the two.



Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Again, simple and self-explanatory text. Mosques (and places of worship for other religions) hold special importance and should be respected. Explain each point individually and discuss cause and effect of adhering to protocol. Stress on a tolerant and cooperative attitude.

Conclusion (10 minutes):

The suggested activity should be carried out as a discussion, with ideas put down on the board.

Homework: Read the topic. Mark difficulties, if any.

Lesson 3—Written work

Teaching Objective:

To reinforce key concepts about mosque and museum etiquettes

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Questions 1 and 3 from *Content review.* You can also use the worksheet on next page.

Homework: Complete class work.

WORKSHEET

Date	e: Name				
coir	Imagine you are the curator of the National Museum of Art and History. You have paintings, coins, pottery, carpets, and jewellery from the times of the Mauryan Empire on display under your care. Students from a school want to come and visit.				
(a)	What instructions would you send to the school to create awareness of the museum's etiquette? What reasons would you give for these instructions?				
	Instructions/etiquette to be followed	Reason			



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(b)	After the students have left, you find out that one of the paintings is torn, a pottery bowl is chipped, a vase has been knocked over, and there is a scratch on an ancient wooden box. Other visitors have complained that there was too much noise on the day these students visited.			
	(i)	Why do you think the students behaved in this way?		
	(ii)	How did you feel?		
	(iii)	Would you invite these students to your museum again?		

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Lesson 4—Park and library

Teaching Objective:

• To explain how to behave in parks and libraries where resources are limited and have to be shared

Learning Outcomes:

Students should be able to:

- describe the importance of sharing of resources
- name the principles/priorities/preferences that should be kept in mind to ensure fairness to all

Introduction (10 minutes):

Read and explain the glossary words and their significance.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Places of relaxation and leisure are a great benefit. There are many cities and towns that do not have this utility. Ask students how they would feel if they didn't have parks and libraries, or if they had to be shut down because they were not being cared for. Read out the points and ask students for their comments.

Conclusion (5 minutes):

Ask students to do an honest self-assessment of what they do when they visit a park or library—the positives and negatives. Discuss any negative activities they may have shared or come up with your own ideas. Ask them how indulging in bad behavior makes one feel—whether other people can see or not.

Class work: Worksheet—Right or Wrong

Homework: Exercise from *Going further* as worksheet.

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WORKSHEET

Dat	e: Name:	_
S	suggestions for some more good manners for visiting a mosque or a park.	
_		
_		
_		
_		
_		
Pia	ht or Wrong?	
The	e statements below relate to library etiquette. Put a tick on the right actions and a cross on wrong ones.	
1.	Before entering the library, Aalia remembered to switch off her cell phone.	_
2.	Kazim and Nazim were discussing the cricket match.	
3.	Umer yawned loudly.	
4.	Saadia put a book about the Aryans back on the history shelf.	
5.	Roha had to do a research project. She tore a picture out of a magazine belonging to the library.	
6.	Mariam wanted to underline some beautiful verses in a poetry book but Tina stopped her from doing this.	
7.	Ali did not take the encyclopedia home because it belonged to the reference section.	
8.	Saqib lost two of the library books he had borrowed, but he saved his pocket money and paid for them.	
9.	Noor forgot when her library books were due. The librarian fined her, but she argued with the librarian, saying it was not her fault.	1

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Lesson 5—Restaurants

Teaching Objective:

 To educate students about the etiquettes that need to be followed in restaurants and other eateries

Learning Outcome:

Students should be able to demonstrate etiquettes for dining out.

Resources: Textbook, text, map, illustrations/drawings

Introduction (5 minutes):

Review and recap previous lessons. Address student queries, if any. Go straight on to the text.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Keep asking for views of students about the consequences of not following each of the etiquettes under discussion. Also discuss the advantages. Discuss the checklist given in the worksheet point by point. Draw a column on the board for the negatives and positives of adopting proper dining etiquettes. Ask students for the points. Have a vote on what is greater and better, and then ask when people know there are more benefits, why do they still behave in an improper manner?

Conclusion (10 minutes):

Sum up the chapter, talk about school also being a public place with its own rules and etiquette.

Homework: Question 2 from Content review.

Worksheet/assessment sheet

Teaching Objective:

• To reinforce key concepts about etiquettes in public places

Learning Outcome:

Students should be able to answer correctly.

Sample/suggested assessment sheet

Students can also be marked/assessed on Content review and Going further.

Self-assessment worksheet can also monitor students' understanding of all key ideas.

WORKSHEET

	Name:
	t are the 3 A's that I must remember when I have to visit any public place? How wil help me?
i.	
ii.	
iii.	
Wha	t are some of the public places I visit?
_	
How	do/did I behave?
How	do/did I behave?
How	do/did I behave?
How	do/did behave?
How	do/did behave?

someo	ne was observing me, what opinion would they have of me?
oid/do	help in (a) making things better for people and (b)protect property?

CHAPTER 24

Gratitude

CIVICS

Discussion points

- Gratitude is an important part of our value system. It is an attitude that children need to learn.
- In present times, with the abundance and ease and availability of material things, children take things for granted. Therefore, it becomes necessary to talk to them about appreciating the presence of things and privileges in their lives.
- Appreciation leads one to gratitude.
- Gratitude also leads us to look after our resources and refrain from abusing the privileges because we understand their value and preciousness.

ANSWER KEY

Content review

- 1. Being thankful and appreciative.
- 2. Make a list of all the people you should be grateful to and say why. Openended
- 3. Complete the table below by adding your own experiences. Some have been done for you.

My reaction	Gratitude/ Ingratitude	What I gained/ lost	What I should have done
I sulked because my mother could not take me to my friend's house.	Ingratitude	My mother's sympathy	I should have tried to understand her point of view, and be supportive of her in her problems.
My aunt sent me some chocolates and I shared them with my siblings.	Gratitude	Siblings' respect and gratitude. Aunt and elders' appreciation. An image of being a responsible and caring young adult.	

Lesson Plans

No. of lessons: 2

Duration: 40 minutes each

Resources: Textbook, text, map, illustrations/drawings

Teaching Objective:

To instill and inculcate gratitude amongst students

Learning Outcome:

Students should be able to understand the importance of gratitude and its outcomes

Lesson 1 Gratitude

Introduction (10 minutes):

Read out 'Great thoughts on gratitude'. Ask students (a) to explain what they understood from each thought, (b) what they think gratitude implies. Then move on to the text.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Text simple and self-explanatory. Activities and worksheets can also be discussed as explanation. Explain each point and ask students if they have been in such a situation where they were not appreciated, or when someone did something for them, they were ungrateful or assumed that it was their right.

Conclusion (5 minutes):

End on the quotation in *Going further*. Brainstorm for ideas on the board. Ask students to copy.

Homework: Going further

Lesson 2 -Written work

Teaching Objective:

To assess students' understanding and retention of key concepts about gratitude

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Use worksheet on next page.

WORKSHEET

Date	e:	Name:
Q 1.	Con	nplete the following.
	a)	Gratitude means being
	Ь)	We can show our gratitude by
	c)	If we take out five minutes every day to look around us, we will
	d)	When we do someone a favour, we should
	e)	When someone does us a favour, we should

Teamwork and Spirit

CIVICS

Discussion points

A group of people making combined effort towards a common goal are said to be working as a team. In teamwork, even if a single person makes the effort and leads his team or group to success, the entire team benefits. The success of a team depends on the team leader and his decisions as well as on the attitude of the team members.

ANSWER KEY

Content review

- Open-ended question. Answer will vary from student to student. Must include ideas of togetherness, harmony, mutual respect, helping, sharing, and common goals.
- 2. Open-ended question.

Issue	How you felt about it	How you dealt with it
Your teammate made fun of your suggestion in public.		
You have done research for a group project and two members from your group do not have any knowledge of the topic.		
Your leader scolded you for being late even though it was your team mate's fault.		
You were playing with your pencil while instructions were being given out and missed some important details.		
You forgot to bring what you were asked to and because of that, your team lost points.		
Your team has lost all its matches in the last two years and your best friend suggests that you join a different team.		

Going further

a. Open-ended question—check answers with points on page 81.

b. Open-ended question—discuss individual answers.

Lesson Plans

No. of lessons: 3

Duration: 40 minutes each

Resources: Textbook, text, map, illustrations/drawings

Lesson 1: Team, teamwork, and duties of a team member

Teaching Objective:

• To introduce students to the concept of teamwork and working together in peace and harmony

Learning Outcomes:

Students should be able to:

- describe the importance and benefits of teamwork
- explain their roles as a team member and leader

Introduction (10 minutes):

Read and discuss the glossary for this chapter. Talk about the sports teams in your school and how they win matches. Talk about the Pakistani national sports teams and individual players. Highlight their strengths and weaknesses as a team. Talk about your class as a team. Build up on these.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Continue introduction. Read out the Worksheet in *Content review* with students. Keep asking questions. Read and explain the duties of a team member and a captain. Tell students that each individual contributes to a team's success and being a leader entails more responsibility than glory. Even though one man leads, his success depends on the members. And the members also have responsibility on their shoulders—to cooperate and put in their best, and to do what is their duty. Responsible members are always sought by good leaders.

Conclusion (5 minutes): Recap/review. Address student queries or responses.

Homework: Read the topic. Mark difficulties, if any.

Lesson 2—Responsibilities of a team leader

Teaching Objective:

To inform students that all leaders have to be responsible for their actions

Learning Outcomes:

Students should be able to:

- explain that leadership entails responsibility
- describe the challenges a leader may face

Resources: Textbook, text, map, illustrations/drawings

Introduction (10 minutes): Talk to students about different leaders in the world—one principal, one class teacher, one president, one prime minister, one general, versus many followers. Discuss one shepherd looking after a flock of sheep. Success of a good team depends on the capability of the leader plus the reasonability and obedience of followers. A leader has responsibilities.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Text simple and self-explanatory. Ask students about some leaders and role models. What makes them popular? How do they behave? Do they command respect because of their good habits? Are bullies leaders? Ask students to observe/recall/think of an event/incident where they have been in-charge of situations. Did they enjoy being responsible for others? Did they take advantage of their position?

Conclusion (5 minutes):

Use Questions 1 and 2 of Going further as points to think about.

Homework: Read the topic. Mark difficulties, if any.

Lesson 3 -Written work

Teaching Objectives:

- To assess students' understanding about team and leadership
- To reinforce key concepts through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Questions 1 and 2 of *Content review.* Use worksheet on next page.

Homework: Question 2 of Content review.

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WORKSHEET

Date:	Name:
	, captains, and monitors are leaders of different teams. If you were appointed as one, portant points would you keep in mind?
	e else from your class is appointed as a leader. How should you feel and behave that person? Open question—discuss individual answers.
Q 2. Cor	mplete the following:
(a)	Achieve :
(b)	take action to begin a new process
(c)	Consistent:
(d)	Assigned:
(e)	: make a thing complete
(f)	: choices available instead of something else
(g)	Lapse :
(h)	: to make up for a loss or injury
(i)	: something done or said to show appreciation

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CHAPTER 26

The National Anthem of Pakistan

CIVICS

Discussion points

The national anthem of any state is its pride and joy, a national song. The *Qaumi Tarana* of Pakistan is our national song in which we sing the praises of our country and make a promise to our country—to uphold its honour at all times and at all costs, ending with a prayer. Students must know the history of its composition and lyrics, what the words mean, the etiquettes for listening to it, and the necessity of respecting it.

ANSWER KEY

Content review

- 1. Patriotic song adopted by a country as its identity
- 2. Ahmed G. Chagla, Abdul Hafeez Jallundhri
- 3. Persian words, Urdu language

Going further

Open-ended question.

Lesson Plans

Number of lessons: 2

Duration: 40 minutes each

Resources: Textbook, text, map, illustrations/drawings

Lesson 1—The National Anthem of Pakistan

Teaching Objective:

 To familiarize students with the background and importance of our national anthem

Learning Outcomes:

Students should be able to:

- describe who wrote the lyrics and who composed the tune
- explain what the words mean
- describe the etiquette of listening to the anthem



Introduction (5 minutes):

Ask students if they know who composed the anthem and its music.

Explanation (25 minutes):

Read aloud from the text and give parallel explanation. Read the national anthem stanza by stanza and explain what it means. Read and discuss the etiquettes. Tell students that people of all countries respect their national anthems. Make the students sing the national anthem in a soft voice in accordance with the etiquettes they have learnt. Ask them how they felt and if they could relate to the feelings of the people described in the chapter.

Conclusion (10 minutes):

Put up a small pledge chart, making each student sign his/her name with a small promise to do good for Pakistan as a tribute to its national anthem.

Homework: Read the translation of the national anthem.

Lesson 2—Written work

Teaching Objectives:

- To assess students' understanding about the background, meaning, and importance of the national anthem of Pakistan
- To reinforce key concepts through written work

Learning Outcome:

Students should be able to answer correctly.

Instructions (5 minutes): Explain the questions to students. Answer any queries.

Class work (35 minutes): Questions. 1–3 of *Content review*. Exercise from *Going further*. Use worksheet on next page.

WORKSHEET

Date	:	Name:			
Q 1.	. Complete the table below by writing the meaning or the word.				
	(a) Identity	(b) Inspiring a person to do something	(c) what you are trying to achieve		
	(d) Solidarity	(e) Given or giving freely	(f) Great determination		
	(g) Interpreter	(h) Fervour	(i) Great enjoyment		
Q 2.	Describe our nat	tional anthem in your own words.			

ANSWER KEY

Answer Key

Chapter 1

- a) subcontinent 1.
 - b) abundant
 - c) populations
 - North-east d)
 - melting pot
- 2. a) True
 - b) False
 - True c)
 - d) False
 - e) True
- 3. a) It was a prosperous region.
 - Abundance of resources like water, b) fertile soil and flat land for farming, favourable climate, other natural resources

Chapter 2

- Mound of the dead Q 1. a)
 - The Brahmins b)
 - The Caste System, bronze and gold, c) horses and chariots, and the use of bow and arrow
 - d) Religious literature of the Aryans
 - Mohenjo-Daro and Harappa e)
- Planning of towns and cities, writing, Q 2. (a) arts and crafts, system of weights and measures, well-developed trading and taxation systems
 - They tell us how developed a (b) civilization it was.
- Q 3. a) exceptional brickmakers
 - b) **Aryans**
 - Hindukush c)
 - d) Russia
 - e) taxes
- Q 4. a) evidence
 - b) revenue
 - c) decipher
 - d) flourish
 - revive e)
- Q 5. King priest, seal, dancing girl, the Great Bath

Chapter 3

- Q 1. a) 565 BCE
 - Suddhodhana, Maya b)
 - c) a kingdom in Nepal
 - d) greed
 - 485 BCE e)
- Q 2. a) Rebirth
 - Dharma b)
 - c) The enlightened one
 - Unpopularity of the Caste System d)
- Q 3. Tibet, Nepal, Sri Lanka, Japan, China, Cambodia, Myanmar, Thailand
- Q 4. (a) That he would become either a great leader or a holy man
 - (b) He did not want his son to become a holy man.
 - He did not let him out of the palace (c) grounds, provided all kinds of luxury and material happiness, and did not let him see any suffering.
- Q 5. WEKXIXNDCIOMKARMANDEDN BYTSH**PROFOUND**DWUTRSKPKN AOKIS**MEDITATION**SDETIDERSP **ARCPOENCOUNTERMEDIALRTIC** TAHNSKSYA**DHARMA**PSIQTAOL NIRVANAUTSJKAP BUDDHALEO **BODHI SUDDHODHANA MAYA**OALA

- Q 1. a) Mediterranean-Indus Valley.
 - b) magus
 - Gandhara c)
 - d) **Persepolis**
 - Ahura Mazda e)
- Darius annexed them through his Q 2. (a) conquest in that region.
 - These were neigbouring lands sharing boundaries with Persia.
- Q 3. Construction of the Royal Road, establishment of a university at Taxila, setting up of a postal system.

- Q 4. (a) Wars with Greeks, cruel, corrupt and incompetent rulers after Darius
 - (b) Greeks defeated and conquered them.
- Q 5. a) Persians
 - b) magus
 - c) decline
 - d) Persepolis
 - e) Zoroastrianism

Chapter 5

- Q 1. a) False—in the memory of his horse
 - b) False—he ruled the Paurava people living on the banks of the Jhelum and the Chenab
 - c) False—Aristotle educated and King Philip trained him in military warfare
 - d) True
 - e) True
- Q. 2 a) Received money, property, or title when the previous owner died
 - b) Gave way to something overpowering
 - c) The assembling of soldiers as a battle unit
 - d) rebel
- Q 3. a) An orderly formation in which soldiers stand close together
 - b) By leaving his governors with teams of professionals, artists, and philosophers in the cities he conquered
 - c) His army had weakened and his soldiers were tired and he wanted to return with a stronger army

Chapter 6

- Q 1. a) Kautilya
 - b) Bindusura
 - c) Chandragupta
 - d) Ashoka
 - e) Seleucus
- Q 2. a) Turkey
 - b) Mauryan Dynasty
 - c) Son-in-law
 - d) Brihadratha
 - e) Bactria

- Q 3. By engraving his edicts and news about developments on metal pillars all around the empire
- Q 4. (a) Weak and corrupt rulers after Ashoka, return of the Caste System
 - (b) In 185 BCE, when the last ruler was killed by his own commander

Chapter 7

- Q 1. a) Kushans
 - b) Hindukush
 - c) Kadphises II
 - d) Century
- Q 2. a) False
 - b) True
 - c) False
 - d) True
- Q 3. a) Because of his tolerance and pro-Buddhist ways
 - b) Dome-shaped structures with Buddhist artifacts
 - c) Near Peshawar
 - d) The Indians considered Buddha a great human teacher who stressed on achieving peace through good deeds, whereas the Chinese considered him as god in human form.

- O.1 a) Chandragupta I
 - b) Both hailed from Magadha
 - c) Napoleon of Asia because of the number of wars he fought
 - d) Chandragupta II
 - e) An astronomer who argued that the Earth is round and rotates on its axis, calculated the length of the year, and explained eclipses
- Q. 2 (a) A Chinese traveller
 - (b) Positive: Peace and prosperity, all kinds of basic facilities available, strict but kind rulers, no heavy taxes. Negative: Return and strengthening of the Caste System, mistreatement of Shudras at the hands of other castes.

ANSWER KEY

- O 3. a) 320, 500 BCE
 - b) son
 - c) Shudras
 - d) Ellora, Ajanta
- Q 4. Write two sentences about each of the following people stating who they were and their importance:
 - a) Chandragupta I: founded the Gupta Dynasty, strengthened areas under his rule which included much of present Pakistan, India, Nepal, Bangladesh and Myanmar
 - Samudragupta: Chandragupta I's son, promoted learning and knowledge, made peace with rulers of the lands he conquered, fought many battles
 - Harisena: one of the two notable poets of the Gupta court who composed poems during the Gupta rule
 - Kalidas: the other of the two notable poets of the Gupta court who composed poems during the Gupta rule
 - e) Chandragupta II: Samudragupta's son who strengthened Gupta rule and brought it to its peak in terms of area under rule, learning, and development

Chapter 10

- Q 1. a) envoys
 - b) Raja Dahir
 - c) nephew
 - d) Bhambhore
 - e) sea port
- Q 2. Answer the following questions.
 - a) They were protected by Raja Dair, the ruler of Sindh
 - b) The Governor of the eastern provinces of Arabia
 - c) He wanted to take action against the pirates and Raja Dahir
 - d) Raja Dahir was defeated

- e) Zakat from Muslims and Jizya from non-Muslims collected as tax, Islamic sharia courts set up, people free to practice their religions, no job discrimination, Caste System abolished, new places of worship constructed
- f) Muslim rule arrived in Sindh, peace and prosperity restored, trade, exchange of ideas and learning between Arabs and Indians, inter-marriages, strengthening of ties, social and cultural transformation
- Q.3. a) True
 - b) False
 - c) False
 - d) False
 - e) False

- Q 1. a) A wide or open space or area
 - b) celestia
 - c) the striking of one body against another
 - d) crash together with violent impact
 - e) marvel
- Q 2. a) Because of their distance from the Earth
 - b) Because of favorable conditions for sustaining life, especially temperature.
 - c) Because of the gravitational pull exerted by the Earth towards its center
- Q 3. a) Georges Lamaitre
 - b) dwarf
 - c) third
 - d) Solar
 - e) centrifugal
- Q 4. Answer the following.
 - a) All matter was condensed in a single spot. Then a major explosion threw this concentrated matter everywhere. This is how the Universe was created
 - b) In light-years

c) The light of the Sun reflected from the Earth to the moon

Chapter 13

- Q 1. a) half, shaped like a globe
 - b) Cancer
 - c) equinox
 - d) northern
 - e) bulges out
- Q 2. (a) (i) Rotation, revolution, tilt, and bulge
 - (ii) Day and night, seasons
 - (b) (i) Winter solstice: June 21/22, summer: December 21/22
 - (ii) Summer solstice on June 21/22, winter solstice December 21/22 opposite in both hemispheres
 - (c) Equal days and nights—because of the position of the Earth in relation to the Sun

Chapter 14

- Q 1. a) False—it is made of different layers of solid and molten rock
 - b) True
 - c) True
- Q 2. Give one-word answers.
 - a) mantle
 - b) core (inner)
 - c) faults
 - d) crust
 - e) convergent
- Q 3. Convergent plates push into each other, causing land to rise up in folds, and form mountains. Divergent plates break or move away from each other, creating rifts and valleys. Conservative plates slide past each other in opposite directions.

Chapter 15

CW Worksheet

Erosion—Advantages: new land is created, natural beauty, debris is transported, new soil created, breaking down of land, new habitats are created, sites are cleaned up. Disadvantages: Habitats may be destroyed, breakdown of land can be destructive, loss of soil

Classwork:

- a) Gradual breaking down through use or stress
- b) crumble
- c) soluble
- d) a narrow opening in a rock or wall
- e) a deep valley formed by a river running through
- f) gorge
- g) fine particles of solid matter that float in water or settle down at the bottom
- h) the remains of something that has been destroyed or broken up

Worksheet

- Q 1. a) Weathering is the wearing down of rock or rock surfaces into smaller pieces, and erosion is the transportation and deposition of broken down pieces of rock.
 - b) Chemical weathering is the breaking down of rock due to reactions between the chemicals in rocks and water and wind. In biological weathering, rocks break down due to the actions of living things like plant roots that grow through cracks and crevices, widening and eventually breaking them down, as well as the burrowing action of animals.
 - c) Sediment is particles of any matter that settle at the bottom whereas debris is the remains of something that has been broken or destroyed.

ANSWER KEY

- d) Glaciers are bodies of moving ice and rivers are bodies of flowing water.
- Q 2. a) minerals
 - b) weathering
 - c) u
 - d) agents
 - e) river
 - f) burrows
 - g) expand
 - h) sandblasting
 - i) topography
 - j) soluble

Chapter 16

- Q 1. a) loftiest
 - b) Baluchistan
 - c) intermontanne
 - d) Potohar
 - e) flat
 - f) barren
 - g) spiky
 - h) fold
 - i) oasis
 - j) ships
- Q 2. Mountain ranges: Alps, Andes, Rockies, Pennines, Himalayas, Hindukush Hills: Chaghai, Margalla, Murree

Lone mountain: Fujiyama, Egmont,

Kilimanjaro

Intermontanne plateaus: Tibet, Bolivia, Peru, Mexico

Deserts: Sahara, Thar, Cholistan, Gobi, Sinai

- Q.3 (a) Explain the following:
 Intermontanne plateau: surrounded by
 mountains on all sides. Piedmont
 plateau: mountains on one side and the
 sea or plains on the other sides.
 Continental plateau: found near coastal
 plains
 - (b) Give one example for each of the following types of plateaus.
 Intermontanne: Tibet, Bolivia, Peru, Mexico.

Piedmont: Colorado Continental: Deccan, Australia, Spain Volcanic: Columbia Wind/water erosion: Potohar, Russia, Brazil, Finland, Greenland

Chapter 17

- Q 1. a) Distance from the Equator: closer to the Equator, high temperature.
 - b) Distance from the sea: land and sea breezes have a cooling effect
 - c) Rainfall: water has a cooling effect, lowers temperature, brings breeze
 - d) Wind direction: if it starts from a cooler place, it will have a cooling effect, and vice versa
 - e) Altitude: higher places are cooler.

Chapter 18

- Q 1. a) Right amount of rainfall and temperature needed to grow crops.
 - b) In case rainfall is not enough, arrangements must be made to channelize water to the farmlands to meet their water needs
 - c) Natural disasters can destroy crops and harvests causing famine, poor quality crops, few crops, and expensive crops
- Q 2. a) agriculture
 - b) mountains
 - c) pests
 - d) nutrients
 - e) waterlogged

Chapter 19

Worksheet 1:

- Q 1. Land, climate, water
- Q 2. 35%
- Q 3. Flat, rocky areas with poor quality soil
- Q 4. Not good. Suitable grazing areas for cattle.
- Q 5. Provides freshwater for irrigation

Worksheet 2:

- Q 1. River Indus—Ravi, Jhelum, Chenab, and Sutlej
- Q 2. At Punjnad in the Punjab
- Q 3. a) Construction of dams and barrages on rivers to store water in reservoirs and regulating its supply to fields
 - b) Digging canals to carry water from rivers and other freshwater sources to the fields
 - c) Digging wells to draw freshwater from the ground
 - d) Digging underground wells and tunnels to tap freshwater resources and channel it to the fields

Worksheet 3:

- Q 1. Cash crops are crops in surplus of domestic needs that are sold to other countries for cash. Food crops are crops grown for domestic consumption as food.
- Q 2. Complete the table.
 Food crops: wheat, rice, sugarcane, beans, lentils, fruit, vegetables
 Cash crops: cotton, rice, sugarcane, oilseed, soybean
 Grain crops: wheat, rice
 Important staple crops: wheat, rice

Chapter 20

- Q 1. They are not found everywhere in the world, oil-producing countries are very powerful and rich because the rest of the world is dependent on their oil to use as fuel.
- Q 2. Complete the table.

 Precious metals: gold, silver, platinum,
 uranium, zinc, copper
 Natural energy resources: oil, coal, natural
 gas

Precious stones: emerald, topaz, tourmaline, onyx

Minerals mined in Pakistan: limestone, sulphur, barite, gypsum, rock salt, and dolomite

- Q 1. a) Islamabad
 - b) Rawalpindi
 - c) Lahore
 - d) Bahawalpur
 - e) Quetta
- Q 2. Write down three salient features each for the following cities:
 - a) Sialkot: world's largest producer of footballs, manufacturer of sports goods, surgical and dental equipment, historical city since ancient times, second most important revenuegenerating city after Karachi
 - b) Peshawar: historical city, link between east and west in ancient times, oldest living city
 - c) Multan: city of saints, handicrafts and cottage industry, agricultural center
 - d) Faisalabad: hub of cotton textile industry, Clock Tower and eight roads leading from here in different directions, was initially named Lyallpur after James Lyall
 - e) Hyderabad: center of Sindhi language and literature, largest bangle manufacturing industry, important historical city since the time of Alexander
 - f) Karachi: main industrial and commercial city, seaport, known as mini-Pakistan, cosmopolitan city

ANSWER KEY

Q 3.

jor cities, home to foreign nitaries, developed vincial capitals, most	Karachi—hub of industrial and commercial activity Islamabad—home to highlevel government officials, embassies and consulates
vincial capitals, most	level government officials,
vincial capitals, most	
reloped cities of their pective provinces	Lahore—deep cultural roots, historical city, surrounded by rivers
	Quetta—dry and harsh climate, fruit producer, home to wildlife
Both centers of culture, important cities during colonial times, upcoming centers for trade and industry	Bahawalpur—princely state, city of palaces
	Hyderabad—industries more developed, center for Sindhi language and literature
h important historical es, witnessed all major	Sialkot—center for trade and industry
es since ancient times	Peshawar—famous for its old educational institutes and colonial architecture
Both in the Punjab, important cities	Islamabad- national capital, home to government offices and buildings, diplomats and dignitaries, less populated
	Lahore—provincial capital, ancient city, cultural influences, densely populated
Both in the Punjab, important trading and commercial	Faisalabad—home to cotton textile industry
ters	Rawalpindi—no major industries
	h centers of culture, portant cities during onial times, upcoming ters for trade and industry h important historical es, witnessed all major es since ancient times h in the Punjab, important es

Chapter 22

- Q 1. a) dynamo
 - b) turbines
 - c) Ash pits for heating boilers
 - d) dams
 - e) Electricity
- Q 2. a) Windmills
 - b) The equipment is expensive
 - c) Wind farms
 - d) Fumes
 - e) Karachi and Chashma
- Q 3. Open-ended question

Chapter 23

Q 1. Awareness: knowing the correct etiquettes helps us behave correctly
Attitude: our willingness to behave properly enables us to take the right action
Action: willingly doing the right thing after we become aware of what should be done

Chapter 24

- Q 1. Complete the following.
 - a) Thankful and appreciative
 - b) Expressing our thankfulness in words and deeds, by taking care of people, by looking after what we have
 - c) See many things to be thankful for things that we generally don't care to notice

- d) Not boast about it or keep reminding people of it. We should forget about it.
- e) Never forget it and be thankful to the person, look for a chance to repay the kindness

Chapter 25

- Q 2. a) To reach a goal or gain something with effort
 - b) Initiate
 - c) Having a regular pattern or style
 - d) Given, allocated, or appointed
 - e) Complement
 - f) Alternatives
 - g) A slight mistake or failure
 - h) Compensate
 - i) Gratitude

- Q 1. Complete the box.
 - a) Who or what a person or thing is
 - b) Motivational
 - c) Objective
 - d) Unity or support for each other because of a common opinion
 - e) Bounteous
 - f) Resolve
 - g) someone who translates what is being said for speakers of another language
 - h) feeling of great warmth and intensity
 - i) gusto

Notes