

4

Revised Edition

NEW OXFORD

# Social Studies

for PAKISTAN

TEACHING GUIDE

OXFORD  
UNIVERSITY PRESS

T/V

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## Lesson 1 The Earth in space

### Discussion points

- The shape of the Earth
- The Earth in space
- Useful terms and their definitions
- Understanding the Earth's movements and effects

This is a very interesting subject and the pupils can get the maximum mileage out of your lecture if you arrange for a globe to be placed on your desk, in full view of the class. This is an essential prop for geography, history, and science subjects. If, however, a globe is not available, a large blue ball, like a football will do, but only as a temporary substitute. Additionally, a large, coloured illustration or photograph of the Earth and its immediate environs, also showing the Sun and the Moon in close proximity, will be necessary to explain the topic of this lesson. You are advised to prepare thoroughly to explain these concepts, and to make good use of this Teaching Guide.

Begin the lesson by telling the pupils that the Earth has a spherical (round, circular) shape by pointing to the globe. It is slightly flatter at the upper and lower ends. Identify the two ends by pointing them out; tell them these two areas are known as the North and South Poles. Ask them why they are called the poles. Explain that the Earth's axis is an imaginary line that runs vertically through the Earth from north to south. The two ends of the axis are known as the North Pole and the South Pole.

Also explain that the Earth's axis is not perpendicular to the Sun, i.e. at  $90^\circ$ , but is tilted at an angle of  $23.5^\circ$ . The importance of this fact will be understood when pupils are taught about seasons and how they are caused.

### Suggested activity to explain revolution

- For this activity, you need a large ball, preferably orange or yellow, to represent the Sun, and a smaller ball (tennis) to represent the Earth and a ping-pong ball, to represent the Moon. Ask three pupils to come up and help you demonstrate this exercise. The pupil with the orange ball (Sun) should hold it in a steady position, while the other pupil will revolve the tennis ball (Earth) around the Sun and the third pupil will revolve the ping-pong ball (Moon) in a circular motion round the 'Earth'. This exercise needs some prior practice to get it right, but it can amply demonstrate the movement of the spherical objects in the sky, in relation to each other.

Ask pupils if they know how day and night take place. Give them a chance to think before answering. Then explain rotation by using the globe to show this movement. The Earth rotates on its axis or pole only once in 24 hours and parts of the Earth that face the Sun have day while those facing away from it have night. Explain that the Sun is *stationary*. It does not *rise* and *set*; it is the Earth that moves on its axis and the Moon that moves around the Earth, as they both move around the Sun.

Explain that for thousands of years the movements of the planets and stars were not discovered. Ancient people believed the Earth to be at the centre of the universe with all other heavenly bodies, including the Sun moving around it. So it was believed that the Sun *rose* and *set* in the sky.

**Day and night:** The Earth's rotation on its axis causes the phenomenon of day and night. Those parts of the Earth that face the Sun have daylight (demonstrate this by pointing to the globe) and those

parts that face away from the Sun are in darkness and, therefore, experience night.

Next, explain hemispheres, i.e. half of a sphere. Tell the pupils that there is another imaginary line that goes around the middle of the Earth, this time horizontally. Point this out on the globe or a world map. This is called the equator. Again, like the axis, we cannot see it, but it is there. This divides the Earth into two parts, the northern hemisphere and the southern hemisphere.

Those countries that are close to or on the equator are very hot because the Sun is directly overhead all year round.

### **Suggested activity**

- You could use a torch here to represent the light of the Sun. Show them the shape of the Earth: the area at the middle of the Earth is fully exposed to the hot rays of the Sun whereas moving towards the poles, there is less heat and sunlight, so these regions are colder.

**Orbits:** Ask the pupils why it is that the Earth and the Moon do not move away from their path round the Sun, but always move in the same direction, on the same path, day after day, year after year, century after century. The reason is that planets and satellites have orbits or paths that are fixed by nature—according to the gravity of the moving and stationary objects—and they always keep to these orbits. Tell them the orbits are elliptical or oval in shape.

Show them oval-shaped objects to drive home the point and show them the diagram on page 2 of the textbook. The Earth's orbit round the Sun is clearly oval in shape.

**Seasons:** What is the season these days? What was the season before this one? What is the next season after this? How are seasons caused? Ask the pupils these questions. See if they have any idea how seasons or changes in weather are caused.

Tell them that they have learnt that the Earth is rotating on its axis and revolving round the Sun simultaneously. The rotation of the Earth causes day and night and the revolution of the Earth round the Sun causes the seasons. The diagrams on pages 2 and 3 of the textbook will help to explain the concept. The tilt of the axis and the Earth's oval-shaped orbit causes the seasons as the hemispheres are thus tilted towards the Sun (summer) or away from it (winter).

**Solstices and equinoxes:** The spring and autumn equinoxes, 21 March and 22 September, are the two days in a year when the length of day and night are equal. These two days also herald the coming of spring and autumn in the northern hemisphere. In the southern hemisphere it is the opposite as it will be autumn in March and spring in September. The diagram on page 3 of the textbook, showing the position of the Earth from the Sun, helps to explain this.

The diagram also shows the summer and winter solstices, 21 June and 21 December. Solstice literally means 'Sun (sol) standing (stice)' but this is actually that point in the orbit when the Earth is farthest from the Sun. Look again at the diagram on page 3. When the northern hemisphere faces the Sun, the longest day is on 21 June. It is the other way round in the southern hemisphere which has the longest night on 21 June. When the southern hemisphere faces the Sun, the longest day is on 21 December, which means the longest night in the northern half.

### **Answers to questions**

1. The Earth has a round shape like a ball. It is called a sphere.
2. Rotation is the spinning of the Earth on its axis. The Earth's movement around the Sun is called revolution.
3. Seasons are caused by the Earth's revolution round the Sun and the tilt (the direction in which it leans; inclination) of its axis.
4. Places that are close to the equator are hot throughout the year.
5. Solstice: Each of the two times in the year at midsummer and midwinter, when the Sun reaches the

highest and lowest points in the sky, marked by the longest and shortest days on 21 June and 21 December.

Equinox: The two times in the year when day and night are of equal length, on 21 March and 22 September.

## Work Page

- A
- 1 astronaut: a person trained to travel in a spacecraft
  - 2 revolution: moving or circling around another object
  - 3 orbit: the path of a planet
  - 4 axis: an imaginary line through the centre of the Earth
  - 5 equator: an imaginary line round the middle of the Earth
  - 6 hemisphere: half of a sphere i.e. the Earth
  - 7 equinox: when day and night are of equal length
- B The pupils will do this themselves with reference to the diagrams in Lesson 1.

## Things to do

- The names of the astronauts who walked on the Moon are Neil Armstrong and Buzz Aldrin. The third astronaut, who stayed in the spacecraft, is Michael Collins.
- Pupils can search the Internet or the encyclopedia and do this exercise individually.

# Lesson 2 Climate

## Discussion points

- What is climate?
- Factors that affect climate
- Climatic regions
- Climatic maps

We learnt in Book 3 that the word 'climate' means the typical weather of a region over a period of time. For example, we can say 'Pakistan has a warm climate'. On the other hand, though the word 'weather' also describes the climate, there is a difference. It is incorrect to say that 'Pakistan has a warm weather'. We could say that, 'Pakistan has warm summers and cool winters' or that 'Pakistan has warm weather all the year round, with only a mild winter.' Generally, weather is the day to day changes in temperature and the rain or dry, sunny days, in a place.

## Suggested activities

- Once the pupils have registered the difference between the two words, ask them to write two sentences to show you that they have understood their meaning and use. Then explain that climates can be of many different kinds: tropical (hot), temperate (not too hot, not too cold), wet (raining all the time), humid (hot and steamy), and arid (dry and dusty, with no rain) as well as very cold as in the polar regions or on high altitudes.
- Ask the pupils to show the location of Pakistan on a world map or globe. Tell them that Pakistan is located between 24° and 37° north of the equator. You could ask the pupils to recall what they learnt about the equator in Book 3. Also show them that Pakistan is located in the northern hemisphere, it has a generally warm climate with mild winters and hot summers; but its northern areas, with high

snow-covered mountains, are very cold. The south of Pakistan, with its coastline along the Arabian Sea, is cooled by the sea breeze in summer.

**Factors influencing climate:** Explain how the climate of a land is affected. Show pupils a relief map of Pakistan (a map that shows physical features) and explain the physical features. Then tell them that the first factor that affects climate is the position of the country on Earth. Point to the globe and ask the pupils to look at the equator and the curve of the Earth, upwards and downwards from the equator.

### **Suggested activities**

- Show them that areas away from the equator are also away from the Sun's rays and the temperature gets cooler. Regions nearer to the North and South Poles become colder and colder, until temperatures drop to almost freezing point or even below.

This means that the climate of a country is affected by its position on Earth, in relation to the Sun. The Sun's heat is greatest at the equator (due to the outward bulge of the land mass of the Earth), and least at the poles.

There are other factors too that influence climate. Explain each factor one at a time or the pupils will be lost in a maze of information that they cannot absorb or comprehend.

The next factor is a country's proximity or closeness to the sea. Countries close to the sea have the advantage of cool sea breezes blowing over the land and cooling it, thus dropping the temperature considerably. For example, the city of Karachi in Sindh is situated on the Arabian Sea coast. The days are very hot in summer, but from late afternoon onwards the temperature drops as the cool sea breeze begins to blow inland.

Cities that are landlocked—surrounded by land—tend to become oppressively hot in summer as wind routes are blocked by landforms such as mountains or hills. Some places are surrounded by hills and cannot catch the rain, such as Quetta in Balochistan. They may be protected from strong rains but generally have a dry climate.

Altitude or height from sea level is another factor that affects climate, because air temperature drops as the height increases. Thus mountainous regions generally have a cold climate, such as Pakistan's northern areas. It would be interesting to show pupils a picture of Mt. Kilimanjaro in Tanzania, Africa—it is almost on the equator, but its peak at 5892 metres is always snow-capped.

### **Suggested activity**

- Ask them to point out some of the landlocked cities in Pakistan on a map; then more on a world map or globe. Let students observe and comment on the climate of other countries and cities near to and away from the sea. Let this be an interactive session as they will gain more from a discussion like this, than from merely reading the textbook.

Now tell the pupils about deserts and show them the location of some of the deserts on different continents on the world map—the Sahara Desert in Africa, the Gobi Desert in Mongolia, the Atacama Desert in South America, and the Mojave Desert in Mexico. Since there is no water in deserts, the sand is dry and infertile; therefore no crops or trees can grow; plants found in deserts regions are tough and thorny. That is why deserts are vast, inhospitable wastelands, where people cannot live. Deserts are only home to certain reptiles such as lizards, iguanas, and snakes, and birds like vultures.

### **Suggested activity**

- Ask them the names of the deserts in Pakistan. Tell them about the Thar Desert in Sindh. There is often a drought (no rainfall, therefore no water) and the people of Thar go through terrible hardship: there is no water to grow crops, no grass to feed their livestock, so many of them have to move with their cattle in search of pasture. However, when it does rain, this region blooms: there is greenery all around and rainwater collects in shallow pools.



**Forests** play a major role in the climate of a region because they attract rain. Ask the pupils if they have visited Murree in the north of Pakistan. Its height is over 7000 feet above sea level, so its climate is cooler all the year round than cities at sea level; it rains all year round because its forests of tall trees and vegetation attract rain. Therefore, in the heat of summer, it is the ideal place to go for a vacation for relief from the sweltering heat. There are other such hill stations, also, like Ziarat in Balochistan. However, the forest cover in northern Pakistan has decreased sharply due to careless chopping down of the trees. This not only affects the rainfall—which has reduced—but also causes flooding when rains come down heavily.

**Monsoons:** Explain what monsoons are. When and where do they take place? The word ‘monsoon’ can be traced back to the Arabic word ‘mausim’ meaning season. The seasonal, rain-bearing winds in South Asia are referred to as the monsoons. Monsoons take place in the subcontinent in summer. These winds blowing inland from the south-west, over the Indian Ocean and Arabian Sea, bring heavy rainfall mainly to India, Bangladesh, and Pakistan. At one time, the arrival of the monsoons was predictable to the day and date in June; however, with changes in the global weather patterns, Pakistan does not always have a defined rainy season. There are a few showers through July, though cool and pleasant cloudy weather continues into August.

### Answers to questions

1. Climate is an important factor because it has a great effect on people’s lives, plants, crops, and on the land in an area.
2. The south of the country is warmer.
3. The higher a place is, the colder the atmosphere (air) becomes.
4. The climate of such places becomes dry because rainfall decreases.
5. Rainfall is an important factor as it encourages plant growth and, secondly, it cools and balances the temperature.
6. Places close to the sea have the advantage of cool sea breezes blowing over the land and cooling it, thus dropping the temperature considerably.

### Work Page

- A
- 1 Cross
  - 2 Tick
  - 3 Tick
  - 4 Cross
  - 5 Cross
  - 6 Cross

B 1 All three types at different times of the year.

C The pupils may do this exercise on their own with guidance from the teacher, where required.

### Things to do

- The chart shown on page 8 is very comprehensive. Pupils can work to prepare their own calendars. The squares for the days and dates should be large enough to write or draw the weather of the day, viz. cloudy, sunny, rainy, etc. Ideally, the temperature should be written down as well, in Celsius. This information can be noted from the daily newspaper or from the local television news programmes.

# Lesson 3 Our country

## Discussion points

- Location of Pakistan
- Variety of physical features in Pakistan
- Pakistan's rivers, plains, cities
- Climatic regions of Pakistan

You should expect the pupils to participate very actively in this lesson, as they will feel most comfortable discussing their country, which will be a familiar topic for them.

Begin the lesson by locating the position of Pakistan on the world map/globe. Point out the neighbouring countries, the names of the Indian Ocean and the Arabian Sea, and of the mountain ranges in the north of Pakistan. Now the pupils know where they stand, speaking literally and figuratively!

## Suggested activities

- Ask them if they know how old Pakistan is and when its birthday is.
- Ask them how they celebrated its birthday last year, if they can remember.
- Ask them if they know about the colours of our flag, the names of our national flower, our national sport, their favourite sportsman, and pop star, etc. Make the lesson lively and interactive; get the maximum response from them. Let them put up their hands if they know the answers. Call them up to the board and ask them to draw things.
- Ask them if they know the words of our national anthem and if they could sing it to the class. Sing along with them, to ease their shyness and give them confidence.

## Suggested activity

Tell them about the four provinces.

- Ask if any pupil can speak Sindhi, Balochi, Punjabi, and/or Pashto. Then ask them to say a sentence or two in that language.

Tell them our religion is Islam, but that people of other faiths also live here, like Christians, Parsees, and Hindus. However, we are all proud to be called Pakistanis.

Tell them that Pakistan has all types of climates and physical features. It has hot weather, cold weather, rainfall, deserts, mountains, plateaus, lakes, and valleys.

Talk to pupils about all that our country has to offer—instil pride and patriotism in the children. They will talk about the problems we face, but explain that all countries have problems—the important thing is to make an effort to put things right and for each one of us to the best we can for our country and ourselves.

Tell the students about our fruit and vegetables which are naturally grown in Pakistan and better than anywhere else in the world. They are flavourful and tasty; our *kinnoo* oranges and, especially, mangoes are world-famous, and are exported all over the world.

## Suggested activity

- Ask the pupils if they know the names of the rivers that flow in Pakistan. Tell them that the River Indus is the lifeblood of the country. It gives us life for because of it, we can grow crops and have water to use in our cities, towns, and villages.

Explain that Pakistan is still a developing country and that there are many small cities and towns that are still growing. Of the five or six major cities of the country, Karachi is the largest in terms of area

and population, while Lahore is the most historic and most green, and Islamabad, the capital, is the most well planned.

Explain that from the point of view of vegetation and climate, Pakistan is divided into two distinct regions, each with its own special features, the Western Highlands and the Indus Plains. This affects the economy and lifestyles of the population of these areas.

### **Suggested activity**

- Ask the students to name some towns and cities in the Indus Plains, which are well provided with water from the River Indus and, going further up, to name towns and cities within the Western Highlands. They should be able to tell you the provinces to which these cities belong.

### **Answers to questions**

1. Iran in the west, Afghanistan in the north-west, China in the north-east, and India to the east.
2. The Arabian Sea.
3. Main deserts of Pakistan: Cholistan Desert, Kharan Desert (in Balochistan), Thal Desert, and Thar Desert.
4. River Indus, which starts in the Himalayas, is joined by the Jhelum, Chenab, Ravi and Sutlej rivers at Panjnad in southern Punjab.
5. South of Karachi.

### **Work Page**

#### **Fact Sheet**

- A
- 1 Sindh, Karachi
  - 2 Punjab, Lahore
  - 3 Balochistan, Quetta
  - 4 North West Frontier Province (NWFP), Peshawar
  - 5 Gilgit-Baltistan, Gilgit
- B Five countries larger than Pakistan:
- 1 China
  - 2 Kazakhstan
  - 3 Russia
  - 4 Mongolia
  - 5 Saudi Arabia (India and Iran are also larger than Pakistan)
- C Five countries smaller than Pakistan:
- 1 Afghanistan
  - 2 Uzbekistan
  - 3 Tajikistan
  - 4 Bangladesh
  - 5 Sri Lanka (Iraq and Nepal are also smaller than Pakistan)

### **Things to do**

Prepare a relief map.

- Guide the children in drawing a relief map of Pakistan. They will need some clay, some soil, sand, small stones/pebbles, a sheet each of blue and green glazed paper for the rivers and lakes, and sea respectively; a piece of plywood (60 x 120 cm) as base, and some paints. An outline of the map of

Pakistan can be traced onto newspaper, cut out and pasted onto the plywood. The clay should be moistened and mountain ranges built up with it. Soil and stones can be sprinkled over the newspaper to resemble the earth or the terrain, while sand will show the desert areas.

Blue paper can be cut into thin strips and these can be placed to represent the River Indus and its tributaries. The green paper should be used to show the Arabian Sea. Small plastic plants and trees could represent the greenery.

You will have to help the pupils with this project and devote at least two to three periods to the preparation of this relief-map project. At the end of it, put the completed project up for display for all to see. It will fill the pupils with pride and a sense of achievement.

If you turn to Lesson 4, there is a map that shows the Western Highlands in detail. This will be a help to the children in placing their materials correctly on the map.

## Lesson 4 The Western Highlands

### Discussion points

- Main features of Western Highlands
- Mountain ranges in Pakistan; distinctive features (peaks, passes)
- Plateaus in Balochistan and the Punjab

In the previous lesson, we learnt that Pakistan is separated into two distinct regions in respect of vegetation and landforms: the Western Highlands and the Indus Plains. With the aid of the maps on pages 13, 15, and 17 of the textbook, explain about the area covered by each of these regions. Put up a relief map of Pakistan with the main towns and cities marked on it to show the towns and cities, rivers, hills, and mountains that form part of these regions. For example, they should be able to say that the province of Balochistan falls in the region of the Western Highlands and that the Balochistan Plateau is also part of this region.

The key words in this lesson are: range, plateau, barrier, mountaineering, peak, sea level, and plains.

### Suggested activities

- After the lesson has been explained to them, ask them to make a list of the provinces, cities and some towns, rivers, and mountain ranges that make up the Western Highlands. This is a way in which their mind's eye can see the land area of Pakistan as a whole, and in parts.
- Explain the purpose of the map key and ask the pupils to study the key to the map on page 12. They could then draw a rough sketch of the map themselves or trace its outline and colour the areas according to the key. This will help them to remember the areas by the colours they represent.

**The Himalayas:** Ask the pupils if they have heard of the Himalayan mountain range. Explain that when there is a line of mountains close to each other, it is known as a range. This historically famous range begins from the Margalla Hills in Pakistan; these foothills are from 1000 to 2000 metres above sea level, in Pakistan, and are known as the Sub-Himalayas. The word 'sub' really means under or below; the Sub-Himalayas are so called because they are considered lower than the rest of the Himalayan range. The Lesser Himalayas, from 2000 to 4500 metres above sea level, and the Greater Himalayas from 4500 to over 8000 metres above sea level, are much higher—gigantic—compared to the Sub-Himalayas. The beautiful, cool, green hill stations, like Murree, Nathia Gali, Ghora Gali, and Abbottabad, etc. are part of the Sub-Himalayas.

### Suggested activity

- If possible, get an enlarged printout of a relief map of Asia and explain how the huge mountain ranges

in South Asia were created when the subcontinent's land mass moved into the Eurasian Plate. It will interest the pupils to learn that these mountains are still growing! Their pace of growth is 9–10 cm per year—about the same rate as human hair growth.

These mountainous regions are largely unpopulated due to their inaccessibility, difficult terrain, and extreme climate. However, people do live around the hill stations and the lower slopes where work can be found in tourism, and farming can also be carried out to some extent. The Greater Himalayas form an almost solid wall of mountains (ask them to look at a physical map of Asia for this observation) from west to east, high above Pakistan, India, and Nepal. These are the highest mountains in the world with a hundred peaks above 7200 metres; these impressive mountains are snow-covered all year round and Mount Everest in Nepal, the highest mountain in the world, continues to attract climbers and tourists from all over the world.

Tell the pupils that people climb mountains as a challenge to themselves, their physical fitness, and their endurance. Mountain climbing is a dangerous sport and everybody cannot do it. There is a danger of being caught in a blizzard (terrible snowstorm), getting frostbite (when the fingers and toes are so frozen that they can break off or become infected), falling into crevasses (deep chasms in the mountains), loss of breathing capacity, and snow blindness. You have to be very fit and very brave to climb a mountain. The people of the Northern Areas are skilled at this, and Nazir Sabir is the first Pakistani to have scaled the Everest.

### **Suggested activities**

- Ask the children to test their heart rate and breathing when they climb a long flight of steps. They will be breathing heavily, their hearts will be pounding hard and they will be quite tired by the time they reach the top. They can get an idea how a mountain climber feels when climbing a high mountain. The air becomes rarefied (contains less oxygen) as they climb higher and higher and breathing becomes difficult as the climber struggles to put each foot forward.
- In order to be able to inculcate a spirit of wonder, adventure, and enterprise in the pupils, arrange for a viewing of suitable National Geographic and Discovery videos. There are many wonderful and fascinating television programmes about mountaineering, nature, and wildlife that are shown regularly.

In the Karakoram Mountains, north of Pakistan, are Mt Godwin Austen, known as K-2 (8611m) and also the Karakoram Pass and the Karakoram Highway. This highway through the Khunjerab Pass is known as the eighth wonder of the world because it has been built at a height of almost 4700 metres. This is also known as the famous Silk Route which connects Pakistan to China. Chinese traders, in olden times, used this route to sell their famous silks and other products in Europe, South Asia, and in the countries along the way.

- Ask the pupils if they know the names of the other 'wonders' of the world. The Taj Mahal in Agra, India, built by Mughal Emperor Shah Jahan, in memory of his beloved wife Mumtaz Mahal, is one. The list of the wonders of the world has recently been revised by popular consensus. The other 'wonders' are:
  - 1 Chichenitza Temple Pyramid, Mexico
  - 2 Statue of Christ the Redeemer, Rio de Janeiro, Brazil
  - 3 The Colosseum, Rome, Italy
  - 4 The Great Wall of China
  - 5 Macchu Picchu, Peru
  - 6 Petra, Jordan

The Hindu Kush mountain range is to the north-west. Tirich Mir and Noshaq are the highest peaks in this range and there are passes that connect Pakistan to Afghanistan. To the south are many ranges,

which cross Chitral, Swat, and Dir. The Safed Koh and the Waziristan ranges form a wall between Pakistan and Afghanistan. The famous Khyber Pass, which links Peshawar to Kabul, is located here. Tell the pupils about the history of the Pathans, a brave, fearless people: many of them are very fair-skinned and have light hair and eyes like the Europeans.

The Sulaiman-Kirthar range of mountains separates Sindh and Punjab from Balochistan. The Balochistan Plateau lies to the west of this range. To the south are lakes and smaller rivers, many of which flow into the Arabian Sea. The Potohar Plateau in northern Punjab is about 600 metres above sea level. It lies between the Jhelum and Indus rivers.

### **Answers to questions**

1. In all the four provinces of Pakistan—Sindh, Balochistan, the Punjab, and the NWFP, and in the Gilgit-Baltistan territory.
2. K2 or Mount Godwin Austen, at 8611 metres above sea level, is the highest mountain in Pakistan. It is the second highest peak in the world.
3. The Potohar Plateau.
4. These are important because to cross the mountain ranges and reach another place, people have to go through these passes. These passes, especially the Khyber Pass, also have historic value.
5. Karakoram Pass, Khunjerab Pass, Lawarai Pass, Khyber Pass, Khojak Pass, Bolan Pass.

### **Work Page**

A The pupils should do this under your supervision.

- B
- 1 A glacier is a mass of ice and snow that slowly moves down mountain slopes. It can be called a frozen river.
  - 2 A pass is a natural route through mountains to transport people and goods.
  - 3 A low area between hills or mountains, typically with a river or stream flowing through it.
  - 4 An area of fairly level high ground.

### **Things to do**

- The children will collect pictures and information. Supervise them in displaying the information.
- Help students with the information about the Karakoram Highway. They can collect pictures on their own to prepare a board display.
- In addition, you can ask the pupils to find out if K2, Tirich Mir, and Noshaq have been scaled by any Pakistani mountaineers, and to list their names. The information can be had from the Internet or the nearest office of the Pakistan Tourism Development Corporation.
- Ask them about the highest mountain peak in the world, Mount Everest, and the two brave mountaineers who first scaled this peak, and in which year (Sir Edmund Hillary of New Zealand and Sherpa Tenzing Norgay of Nepal on May 29, 1953).
- The 50th anniversary of this famous expedition was celebrated in 2003. Maybe, you could initiate a class project, where the pupils could collect news items and photographs from newspapers, sports magazines, and the Internet.

# Lesson 5 River Indus and its plains

## Discussion points

- The importance of water
- The importance of physical features (landforms, rivers, plateaus, plains, deltas) in the economy and lifestyle of a people
- River Indus and its tributaries are the lifeblood of Pakistan.

People need water to live: to drink, to cook with, to wash ourselves and our clothes and utensils.

Ask them how the land needs water—to grow crops, trees, plants, vegetables, fruit, and flowers.

Plants and flowers may not be as essential as crops or trees, but everything in nature has a purpose.

Animals also need water to survive, to drink and to bathe, and we would have no marine life without water. There would be no fish, whales, dolphins, turtles, etc. nor place for the vast variety of beautiful sea creatures to live.

Since ancient times, people have preferred living near rivers as they supplied all their needs.

Civilizations grew and flourished on the banks of big rivers. So a river is indispensable to human life.

Now explain how rivers start and how they continue to have a steady supply of water; also tell students that low or no rainfall makes water levels in the rivers fall, while heavy rains lead to floods.

Tell the pupils that the mighty River Indus is the principal source of water for our country. It gives us life. It flows for almost 3000 kilometres from its source near Lake Mansorawar in the Himalayas.

Starting as a rushing torrent in the mountains, it flows down the plains of the Punjab, where it is joined by its tributaries at Panjnad, and then its course is through Sindh till it widens into a delta and falls into the Arabian Sea, south of Karachi and west of Thatta.

Show them the delta on a map of Pakistan.

Tell the pupils that the Indus Plains are the most fertile land in Pakistan. Because of the abundant supply of water and good soil, the Indus Plains are the best agricultural land in the country. That is why the Punjab is called 'the granary of Pakistan'. Explain the meaning of 'granary': a place where wheat and other grains are stored.

## Suggested activities

- Ask the pupils about other uses of a river; tell them about dams. How does a dam keep water from flooding the surrounding areas? Also explain how and why canals are built, and what benefits they have. Ask students to find pictures of the famous dams of the world like the Aswan Dam in Egypt and the Tarbela Dam in the NWFP.
- Check the pupils' knowledge, if they know the names of the other great rivers in the world. Ask them to find out for homework which is the largest river in the world? In which country is it found? Into which sea or lake does it flow?

## Answers to questions

1. High up in the Himalaya Mountains, from a lake called Mansorawar.
2. Canals carry the river water to many places.
3. The River Indus starts high up in the Himalaya Mountains near a lake called Mansorawar. From here it flows west through a deep valley between the Himalayas and the Karakoram range, until it reaches Pakistan. It is joined by many streams and rivers such as the Gilgit and the Hunza. It begins its long journey south through Pakistan and then turns south at a point about 200 kilometres north of Islamabad. It winds downhill, twisting and turning, till it reaches the Potohar Plateau. From here it continues into the Punjab plain to a place called Kalabagh.

4. By the time it reaches the plains, the river spreads out into a much broader channel, about 16 kilometres wide. Its course becomes much straighter as it flows through the plains.
5. The deserts are on eastern and south-eastern border of Pakistan, where the plains are not drained by any river.

## Work Page

A Pupils to do this on their own; but do help them where required.

- B1:
- 1 A delta is a triangular alluvial tract of land at the mouth of a river.
  - 2 A basin is a bowl-shaped tract of land drained by a river and its tributaries.
  - 3 A tributary is a branch of a large river, which joins in from a different direction.
  - 4 A gorge is a steep, narrow valley or ravine.

B 2: In Pakistan, these physical features can be found as follows:

Delta: Sindh

Basin: Punjab

Tributary: Punjab, the NWFP (River Kabul)

Gorge: the Indus gorge (Northern Areas)

## Things to do

- Students will do this exercise themselves.  
The river that is close to Lahore: Ravi
- Lakes: Manchhar Lake (Sindh)  
Hanna Lake (Quetta)  
Kallar Kahar (Punjab)  
Rawal Lake (Islamabad)

# Lesson 6 The soil and agriculture

## Discussion points

- The importance of soil and climate for agriculture
- Sources of water (rainfall, rivers, irrigation) for agriculture
- Agricultural regions of Pakistan
- Types of farming—food crops, cash crops, livestock and poultry

Explain that if a country is agriculture-based, it must have good, fertile soil and also enough water from rainfall, rivers, and through irrigation, for crops to thrive.

In Lessons 4 and 5, the pupils learnt that Pakistan is divided into two distinct regions in terms of landforms and vegetation—the Western Highlands and the Indus Plains. Go back to those lessons; look at the maps again and the colour key. Balochistan has very little agriculture. Ask the pupils why this is so. The Punjab has the best soil for growing crops because the rivers deposit new soil on the banks when they flood. Water is available through the canals that irrigate the land.

Explain that to be suitable for growing crops, soil must be safeguarded from erosion. Erosion means 'wearing away'. Wind and water are the main factors in the erosion of rocks and soil. Topsoil is the most fertile soil and this can be eroded or 'worn away' by heavy rainfall. If farmers can control erosion, the soil will be good for crops all year round.



Another way in which water damages the soil is when it does not drain out properly and the soil becomes waterlogged. When the water finally dries out, salt is often deposited in the top layer, making it unfit for agriculture.

- Explain how forests can stop soil erosion. The roots go deep, holding the soil together. If trees are cut down carelessly for various uses, such as to build houses, make furniture, burn for firewood, etc. the topsoil is eroded by exposure to wind and rain. So the solution (answer) is to plant more trees to replace ones that have been cut down. Tell them that all things in nature are linked together; one affects the other.

Pakistan is a farming or agricultural country; ask the pupils to name some of the crops grown here. Ask them what they eat—chapatis, dal, rice, meat, fish, vegetables, and fruit. Ask what chapatis are made from—wheat flour. Wheat is a major crop grown in Pakistan. Rice is grown in paddy fields in Sindh and the Punjab. Pulses or lentils (dals) as well as millet, maize, mustard, corn, and sugar cane are grown in Pakistan. Meat, milk, and dairy products are obtained from livestock farming, i.e. cows, buffaloes, sheep, and goats.

The best vegetables and fruits come from the northern areas, Punjab, and parts of Sindh. Malir, an area just outside Karachi, grows vegetables that are supplied to the city, and fruits such as guavas and bananas. Sindh and the Punjab are known for the variety of mangoes grown here.

We also grow cotton, which is made into fabric and exported to other countries, tobacco for cigarettes, and jute to make gunny bags.

### **Suggested activities**

- Ask the pupils to bring small quantities of dals, rice, wheat grain, corn, lentils or beans to class. Let them look and observe and touch the items that they probably never see in this raw, uncooked form.
- Ask the pupils in what other ways we use the animals we rear in Pakistan. We know that they provide us with meat and milk. Tell them that animal skins are ‘tanned’ into leather for shoes, bags, and clothes. ‘Tanning’ is the process by which these skins are made into leather. These animals are also used on the farms to pull ploughs and turn waterwheels (oxen); they are used to pull carts for goods and as transport (horses, camels, donkeys).

### **Excursion**

Arrange an excursion for the pupils to visit a farm or village outside the city. They will see how some of our rural population lives without the conveniences available in big cities, but it also has a peaceful albeit slow-moving lifestyle.

### **Answers to questions**

1. In Balochistan, in some parts of Sindh and the NWFP, and in the deserts, because there is very little water.
2. The most fertile soil is called alluvial soil. It is found in the plains, around the great rivers. When rivers flood and overflow their banks, they deposit good soil on the land. This is alluvial soil.
3. For successful agriculture, rich and fertile soil and lots of water is needed.
4. Livestock farming provides us with meat and milk. Animals are also used to pull ploughs and carts, turn waterwheels and for other farm work. Poultry farms provide us with fresh eggs and chicken for meat.
5. Trees have long roots that hold the particles of soil together, and slow down the process of erosion. Thus control of erosion leads to better soil being available for farmers to plant crops.

## Work Page

### A Food crops

- 1 Wheat
- 2 Rice
- 3 Maize
- 4 Millet

### Cash Crops

- 1 Cotton
- 2 Sugar cane
- 3 Sugar beet
- 4 Tobacco
- 5 Jute

### B Answers in horizontal sequence:

- 1 Green—valleys between rivers
- 2 Brown—snowy areas
- 3 Brown—deserts
- 4 Green—delta
- 5 Green—alluvial soil
- 6 Brown—mountains

### C 1 Fertilizers

- 2 alluvial
- 3 cows, buffaloes, oxen, and even camels and donkeys (students may select any three)

## Things to do

- Refer to the *Oxford School Atlas* for Pakistan for answering this question.
- Activities 2 and 3 can be done as homework.
- The pupils could grow their own vegetable garden. Their mothers can help them buy seeds for onions, potatoes, tomatoes, and for some herbs like *dhania* (coriander), *pudina* (mint), and *soya* (dill). These can be planted in pots or wooden boxes, and tended. They will be in wonder when the first shoots peep out of the ground, and filled with excitement when the first vegetable sprouts!

# Lesson 7 Forests

## Discussion points

- How do forests affect the climate of an area?
- What are the different types of trees found in Pakistan?
- Why are trees cut down?
- Explain the need for conservation.
- Name the uses of different types of wood.

In the cycle of nature, sunshine, clouds, rain, and air in the atmosphere work closely together with the physical features of the land to produce the ideal climate. Trees and green plants attract rain and

give out oxygen. We, and all living things, need oxygen to breathe and to live. The land needs rain so that (a) we can grow crops (b) our livestock can feed on the grass and plants that grow on the land and (c) our rivers have a steady and sufficient supply of water for our needs.

### **Suggested activities**

- Ask the pupils to look at the map on page 24 of the textbook. It shows the location of forests in Pakistan by the use of colours. Tell them to look at the colour key and match the colours with the corresponding areas on the map. They will see that we have a variety of vegetation in our country from north to south. For example, alpine forests are found in Chitral, Dir, Swat, and Gilgit; coniferous forests are found mainly in the Western Highlands i.e. Sub-Himalayas and in Kaghan, Swat, etc.
- Ask the pupils to point out these places on the map of Pakistan. On an outline map of Pakistan, the students can mark the locations and write the names of places (towns, cities, provinces) where a particular type of forest or vegetation is found. This will help to reinforce their learning; they will know where the following types of vegetation are found: coniferous forests, dry forests, thorn or *rakh*, mangrove swamps, riverine forests, and plantations.

Explain that there are many things in nature that are of use to human beings. Trees are one such thing—discuss the uses and benefits of trees. They not only provide shade, wood, and fruit, but also protect the soil as we learnt in Lesson 6. Talk about the uses of wood. It is a very useful resource and abundant in some regions. Explain that while humans may use trees and wood, this must be done carefully. Saplings must be planted to keep the forests alive and to replace the trees being cut down as it takes many years for them to grow and for their wood to mature.

This is a good point to talk about conservation also as forests are home to a variety of plants and wildlife. Cutting down forests disturbs this natural balance and is a long-term loss for man and nature. Most countries are now trying to conserve their natural resources such as water, marine life, forests, and animals from becoming extinct. All these are precious and necessary to life on earth. Overfishing is reducing certain species of fish in the seas; animals are being killed for their skins, tusks, and bones; water is being used wastefully. If all this continues, we will use up our resources and, eventually, we will suffer.

Uses of wood: It is used in construction for beams and as ply for walls and flooring; it is used as fuel in remote rural areas; it is used for making furniture, and to make paper. The pupils will be surprised to know that the pages they are turning are made from wood. Give a short insight into the production of paper from the first stage. Trees are cut down, then the logs are floated downriver to paper mills. The bark is removed and the logs are cut into smaller pieces. The wood chips are converted to ‘pulp’ in machines where chemicals are added to it. This pulp is fed into paper-making machines and pressed out into sheets. The sheets are dried in another machine, then rolled out into huge rolls, and sold in the market.

### **Suggested activity**

- Ask the pupils, one by one, to tell the class what favours a tree gives us. They should say a shady place under a hot sun, pretty leaves and flowers, wood and bark, fruit and nuts.

### **Answers to questions**

1. Silver fir, juniper, and birch.
2. Due to the very cold climate above a height of 4000 metres, trees do not grow very tall.
3. It gives out a lot of oxygen and is also used to make medicines.
4. In the western part of Balochistan and over most of Punjab and Sindh, there are thorny hardwood trees such as acacia and tamarisk.
5. Forests are important because trees give us wood and bark, shade, attract rain, give us flowers, fruits and nuts; they are home to birds and small animals like squirrels; their roots protect the soil.

## Work Page

- A
- 1 Alpine forests' location: Chitral, Dir, Swat, and Gilgit  
Types of trees: silver fir, birch, juniper, alpine scrub
  - 2 Coniferous forests' location: the mountains of the north and parts of the hills of Balochistan  
Types of trees: fir, spruce, *deodar*, *kail*
  - 3 Dry forests' location: the Potohar plateau region, around Jhelum, Rawalpindi, Attock, Mansehra, Abbotabad, Kohat, Peshawar, and in the Sulaiman range in Balochistan  
Types of trees: evergreens like *phula* and *kao*; also chestnut, walnut, oak, and juniper
  - 4 Thorn and *rakh* location: the western part of Balochistan, most of Punjab, and Sindh  
Types of trees: hardwoods like acacia and tamarisk
  - 5 Plantations' location: near rivers and canals or close to a dam  
Types of trees: eucalyptus, *shisham*, *babul*
  - 6 Riverine forests' location: close to rivers, especially in Sindh (*bela* forests)  
Types of trees: mainly *babul* and *shisham*
- B
- 1 *Babul*
  - 2 Plantations
  - 3 Wheels and oil presses and ploughs

## Things to do

- This activity encourages observation. Get the pupils to note the different trees near and around the school, and their homes. Tell them about the different shapes and heights. Some trees spread out widely as they grow. Like the *neem*, mango, and tamarind trees. Some grow tall and straight like the pines, firs, and some species of coconut palms. Some trees, like acacias and some fruit-bearing trees do not grow very tall.
- Try and get pictures of different kinds of trees so that the children can identify them. Heights can also be noted in comparison with buildings nearby. Children should not pluck the leaves off trees. They should collect the leaves that fall naturally. These can be dried as instructed, then put in a scrapbook with a piece of clear tape. The name of the tree should be written below the leaf.

# Lesson 8 Water and its uses

## Discussion points

- How important is water?
- Where does water come from?
- Understanding the water cycle
- How does water affect the weather?
- How can we control and channel our water supply?

Water is essential to human life and to all living things on Earth. Seventy-one per cent of the earth is covered with water. Two-thirds of the human body contains water. If we become 'dehydrated', that is, if the water in our bodies dries up or escapes, we can die.

The two sources of our water are salt water from the oceans and seas, and fresh water (non-salty) from precipitation (rain, snow), rivers, and lakes on land.

## Suggested activity

- Ask the pupils to list how many times a day they use water, starting with washing up in the morning, to drinking it when they are thirsty, to bathing and swimming. This will help them to understand how essential water is.

Explain the water cycle with the help of the diagram on page 28 in the textbook. Water from the surface of the oceans, seas, and lakes evaporates due to the Sun's heat and rises up as water vapour, condensing to form clouds. Clouds release the moisture as rain or snow back to the Earth's surface, and so the cycle continues. Pupils will be surprised to learn that the amount of water on Earth today is the same as it was since its creation—it simply goes around in the water cycle.

Where some places do not have direct access to water, it is necessary to 'store' it in tanks and reservoirs and to control the movement of rivers by building dams across them. The movement of water is controlled by huge gates that open and close the water supply as required. Show them a picture of the Tarbela Dam which controls and channels the water of the River Indus or the Warsak Dam, near Peshawar. Dams are also utilized to generate power, i.e. electricity.

How can dams be used to create electricity?

Electrical power is generated when the gates of a dam are opened to allow water to rush through the turbines, as explained in the textbook. The generator changes the power created by turbines into electrical power. This is called hydroelectricity.

In the cities, wells and tube wells are quite uncommon. They are found in rural areas near villages and on farmland to water the crops. In very dry areas, tube wells are the only source of water for miles.

## Answers to questions

1. Five uses of fresh water: drinking, cooking, bathing, washing clothes and utensils, gardening, growing crops.
2. Rain, snow, glaciers, rivers, lakes.
3. They are able to have several uses at the same time, such as dams.
4. Wells are really large holes dug in the ground to store water. A tube well is made by digging very deep wells in the ground. A tube or casing is put into the hole. Water from many hundreds of metres below the surface is pumped up by electric or diesel pumps.
5. Water is stored in dams, reservoirs and tanks.

## Work Page

- A
- 1 A place where water is stored, especially an artificial lake.
  - 2 A slowly moving mass of ice formed when snow piles up and is compacted on mountains or near the poles.
  - 3 A dam is a wall built to hold water back
  - 4 An artificial barrier across a river, a dam
  - 5 Something that can be used, an asset
  - 6 An artificial waterway allowing the passage of boats inland or carrying water for irrigation
- B Pupils can do this for homework with reference to the diagram on page 28.

## Things to do

- 1 Warsak Dam: River Kabul  
Tarbela Dam: River Indus  
Mangla Dam: River Jhelum

- 2 Children will do this activity in groups.
- 3 Sea water is a source of moisture for the rain clouds. It is home to a huge variety of marine life. Sea water contains salt which is used as a preservative for food, e.g. meats, and for tanning hides and skins. Salt also has medicinal uses. Salt from the sea contains iodine which is very important for the human body.

## Lesson 9 Minerals and industries

### Discussion points

- What does an industrialized country need?
- From where does Pakistan get or produce its 'power' or electrical energy to run its industries?
- What are minerals?
- How many kinds of 'power' are there?
- The different kinds of industries in Pakistan

Explain the process of the development of a country. Just as humans progressed from being cavemen to present-day man, so did farming or agricultural communities grow to becoming industrial communities. 'Industry' means to make or manufacture things on a large scale. Science and technology (new ways and methods of improving old or outdated things) play a large part in making a country industrialized. We use our professional people who are trained as engineers and scientists, chemists and physicists, to develop new techniques and new inventions of machines to reduce time and money by operating a machine instead of doing things manually.

Give the pupils an example of this. Tell them that in the olden days, the power of animals was used to plough the fields, but today in the rich agricultural countries, tractors do this work much faster and more efficiently than an animal-drawn plough. Though animals are still used in many rural areas of Pakistan, those farmers who can afford them, also use agricultural machinery like tractors, harvesters, and threshers. Also explain that on small farms animal-drawn ploughs are easier to use. Mechanical farm equipment requires a lot of space to move around.

How is power produced? We read about hydroelectric power in Lesson 8. We also have nuclear or atomic power, solar power (energy from the sun), wind power, and biogas.

### Suggested activity

- Ask the pupils if their fathers have electric shaving razors. Tell them to calculate the time it takes for them to use a manual razor as compared to an electric razor. They will see that the electric razor will naturally do a faster and more thorough job of shaving. Give the pupils all sorts of examples of the triumph of machines over man: robots in car assembly plants; the food processor instead of the pestle and mortar and the grinding stone (*sil batta*); the car over the horse, etc.

Now, to minerals: the Earth is a treasure trove of wonderful things. It gives us fuels, like coal, oil, and gas; it gives us water and it gives us minerals, metallic and non-metallic. Of the metallic minerals, we use iron ore, copper, chromites, and manganese. Early man used iron and copper to make implements, weapons, and pots. Coal was used for smelting metals and, much later, to power steam engines. Of the non-metallic minerals, we get rock salt from the earth, marble, precious and semi-precious gemstones, limestone, and soapstone.

### Suggested activity

- Ask the students to name some more metallic minerals. Ask them to look at any jewellery or other items they may have and to guess the metal used. Next, ask them to find out the names of the

precious stones (diamond, emerald, ruby) and semi-precious stones (aquamarine, tourmaline, garnet) used in jewellery. Tell them that garnet and emerald are mined in Pakistan, in Swat and other northern areas. Marble and onyx, used in construction and to make decorative objects, come from quarries in the NWFP, in beautiful natural colours and designs.

Tell them the meaning of the word 'manufacture'. Things or products that are made for the market in large quantities are 'manufactured'. Small industries, where things are made in small quantities are called cottage industries. Some products we use are 'imported' from other countries and many are made in Pakistan.

### **Suggested activity**

- Ask the pupils to name some of the items that are imported (chocolates, candy, shampoo, perfumes, etc.) and some that are made locally. We manufacture leather goods, jewellery, shoes and handbags, fabric for clothes, house and bedlinen, hosiery, etc.

### **Answers to questions**

1. A country that uses its own power and natural resources to manufacture various products is industrialized.
2. From the land, seas, and oceans. Pakistan also imports from other countries those raw materials for its industries which are not available locally.
3. The essential requirements for developing industries are funds, power, water, raw materials, machines, and workers.
4. Water is important for setting up industries as it is used during some part of the production process.
5. Electrical power, nuclear or atomic power, solar power, gas, and sometimes, mainly biogas.

### **Work Page**

- A Pupils can do this exercise for homework with reference to the atlas.
- B hydroelectricity: electricity produced by water power  
turbine: a machine or motor driven by a flow of water, stream, or gas  
generator: a machine for converting mechanical energy into electricity

### **Things to do**

- For the first exercise, they could choose the marble, cement, furniture, or jewellery industries.
- This task can be preceded by brainstorming, but the teacher will need to help with the various questions here.

## **Lesson 10 Transport**

### **Discussion points**

- The importance of a good transport system for people
- The importance of a good transport system for a country's progress
- Different modes of travel and transport in Pakistan

Tell the pupils that current lesson deals with 'communications' (in the plural form), which refers to different modes of travel and transport.

Test the pupils by asking them what the different modes of travel could be. They would first say 'walking'; travel by car, bus, wagon, pickup, etc., that is by road; going by train, by air, and by sea.

Talk about the different types of transport available in each category. It would help to show them pictures of various old and new aircraft, ships, boats, etc. from the National Geographic magazine or other magazines.

### **Suggested activity**

- Ask the pupils which, they think, are the fastest and the safest modes of travel. The fastest are aeroplanes, then cars, then trains, and then ships.

**Roads:** Talk about the usefulness of roads to connect places. The Romans were known for building an excellent network of roads which enabled their armies to move across their empire. The ancient Silk Route connected China to the rest of Asia and Europe.

As people progressed and different types of transport were invented, the primitive roads were improved upon and proper roads, as we use today, were built. We are aware today of how roads are built for the movement of all kinds of vehicles. This will be a good point to let the students talk about road-building which is a constant and visible process almost all over the country.

A good road network is very important for a country as people and goods can be moved easily and swiftly. Also, roads can reach locations which do not have railway or air links to the rest of the country.

### **Suggested activity**

- Ask the pupils to name the road on which their house is located. Then ask them to name some of the main roads of their city, if they can.

**Railways:** Pakistan's railways are a cheap, though slower, means of communication for the people. To send cargo by train may take longer, but it is more economical. It is the same for passengers travelling from one city to another. Busy people prefer to go to their destinations by air. The train was known as the 'iron horse' when it was first invented. Today, it is a blessing for the masses of people commuting from the interior of the country to the cities, to work there.

France, China, and Japan have developed very fast trains, **Maglev**, that move by **magnetic levitation**.

Ask the pupils to bring photographs of these latest trains to class. They are very different from our trains. They are very modern, sleek, beautifully designed machines known as bullet trains, which move at bewilderingly high speeds. Find out and explain to students how these trains operate. France also has similar trains. The underground or subway trains in the USA, UK, and Europe are also a fast, convenient mode of transport.

Tell the pupils that there is a train service built under the English Channel that links the British Isles to the continent of Europe. How can a railway be built under a sea? Explain to them that first a strong waterproof 'tunnel' of concrete and steel was built and then the tracks were laid for the trains. (A lot of information on this project is available on the Internet as well.)

**Airways:** Aeroplanes are the fastest mode of transport today. Even among these, there are different types that are used for different purposes and have different speeds. Some can even travel at supersonic speeds i.e. they break the sound barrier by travelling faster than the speed of sound. Passenger planes like the Boeing 747 can carry up to 400 passengers, and even larger aircraft are now planned, with more seating capacity. The Airbus A380 can carry a load of 650 passengers!

### **Suggested activities**

- Students may be asked to find out how long it would take to reach from Pakistan to the UK by air.
- An interesting project would be to collect information about PIA and how it has grown as a national airline.

**Shipping:** This is another interesting way of travelling and before the invention of aircraft it was the only way people could travel overseas. The idea that a ship or boat can float on water, and take you



from one place to another, is fascinating for young children. Tell students about big passenger liners of the past, luxury liners and yachts, huge cargo ships, and tankers. Transporting heavy cargo by ship is still cheaper than using other modes of transport.

### **Excursion**

If possible, a visit to a shipyard or a boatyard could be very exciting and informative for the pupils. They will see how boats and ships are made. Similarly, an excursion to an airport or a railway station, undertaken with proper security for the children, can be a very informative experience.

### **Answers to questions**

1. a) They link (join) all our villages, towns, and cities.  
b) They connect all the regional markets so that producers and consumers can reach the collection and distribution centres.
2. More people travel by road because it is cheaper than flying, faster than railways, and roads reach almost all remote corners of the country.
3. They were the two brothers, Wilbur and Orville Wright in 1903.
4. Islamabad, Karachi, Lahore, Quetta, Peshawar, and Multan (Gwadar, Faisalabad, and Sialkot are also listed as international airports).
5. Keamari and Port Mohammed Bin Qasim in Karachi, and a third port being built at Gwadar, Balochistan.

### **Work Page**

A Roads: trucks, cars, diesels, highway  
Railways: tracks, railway engines, steam  
Airways: Wright Brothers, PIA, aircraft, airport  
Ships: ships, harbour, Gwadar, ports, PNSC

- B
- 1 network
  - 2 steam
  - 3 1903
  - 4 248,000
  - 5 Karachi, Gwadar

### **Things to do**

- Largest passenger aircraft: Airbus A380  
Fastest aircraft: Concorde (retired), Lockheed's SR-71 (3370 kph) and American X-15 (7274 kph)  
Fastest train: Japan's JR-Maglev, speed: 584 kph; China's Maglev (500 kph); France's TGV (574 kph)

### Lesson 11 Communication

#### Discussion points

- What is communication?
- What are the different forms of communication?

To talk to someone, to write to them, to put your thoughts, opinion and ideas forward to anybody in the world, is communication. To let others know how you think or what you think, is how you 'communicate' with them. Speaking and writing are the best forms of communication. In this day and age, however, cellphones and email are the most common forms of communication.

Note that 'communication' also means modes and methods of travel and the kinds of transport involved, but in this book transport and communication are dealt with separately.

#### Suggested activity

- Ask the pupils what you are doing in class. You are 'communicating' their lessons to them by teaching, writing, guiding, and advising. It is often said, when two people stop talking to one another because they have disagreed over an issue, that the 'lines of communication' have been closed.

How do we stay in touch with people and events that are happening in the world? Radio, television, the newspapers, and the Internet communicate news to us. So do the telephone and the post office—through letters we receive from family and friends.

#### Suggested activity

- Ask the pupils, of all the modes mentioned above, which mode is the oldest. They should write down all the modes in the order in which they think they began to be used. Cave drawings, smoke signals and marks made on tortoiseshells were some of the earliest forms of communication besides messages conveyed by word of mouth. The Incas of South America used lengths of knotted rope called 'quipos' to send coded messages—the messenger was trained to decode them. When language scripts were developed, messages were sent in writing, and when paper became common, letters and documents became the most common form of recorded communication. The Pony Express in North America was an early postal service, where young men rode across the country delivering letters to the early settlers and pioneers. Ask the pupils to find out more about this and how people communicated in other civilizations.

Ask the students to write a letter to their friends and communicate the good news to them that they now know the meaning of 'communication'!

Talk about modes of communication no longer in use and the reasons for it. For instance, the radio has been replaced by television in many places because it is not a visual medium and is less popular.

#### Suggested activity

- How many students read the newspaper? Take a hands-up count. Compare this to how many of them watch television? They will all put up their hands. How many use the telephone? They will all put up their hands. For the last one, email, they may be using the computer mainly for games.

## Answers to questions

1. Communication means keeping in touch with someone through speech or writing.
2. The main means of communication are letters, the radio, telephone, the television, the newspapers, fax, and email.
3. By sending a money order by post.
4. A newspaper has to be read, and if a person cannot read, then it is better to listen to the radio and watch television, where can be seen and heard.

## Work Page

A 1 Television

2 The post office

3 The telephone

B Pupils to do this with your help.

## Things to do

- This can be done as a pair activity. It is an interesting exercise, for all the pupils probably watch television. They can discuss their favourite programmes and list them.
- Tell the pupils that stamp collecting is called philately. Ask them if they remember the name for a coin collector, then tell them that a stamp collector is called a philatelist.

# Lesson 12 The government

## Discussion points

- Why do countries need governments?
- What kinds of governments are there?
- What kind of government do we have in our country?
- Who looks after the country?
- Why do people have to be elected to the government?

Tell the pupils to calculate how old Pakistan is from 1947 to the current year. We have a parliamentary form of government, where the prime minister and his elected ministers (the cabinet) run the country. The president is the head of state and helps the prime minister. These persons got their jobs because the people voted for them through an election. Similarly, each province has its governor, the chief minister and his cabinet.

Tell the pupils how elections take place. Political parties nominate their candidates from the different parts of the country. They promise to look after those areas if they are elected (chosen) for five years till the next elections. This way, everybody who is capable gets a chance to do good work for his/her country.

The people mark the symbols of their favourite party candidates on a specially printed sheet (ballot paper) and put it in the ballot box. When the voting is over, all the papers are collected, the votes are counted, and the person who gets the highest number of votes from a particular area gets elected to a position in the government.

Note that this is a difficult topic. Spend adequate time to explain this lesson so the pupils can comprehend the system of elections. When they move to the higher classes they will, no doubt,

experience an election first-hand, when the school prefects are being elected, but for now, simplify it by using easy language.

### **Suggested activities**

- To help them understand, conduct a small election in class for a class monitor in the same way as above. Tell them that there will be no cheating or bad feeling among the pupils. The election will be fair and friendly, and that the person elected was the best choice by virtue of getting the most votes.
- Ask the pupils to assess how much work there is to be done in a country. Help them here. Explain that a country's finances, defence, education, health, industry, agriculture, business, housing, etc., all need to be looked after. Ask them to suggest more departments that are the government's responsibility, such as transport, shipping, banking, insurance, tourism, etc. For all these areas of work, we need ministers and ministries.
- Ask them if they know what a 'constitution' is. Explain that it is a written document that is made up of all the rules that have to be followed in a country. Tell them to write their own constitutions for school and home. What are the rules for school and home?

### **Answers to questions**

1. Democracy is a Greek word meaning 'people's rule'.
2. Through a system of elections every five years.
3. Chief ministers.
4. There are many things a government has to decide: to deal with law and order, how much tax to put on people and goods, what it is going to spend money on, whether new buildings such as hospitals, offices, and colleges have to be built, and where they are going to be built. It has to plan for the future, and improve conditions in the country.
5. Pakistan Muslim League (PML), Pakistan People's Party (PPP), Muttahida Majlis-e-Amal (MMA), Muttahida Qaumi Movement (MQM), Awami National Party (ANP), Jamaat-e-Islami (JI).

### **Work Page**

- A
- 1 The constitution
  - 2 Chief minister
  - 3 Ministers
  - 4 National Assembly
  - 5 Election
  - 6 The prime minister
  - 7 The Senate
- B
- 1 governor
  - 2 Islamabad
  - 3 president
  - 4 National Assembly
  - 5 18

### **Things to do**

- Help the students to find the names of the people mentioned.
- Ask the pupils to bring a picture of each of the six government functionaries mentioned in this activity. They can find these in the newspapers with the help of their parents and older siblings.

# Lesson 13 The law

## Discussion points

- Why are rules important?
- What are the rules of a country called?
- Who makes sure that laws and rules are followed?
- What happens when laws are broken?
- Who decides how law breakers should be dealt with?
- Where are these decisions taken?

Think of all the words and phrases you know linked with the law. For example *law, lawmaker, law making, law of the land, lawyer...*, etc.

## Suggested activity

- Ask the pupils what other words they can think of that could explain or describe law. Tell them about rules and regulations. Why do we need rules and regulations?

The country's law is the constitution as explained in the preceding chapter. If there were no constitution, the country would not move and grow in an orderly manner. There would be complete chaos and confusion if lives were not governed by law, at home, in schools, in business offices, and in government offices. Everyone would be doing as he/she pleased. Therefore, laws are made which also include punishment for those people who 'break the law'.

## Suggested activity

- Ask the pupils what rules or laws apply in the following places: at home, at school, in the playground, in the company of people. Write their responses on the board. Ask them what punishment would apply to each breach of law. For example, if a child pushes another child in school and he falls down and gets injured—the naughty child should be made to apologize to the hurt child and his/her parents and promise never to do it again. The embarrassment of having to apologize and being marked as a naughty child will be more than just punishment for the offence.

To maintain law and order in a city, policemen and judges are appointed by the authorities. The policeman arrests the offender and the judge decides the case and awards the punishment. In the case of the example above, the class teacher would take the place of the policeman and the principal would take the place of the judge. By giving the pupils examples of crime and punishment at their level of age and understanding, the concept of law can be partially, if not fully, understood.

Take a game, for instance. In a hurdle race, the rule is that you must jump over the hurdle without knocking it to the ground in order not to be disqualified or lose the victory.

In a tennis match, if the ball is hit out of the court, it is declared out and the player loses a point. That is why the white lines are drawn around the court. These are the 'limits', which must not be crossed or breached.

The law is a very serious matter in a country. Courts are there to dispense justice and keep the peace. Lawyers are of two kinds; those that fight your case for you and those that fight against you; and a judge or a panel of judges (tribunal) decides if you are innocent or guilty.

## Suggested activities

- Find out how many of the pupils' parents are in the legal profession.
- Do a role-play to demonstrate this concept. For example, one pupil may have broken a chair or a window in class. Another child will be the 'witness'. One child can be the judge, while there are two lawyers.

## Answers to questions

1. If there were no laws, there would be no order in society; things would not run smoothly; there would be no justice.
2. The police helps by arresting/penalizing the law breakers, and by providing a deterrent to people.
3. They are arrested by the police and charged with a crime, and taken to a court of law where the judge or magistrate sees that justice is done and the guilty person is punished.
4. The Sessions Court, the High Court and the Supreme Court which is the highest court in Pakistan.
5. When someone is charged with a crime, he is taken to court. A lawyer will tell the judge about the crime. Another lawyer (a defence lawyer) will speak for the person who has committed the crime. Witnesses to the crime may also be called to give evidence. Then the lawyers argue the case and the judge listens to both the sides. Then he gives his decision.

## Work Page

- A
- 1 No parking
  - 2 Civic work in progress
  - 3 Slow down, bumps or speed breakers in the road ahead.
- B
- 1 To officially accuse a person of a crime.
  - 2 A person, who belongs to the legal profession, and who handles people's cases, when they are prosecuted for a criminal offence.
  - 3 A magistrate is the one who decides cases in the lower courts.
  - 4 A jury is a group of people who decide if a person is innocent or guilty.
  - 5 Statements made or objects produced in a law court to prove something.
  - 6 A person who has seen a crime being committed.

## Things to do

- This activity can be done in pairs or small groups. Give students time to discuss, note, and decide rules for the class and playground. This is also a good practice of democracy.
- Individual work by students.

# Lesson 14 People and work

## Discussion points

- Why does the government need to know details about the population?
- How do we know how many people live in a country?
- What are their average ages, their occupations, their religions? How many people are there in an average family?
- What kind of work do the people of Pakistan do?
- How does a government serve the people?

## Census

Explain the concept of a census to the class. Explain that teams of people are employed by the government to go from door to door asking the residents all these details about them, needed by the government. The cities are usually divided into neighbourhoods or zones. Separate teams go to different areas with a questionnaire that they usually fill in themselves.

### **Suggested activity**

- Conduct a census on a small scale in the classroom. Ask the pupils to count the number of children. Ask them their ages. Which areas do they live in? How many live in the same area? How many come from the same province? How many languages do they speak and how many speak the same languages? How many brothers and sisters does each pupil have? Are they younger or older?

When all the facts are put together, the pupils will have a good idea what a census is. You will also get a fairly good picture of your class, e.g. their respective ages and their family backgrounds. You will also know which neighbourhoods they come from and their position in the hierarchy of their homes. You might also be able to organize a car pool for pupils living in the same area, to come to school every day.

### **Suggested activity**

- Explain to them the pie chart on page 54 of the textbook. It shows, with the help of different colours, the percentage of the three different age groups of people in Pakistan, i.e. children, adults, and the very old or senior citizens. Explain that such data help the government to plan ahead for education, employment, and health facilities as it has all these statistics at its fingertips.

What types of work do Pakistanis do?

Pakistan has a rural (countryside) population and an urban (cities) one. The majority lives in rural areas where agriculture is the main occupation. They tend the land, grow crops, rear livestock, harvest the crops, and prepare it for the markets. Many of the people who do domestic work such as cooks, gardeners, and cleaners as well as security guards in homes and offices come from rural areas to work in the city for better income, leaving their families back home.

The people who work in the cities do a variety of jobs. There are people who work in factories and offices as skilled technicians and unskilled labourers; there are well-educated people who work as clerks, secretaries, and managers in offices. Then there are the 'professionals', such as doctors, nurses, teachers, engineers, pilots, and lawyers, who have studied and trained for their line of work. There are also industrialists who manufacture goods, businessmen and traders who buy and sell commodities.

Apart from this, we have people who work in the police and armed forces, the fire brigade, the transport sector—road transport, railways, airlines, shipping—to name a few.

To recap, ask the pupils to define the following: a doctor, a lawyer, a pilot, a teacher, an engineer, an industrialist, and a trader. Ask them to name more professions so that they are aware of different kinds of work one can do.

Explain what is meant by the 'dignity of labour' and the importance of this concept. It means that no matter what work one does, it has its own value and dignity and must be respected.

### **Services**

Services: Textbook 3 has dealt with the private and public services that a government provides its people. There are departments to handle public welfare, such as road repair, water supply, transport, parks, and schools. They also build bridges, canals, and dams.

### **Suggested activities**

- Ask the pupils to think carefully about what else a government can do for its people which they cannot do themselves on a large scale; list their responses on the board and read them out in class. It will be interesting to see how their young minds come up with ideas.
- Role-play: Nominate some of the pupils to act out the parts of various professionals. Each one should say in a sentence what work they do. They can answer in English or Urdu, depending on the vocation they choose. For example: 'My name is Rasheed. I am a secretary in a big company', (in English) or 'My name is Rafiq. I am a carpenter and I make all sorts of things out of wood' (in Urdu).

## Answers to questions

1. By conducting a census of the population.
2. We need to know the details of a country's population so that the government can plan and decide many things.
3. Education and training help people get jobs that pay well.
4. Every job has its value.
5. It provides public services to its people like schools, colleges, hospitals, clinics, banks, etc. It also builds buildings, canals, roads, and bridges.

## Work Page

- A
- 1 Cross
  - 2 Tick
  - 3 Cross
  - 4 Tick
  - 5 Tick
- B
- 1 Carpenter
  - 2 Artist
  - 3 Doctor
  - 4 Chef
  - 5 Dentist
  - 6 Postman
  - 7 Cashier
  - 8 Pilot
  - 9 Actor
  - 10 Painter
  - 11 Nurse

## Things to do

- Activity 1 has already been explained. In activity 2, tell the pupils what an NGO (non-governmental organization) is, and what work it does. Mention the names of some and the people who run them. Where do they get the money to do their work? There is The Citizen's Foundation, Helpline Trust, The Reformers, Shehri, Shirkat Gah, etc. Ask the pupils to find out what work these organizations do.



## Lesson 15 Our past

### Discussion points

- Who were our ancestors?
- How civilized were they?
- The Indus Valley Civilization
- The empires that rose and fell
- Who brought learning to the world?

The history of man in the subcontinent dates back to the Paleolithic Age as stone tools of this period have been found in caves in the Soan Valley, Charsadda, and in Chilas, in the north.

The Indus Valley Civilization has been traced back to 2600 BC, that is, before the birth of Jesus Christ. Ask the pupils if they know the word 'archaeology' (pronounced *ar-kee-ol-o-gy*). This is the study of past civilizations, by digging in selected areas of land to locate the sites where these ancient cultures lived. By careful digging and certain scientific methods, such as 'dating', archaeologists have managed to find out a great deal about our ancestors. Many 'artifacts' have been found at these sites, which tell us how the people of these cultures lived, how they worshipped, what they ate and wore and how advanced they were. Our famous sites are Mohenjo Daro (the meaning is given alternately as 'the mound of the dead' or 'the settlement of the Mohanas', a tribe still found in this region), Harappa and Taxila.

Also tell the students about the Soan Valley and Mehrgarh civilizations, believed to be older than the Indus Valley Civilization.

**The Indus Valley Civilization:** Start by explaining that most of the great civilizations of the world began near river sites; for example, the Babylonian/Sumerian civilizations near the Tigris and Euphrates rivers in Iraq; the Egyptian civilization by the River Nile; the Indus civilization, as the name suggests, by the River Indus. This civilization is really the beginning of our culture. If you can take the pupils on an excursion to Mohenjo Daro near Larkana in Sindh, they will see how advanced this civilization was thousands of years ago.

They already used the wheel, which is considered by the western world to be a great achievement, because it was the beginning of movable transport, and is the basis of mobility in vehicles till today. The site has been carefully excavated (dug) to reveal temples, houses, streets, a sewage system, communal baths, and a granary. Archaeologists have also found many objects which give us a clue as to what materials the objects were made of, and also how the people lived.

Ask the pupils to calculate how long ago this civilization flourished. They will have to go back 2600 years before Christ and add another 2004 years of life on Earth as we know it now. This would work out to approximately 4604 years. That's how old the Indus Valley Civilization is! The ruins at Harappa also date back to about this time.

(The Mehrgarh site in Balochistan is even older, dating back to 7000 years BC.)

**The Aryans and later empires:** The Aryans came to the subcontinent from about 2000 BC onwards. They drove the original inhabitants, the Dravidians to the east and south of the subcontinent, taking the fertile plains of the rivers Indus and Ganges for themselves. Then, later, came the Persians,

Greeks, Mauryans, Parthians, Kushans, and the Huns.

### **Suggested activity**

- Draw a timeline to show the concept of time. Explain by making a simple timeline for the students, showing their date of admission to the school and year-wise progress to Class 4. Then get the pupils to make a timeline showing each civilization with the dates. This activity will help the children to remember the dates chronologically.

**Religions:** Hinduism was the earliest religion of the subcontinent. In the fifth century BC, Buddhism was introduced by Gautama Buddha, who lived in Bihar; unlike Hinduism, there is no caste system in Buddhism. Jainism was founded by the religious leader, Mahavira in the sixth century BC.

Islam came to the subcontinent with the Arabs in the seventh century AD. (AD stands for 'Anno Domini' in the Latin language and means 'in the year of our Lord' i.e., Jesus Christ.)

### **Suggested activity**

- Ask the pupils what happened in the sixth and seventh centuries in Arabia. Who brought Islam to Makka and Madina, the rest of Arabia, and the rest of the world?

**Learning:** The Greeks and then the Arabs and later, the Persians, brought much learning to the world in mathematics, astronomy, medicine, art, and geography. They introduced numerals and the concept (idea) of zero that they had borrowed from Indian mathematics.

Objectively speaking, almost every past civilization throughout the world has excelled in one or more fields. The learning of the Eurasian civilizations was studied, saved, and passed on by the Arabs. The Chinese had an advanced civilization for their time, as did the Indians. Knowledge from the Central and South American civilizations came to be studied much later.

## **Answers to questions**

1. We have learnt about the past through archaeology; by digging up the sites where these civilizations were thought to have flourished; by finding pieces of pottery, ornaments, jewels, clay figures, and seals, some of which had inscriptions and symbols on them. Historians are trying to decipher the writings, which could give them a clue as to the culture and state of advancement of the people who lived there once.
2. Mohenjo Daro means 'mound of the dead' in the Sindhi language. It is located in Sindh, near Larkana.
3. The Indus Valley Civilization was advanced for its time because they used wheels, made pots and other vessels, made things out of metals such as copper. They also made cloth which they traded with Mesopotamia.
4. The Aryans were a large tribe from Central Asia who settled in the subcontinent around 1500 BC. They brought a new language, Sanskrit, and new culture with them. They also brought a religion, Hinduism.
5. Taxila had a big university where many Buddhist scholars came to study besides other people. The Mauryas and Guptas promoted learning, and Harsha, the ruler of the Nanda dynasty, set up the Nalanda University, famous for its mathematician Aryabhata who invented the concept of zero.

## **Work Page**

- A
- 1 The Persians (rulers: Cyrus the Great, Darius the Great)
  - 2 The Greeks (ruler: Alexander)
  - 3 The Mauryans (ruler: Asoka)
  - 4 The Kushans (ruler: Kanishka)
  - 5 The Guptas (ruler: Chandra Gupta)

- 6 The Parthians
  - 7 The Huns
  - 8 The Nandas (ruler: Harsha)
- B**
- 1 True
  - 2 False
  - 3 False
  - 4 True
  - 5 True
  - 6 False
- C**
- 1 Archaeology is the study of the remains of ancient civilizations.
  - 2 Inscriptions are the words written or carved on a monument, coin, stone, etc.
  - 3 A dynasty is the succession of rulers from the same family.

### Things to do

- A visit to a museum would be a good learning experience for the students.
- This can be done as a group activity.
- The third activity requires the students to use their imagination.

## Lesson 16 Muslim rule in the subcontinent

### Discussion points

- The beginning of Muslims' interaction with the subcontinent
- Mohammad bin Qasim's entry and impact on the Indus Valley region
- Muslim invasions from the north-west
- Establishment of the Delhi Sultanate
- The Mughal Empire and its impact

**Mohammad bin Qasim:** Use a map of South Asia or the subcontinent to help pupils know the routes taken by Muslim invaders, and the later extent of their kingdoms. Begin by giving brief background of the Arab trade with the subcontinent before the advent of Islam. Talk about the reasons for Bin Qasim's mission to the subcontinent and his style of government after the conquest of Sindh and lower Punjab. His fair and just dealing made many people convert to Islam.

**The Delhi Sultanate:** With the coming of Islam to the subcontinent, also came many Muslim rulers. Mahmud Ghaznavi from Afghanistan invaded the subcontinent several times in the 11th century, but he did not stay back in India. In the 12th century AD, the Muslim rulers of India were: Mohammad Ghori, Qutbuddin Aibak who formed the Delhi Sultanate, the Khaljis of whom Alauddin Khalji was the most well known, the Tughlaqs, the Sayyids, and the Lodhis. Talk about Iltutmish's brilliant daughter, Razia Sultana, who was advanced for her time.

Do note that this lesson is aimed at informing the pupils about our history in the subcontinent, the dynasties that came and went, how the Muslim rule was firmly established, and what Muslim culture brought to the subcontinent: a love of literature, music, and poetry; gentility and courtesy; and a lifestyle based on Islamic traditions and values.

**The Mughal Empire:** Begin with telling students that the Mughals were the descendants of the Mongols, Changez Khan and Timur, but they built instead of destroying. Explain that the Mughal era

is generally known to be one of the most glorious in the history of the subcontinent. Beginning with Emperor Babur, India saw his sons, grandsons, and great-grandsons bring prosperity, progress, good governance, excellent administration and unity to India's many states. More of the subcontinent came under one rule under the Mughals than under any other dynasty. They brought a courtly culture to their glittering empire that was more developed than other contemporary empires. The earlier Mughal rulers never forgot the people, whom they kept happy by inducting them into the government; they abolished *jizya*, the tax on non-Muslims, and took care of their people's needs. From 1526, when Babur defeated Ibrahim Lodhi at the Battle of Panipat, India's fortunes were to change for the better over at least two hundred years or more of Mughal rule. Note that the Mughals succeeded because they were tolerant of the culture and traditions of their subjects, and fair in their dealings.

### **Suggested activities**

- Ask the pupils to name each of the Mughal emperors who ruled in succession after Babur.
- Which Mughal emperor built the Taj Mahal? Why? Ask the pupils if they know. Then relate the story to them. It's a beautiful story. Today, the Taj Mahal is considered to be one of the seven 'wonders' of the world, because of its timeless beauty and perfect architecture.
- Get the pupils to make a list of all the Mughal era buildings in Pakistan: Shahjahan Masjid, Thatta; Akbar's Fort, Attock; Lahore Fort, Badshahi Masjid, Shalimar Gardens, Haran Minar in Lahore.

### **Answers to questions**

1. He was sent to Sindh to deal with Raja Dahir, who had been unable to control the pirates who had captured ships carrying goods for the rulers of Iraq, and Muslim pilgrims to Makka.
2. They learned how to write digital numerals and the concept of zero.
3. The Afghan ruler of Ghor, Mohammad Ghori conquered all of north India up to Bengal in 1192. He made Delhi the capital of his kingdom. Ghori was followed by a long line of Muslim rulers. The first of these was his general, Qutbuddin Aibak, who formed the Delhi Sultanate in 1206.
4. Balban was an effective ruler because he was a capable general who saved the subcontinent from the attacks of the Mongols. He built strong forts along the routes and stationed his troops there to stop the Mongols from advancing.
5. Akbar was probably the greatest of all the Mughal kings. He ruled capably from 1556 to 1605. He expanded the empire and was known to be a brilliant general who never lost a battle.
6. The Mughal kings united many states into a large empire. They set up a proper system of government and administration. They introduced a marvellous culture to the region. Many great buildings were constructed and literature, poetry, art, and music flourished.

### **Work Page**

- A 712: Muhammad bin Qasim defeated Raja Dahir  
997-1030: Mahmud of Ghazni's rule  
1192: Mohammad Ghori conquered India  
1206: Delhi Sultanate was established by Qutbuddin Aibak  
1246-87: Balban's rule  
1398: Delhi attacked by Timur's armies  
1526: Babur defeated Ibrahim Lodhi at Panipat  
1540: Humayun defeated by Sher Shah Suri  
1556-1605: Akbar's rule

1658–1707: Aurangzeb's rule

B Khaljis (1290–1320)

Tughlaqs (1321–98)

Sayyids (1414–51)

Lodhis (1451–1526)

### **Things to do**

- Organize this as a class project, done by groups and put up for display.

### Lesson 17 Religion and languages

#### Discussion points

- What is meant by culture?
- How does religion affect our lives?
- The teachings of Islam
- Islam and other religions in Pakistan
- The importance of respect and tolerance for all
- The languages of Pakistan

Before you begin this lesson, explain the meaning of the word 'culture' to the class, because Lessons 17, 18, and 19 of the textbook discuss the 'culture of Pakistan'.

The word 'culture' actually means to 'cultivate' over a period of time. Therefore, when we refer to the cultures and civilizations of the world, we mean the many facets of a civilization, such as language, religion, the arts, literature, music, dance, crafts, education, and science. Culture also encompasses the social traditions of a society of people.

In this lesson, we discuss religion and language. There are five great religions in Asia, and although Islam is the state religion, at least three of them are also practised in Pakistan: Christianity, Hinduism, and Zoroastrianism. There are very few Buddhists, if any, in Pakistan.

#### Suggested activities

- Ask the pupils if they join their family members to say their prayers and read the Quran Shareef or, if they follow any other religion, then their religious practices.
- Do any of the boys go to the masjid to say their Friday prayers? Ask those who do to put up their hands. Ask the others if they go to their places of worship and, if so, when.
- Ask them what all these practices mean; explain that these actions are part of religious belief.
- The Kalima is the statement of belief in the Oneness of Allah (*tauhid*) and in the prophethood of Hazrat Muhammad (PBUH) as the messenger of Allah. The practice of *namaz* and fasting (*roza*) are also Islamic beliefs that we follow.

To understand different religions and to inspire tolerance in the pupils, show them pictures of churches, *mandirs*, and fire temples. Tell them that Christians worship in churches, Hindus in *mandirs* or temples and Parsees go to their fire temples. These are known as minority communities in Pakistan, because they constitute less than five per cent of the population of more than 165 million Pakistanis.

At this point, it would be wise to explain the difference between *religion* and *nationality* to the pupils. All the Muslims, Christians, Hindus, and Parsees, who live in Pakistan, are Pakistani by nationality, though their religions are different and they practise their religion in their own places of worship.

Very often people from different religions may have different and typical names which identify their faiths.

## Suggested activities

- If the school considers it appropriate and parents of the pupils have no objection or prejudice, it would be a good idea to introduce the pupils to people of other religions and, if possible, take them on a field trip to observe their places of worship. If they are to live side by side as Pakistanis, then they must also be able to appreciate and respect their different religions and cultures. By doing so, we will be teaching them tolerance, as is enjoined upon us by the Quran. People of other faiths can also come and talk to the pupils about special festivals, etc.
- They should join in the celebration of festivals of different religions and cultures. Tell the students about their history, for example, Christmas (Christians), Nauroz (Parsees), Diwali (Hindus), and Baisakhi (Sikhs).

Students will be surprised to know that one of the revered Sikh shrines, Nankana Sahib, is near Lahore and another is near Hasan Abdal in the NWFP. These are visited by Sikh pilgrims every year. Similarly, one of the oldest Hindu temples in this country is Nani Mandir in Hinglaj, Balochistan.

## Language

Many of us speak Urdu and English and one or more regional language like Sindhi, Punjabi, or Pashto; still more speak Urdu and Sindhi or Punjabi, Pashto, or Balochi. People from the various parts of Pakistan have their own cultures and languages. They live in different cities across the country. We meet most of these people in the big cities of Pakistan, because they can get jobs there, run their businesses successfully, and earn more money.

Tell the pupils that in Pakistan, which is a multicultural country, people are multilingual. Explain what ‘multi’ means. You will hear one person speak at least two languages, English and Urdu, as well as their mother tongue. Whatever it maybe, it is fascinating.

Explain what is meant by dialects—these are regional variations of a language as spoken in a particular area by a particular group of people. A dialect is an offshoot of a major language. For example, Hindko is spoken by people who have a Pathan background, hail from the NWFP and its environs, and who speak Pashto also; and Seraiki is an offshoot of Punjabi. Secondly, dialects are only spoken languages, and do not have a separate script.

Urdu is our national language and is widely spoken and understood across the country. English is spoken and written in schools, colleges, and offices; it is the official medium in Pakistan for communication with the outside world.

## Suggested activities

- Ask the pupils to make a list of the religions practised in Pakistan other than Islam. They should also be able to name their holy books and places of worship.
  - Sikhs: Guru Granth Sahib—*gurdwaras*
  - Hindus: Vedas—temples, *mandirs*
  - Parsees: Zend-Avesta—fire temples
  - Christians: Bible—churches

## Answers to questions

1. Culture is the way people live, dress, speak, eat, and behave, in general.
2. Religion, language, the arts (which include literature, music, dance, painting, sculpture, poetry), sciences, traditions, and customs of a people.
3. In the Bible.
4. It is a place of worship in the Sikh religion.

## Work Page

A 1 URDU	B 1 Quran Shareef
2 ENGLISH	2 Guru Nanak
3 ISLAM	3 Parsees
4 TEMPLE	4 Balochi
5 MOSQUE	5 dialect
6 CHURCH	6 Bible
7 AVESTA	

## Things to do

- Ask the children to find photographs or pictures of the typical places of worship of the different religions mentioned in the book.
- Students can surely write their names in English and Urdu.
- This would be an interesting exercise for the students as well as a test of their fluency in other languages.

# Lesson 18 The arts

## Discussion points

- What is meant by the arts?
- What art forms does one find in Pakistan?
- Why are the arts important?

In continuation of 'Culture,' begin with the discussion of the arts; does it only mean drawing and painting in their art class?

In academic terms, we use the word 'humanities' instead of 'arts' but here it means a practical skill or its application, guided by principles, to produce beautiful objects and works of creative imagination, skill or knowledge in a particular department. Explain that there are two categories of study viz. the arts and the sciences. The arts comprise the learning of history, geography, social studies, literature and poetry, painting, drama, singing and dancing, and making or creating things. The sciences deal with all the technical aspects of life, their statistics and calculations, such as knowing chemistry, physics, biology, and mathematics.

In this lesson, discuss the arts as being the literature, music, painting, and dance of Pakistan's four provinces.

Start with literature. Sadly, it is a subject in decline, although literature alone can teach the beauty of language and words. Many of the pupils will be familiar with the names of our three great Urdu poets, Iqbal, Faiz, and Faraz. There are also other writers and poets who write in Pakistani's regional languages as well as Urdu and English.

## Suggested activity

- Ask them to find out a little from home about each poet and speak about each one in the next class.

It is vital that our children be well versed in the biographies of these poets and writers and know about their famous works. Ask them to recite a short poem of any one or all of the three poets.

Next, tell them about our famous painters and artists, like Abdur Rahman Chughtai, Ustad Allah Baksh, Sadequain, and Gulgee, etc. This should be another activity for them to do for homework. They



should find out their names, if they are alive, or have passed on, and where they lived. Arrange to show students samples or pictures of their famous works. Taking students to an art gallery or the Arts Council would be a worthwhile experience.

### **Excursion**

Field trips, security permitting, are an interactive and effective way of learning. Take students to an art gallery and show them paintings by upcoming artists. Keep track of the painting exhibitions in the city and arrange with the school to take the pupils to an exhibition. Mere book study will not accomplish seeing and 'retaining' learning in the way that observing, feeling, and touching do. Remember that images remain embedded in the mind long after words are forgotten, especially in the curious, young mind.

Tell them about Islamic calligraphy; it is a special and decorative style of writing; its unique and special form is visible, usually, in stylized versions of the *ayats* of the Quran. The words are so precious that to give them a special significance they were written in calligraphic style.

Talk about our famous 'truck art'. Tell them to look at all the buses and trucks on the roads. Aren't they all 'dressed up?' This is part of our culture and people who live away from their homes for long periods of time express their love for their homes in this way. Incidentally, we are not the only country to decorate our transport vehicles. You can find similar decoration on buses in Thailand and on jeeps and wagons in the Philippines.

Playing a musical instrument is also an art, as is classical dance. Ask the pupils if any of them play an instrument. Tell them to bring pictures of our traditional musical instruments and to draw and label them. We have such diverse instruments used in all our provinces, wind instruments, string instruments, and percussion instruments.

Show them photographs of various other musical instruments and ask them to identify each one by name, and sketch any one they would find easy to do.

Dance is another form of expression of moods, emotions, stories about love and life. Again, all the provinces have their own dance forms. Dance expresses the people's happiness at weddings, harvests, festivals, and celebrations; the rhythm and drama of battle and the joy of victory. Dances performed to the rhythm of music can be light-hearted and joyous. Some schools have a music class, which relaxes the pupils' minds and, apart from teaching an art form, also relieves the anxiety and stress of schoolwork.

### **Answers to questions**

1. Dances are performed to express joy on a special occasion such as harvest time, a festival. or a wedding.
2. The *luddi* and the *bhangra*.
3. Truck art is typical of Pakistan. It can be seen on most trucks and buses.
4. Pupils will write their own answers.

### **Work Page**

A Nusrat Fateh Ali: *qawwali* singer

Ahmed Faraz: poet

Gulgee: artist

Sadequain: artist

Ashfaq Ahmed: writer

Sheema Kirmani: dancer

B flute, *shehnai*, *tabla*, bagpipes, tambourines, ankle bells, drum, bugles

## Things to do

- Some towns and cities have museums and art galleries. In Karachi, take the pupils to the Mohatta Palace, a beautiful building with coloured glass windows, which hosts exhibitions from time to time. The Arts Council and the National Museum in Karachi are also worth visiting. In Lahore, students can be taken to the Lahore Museum and the Arts Council at Alhamra. Enlarge the vision of children at this impressionable age with practical activities. *Showing* them something, as opposed to *teaching* them, goes a long way in helping them remember the lesson.
- Show the children a tile from Hala in Sindh. Ask them to draw and paint it in its natural colours.
- Ask the pupils to trace a small floral or geometric motif from any of the carpets they have at home, then draw and colour it.
- Students can do this with the help of parents and teachers.

# Lesson 19 Food, festivals, and games

## Discussion points

- Why are festivals celebrated?
- Food, festivals, and games are part of culture
- Favourite foods and games

Involve the pupils in a lively discussion about food. Apart from food being essential for us to live, we all enjoy food! Let the discussion be fun and interactive. Talk to the pupils about their favourite foods, desserts, puddings, the fruit and vegetables they like to eat or detest. Explain that different types of food also reflect the culture and lifestyle of the regions they come from.

## Suggested activity

- Ask the children to make a list of what they eat every day for breakfast, lunch, and dinner, and then write their favourite foods under those headings. Each pupil may read out his/her list. This can be very entertaining because there will be faces made at some of the items and ‘yummy!’ shouted out for things like ice cream and chocolates!

**Spices:** The East has always been famous for its spices which are also an indispensable ingredient of our food. Food is tasteless without them. Explain to students that apart from adding flavour to food, spices also have medicinal properties. Turmeric (*haldi*), for example, is an effective anti-bacterial agent; cumin seed (*zeera*) and aniseed (*saunf*) help digestion.

## Suggested activity

- Bring small amounts of at least 10 whole spices to class in little bottles or clear plastic bags to show them to the pupils. Ask if they know the names; tell them the names and what the taste is like. Alternatively, a board display can be made by pasting small clear plastic bags containing the spices on a chart paper with labels for the names.

Some of the spices they could use are: *zeera* (cumin, black or white) *rai* (mustard seed) *kalonji* (onion seed), *laung* (clove), *ilaichi* (cardamom), *darchini* (cinnamon stick), *dhania* (coriander seed), and *tez patta* (bay leaf).

**Foods:** Each province has its own tasty dishes. Sindhi *biryani* and *palla* fish are specialties of Sindh; *Sajji* is a favourite and delicious meat dish from Balochistan, while *chapli kababs* from the NWFP are enjoyed all over the country and *paaye* and carrot *halwa* are favourites from the Punjab.

### Suggested activity

- Ask the pupils to suggest the names of a few typical regional dishes such as *sarson ka saag* and *makai ki roti* which are favourites in the Punjab. Do the same for the other provinces. However, we all eat *tikka* and *kababs*, *daal* and rice, *biryani*, *koftas*, and curries of all kinds, as well as omelettes and *parathas*, *jalebis* and *halwa puri* which are all-time favourites.

Tea is widely drunk in Pakistan in every home, shop, and office; since it is generally hot in this country and fruit is plentiful, seasonal fruit juices are in abundance. Sugar cane and lime juice are available all year round, but *falsa* and mango juice are available only in summer. Apple and orange juice are a winter specialty along with delicious pomegranate juice.

### Suggested activity

- Ask the students to write down names of fruits available in the different seasons in the provinces. Start with spring, then summer, autumn (which is an extended summer in most parts of the country), and winter.

**Festivals:** What is a festival? These are days celebrated to mark events and even seasons. *Basant* is celebrated in the Punjab to mark the arrival of spring; similarly, Parsees celebrate Nauroz (new day) on 21 March which is the spring equinox. Ask the pupils to come up with more names, such as Eid, Christmas, and other cultural, religious, and national festivals.

### Suggested activity

- Divide the class into groups and assign each group to do a project on a particular festival. They should find out why it is celebrated and how, and write brief notes on them. Ask them to find and paste pictures as well and put up the project for display in the class. Students can also act out the celebration of selected festivals, under the teacher's guidance.

**Games:** The textbook covers this quite well for this level. Pakistanis are a sports-loving nation. This topic will interest the boys in your class particularly, as they are generally more sports-oriented than girls. Talk about the latest sports events in the country. Discuss favourite sports and take a popularity poll by a hands-up count.

### Suggested activities

- Ask them what their favourite sport is. (Remember that swimming is also a sports activity, as are other track and field events.) Students could make a sports corner on the class notice board and put up information on sports events in the city/country.
- Ask them how many sports involve playing with a ball. Perhaps the pupils could bring to class different balls for different games, draw and colour them and name the game they are used in.
- Ask them why a football cannot be hit with a racket or a hockey stick and why a shuttlecock is shaped the way it is. Show them a tennis, squash, and badminton racket each and ask them to weigh each one in their hands. This will help them to understand why a squash racket cannot be used to play tennis with, and so on. The same exercise can also be conducted using a cricket bat and a hockey stick.

Explain that other than these games, polo, *kabaddi*, etc. are also played. Help pupils to describe how each game is played.

### Answers to questions

1. Pupils to do this using the information given in the lesson and its explanation.
2. Chapatis, naan, and rice; daal, beans, vegetables, and meat, poultry, and fish dishes.
3. Pupils to do this using the information given in the lesson and its explanation.
4. Pupils to write their own answers.
5. Pupils to write their own answers.

## Work Page

- A
- 1 Cricket
  - 2 Cricket, football, tennis, squash, golf
  - 3 Cricket, baseball
  - 4 Tennis, squash, badminton
  - 5 Badminton
  - 6 Tennis, badminton, volleyball
  - 7 Golf
  - 8 Billiards
- B Pupils to do this exercise individually.

## Things to do

- Give the pupils an assignment to do at home. Ask them to try and cook an easy dish, even frying an omelette or making noodles, and bring it to class. They should then write down what they used to make the dish, under the heading, 'Ingredients', and how they made it, under the heading, 'Method'. Give a practical example by writing out a simple recipe on the board.
- Activities 2 and 3 can also be given as homework.

# Lesson 20 Animal rights

## Discussion points

- Understanding the term 'rights'
- To know that all living things have some basic rights
- Rights should be respected
- Animals must be treated with care, consideration, and kindness

Animals have three of the five basic rights that humans have. They have the right to food, to shelter and the right to be loved. Now, we know that animals cannot speak and ask for their rights as humans can, but there is an unspoken rule for all living things that Allah has created (plants and insects too). Since they are living, that is, they are alive (a) we cannot mistreat them, (b) we cannot deny them food, (c) we cannot kill them for sport, and (d) if we cannot give animals (street or wild animals that are not household pets) love and care, we can, at least, let them live in peace and not be cruel to them.

## Suggested activity

- Ask the pupils how they would feel if they were denied their rights. Explain to them that animals cannot ask for food, shelter, and care—they cannot speak. But we, as humans, should be sensitive to their needs and must be kind to them. Explain that it is cruel to hurt any living thing: one should not beat animals, pull their tails, pull the feathers off birds, or the legs off insects. Emphasize the fact that animals cannot speak and tell us what they think and feel. If they could, this world would change.

Tell the pupils that in developed countries people are more caring towards stray and pet animals. They often take stray dogs, cats, or birds to their homes or take sick or injured animals to the vet for medical treatment. Sadly, in Pakistan one finds animals treated poorly. Beasts of burden, such as donkeys, horses, oxen, and even camels are made to carry very heavy loads, cruelly beaten, not fed

or watered properly, and turned out to suffer when they are old or too sick to work. Only expensive household pets are well treated and looked after.

### **Suggested activities**

- Ask the pupils how they feel carrying heavy schoolbags every day to school and back. How do camels, donkeys, horses, and bullocks tell their masters they are tired because of carrying heavy loads day after day, and working tirelessly in all kinds of weather? They have a life of hardship.
- When you have made the pupils aware of the injustice and cruelty of man's treatment of animals, ask them what they could do to improve the lives of animals in Pakistan. Tell students about the Society for Prevention of Cruelty to Animals (SPCA) that was run by Lady Constantine, a remarkable person, and about the Pakistan Animal Welfare Society (PAWS) that has been organized by a group of young animal lovers. Information about these can be found on the Internet.
- The pupils could write a letter, collectively, to a newspaper asking that animals used as beasts of burden should be cared for by their owners. They could sign their names individually to the letter or simply write 'the students of X-Y-Z School'.
- They could organize a skit or a play showing the mistreatment of animals (perhaps the 'animals' could speak about their misery), so that more people can become aware of their plight.
- They could draw and colour posters in both English and Urdu, to be put up in prominent places, to protest the ill-treatment of animals.
- They could set up a club or a society for the prevention of cruelty to animals like PAWS or SPCA.
- They should speak to the *nazims* of their cities, through your efforts and the school's, and ask for bears and monkeys that are used to perform before crowds, to be set free. Poor people use them as a source of income but the animals are treated very badly. They should be allowed to return to their natural habitat.

### **Answers to questions**

1. People should be kind to animals as they cannot speak and complain when they are tired, hungry, or sad.
2. They have a right to food, shelter, and love.
3. By being kind to them.
4. Pupils to write their own answers.

### **Work Page**

- A
- 1 Domestic animals: cow, goat, buffalo, duck, ox, rabbit, cat, dog
  - 2 Wild animals: tiger, lion, zebra, elephant, bear, snake
  - 3 Pets: parrot, dog, pigeon, rabbit, cat
- B Pupils to do this exercise individually.

### **Things to do**

- Take the pupils to visit a zoo.
- Ask the pupils who a 'vet' is and what he does, and whether they know how many vets there are in their city. Tell them that the complete word is 'veterinarian'. Break it up for them into syllables for easy pronunciation, viz. *vet-er-in-ar-i-an*.
- Children can use the Internet to find out more about PAWS or SPCA.

## APPENDIX: WORKSHEETS

### Unit 1: Geography

#### Lesson 1: The Earth in space

1 Why does it take 24 hours from one sunset to the next?

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2 Why does a place receive lesser sunshine, the further it is from the equator?

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3 In the space below, draw a diagram to show the rotation and revolution of the Earth and label it.



## Lesson 2: Climate

1 Fill in the blanks.

- i) When the climate is not too hot or too cold, it is called \_\_\_\_\_.
- ii) Places that have \_\_\_\_\_ receive more rainfall.
- iii) The \_\_\_\_\_ high above the Earth is quite cold.
- iv) The seasonal rain-bearing winds in south-east Asia are known as the \_\_\_\_\_.
- v) In Pakistan, monsoon rains fall between the months of \_\_\_\_\_ and \_\_\_\_\_.
- vi) Places close to the \_\_\_\_\_ have a cool, moderate climate.

## Lesson 3: Our country

1 Which area of Pakistan has hardly any rivers?

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2 In what way is life different here from that in the Punjab?

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3 Why do more people live in the plains of our country than in the northern regions?

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## Lesson 4: The Western Highlands

1 Name the plateaus found in Pakistan.

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2 Which ranges separate Pakistan from Afghanistan?

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3 What is a *hamun*? Where would you find Hamun-e-Mashkel?

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4 Name the rivers that flow into the sea at the Makran coast.

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5 Tirich Mir and Noshaq are peaks in the \_\_\_\_\_ Range.

6 The road that crosses from Pakistan into China is the \_\_\_\_\_.

7 Name the main passes found in Pakistan.

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## Lesson 5: River Indus and its plains

1 Fill in the blanks.

- i) The length of the River Indus is \_\_\_\_\_ km.
- ii) The place where the Indus enters the Punjab is called \_\_\_\_\_.
- iii) The tributaries of River Indus join it at \_\_\_\_\_.
- iv) The Indus Delta is to the south-east of \_\_\_\_\_.
- v) The River Indus flows down into the \_\_\_\_\_.

2 During which months of the year is there plenty of water in the River Indus? Why is it so?

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3 Would you expect to see more boats on the river at Sukkur or at Kalabagh? Why?

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## Lesson 6: The soil and agriculture

1 What is erosion? How does it take place?

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2 How can erosion be controlled?

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3 What is terrace farming? Where is it practised?

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4 Name some fruits grown in Pakistan. Also name the areas where they are grown.

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## Lesson 7: Forests

1 Read and mark these statements as true (T) or false (F).

- i) Alpine forests are found in the coastal areas of Pakistan. \_\_\_\_\_
- ii) The juniper forest of Balochistan is very old and is a protected site. \_\_\_\_\_
- iii) Mangroves protect coastal areas from tidal waves and tsunamies. \_\_\_\_\_
- iv) Riverine forests are found in the highland areas. \_\_\_\_\_
- v) Plantations are man-made forests. \_\_\_\_\_

2 In what ways is the eucalyptus useful?

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3 Why is the neem tree so valuable?

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## Lesson 8: Water and its uses

1 Briefly describe the water cycle.

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2 How are dams and barrages useful?

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3 Complete these sentences.

- i) Pakistan has the largest \_\_\_\_\_ in the world.
- ii) When water is heated by the sun, it turns into \_\_\_\_\_.
- iii) Almost \_\_\_\_\_ of the Earth is covered by water.
- iv) Water from tube wells is pumped up by \_\_\_\_\_.

## Lesson 9: Power, minerals, and industries

1 Name the different sources of power. Which sources are most used in Pakistan?

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2 Explain what is meant by raw materials.

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3 Name two examples each of metallic and non-metallic minerals found in Pakistan.

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4 How are fossil fuels formed? Where are they found?

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5 What is Pakistan's biggest industry?

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6 Name some of Pakistan's industrial products.

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## Lesson 10: Transport

1 Fill in the blanks.

- i) The \_\_\_\_\_ were among the first people to develop good roads.
- ii) In Pakistan, the road network covers \_\_\_\_\_ kilometres.
- iii) Motorways are fast because they do not have \_\_\_\_\_ and do not \_\_\_\_\_ small settlements.
- iv) More people use highways because they are \_\_\_\_\_ than flying and faster than \_\_\_\_\_.
- v) Pakistan's railway network covers \_\_\_\_\_ kilometres.
- vi) Railway engines in Pakistan are powered by \_\_\_\_\_.
- vii) Pakistan's main international airports handle \_\_\_\_\_ passengers every year.
- viii) PIA began operating in \_\_\_\_\_.
- ix) Pakistan's main ports for shipping are \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

## Unit 2: Citizenship

### Lesson 11: Communications

1 Why is email such a popular means of communication?

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2 Explain why cellphones have become so popular.

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3 What useful information have you gained recently from a) listening to the radio and b) watching television?

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4 Name three of your favourite FM radio channels. Briefly say why you enjoy them.

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## Lesson 12: The government

1 Why is it important to have a government in a country?

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2 What is the minimum age for voting in Pakistan?

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3 Explain how elections take place.

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4 Do you know of any form of government other than democracy? Name the country and the ruler.

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## Lesson 13: The law

1 Complete the following statements.

- i) The highest court in a country is the \_\_\_\_\_.
- ii) The highest court in a province is the \_\_\_\_\_.
- iii) Breaking the law is called an \_\_\_\_\_ or a \_\_\_\_\_.
- iv) When an offender is taken to the court, his/her case is heard by a \_\_\_\_\_ or a \_\_\_\_\_.
- v) The person who tells the court about a crime also called a \_\_\_\_\_.

2 Make up one rule for the school playground. Also write the punishment for breaking that rule.

Rule: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Punishment: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Lesson 14: People and work

- 1 Find out names of people among your family and relatives who belong to five different professions. What do they do?

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- 2 Give examples of five jobs each that do not require skills.

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- 3 Write briefly about the kinds of jobs people do in the villages.

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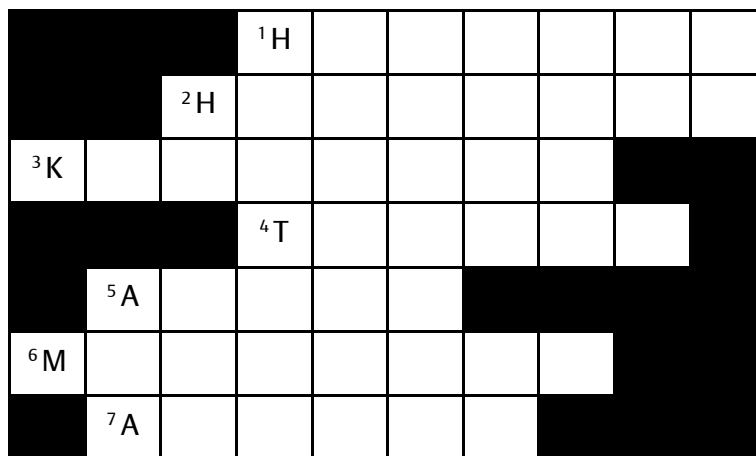
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## Unit 3: Our History

### Lesson 15: Our past

- 1 Complete this word puzzle following the clues. When you finish, you will find a new word (beginning with H) going top to bottom.
  - 1) An Indus Valley Civilization site
  - 2) A religion brought in from Central Asia
  - 3) The most famous Kushan ruler
  - 4) This was the seat of the Gandhara civilization
  - 5) He was a powerful Maurya ruler
  - 6) This site in Balochistan is older than Mohenjo Daro
  - 7) This Central Asian race invaded the subcontinent and settled here



- 2 Name the route taken by Alexander and his army to enter the subcontinent.

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- 3 What have archaeologists found when ancient sites were excavated?

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- 4 Give the names of the two Chinese pilgrims, with dates, who visited the subcontinent.

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- 5 Who were the Huns? What did they do?

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## Lesson 16: Muslim rule in the subcontinent

1 Describe the two ways in which Muslims first came to the subcontinent.

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2 Who was Mahmud? Why did he become famous? Where is he buried?

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3 Name the Mongol rulers who were a threat to the subcontinent.

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4 Who was the only female ruler of the Delhi Sultanate?

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5 Who was Ibn Batuta? What did he do?

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6 Why and where did Humayun go into exile? When did he return?

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## Unit 4: Culture and Society

### Lesson 17: Religion and languages

1 Name the holy books of the Hindus.

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2 Who was Buddha? What did he do for many years? What did he become famous for?

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3 Find out and write the names of five other Islamic countries.

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4 What is the difference between a language and a dialect?

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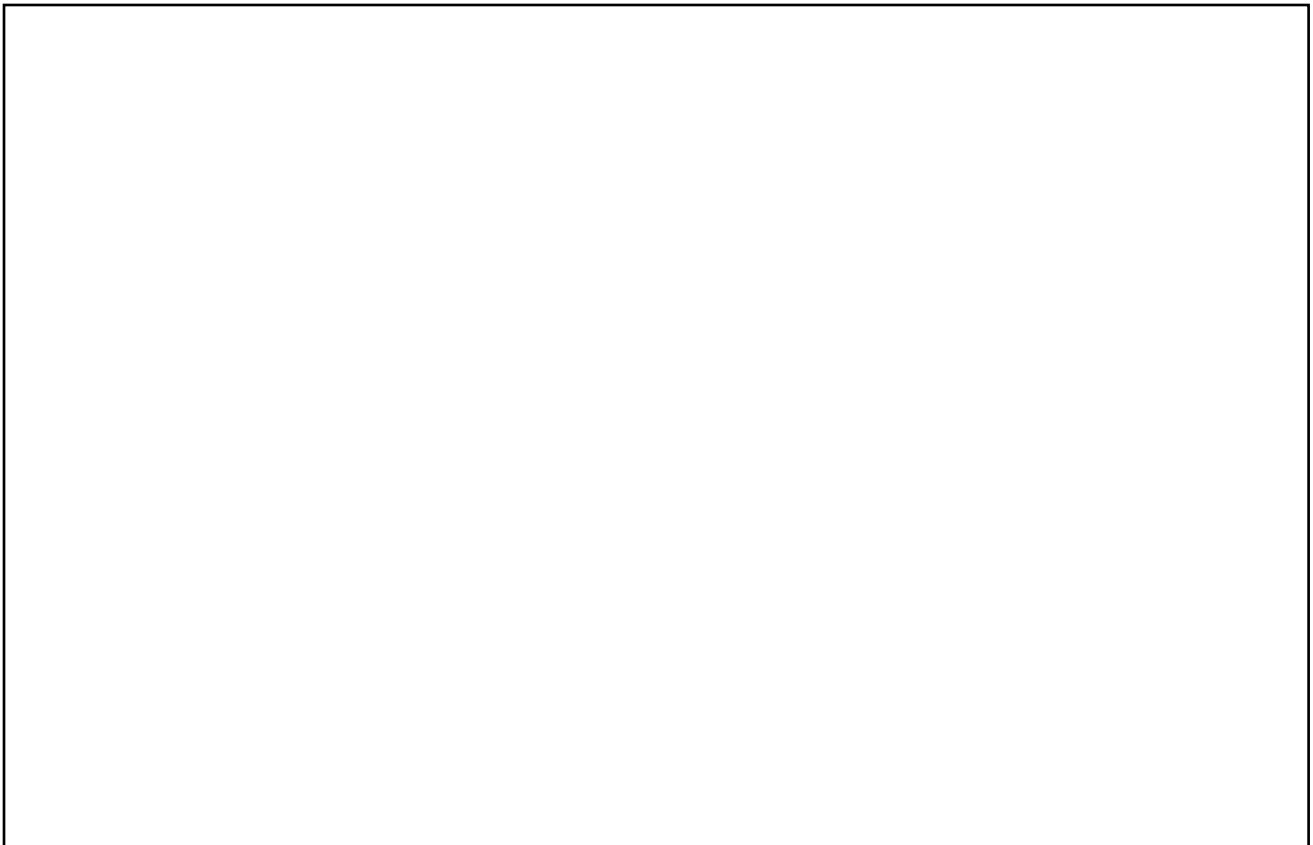
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## Lesson 18: The arts

Complete these statements.

- 1) A country's culture is formed by its \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
  - 2) Dance is a way of \_\_\_\_\_.
  - 3) Traditional dances by various groups are called \_\_\_\_\_ dances.
  - 4) The two forms of music most enjoyed are \_\_\_\_\_ music and \_\_\_\_\_ music.
  - 5) Calligraphy is a stylized form of \_\_\_\_\_.
  - 6) The craft of designing and building is called \_\_\_\_\_.
  - 7) The writing of prose and poetry is known as \_\_\_\_\_.
- 2 In the space below draw and decorate a car, in the truck-art style.



## Lesson 19: Food, festivals, and games

1 Make a list of the spices in your kitchen. Find out where they originally come from.

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2 Name two places in your city where you can get food cheaply and two places where it is expensive.

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3 Pakistan has won the world snooker championship. Find out who the player was and when he won it.

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4 Find out the name of Pakistan's top tennis player and the latest matches he has played.

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## Lesson 20: Animal rights

1 Write about three animals that help us in farming. Explain how they are used.

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2 Make a list of all the animals that we eat in Pakistan.

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3 Find out and list the names of endangered animals in Pakistan.

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4 In the space below, draw a poster for protection of wildlife in Pakistan. Think up a catchy slogan.

