

1. Globes and Maps

Assessment Corner

Oral Assignment

- ▶ Discuss and let the students fill in the answers in class.

Written Assignment

- ▶ B to E. Discuss in class and let students answer the questions as homework. Teacher may assess individual work to see their level of understanding.

Think Tank

- ▶ F to I. Discuss and let the students do these exercises on their own, either in class or at home. It can be assessed with the homework.

Answers to Checkpoint

1. Russia 2. Asia 3. Pacific Ocean 4. A map is a representation of the whole Earth or a part of it on the Earth's surface.

Answers to Assessment Corner

- A. 1. True 2. False 3. False 4. True 5. True 6. False 7. True 8. False
- B. 1. a 2. d 3. b 4. c 5. a 6. d
- C. 1. eight 2. continents 3. seventh 4. Pacific 5. sphere 6. skins; cloth 7. detailed 8. green
- D. 1. d 2. f 3. a 4. c 5. b 6. e
- E. 1. We can't see the whole Earth at a time because it is shaped like a sphere.
2. The limitations of a globe are that a large-sized globe cannot be made easily and will be difficult to handle, while a small globe does not show any details.
3. Maps are less accurate because the curved surface of the Earth cannot be made flat and represented on them.
4. A scale helps to show the distances between places accurately on a map. That's why it so useful.
5. The actual distance between two points on the ground is called its ground distance and the straight line between the same two points on a map is called the map distance.
6. Signs and symbols help us to understand information given on a map in the form of a small drawing or sign. These are used universally.

7. Continents: Asia, Africa, Australia, Antarctica, Europe, North America, South America.

Oceans: Pacific, Atlantic, Indian and Arctic.

F. The Earth has a larger cover of water than land; therefore, it is called the blue planet.

G. Students can do this on their own.

H. Australia; Europe; Antarctica; South America; North America; Africa; Asia.

I. (b)

2. Parallels and Meridians

Assessment Corner

Oral Assignment

- A. The students can do this on their own in class. Then answers can be elicited from them and they may correct their own work.

Written Assignment

- B&C.** The students may do these exercises on their own and answers may be elicited orally in class. Students can check partner's work.
- D. Discuss in class and then let the students write the answers as homework. Teacher should assess individual work.

Think Tank

- E. **HOTS question:** Discuss in class and let students answer on their own. Some of the answers can be read aloud at random in class. Teacher can comment, ask for student's comments and correct any wrong interpretations.
- F. **Activity:** This can be done by all students on their own and answers can be checked by partners. Make corrections where necessary.
- G. **Life Skills:** Students can do this on their own.

Answers to Checkpoint

1. axis 2. Equator 3. equal 4. $66\frac{1}{2}^\circ$

Answers to Assessment Corner

Oral Assignment

- A. 1. False 2. True 3. True 4. False 5. True 6. False [It passes through Greenwich near London]

Written Assignment

- B. 1. d 2. b 3. a 4. c 5. a 6. b
- C. 1. Earth 2. Longitude 3. equal; each other 4. Maximum 5. latitudes/parallels; longitudes/meridians 6. imaginary
- D. 1. Parallels and Meridians are numbered according to degrees, starting from the Equator

and the Prime Meridian respectively.

2. Parallels are circles and meridians are semi-circular lines. The total number of parallels is 181 while the total number of meridians is 360.
3. Once we know the value of the longitude and the latitude of a place, we can locate it on a grid easily, since the grid is composed of the parallels and meridians.
4. Parallels are circles in decreasing order of length from the Equator to the Poles, where they are points. They mark the angular distance from the Equator, measured in degrees, from 0 degrees at the Equator to 90 at the Poles. There are 181 parallels. They tell us the location North and South of the Equator.

Meridians are semi-circles drawn from the North to the South Pole. They all have the same length, but their distance from each other decreases from the Equator to the Poles. The Meridians cross the Parallels at right angles [90 degrees]. They tell us the location East and West of the Prime Meridian which is 0 degrees. There are 360 Meridians.

5.

<i>Longitude</i>	<i>Latitude</i>
(a) They are semicircles.	They are circles.
(b) They are not parallel.	They are parallel.
(c) The starting point is the Prime Meridian that passes through Greenwich.	The starting point is the Equator that divides the globe into two Hemispheres.

6. The Prime Meridian is the starting point of the meridians which indicates whether the location of a place is towards its west or east. It has 180 meridians to its east and 180 to the west. World time is based on calculation of time from the Prime Meridian at Greenwich.

Think Tank

- A. **HOTS question:** The Globe represents the Earth which is spherical. It is divided into two hemispheres by the Equator. The Equator circles the centre of the globe and is therefore the longest line since it is the place at which the circle has the longest radius and diameter. All parallels north or south of the Equator reduce in length because of the spherical shape of the globe, till they are points at the two Poles.
- B. **Activity:** This can be done by students in class in pairs and checked orally by another pair.
- C. **Life Skills:** This can be done by students on their own and teacher can walk around the class checking each to offer comment or correct.

3. Major Landforms

Assessment Corner

Oral Assignment

- A. This can be discussed and answered in class orally. Students may write the answers down.

Written Assignment

- B,C&D.** Students can do this on their own in class and answers can be elicited at random. Students can check partner's work in pairs.
- E.** Discuss in class and then let the students answer the questions on their own. Teacher must assess or have the partner assess, based on discussion.

Think Tank

- F. HOTS questions:** Discuss and tell students to do this on their own. Teacher must assess individual work and discuss the best answers.
- G. Activity:** Tell students to use a map to write this down. They can work in pairs. The answers can be checked by another pair of students.
- H.** Adventure sports have been discussed earlier, it is presumed. This can be done orally and students may write any two skills needed.

Answers to Checkpoint

1. ✓ 2. ✗ 3. ✗ 4. ✓

Answers to Assessment Corner

Oral Assignment

- A. 1. The surface of the Earth is made up of land and water bodies.
2. Mountains, plateaus and plains are three main relief features of the Earth.
3. Young mountains are very high, have sharp features and conical peaks.
4. Generally, plateaus are located near mountains or surrounded by them.
5. Rivers help to form plains.
6. Tributaries are often found in the lower part of a river.

Written Assignment

- B. 1. a 2. c 3. b 4. d 5. a 6. c
- C. 1. 29 2. Old 3. features; conical 4. lowlands 5. suddenly 6. mountains
- D. 1. d 2. f 3. a 4. e 5. c 6. b
- E. 1. The main type of relief features on the Earth are mountains, plateaus, plains and river valleys.
2. Mountains are useful because they block cold or hot winds moving from one side to

another. The winds carrying water vapour get cooled and bring rainfall. Rivers starting in mountains bring water to the plains. They provide forests and rich grasslands. Minerals are often found there. Health and tourist resorts are developed. Stones and rocks are taken for building houses and roads.

3. Upper river has rapids and waterfalls. Mature river has loops called meanders. Lower river has distributaries.
4. Lowlands are usually fertile, especially if they have a river flowing through. This makes the land good for growing crops. The climate is also usually moderate and travel becomes easier. It is possible to have industries there.
5. Plateaus are often rich in mineral deposits and are also good for growing crops. Often rivers cut deep waterfalls into the sides and these are used to produce hydroelectricity. Some have rich grasslands to support cattle and sheep.
6. Most of the plains in the world are formed by rivers.

Think Tank

- F. **HOTS question:** The lives of people are affected in many ways by landforms. For example, the food grown and eaten in mountains will be different from that in the plains. The way the houses are built in each place and the clothes people wear also depend on the landform. Roads are easier to build in plains than in mountains, thus making it easier for people to travel. Industries set up according to the land provide employment to the people living there.

G. Activity

<i>Courses</i>	<i>From</i>	<i>To</i>	<i>Important cities</i>	<i>Important Factories</i>
Upper	Gangotri	Haridwar	Haridwar	Heavy electrical goods
Middle	Haridwar	Patna	{Kanpur, Allahabad}	Kanpur—leather, textiles etc.
			{Varanasi, Patna}	Allahabad—Agro & Metal based, garments, Engineering etc. Varanasi-silk handloom Patna- Agro & metal Based, garments, etc.
Lower	Patna	Haldia	[Bhagalpur, Kolkata]	Bhagalpur—Silk and Agro based
			[Haldia]	Kolkata—Jute, metal, Chemicals, paper, etc. Haldia—Oil, petroleum, steel, chemicals, etc.

- H. **Life Skills:** Any two of the following skills may be mentioned:

Rope climbing, rappelling, camping, route finding, map reading, ice climbing, crevasse rescue, weather reading, first aid, etc.

4. Weather and Climate

Assessment Corner

Oral Assignment

- A. Students can do this on their own and it can be checked orally by asking them at random.

Written Assignment

- B&C.** Students can do these on their own, answers can be discussed and checked in pairs.

- D. Discuss and let the students answer the questions on their own. Teacher must assess them individually.

Think Tank

- E. **HOTS questions:** Discuss in class and let students answer them on their own. The teacher must assess them individually.

- F. Ask students to see the grid and select words and write them down separately or circle them with a pencil. They may look horizontally and vertically.

- G&H.** Students can do these on their own and they can be discussed in the class.

Answers to Checkpoint

1. Humidity 2. Distance from the sea 3. The temperature decreases as the height of a place increases. 4. The moisture or water vapour in the air is called humidity.

Answers to Assessment Corner

Oral Assignment

- A. 1. False 2. True 3. False 4. True 5. False 6. True

Written Assignment

- B. 1. b 2. d 3. a 4. c 5. b 6. d

- C. 1. climate 2. fixed 3. Torrid 4. sun 5. decreases 6. hot; dry

- D. 1. Weather is the condition of the atmosphere at a particular time and place. It is never fixed. Climate, on the other hand, refers to the average weather conditions over a long period of time. It remains the same at any place for a long time and is repeated every year.

2. The main elements of weather are the temperature, pressure and humidity of the air. Though elements of climate are the same as weather, it is mainly influenced by air temperature and rainfall.

3. The main factors that influence climate are distance from the Equator; height above sea level; distance from the sea; prevailing winds; and the amount of moisture in the air.

4. The rays of the sun remain vertical at the Equator throughout the year and therefore as

they are concentrated in a small area, the areas near the Equator remain hot and humid.

5. Winds can be hot or cold, wet or dry, depending on whether they blow over land or sea. They can heat or cool the area over which they blow. On high altitudes it is colder and often there is snow and ice. Therefore at higher altitudes it is cooler even during summer. Winds from the sea carry moisture and bring rainfall too. They can increase moisture in the air, which is humidity.

6. There are three Heat Zones. The Tropical Zone is between the two Tropics on either side of the Equator. It gets the maximum heat and moisture, making the climate hot and humid. It is also called the Torrid Zone.

The Temperate Zone in both the hemispheres lies between the two Tropics and the Arctic Circle in the north and the Antarctic Circle in the south. Since it receives a moderate amount of heat from the sun, the climate is neither very hot nor very cold.

The Polar Zone or the Frigid Zone lies between the Poles and the Circles around them. They receive very little heat from the sun and remain very cold throughout the year, generally below zero degrees.

Think Tank

E. 1. Chandigarh is not a coastal city while Mumbai is a coastal city. Since Chandigarh receives no moderate influence of sea breezes, it is hot, though it is quite far from the Equator than Mumbai.

2. At noon, the rays of the sun are at the zenith. Therefore, we feel warmer at noon than in the mornings and evenings when the sun is lower towards the horizon.

F. The following words are in the grid: [Horizontal] TEMPERATE, PRESSURE, RAINY, WINDY, TORRID, RAINFALL, SUNNY, CLOUDY, COOL, WARM, MILD.

[Vertical] TEMPERATURE, EQUATOR, WIND, CLIMATE, HEAT, SEA, SUN, WEATHER, HUMIDITY.

G&H. This can be done by students on their own. Also give them time to study the exercise in H. Then both can be discussed briefly in class.

5. DRC – The Land of Dense Forests

Assessment Corner

Oral Assignment

- A. This can be discussed and answered orally by students in class.

Written Assignment

B,C,D&E. These can be done by students on their own. Then answers can be elicited at random and the work corrected by partners.

- F. This can be discussed in class and answered by students as homework along with other work.

Think Tank

- G. **HOTS questions:** Discuss in class and the students can do this as homework. Teacher must assess the answers. The best answer can be shared.
- H. The students can do this on their own. There are about 20 words to be found in the grid.
- I. The students can do this on their own.
- J. This is a very important life skill in a world that is increasingly facing racial and religious intolerance and violence. It is not only the tribals but people from all over the country and the world who should be treated with respect.

Answers to Checkpoint

1. Equator 2. Zaire 3. second 4. Kinshasa 5. tse-tse fly

Answers to Assessment Corner

Oral Assignment

- A. 1. DRC was earlier called Zaire.
2. Kinshasa is the capital of DRC.
3. Algeria is the largest country in Africa.
4. The tse-tse fly causes sleeping sickness.
5. Cassava is the staple food of the people in DRC.
6. Hydroelectricity is the main source of power in DRC.

Written Assignment

- B. 1. b 2. d 3. a 4.c 5.a 6. d

- C. 1. Tropical rainforests 2. south 3. seventh 4. southern 5. scattered 6. Pygmies
- D. 1. South Sudan, Central African Republic, Uganda, Rwanda Burundi, Zambia, Angola, Republic of Congo. [any three]
2. Rhinoceros, hippopotamus, elephants, gorilla, chimpanzee, monkey, baboon, lion, wolf, giraffe, antelope, antelope, zebra, leopard, crocodile, alligator. [any three]
3. Cobalt, calcium, copper, uranium, zinc, silver, gold, manganese, tin, diamonds, iron ore and bauxite. [any three]
4. Coffee, cocoa, rubber, tobacco, cotton, oil-palm. [any three]
5. Kinshasa, Lubumbashi, Katanga, Kisanganj, Matadi. [any three]
6. Cassava, rice, maize.
- E. 1. The Equator passes through Asia and Africa.
2. The largest country in Africa is Algeria.
3. The Congo river is not fully navigable because of rapids and waterfalls.
4. The government is trying to save the wildlife by setting up wildlife sanctuaries and safari parks.
5. Most people speak the Bantu language in DRC.
6. DRC is sparsely populated because of the dense forests and people live in scattered villages, largely along the river basin or near industrial sites.
- F. 1. DRC is situated in the equatorial region, with the Equator passing through its northern part. Two-thirds of the country lies in the Southern Hemisphere.
2. The Congo River flows through DRC and is the second longest in Africa. It is the seventh longest river in the world. The river is not fully navigable because of rapids and waterfalls. It has a vast basin surrounded by mountains and plateaus.
3. DRC has evergreen forests, with trees, creepers, climbers and shrubs, that are so dense that the lowest layer of plants get very little sunlight. The next layer has shrubs. Then a canopy forms a roof over the forest. Beyond this third layer are the tallest trees. The forest is so dense in places that it is difficult to pass through. Ebony, mahogany and rosewood trees grow there and the northern and southern parts have savannah grasslands.
- In the swamps live rhinoceroses, hippopotamuses and elephants, while crocodiles and alligators live in the river waters. Gorillas, chimpanzees, baboons and monkeys fill the forests and in the Savannah grasslands are lions, zebras, wolves, antelopes, giraffes, leopards and elephants. Also found there is the tse-tse fly that causes sleeping sickness.
4. Farming is the main activity of people in DRC. They grow cassava, rice and maize for food; while coffee, cocoa, rubber, tobacco, cotton and oil-palm are cash crops, some of which are exported to Europe and North America. Fishing is done in the rivers and lakes.
- DRC being rich in minerals, mining and industries connected with them are developed. Hydroelectricity is the main source of power and the chief industries are textiles, metal refining, food processing, beverages and consumer goods.
5. DRC has an equatorial, tropical climate which is hot and humid all the year round.

Mornings are generally sunny and pleasant, but it becomes very hot by noon, followed by heavy rains in the afternoon. The nights are usually comfortable. The average annual rainfall is about 200 cm.

6. The Europeans exploited the rich mineral resources of DRC. Even after it became independent in 1960, people have not become skilled enough to develop those resources.

Think Tank

- G.
 1. Sunlight cannot reach the forest floor because of the dense canopy formed by the trees of the rainforest in the equatorial forest region.
 2. This may be discussed in class: reasons – it has heavy rainfall and falls close to the tropical region.
- H. Words available in the grid are: MAHOGANY, TIN, GORILLAS, URANIUM, KATANGA, CONGO, ALBERT, ZEBRA, COBALT, TSETSE, PYGMIES, ROSEWOOD, BAUXITE, EBONY [horizontal]
AFRICA, COCOA, GOLD, CASSAVA, EQUATOR, TIN, BANTU, ZAIRE, KINSHASA, KIVU. [vertical]
- I. This can be done/understood by students on their own, using books, magazines, internet, etc. Any reasonable work on the Bantu negroes and pygmies is acceptable.
- J. Discussion on the life skills in class may focus on racial tolerance and understanding.

6. Greenland – The Land of Snow and Ice

Assessment Corner

Oral Assignment

- A. This can be answered by students at random in class.

Written Assignment

- B&C. These can be done by students on their own. Answers can be elicited orally at random and partners may correct.
- D&E. These can be discussed and then answered by the students on their own. Teacher must assess the answers individually.

Think Tank:

- F. **HOTS question:** Discuss in class and let students answer on their own. Teacher must assess individually. Bring warm moderating ocean winds and being further away from the Arctic Circle to the notice of the students.
- G. There are about 22 words in the grid. Ask students to find them, at least 12.
- H. **Project:** This can be done by the class as a group, using magazines, internet etc.
- I. **Life Skills:** Let students answer on their own.

Answers to Checkpoint

1. Eric the Red 2. Nuuk 3. ice cap 4. huskies

Answers to Assessment Corner

Oral Assignment

- A. 1. Antarctica lies around the South Pole.
2. Eric the Red discovered Greenland.
3. The new name of Godthaab is Nuuk.
4. Huskies are used to draw sledges for hunting.
5. The Eskimos came to Greenland from North America about a thousand years ago.
6. Eskimos use animal skins and furs to make their clothes.

Written Assignment:

- B. 1. c 2. a 3. d 4. b 5. a 6. d
- C. 1. North Pole 2. coldest 3. Greenland 4. Inuit 5. Ice cap 6. icebergs

- D.
1. Greenland is the largest island in the world.
 2. Greenland looks white because, except for its coastal areas, it is permanently under ice and snow throughout the year.
 3. Only plants with short roots like shrubs, mosses, lichens and grasses grow in Greenland. Some flowering plants grow in summer.
 4. Only animals that can survive in extreme cold live in Greenland as they have thick fur or thick skins, like polar bear, musk-ox, arctic fox, wolves, seals and huskies.
 5. Eskimos hunted whales using harpoons earlier; now they use rifles.
 6. Kayaks are long narrow boats with pointed ends rowed by one person. Umiaks are larger boats that can carry many people.
- E.
- Greenland is an island that lies to the northeast of North America. It lies mostly within the Arctic Circle and is surrounded by the Greenland Sea in the northeast, Denmark Strait in the southeast, Davis Strait in the southwest and Baffin Bay in the northwest. To its north lies the Arctic Ocean.
2. Normal life is not comfortable in Greenland because the climate is extremely cold all the year through.
 3. It is extremely cold in Greenland around the year, with heavy snowfall and the temperature being below freezing point always. Winter lasts for about nine months with cold winds blowing. There is no sunlight visible for many weeks. The summers are brief, with bright sunshine, as the sun doesn't set for weeks. Despite sunny weather and scanty rainfall, the temperature remains below freezing point, though some ice melts.
 4. Eskimos wear clothes made of animal furs and skins, mostly seal skin. They cover their heads with fur caps. Their hooded jackets are called parkas. They wear double trousers and high boots, men, women and children dressing alike.

Think Tank

- F. **HOTS question:** The southern parts of Greenland are coastal areas slightly further away from the Arctic Circle. They receive the influences of the sea that is slightly warmer than the Arctic waters. Therefore, the southern parts of Greenland are more comfortable for people to live in than the bitterly cold northern parts.
- G. Words on the Grid are as follows: GREENLAND, ICELAND, UMIAK, SEA, NUUK, ESKIMO, ICE, IGLOO, WHALE, POLAR BEAR. [horizontal]
ICEBERG, PARKA, GODTHAAB, MOSS, INUIT, KAYAK, SEAL, FISHING, LICHEN, HUSKIES, HARPOON, ERIC, REINDEER [vertical]
- H. **Project:** Any reasonable work, referring to the melting of ice due to climate change and global warming, is acceptable. Information is available in National Geographic and Internet.
- I. **Life Skills:** Any reasonable answer is acceptable.

7. Saudi Arabia – The Land of Hot Sand

Assessment Corner

Oral Assignment

- A. This can be done by students on their own. Elicit answers at random and they may check their own work.

Written Assignment:

B,C&D. These can be done by students. Answers may be elicited at random and students can check their partner's work.

- E. Discuss in class and let students do this as homework. Teachers must assess individually.

Think Tank

- F. Discuss in class and let the students do this for homework. Teacher must assess individually and share the best answer. Clue – the dress helps to avoid heat and dust.

- G. Students can do this on their own and partners can check.

H&I. These can be done in pairs or groups.

Answers to Checkpoint

1. Africa 2. Saudi Arabia 3. empty area 4. hot, dry

Answers to Assessment Corner

Oral Assignment

- A. 1. The Sahara Desert in northern Africa is the largest desert in the world.
2. Saudi Arabia is the largest country in the Arabian Peninsula.
3. Abha is a hill station in Saudi Arabia.
4. Wide padded feet help camels move swiftly in the desert.
5. Mineral oil is called liquid gold because it has very high value in the world and is not available easily.
6. Mecca and Medina are two pilgrim centres in Saudi Arabia.

Written Assignment

- B. 1. a 2. d 3. b 4. c 5. a 6. d
C. 1. northern 2. Cancer 3. Red 4. Cloak; smock 5. Saudi Arabia
D. 1. The Arabian Peninsula is located on the western side of Asia with the Tropic of Cancer passing through it. It has the Red Sea on the west dividing it from Africa, the Gulf of

Aden and the Arabian Sea on the south and the Persian Gulf on the east.

2. Saudi Arabia has Iraq, Jordan and Kuwait in the north, Qatar, Oman and the United Arab Emirates in the East and Yemen in the south. The Red Sea is on its west.
 3. The camel is the only animal that can withstand the hot dry climate and move over the sand. Its hump helps it to store food and water is stored in its stomach for many days, thus making it possible for it to travel long distances across the desert. Its wide padded feet help it to walk swiftly on sand. This makes it an ideal form of transport in the desert and has given it the name of the ship of the desert.
 4. Bedouins are the nomads in Saudi Arabia, travelling from place to place and living largely in the villages.
 5. The main crops grown in Saudi Arabia are wheat, barley, dates, vegetables and alfalfa.
- E.
1. Saudi Arabia is one of the biggest producers and exporters of mineral oil in the world. Since it is a commodity that is difficult to get, it is very costly and its discovery has made the people of the country rich. The money from the sale of petroleum is used for developing industries, transport and communication and cities in Saudi Arabia.
 2. Saudi Arabia is hot and dry throughout the year, with strong winds and dust storms. In summer, from May to September, the days are very hot with bright sunshine and temperature often over 50 degrees C. But the nights are cool. In winter, from October to April, the days are warm and the nights very cold. There is hardly any rain. The coastal areas have a mild climate.
 3. Only plants like cacti can survive in this hot desert areas. They have long and soft fleshy roots and stems that can search and store water. They have thorns instead of leaves, helping them to prevent loss of moisture by evaporation.
 4. Bedouins are nomads who live largely in the villages of Saudi Arabia and move from place to place in search of water, food and shelter for themselves and their animals. They move in long rows of camels, called caravans. The camels provide them milk, meat, fur and skin. Now they often use jeeps and cars instead of camels.
 5. Saudi Arabia has the two most sacred Muslim pilgrim centres: Mecca and Medina. Therefore it is very important for Muslims all over the world.
 6. Oases are formed where some water is available in the desert. Date palms also grow around there. Therefore with food and water being available there, oases become very important for travellers across the desert.

Think Tank

- F. Multiple layers of loose clothing help to prevent heat from being absorbed. Also, Saudi Arabia is a desert country with regular sand storms. Long loose clothing protects the body from the dust and sand. It is necessary to cover oneself from head to toe as sand can get into your skin folds and cause irritation while moving. The hair and head must also be protected from the heat and sand.
- G. The words are: 1. WADI 2. SMOCK 3. CAMEL 4. MECCA 5. BEDOUIN 6. ABHA
- H. Any reasonable work is acceptable.
- I. Any reasonable suggestions are acceptable: reservoirs, harvesting the little rainwater that is available, treatment to desalinate sea water, etc.

8. The Temperate Grasslands (Prairies in North America)

Assessment Corner

Oral Assignment

- A. This can be done by students on their own and the answers elicited at random. Students can correct their own work.

Written Assignment

- B,C&D. These can be done by students on their own. The answers can be elicited at random and students can check partner's work.
- E. Discuss and let the students do this as homework. Teacher must assess individually.

Think Tank

- F. **HOTS question:** Discuss and let the students do this as homework. Teacher must assess individually. Clue – land is used largely for farming. Most of the farming work is done by machines. Population clustered around some cities.
- G. This can be done in class. Partners can check each other's work.
- H. **Discuss:** Agree generally, should not hunt as a sport – except when it is for the purpose of food or to wipe out vermin that attack crops, homes, etc.

Answers to Assessment Corner

Oral Assignment

- A. 1. True 2. False 3. False 4. True 5. False 6. True

Written Assignment

- B. 1. b 2. d 3. a 4. b 5. a
- C. 1. bison 2. coterie 3. the Equator; the North Pole 4. French; meadow or grassland 5. Europeans 6. Wheat
- D. 1. c 2. f 3. e 4. b 5. a 6. d
- E. 1. The Prairies of North America lie in the Temperate Zone, that is between the Tropic of Cancer and the Arctic Circle. They are almost midway between the Equator and the North Pole. Away from the sea, they are located between the Rockies on the west and the Great Lakes on the east, and stretch from Canada in the north to Mexico in the south.
- 2. In the temperate grasslands, summers are hot and winters are very cold and there is

a little rainfall in summer, though rainfall may vary from one year to another. Some of the temperate grasslands, like the Prairies, do not receive any influence from the sea.

3. The Prairies produce enough wheat for local consumption and also for export. They are, therefore, known as the wheat basket of the world.
4. Farming in the prairies in the USA is done largely by machines.
5. Cattle are reared on the prairies mostly for meat. Cattle grazing areas are called ranches. Chicago is a big centre for cattle slaughter. Dairying is also popular. Cattle rearing is thus very important in the prairies.
6. Mechanised farming, cattle rearing for meat and dairying, mining of coal and petroleum, oil refining, flour making and meat-packing are the major economic activities in the Prairies.

Think Tank

- F. Much of the farming in the prairies is mechanised. Therefore the area is sparsely populated. The population clusters are found near the cities largely.
- G. This can be done in class.
- H. Hunting for sport or for theft as is done by poachers is bad. Even hunting for purely commercial purposes can be harmful and can lead to endangering or to the extinction of species as has happened in the case of dodo, the Beluga whale, etc. But sometimes hunting is essential for food, as in the case of Eskimos, whose only source of food is by hunting or fishing.

9. Global Warming

Assessment Corner

Oral Assignment

- A. The students can do this on their own and answers can be elicited at random. Students may check their own work.

Written Assignment

- B&C. These can be done by students, the answers can be elicited at random and partners may check them.
- D. Discuss and let the students answer on their own. Teacher must assess individually.

Think Tank

- F. HOTS question & G: Discuss and let the students answer on their own. Teacher must assess individually.
- H&I. Students can do this and the posters may be displayed. See which are the best and share why. Discuss the three Rs. Some posters may be based on this.

Answers to Checkpoint

1. True 2. False 3. True

Answers to Assessment Corner

Oral Assignment

- A. 1. CFC stands for chlorofluorocarbon.
2. The main source of heat and light on Earth is the sun.
3. Perfumes and deodorant sprays release CFCs.
4. Burning of wood and fossil fuels, vehicles and industries add carbon dioxide to the atmosphere in large quantities.
5. We can help control Global Warming by using only environment-friendly products, avoiding plastics, using public transport or pooled vehicles, solar energy, recycled paper, jute or cloth bags and by planting more trees.

Written Assignment

- B. 1. a 2. d 3. b 4. c 5. a
- C. 1. Greenhouse Effect 2. Carbon dioxide 3. earthquakes 4. vehicles 5. rainfall.
- D. 1. Greenhouse Effect occurs when the earth receives heat from the sun and the heat and

the gases are unable to escape into space because of the pollution in the atmosphere. This increases the heat in the atmosphere.

Global Warming is caused by the Greenhouse Effect and is the name given to all the harmful things that happen on Earth as a result of this heating up process. This includes the melting of ice caps and glaciers, the warming up of the oceans, the increase in rainfall, all leading to greater natural disasters and the destruction of habitat of many species.

2. Global Warming is caused by the Greenhouse Effect, by the burning of wood and fossil fuels, pollution from vehicles and industries, use of products that are not eco-friendly such as perfumes, deodorants, and even refrigerators.
3. Greenhouse Effect occurs when the earth receives heat from the sun and the heat and the gases are unable to escape into space because of the pollution in the atmosphere. This increases the heat in the atmosphere. For example, if we sit inside a car with the windows rolled up on a sunny day, the car gets warm. The heat collected in the car cannot escape and causes the air inside to warm up.
4. Several problems are caused by Global Warming: i) Glaciers and ice caps melt raising the sea-level which may drown many islands; ii) Ocean waters warm up causing heavy rainfall leading to floods; iii) Death and extinction of species like polar bears, penguins, coral reefs, etc., due to destruction of their habitat; iv) floods leading to food shortage and disease; v) natural disasters like floods, earthquakes, landslides, tornadoes, tsunamis, etc.
5. We can help control Global Warming by first becoming aware of its dangers and explaining them to others, planting more trees, using eco-friendly products like jute and cloth instead of plastic, fuel-efficient vehicles or pooling of vehicles and using public transport and solar energy.

Think Tank

- E. The rich and industrialised countries use more individual vehicles and have greater number of industries. They also have a higher usage of products like perfumes, deodorants, refrigerators, etc., causing more pollution in the atmosphere than some of the poorer countries where the use of these things is very little or much less.
 - F.
 1. There would be flooding of the river basins and beyond in the sub-continent. The eco-systems of the Himalayas and the plains would be destroyed and many species which have their habitat in these areas would be wiped out. There would be deaths of thousands of people and domestic animals due to floods and disease. Homes, farms and industries in the area would be destroyed. The effect would be felt even beyond the river basins.
 2. Solar heaters use the energy of the sun's heat and does not emit any gases to pollute the atmosphere. It is therefore eco-friendly.
- G&H. Any reasonable work and discussion is acceptable. The three Rs should become a part of our lives.

10. Natural Disasters

Assessment Corner

Oral Assignment

- A. The students may do this on their own. Then elicit oral answers at random and let the students check their own work.

Written Assignment

- B,C&D. The students may do this on their own. Then elicit oral answers at random and let the students check their own work.
- E. Discuss and let the students do this as homework. The teacher must assess the work individually.

Think Tank

- F. **HOTS question:** Discuss and let the students do this as homework. The teacher must assess the work individually. Clue – how does nature protect: sunshine, rainfall, seasons, crops, trees holding the soil, food for all creatures, water, rivers, seas, minerals, material for building, etc. How it destroys – various natural disasters.
- G. The grid has 12 words. The students may do this on their own and check with partner.
- H. This can be done by the students in four groups and their findings can be compared in the class.
- I. Discuss and let the students tick off the right answers.

Answers to Checkpoint

1. seismology 2. water 3. very fast.

Answers to Assessment Corner

Oral Assignment

- A. 1. True 2. False 3. True 4. True 5. False 6. False

Written Assignment

- B. 1. b 2. d 3. a 4. c 5. a 6. d
- C. 1. human life; property 2. rainwater 3. Eastern 4. seismograph 5. dry
6. drowning
- D. 1. Floods, droughts, cyclones, earthquakes and tsunamis.
2. Floods occur due to heavy rainfall and due to the overflowing of rivers.

3. Focus is the point at which an earthquake originates. Epicentre is the point above the focus on the surface of the Earth.
 4. UP, Bihar, West Bengal, Assam and Uttarakhand.
 5. We measure the strength of an earthquake by the Richter scale.
 6. A tsunami is a huge wall of water from the sea rushing at high speed towards the coast, caused by an earthquake or volcanic activity under the sea.
- E.
1. The following precautions can be taken during and after an earthquake:
 - Come out of your house or school building and move to an open area immediately.
 - Do not run through building during or just after an earthquake.
 - Remain close to walls to protect your head.
 - Sit under a heavy table, if it is difficult to move out.
 - Keep away from windows, mirrors and ceiling fans.
 - Do not use lift after an earthquake, go by stairs.
 - Keep away from trees, electric poles or wires.
 - Do not sit inside a car or a bus.
 2. We can reduce the impact of drought by taking the following precautions:
 - Learn to save and conserve water.
 - Instal rainwater harvesting system.
 - Save water through drip irrigation.
 - Encourage the system of dry farming.
 - Plant more trees to conserve water.
 3. Floods are destructive to human beings because they cause heavy loss of life and property.
 4. We should take the following precautions during and after cyclones:
 - Listen to weather reports on radio and television.
 - Move to a safer place before cyclone reaches your area.
 - Store enough food in waterproof bags.
 - Check for gas leakage before using the stove.
 - Avoid flood water and be careful about snakes.
 - After cyclone, dry the electrical appliances.
 - Do not go near the sea coast.
 - Do not go out till official advice allows you.
 5. The occurrence of an earthquake or a volcanic eruption under the sea can create huge sea waves. This is known as tsunami. The tsunami sea waves can travel at a speed of about 750 km per hour. Near the coast a tsunami wave looks like a wall of water coming towards the coast with great speed.

A tsunami can lift boats or ships and throw them on land near the coast. It can crush houses in the coastal areas. Most of the loss of human life is due to drowning by tsunami.
 6. A tsunami is created when there is an earthquake or a volcanic eruption under the sea. As a result, there is a huge sea wave that can cause great destruction to both life and property as it reaches the land. Cyclones, on the other hand, are giant storms that move in a circular motion. A cyclone is developed on the surface of the water. A tsunami originates under the water due to earthquakes, landslides, volcanic eruptions, etc.

Think Tank

- F. Nature protects us in various ways. It provides us sunshine, rainfall, seasons, earth, crops; trees for holding the soil and to give food; medicines and other benefits; food for all creatures; water, rivers, seas; minerals, material for building, etc. It destroys us through various natural disasters: floods, droughts, earthquakes, tsunamis, cyclones, forest fires, volcanic activity, etc.

- G. The grid has the following words: SEISMOGRAPH, FLOOD, DROUGHT, ROUGH TIDES, SEISMOLOGY [horizontal] SEA WAVES, FOCUS, LANDSLIDE, IRRIGATION, CYCLONE, TSUNAMI, EARTHQUAKE [vertical]
- H. Any reasonable work is acceptable. Check all the major and minor earthquakes, some with their epicentre in Nepal, Pakistan or Afghanistan.
- I. 2 is the first right answer followed by 3.1 should be avoided.

TEST PAPER 1

A. 1. a 2. c 3. a 4. c 5. b 6. b 7. a 8. b

B. 1. F 2. T 3. T 4. F 5. F 6. T 7. T

C. 1. Huskies 2. Bison 3. Silos 4. Earthquake 5. Igloo 6. Globe

D. 1. A globe is a spherical representation of the Earth that tells you the location of a place on the surface of the Earth. It is more accurate than a map, which is a flat representation of an area located on the Earth. But a map carries a greater detail than a globe.

2. Asia, Africa, Australia, Antarctica, Europe, North America and South America.

3. A plain is usually a low-lying land, sometimes very flat, sometimes gently sloping. It is normally less than 200 metres above sea level. Most plains are formed by rivers.

4. The three heat zones of Earth are:

Torrid Zone: The Torrid Zone lies on both sides of the Equator. It extends between the Tropic of Cancer in the north and the Tropic of Capricorn in the south. It is also called the Tropical Zone. This zone is hot and humid throughout the year because the sun's rays fall directly on it.

Temperate Zone: The area lying between the Torrid Zone and Frigid Zone in both the hemispheres is called the Temperate Zone. This zone is neither very hot nor very cold as it is away from the Equator.

Frigid Zone: The area lying between the Arctic circle and the North Pole in the Northern Hemisphere and between the Antarctic circle and the South Pole is called the Frigid Zone. Here, the sun's rays are slanting. Therefore, it is very cold here.

5. The natives of the Democratic Republic of the Congo (DRC) are the pygmies. They are short, usually less than 150 cm tall. Pushed into the dense forest by the Europeans, they continue to lead a primitive, nomadic life in search of food in the forests of Ituri in the northeastern part of DRC.

6. In the Arctic zone lies Greenland. This area receives continuous daylight during many months in the summer. It is therefore known as the Land of the Midnight Sun, as the sun continues to shine there through those nights.

7. In summer, from May to September, the Arabian Desert is very hot and dry, temperatures often being over 50°C. In the winter, from October to April, the days are warm and the nights are very cold. Strong winds and dust storms are common throughout the year and there is hardly any rainfall.

8. The economic activities in the Prairies of America centre on the land that has a rich and fertile soil. Mechanised farming, dairying, cattle rearing and meat packing and industries related to mining and petroleum, oil refining are the main activities.

9. Three natural disasters are earthquakes, cyclones and tsunamis. Tsunamis and cyclones may hit coastal regions.

10. A gradual increase in the overall temperature of the Earth's temperature is known as global warming. It is attributed to the greenhouse effect caused by increased levels of carbon dioxide, CFCs and other pollutants.

11. Need for Transport

Assessment Corner

Oral Assignment

- A. Students can do this on their own and the teacher can elicit answers orally from them. They may check their own answers.

Written Assignment

- B&C. Students can do these on their own. The teacher can elicit the answers orally and partners may check the answers.
- D. Discuss in the class and let the students answer on their own. The teacher must assess the answers individually.

Think Tank

- E. **HOTS question:** Discuss in the class and let the students answer on their own. The teacher must assess the answers individually.
- G. Students can do this on their own.
- H. Discuss why each of these instructions is important. Ask the students to share any other road rules that they think are important, for example, wearing helmets on two wheelers, not walking along the road with earphones plugged in or talking on the cellphone, not taking selfies on the road or in dangerous locations, wearing safety belts, not jay-walking, etc.

Answers to Checkpoint

1. wheel
2. Bombay (now Mumbai), Thane
3. USA

Answers to Assessment Corner

Oral Assignment

- A.
 1. The invention of the wheel revolutionised the system of transport completely.
 2. James Watt developed the first steam engine.
 3. Roadways and railways are two types of land transport.
 4. The busiest sea route is the one between Western Europe and Eastern North America.
 5. The flying machine developed by the Wright Brothers in 1903 was called the Flyer.
 6. Rafts are logs of wood tied together to make a flat surface to float down a river. They can carry a few people and some goods too.

Written Assignment

B. 1. c 2. a 3. d 4. b 5. a

C. 1. Paris; Istanbul 2. Mumbai; Thane 3. 400 km 4. Atlantic; Pacific 5. 10 km above sea level.

- D. 1. Before the invention of the wheel, people would walk from place to place or ride animals. They would carry goods themselves or get the animals to carry them. With the invention of the wheel, human beings made carts with wheels so that animals could draw heavier loads and more passengers.
2. The steam engine was a turning point in the system of transport. It brought in the railway train pulled by a steam engine. It began running on coal and went to run on petrol, diesel and now on electricity.
3. Water transport is the cheapest mode of transport because one doesn't have to build roads, highways, etc. Ships can carry tonnes of load. People have been using rivers and waterways for thousands of years as it is easier to carry heavy loads on water rather than on land. Building boats and rafts is less costly than building railways, trains, aircraft and stations and airports.
4. Air transport is the fastest mode of transportation. Aeroplanes can cover very long distances in a much shorter time than road, rail or water transport. Many aeroplanes can carry a heavy load of passengers and cargo too.
5. The British introduced railways in India in 1853, with the first train running 30 km between Mumbai and Thane. Now all state capitals, industrial and trade centres, seaports, etc., are connected by the railways. Electric trains, superfast trains and the Metro Rail have been introduced too.
6. The opening of the Suez Canal has reduced travel time between India and UK by about 15 days. The opening of the Panama Canal has reduced the travel time between the east and west coasts of the USA by many weeks.

Think Tank

- E. The modern system of transport has reduced travel time greatly, whether by road, rail, sea or air. It has made travel easy and people go from one part of the world to another more often and faster. Since people get to know and see each other in different parts of the world more easily, everyone seems to have come closer, and the world has become like a global village. It does not seem so vast and far away as it used to seem earlier.

12. Means of Communication

Assessment Corner

Oral Assignment

A&B. Students can do this on their own and answers can be elicited orally. The students can check their own work.

Written Assignment

C,D&E. Students can do this on their own and answers can be elicited orally. The students can check their own work.

- F. Discuss and let the students answer these questions on their own. The teacher must assess individual work.

Think Tank

- G. Discuss and let the students answer this question on their own. The teacher must assess individual work.
- H. This can be done after discussing the letter format in class. Most students are unaware of this format.
- I. This can be done in a practical lesson with the class. Many students may already be familiar with this.

Answers to Checkpoint

1. d 2. c 3. b 4. a

Answers to Assessment Corner

Oral Assignment

- A.
 1. A post office helps us to send letters, parcels and money orders by land, sea and air to different parts of the world. We can also buy stamps, letters and envelopes from the post office.
 2. The introduction of paper and printing machines brought a turning point in communications.
 3. Mobile phones and telephones are the most popular means of personal communication.
 4. STD stands for Subscriber's Trunk Dialling.
 5. Julius Caesar, the Roman Emperor, was probably the first to bring out a newspaper, the Acta Diurna, in 60 BC.
 6. Any information that we need is usually available on the internet. It helps us also to keep in touch with friends through e-mail and social websites. We can also use it to

shop online, pay online, book tickets, etc. It is also a very quick and easy method for advertising products, services and goods.

- B. 1. False 2. True 3. True 4. False

Written Assignment

- C. 1. b 2. d 3. c 4. a 5. d 6. c

- D. 1. speed 2. telegraph 3. Alexander Graham Bell 4. telephone 5. 1921 6. websites

- E. 1. d 2. f 3. a 4. b 5. c 6. e

- F. 1. Early humans communicated among themselves through sounds and gestures, symbols and pictures.
2. Communication helps us in many ways. We can share ideas, information and news with others. We can buy and sell things through the communication media, pay for things, book tickets, etc. It aids education and social awareness also.
3. Mass communication is important because it helps to make information available to a very large number of people. It also has several other uses that help a person to advertise, buy, sell, make payments, etc., to faraway places too.
4. The teleprinter evolved from the telegraph, and helps to send text-based communication directly from one point to another. It does not require a code.
5. The internet shares information through websites. It helps both personal and mass communication of news, ideas, information and advertisements. It provides e-mail and social media. It helps us to do online shopping, banking and make payments. It is useful both for the government to create social awareness and to companies and business persons to advertise their goods and services.
6. Personal communication is informal or formal communication between two people or within a limited group. Mass communication is something that makes information, news and ideas available to a very large number of people.

Think Tank

- G. The practice of letter writing is losing importance not only in India, but worldwide, because other faster means of communication, often less expensive, are available in the form of e-mail, telephone, mobile phones and the internet. Social media like Facebook, Twitter, Instagram, etc., and apps that make one-to-one contact easier are also available.
- H. Any reasonable letter is acceptable.

13. The Power of Knowledge

Assessment Corner

Oral Assignment

- A. Students can do this on their own and answers may be orally elicited. Students can check their own work.

Written Assignment

B,C&D. Students can do this on their own and answers may be orally elicited. Students can check their own work.

- E. Discuss and let the students answer this on their own. The teacher must assess the answers individually.

Think Tank

- F. **HOTS question:** Discuss and let the students answer this on their own. The teacher must assess the answers individually.
- G. Websites are given. Use them to do this activity.
- H. This is an important life skill. Discuss in class. Highlight the extraordinary performances of athletes in Paralympics, mountaineering, dancing, music, etc., though they are physically challenged. Give examples: Helen Keller, Beethoven, Sudha Chandran, etc.

Answers to Checkpoint

1. True 2. False 3. True 4. False

Answers to Assessment Corner

Oral Assignment

- A. 1. Early human beings learnt to communicate by using gestures, speaking and drawing their feelings on walls.
2. Syria was probably the first to develop a system of alphabets.
3. The Devanagari script is used for writing Hindi.
4. The concept of zero was given by Indian scholars.
5. The word paper has been derived from a reed in the Nile delta in Egypt, called papyrus, which was used to make a thin film for writing.

Written Assignment

- B. 1. b 2. d 3. c 4. b 5. d
C. 1. hieroglyphics 2. abacus 3. papyrus 4. first printing press 5. Nile, Egypt
D. 1. d 2. e 3. a 4. b 5. c

- E.
1. Early humans communicated by using gestures, speaking and drawing their feelings on walls.
 2. Early humans counted their animals by using sticks, stones or pebbles. Then they used fingers, figures, dots and symbols. The Chinese used an abacus to count. Finally, Indian scholars created a system of ten digits from 0 to 9 that the Arabs called the Hindsa system. The Arabs carried this to other parts of the world. This became the basis of number systems.
 3. Braille is a script created by Louis Braille to enable the blind to read. In this, letters are written in a pattern on a thick smooth sheet using raised dots to form words. The words can be felt with the fingers to read.
 4. The first printing press was developed in Germany in Europe in the 15th century by Johannes Gutenberg.
 5. Human beings needed to keep records. So they used to write first on clay tablets. In India people began writing on palm leaves. The Egyptians developed paper using papyrus, a reed that grew in the Nile delta. Now paper is made of wood pulp, plant fibre and old rags. It is used for books, records and communication.

Think Tank

- F. The record of ideas and information in books is a long-lasting one. It can be available to many people and for generations. Besides, books can be read again and again and the knowledge can be shared with others too.
- G. This can be checked at random. Or it can be done on the blackboard too.

14. A Healthy and Long Life

Assessment Corner

Oral Assignment

- A. Students can do this on their own and answers may be orally elicited. The students can check their own work.

Written Assignment

- B,C&D. Students can do this on their own and answers may be orally elicited. The students can check their own work.
- E. Discuss and let the students answer this on their own. The teacher must assess the answers individually.

Think Tank

- F. **HOTS question:** Discuss and let the students answer this on their own. The teacher must assess the answers individually.
- G. This can be done by the students on their own and displayed.
- H. Let the students answer and discuss orally. Ask if they have seen advertisements on this.

Answers to Checkpoint

1. 98.4° F or 37°C
2. Rene Laennec
3. Alexander Fleming
4. replacement of diseased organ with a healthy one

Answers to Assessment Corner

Oral Assignment

- A. 1. False 2. True 3. True 4. False 5. True 6. False

Written Assignment

- B. 1. a 2. d 3. a 4. c 5. b
- C. 1. 98.4 2. optician's 3. bacteria 4. Italy 5. doctor
- D. 1. d 2. c 3. e 4. b 5. a
- E. 1. To lead a healthy and long life, we need nutritious food, a clean, pollution-free environment and proper and timely medical aid. We also need to follow a healthy lifestyle.
2. Dr Rene Laennec watched two children whispering to each other from two ends of a hollow wooden log. They could hear each other clearly. He tried and heard a patient's heart-beat through a similar tube made of a rolled newspaper. This led to the development of the stethoscope by Dr Laennec.
3. Cowpox is a disease like smallpox caused by infected cattle. It was learnt by Dr Edward Jenner that a milkmaid who caught cowpox was immune from smallpox. It led to his

experimenting with the cowpox bacteria to make a vaccine for preventing smallpox.

4. Zacharias Jansen, the owner of an optician's shop in Holland, noticed that a fly seen through two lenses looked larger. He made a 'flea-glass' with two lenses to make things look larger when seen through it. This idea was developed and improved by the Italian scientist Galileo to make the microscope.
5. We can keep ourselves healthy and strong by following a correct lifestyle and taking some necessary precautions: washing hands well before and after meals; drinking fresh, clean water; eating a nutritious, balanced diet; keeping food covered; exercising or doing yoga regularly to strengthen the body; not walking barefoot; keeping the environment clean and pollution-free; consulting a doctor if we feel sick.
6. New machines help in a detailed study of our organs and to diagnose and treat diseases faster and better.

Think Tank

- F. Only if a disease is correctly identified can the right treatment be given. If the diagnosis is incorrect, then the medicines and the treatment are also likely to be wrong. This can be harmful and even dangerous for the patient.
- G. Any reasonable work is acceptable.
- H. I would advise him to wash his hands thoroughly before and after meals and tell him the need for personal hygiene in order to stay healthy.

15. Some People Never Die

Assessment Corner

Oral Assignment

A&B. Students can do this on their own and answers may be orally elicited. The students can check their own work.

Written Assignment

C,D,E & G. Students can do this on their own and answers may be orally elicited. The students can check their own work.

F. Discuss and let the students answer this on their own. The teacher must assess the answers individually.

Think Tank

H. **HOTS question:** Discuss and let the students answer this on their own. The teacher must assess the answers individually.

I. The students can use the library, the internet, etc., to do this activity. It may be done in groups of 6-10 students, each group making a chart. Then display the work.

J. This can be done by students on their own and discussed.

H. Let students answer and discuss orally. Ask if they have seen advertisements on this.

Answers to Checkpoint

1. Greece 2. against 3. 1942 4. Karl Marx

Answers to Assessment Corner

Oral Assignment

- A. 1. Plato was the main disciple of Socrates.
2. The Civil War was fought between the northern and southern states of the USA.
3. A non-violent method is one in which people don't use violence as a tool to achieve their goals.
4. Karl Marx is the writer of the *Communist Manifesto*.
5. Martin Luther King was the leader of the Civil Rights Movement in the USA.

B. 1. False 2. True 3. True 4. False 5. True

Written Assignment

C. 1. b 2. d 3. a 4. c 5. d

D. 1. hemlock 2. Africa, slaves 3. Porbandar 4. Karl Marx 5. 1959

- E. 1. Blacks
2. Capitalists
3. Revolution
4. Philosopher
5. Movement
- F. 1. Socrates said that the source of knowledge is thinking and reasoning and was against blind superstition. He always searched for truth and goodness. According to him, no one did evil knowingly. He asked people to believe in honesty, free thinking and freedom.
2. The Civil War was fought between the Northern and Southern States of the USA because the Southern States wanted to continue having slaves and the Northern States agreed with Abraham Lincoln's views regarding abolition of slavery. So the Southern States wished to form a different state. The war was won by Abraham Lincoln with the result that slavery was abolished.
3. Mahatma Gandhi achieved independence for India by following the non-violent methods of Satyagraha consistently against the British rulers. He followed the path of truth and non-violence. His leadership inspired many people and they happily laid down their lives to achieve independence of India.
4. Martin Luther King said, "I am not a tourist and I have come from USA on a pilgrimage to pay homage to the land of Mahatma Gandhi."
5. Karl Marx encouraged workers to fight against capitalism unitedly as they were forced to work long hours at low wages, while the capitalists lived rich and luxurious lives. He wrote *Communist Manifesto* and *Das Kapital* that supported and encouraged workers.
- G. 1. c 2. d 3. a 4. b

Think Tank

- H. Karl Marx supported workers in their fight against capitalists, as they were forced to work long hours at low wages, because he believed in the equality of all human beings.
- Abraham Lincoln led the USA to abolish slavery as it was a cruel and humiliating life led by the black slaves. He faced the Civil War in order to stand by what he believed in till his assassination.
- Martin Luther King led the Civil Rights movement in the USA to fight for the rights of the American blacks to be treated with equality and dignity with the whites.
- I. Learn the meaning of these quotes.
1. If you want to change the world around you, start by changing yourself.
 2. We demand rights from the country, but we should rather be thinking of how we can serve our country.
 3. A nation is made of people working together towards common goals; it cannot work together if half the people are free to do as they like and the other half are treated like slaves and all their freedom is taken away.
 4. Revenge is of no use to anyone; it creates a cycle of violence that destroys everyone.

16. Struggle for Freedom in India

Assessment Corner

Oral Assignment

A&B. Students can do this on their own and answers may be orally elicited. The students can check their own work.

Written Assignment

C,D&E. Students can do this on their own and answers may be orally elicited. The students can check their own work.

- F. Discuss and let the students answer this on their own. The teacher must assess the answers individually.

Think Tank

- G. **HOTS question:** Discuss and let the students answer this on their own. The teacher must assess the answers individually.
- H. The students can use the library, the internet, etc., to do this activity. It may be done in groups of 6-10 students, each group making a chart. Then display the work.
- I. This can be done by students in groups of 10.

Answers to Checkpoint

1. Portugal 2. Farmers 3. Bahadur Shah Zafar

Answers to Assessment Corner

Oral Assignment

- A. 1. The East India Company was established in AD 1600.
2. Portugal, Holland, France and England came to India to trade.
3. The first War of Independence was fought in 1857.
4. A. O. Hume, a retired British officer, established the Indian National Congress.
5. Mangal Pandey was the first Indian soldier to refuse using the Enfield rifle.
- B. 1. True 2. False 3. False 4. False 5. False

Written Assignment

- C. 1. a 2. d 3. c 4. b 5. d
- D. 1. Divide, rule 2. Mangal Pandey 3. 72 4. 16th 5. Viceroy

- E.
 1. An armed protest against rulers
 2. An exclusive devotion to one's own country
 3. Dividing people on the basis of their occupation and social status
 4. People who attempt to change or remove the evils existing in society.
 5. A custom of burning the wife on the funeral pyre of her husband
- F.
 1. The Europeans came to India to trade because at that time India was well known for spices, textiles, handicrafts, etc.
 2. There were two immediate causes for the Revolt of 1857. (a) There was discontentment and anger among Indian soldiers [sepoys] who were paid less than the British. The introduction of the Enfield rifle started a rumour that the cartridges were greased with the fat of cows and pigs. This angered both Hindu and Muslim sepoys, as the cartridges had to be held in the mouth before loading. (b) The kings and nawabs were angry at the attempt by the Company to take over their kingdoms. When the revolt began, other groups like farmers, traders and tribals also joined them.
 3. The causes of failure of the revolt were: a) It was limited to a small part of the country only, not spreading all over India; b) It was not supported by all parts of society. Many Indians sided with the Company; c) Indian soldiers were not well-equipped.
 4. The main purpose of the Indian National Congress was to have a single strong association, which could enable Indians to have a meaningful relationship with the British.

Think Tank

- G.
 1. The revolt of 1857 proved a turning point in Indian history for several reasons: a) Rule by the East India Company ended; b) The administration was taken over by British Crown under Queen Victoria; c) Indian kings and nawabs were allowed to rule their kingdoms under British control; d) A Viceroy was appointed by the Crown to rule India; e) Indians began to form associations and to think of being free of the British; f) Indians, under the influence of western education, began to question many Indian customs and reform them – sati, child marriage, widow remarriage, killing girl child, the caste system, etc.
 2. The Indian National Congress held meetings annually in different cities of India. Discussions about British policies and the problems raised by them also unified the Congress.

17. India Wins Freedom

Assessment Corner

Oral Assignment

A&B. Students can do this on their own and answers may be orally elicited. The students can check their own work.

Written Assignment

C&D. Students can do this on their own and answers may be orally elicited. The students can check their own work.

E. Discuss and let the students answer this on their own. The teacher must assess the answers individually.

Think Tank

F. HOTS question – Discuss and let the students answer this on their own. The teacher must assess the answers individually.

G. The students can use the library, the internet, etc., to do this activity. It may be done in groups of 6-10 students, each group making a chart. Then display the work.

H. This can be discussed in class.

Answers to Checkpoint

1. Dadabhai Naoroji 2. Bal Gangadhar Tilak 3. 1905
4. In 1919, a meeting was held in Jallianwala Bagh (Amritsar) to protest against the British politics. A British Commander, General Dyer, surrounded the place and ordered the troops to shoot and kill everybody. Thousands of men, women and children died in the Jallianwala Bagh on the Baisakhi Day.
5. Subhash Chandra Bose

Answers to Assessment Corner

Oral Assignment

- A.
1. The British used the policy of divide and rule.
 2. The partition of Bengal was planned in order to divide the Hindus and Muslims.
 3. The First World War began in 1914,

4. Gandhiji used satyagraha as a weapon against the white rulers.
5. The Second World War ended in 1945.

B. 1. False 2. True 3. False 4. True 5. True

Written Assignment

C. 1. b 2. d 3. a 4. c 5. a

D. 1. Non-Cooperation Movement 2. Salt 3. 26th January 4. Sabarmati Ashram
5. jail, Japan

- E. 1. The moderates requested for reforms but the radicals wanted to oppose the British strongly and fight for India's freedom.
2. The Non-Cooperation Movement was started by Gandhiji to protest against the massacre of innocent people in Jallianwala Bagh. But some revolutionaries burnt down the police station at Chaura Chauri. Upset by this violence, Gandhiji withdrew the movement.
3. On Baisakhi Day in 1919, a meeting was held in Jallianwala Bagh in Amritsar to protest against the British politics. There were men, women and children attending it. General Dyer, a British Commander, ordered his troops to surround the place and shoot and kill everyone. It was a massacre of thousands of innocent people.
4. The Salt Satyagraha was a part of the Civil Disobedience movement to break the unjust salt laws imposed by the British on the Indians. The march from Sabarmati to Dandi was a protest against the British laws.
5. During the Second World War, Indians were forced to fight on behalf of the British without any consultation with the Indian leaders and without giving any promise of freedom. Angry at this, Gandhiji began the Quit India Movement in 1942 in order to demand freedom. The slogan for the movement was 'Do or Die', that is, we will either get freedom or die in the effort to win it.

Think Tank

- F. The Indian National Army led by Subhash Chandra Bose showed the British that there were Indians who would not agree with a peaceful solution only. They were prepared to battle with the British to prove the just demand of India for freedom. This, in addition to the other movements, made the British realise the seriousness of the demand.

18. Governing Our Country

Assessment Corner

Oral Assignment

A&B. Students can do this on their own and answers may be orally elicited. The students can check their own work.

Written Assignment

C&D. Students can do this on their own and answers may be orally elicited. The students can check their own work.

E. Discuss and let the students answer this on their own. The teacher must assess the answers individually.

Think Tank

F. **HOTS question:** Discuss and let the students answer this on their own. The teacher must assess the answers individually.

G. The students can use the library, the internet, etc., to do this activity. It may be done in groups of 10 students. Then share in class.

H. This can be discussed in class. Make five groups. Discuss the different suggestions and their importance.

Answers to Checkpoint

1. False 2. True 3. False 4. True

Answers to Assessment Corner

Oral Assignment

- A. 1. There are 7 Union Territories in India.
2. The government in India has three types of work: to make laws and rules; to enforce them; and to get justice for people.
3. The Lok Sabha is the main law-making authority in India.
4. The minimum age to be a Member of the Parliament is 25.
5. The other name for the Lower House in the Parliament is Lok Sabha.
6. The Vice President of India is the Chairman of the Rajya Sabha.
- B. 1. Election 2. The Supreme Court 3. Parliament 4. Governor
5. Election Commission of India

Written Assignment

- C. 1. d 2. b 3. c 4. a 5. b
- D. 1. 29; 7 2. parliamentary 3. President of India 4. five years
5. President of India [He appoints, but the PM is elected by his party or group]
- E. 1. The main functions of the government are: to make laws and rules; to enforce them; and to get justice for people.
2. The Lok Sabha is the main law-making authority in India.
3. The President of India is elected by members of the Lok Sabha, the Rajya Sabha and the State Assemblies.
4. First, Members of Parliament (MPs) are elected by the people of India from 545 constituencies. The party that wins more than 50% seats or combines with other parties to get more than 50% seats, elects a leader. The President of India invites that leader to form the Union Cabinet or Council of Ministers. The leader will be Prime Minister.
5. The Lok Sabha and the Rajya Sabha in Parliament are the law-making authorities of India.

Think Tank:

- F. India is a large country with a huge population. In order to keep the country clean, the government alone cannot do everything. We the people of India must maintain cleanliness ourselves too. Proper garbage disposal is necessary. Toilets must be available in every home and building and should be used properly. We should never litter the roads and public places, or spit, urinate or defecate in the open. Gutters and drains should be available and should be kept covered.
- G. The Parliaments of the following countries are called :
- | | | |
|------------|---|----------------------------|
| China | – | National People’s Congress |
| Bangladesh | – | Jatiyo Sangsad |
| Russia | – | Duma |
| USA | – | Congress |
- H. Any reasonable answers are acceptable.

19. The United Nations [UN]

Assessment Corner

Oral Assignment

A&B. Students can do this on their own and answers may be orally elicited. The students can check their own work.

Written Assignment

C,D&E. Students can do this on their own and answers may be orally elicited. The students can check their own work.

F. Discuss and let the students answer this on their own. The teacher must assess the answers individually.

Think Tank

G. **HOTS question:** Discuss and let the students answer this on their own. The teacher must assess the answers individually.

H. The students can do this on their own and check their partner's work.

I&J. The students can use the library, the internet, etc., to do this activity. It may be done in groups of 10 students. Then share in class.

Answers to Checkpoint

1. 1920
2. 24 October every year
3. New York (USA)
4. United Nations Educational, Scientific and Cultural Organisation (UNESCO)

Answers to Assessment Corner

Oral Assignment

- A.
1. Europeans established colonies in Asia, Africa, North America, South America, Australia and Oceania.
 2. The Second World War was fought from 1939 to 1945.
 3. The League of Nations was formed after the First World War.
 4. WHO – World Health Organisation; ILO – International Labour Organisation
 5. Franklin D. Roosevelt, then the President of the USA, gave the name UNO.

- B. 1. True 2. False 3. True 4. True 5. False

Written Assignment

- C. 1. b 2. d 3. a 4. c 5. b

- D. 1. San Francisco 2. 1994 3. the Hague, Netherlands 4. 'Freedom From Hunger'

5. diseases
- E.
1. It was formed to help in solving problems through discussions so that war could be avoided.
 2. Any peace-loving nation can become a member of the UN.
 3. The Europeans quarrelling over the control and benefits of the colonies was the cause of the First World War.
 4. The major organs of the UN are the General Assembly; the Security Council; The Secretariat; the Economic and Social Council; the International Court of Justice; and the Trusteeship Council.
 5. The main work of the UNICEF is to eradicate illiteracy from the world.
- F.
1. The main aims and objectives of the UN are (a) to maintain peace and security among nations (b) to develop friendly relations among nations (c) to solve problems of nations in a peaceful and cooperative manner (d) to protect human rights and freedom based on race, religion, language and sex (e) help members achieve these objectives.
 2. The Security Council works for security and international peace. The Secretariat handles the day-to-day administration work of the UN and looks after the programmes and policies of all organs of the UN, under the Secretary General who is the most powerful person in the UN.
 3. The UN has been successfully maintaining peace wherever and whenever possible and has prevented disputes developing into war. It has prevented the spread of the wars in Korea, Vietnam, Palestine, Iraq and Iran and the use of destructive weapons. It has been involved in peacekeeping operations and helped developing countries fight poverty, disease and illiteracy. Thus, it is making the world a better place to live and work in.
 4. The agencies set up under the Economic and Social Council work to help the poor, the sick and the illiterate. The UNESCO's main aim is to eradicate illiteracy, encourage international cooperation in education, science and culture, protect human rights and preserve cultural heritage. The UNICEF works for children's welfare, their rights, development, protection, providing food, education, health and homes. The WHO works to improve health conditions in the world and fight against diseases. The FAO works to provide food and increase food production in the world. The ILO helps to promote employment opportunities and solve problems between governments, employers and workers.
 5. India is a founder member of the UN and actively supports its programmes.
Indian Armed Forces work as UN peacekeeping forces. India has worked against racial discrimination and arms race, use of atomic weapons. It supports use of atomic energy for peaceful purposes and partners UN in relief operations. UN experts work in India to help solve our problems. Similarly, Indian experts work in other countries.

Think Tank

- G. The two World Wars had caused terrible suffering in the world. Millions of people had died, cities had been destroyed, and the dropping of the atomic bombs on Hiroshima and Nagasaki was the final horror. Leaders realised that war could not solve the problems of the world. Therefore, they decided they needed an organisation that would help to solve problems so that nations of the world may live in peace and prosper. That is why the UN

was set up soon after the end of World War II.

H. The languages are—1. ENGLISH 2. SPANISH 3. ARABIC 4. FRENCH 5. RUSSIAN
6. CHINESE

I&J. Any reasonable answers are acceptable.

TEST PAPER 2

- A.** 1. c 2. a 3. a 4. b 5. a 6. a 7. a 8. a
- B.** 1. Noise 2. Vladivostok 3. chloroform 4. Greek 5. 1600 6. Bal Gangadhar Tilak
7. Vice President 8. Ban Ki-moon
- C.** 1. Television 2. smallpox 3. Trygve Lie 4. Rani Lakshmi Bai
5. Subhash Chandra Bose 6. The Supreme Court of India
7. Pranab Kumar Mukherjee
- D.** 1. Before the invention of the wheel, people would walk from place to place or ride animals. They would carry goods themselves or get the animals to carry them. With the invention of the wheel, human beings made carts with wheels so that animals could draw heavier loads and more passengers. Later on, other means of transport etc., like bicycle, car, aeroplane, used wheels.
2. The means of mass communication are newspapers and magazines, radio, television, cinema, internet and advertisements. Mass communication helps to make information available to a very large number of people. It also has several other uses that help a person to advertise, buy, sell, make payments, etc., conveniently and easily.
3. We can keep ourselves healthy and strong by following a correct lifestyle and taking some necessary precautions: washing hands well before and after meals; drinking fresh, clean water; eating a nutritious, balanced diet; keeping food covered; exercising or doing yoga regularly to strengthen body; not walking barefoot; keeping the environment clean and pollution-free; consulting a doctor if we feel sick.
4. Karl Marx, born 1818 in Germany, was a political thinker. He saw the impact of the Industrial Revolution around him with the exploitation of workers by owners of factories who gave them poor wages, long working hours, bad working conditions. The rich owners and industrialists were called 'capitalists'. Karl Marx supported the workers and wanted that society should own everything, not just the capitalists. He wrote *Communist Manifesto* and *Das Kapital*. He supported the revolt of workers against the capitalists, which was crushed, and he fled to London. After his death, the ideas of Karl Marx were carried out by Lenin who formed the Soviet Union.
Karl Marx's greatness lies in his belief that all men should be treated as equal.
5. The revolt of 1857 came to be known later as the First War of Independence because it was for the first time that Indians in different parts of the country began to fight the British rulers. It had a very major impact on the way India was ruled by the British. The consequences of the Revolt of 1857 were: (a) The rule by the Company ended. (b) India's administration was taken over by the British Crown, Queen Victoria. (c) Indian kings and nawabs were allowed to rule their kingdoms under British control. (d) A Viceroy was appointed by the Crown to rule India. (e) British officers were still cruel, Indians began to think of being free of them. (f) Indians, under the

influence of western education, began to question many Indian customs and reform them, such as sati, child marriage, widow remarriage, killing of the girl child, the caste system, etc.

6. The UN was formed to help in solving problems through discussions so that war could be avoided. Its main aims and objectives were: (a) to maintain peace and security among nations (b) to develop friendly relations among nations (c) to solve problems of nations in a peaceful and cooperative manner (d) to protect human rights and freedom based on race, religion, language and sex (e) to help members achieve these objectives.

ANSWERS TO MODEL TEST PAPER I

- A. 1. The North Pole lies on the 90 degrees N latitude.
2. (a) Zebra (b) Bison (c) Camel (d) Polar bear (e) Tiger
3. The factors that affect climate are
- Distance from the Equator
 - Height above sea level
 - Distance from the sea
 - The amount of moisture in the air
 - Prevailing winds
4. Young mountains are very high with sharp features and conical peaks whereas old mountains are low and have rounded features and peaks.
- B. 1. c 2. b 3. a 4. b
- C. 1. sea-level; islands 2. Richter 3. vertical 4. grid; graticule 5. hippopotamus
- D. The sun's rays will fall vertically on the Equator and will be slanting at the Poles.
- E. 1. Cassava: A plant whose roots are dried and ground into flour to make bread – a staple food of the people of DRC.
2. Igloo: A house made of ice bricks by the eskimos.
3. Oasis: A place in the desert where underground water reaches the surface and around it grow date palms.
4. Greenhouse Effect: When heat is trapped near the surface of the Earth and is unable to escape into space, thus warming up the atmosphere.
5. Drought: Severe shortage of water particularly because of less or no rainfall.
- F. 1. The two types of lines on the globe are called latitudes/parallels [horizontal] and longitudes/meridians [vertical].
2. This picture shows an earthquake.
3. Solar energy is used by this equipment.
- G. Mapwork to be done accurately.

ANSWERS TO MODEL TEST PAPER 2

- A. 1. I would take an aeroplane because it would take the shortest time to travel the distance. It is the only way of reaching my destination by tomorrow.
2. I would write a letter to my grandmother or send her a message on the mobile phone, because I cannot send her an e-mail, and she will not hear clearly on the phone.
- B. 1. f 2. j 3. h 4. i 5. g 6. d 7. e 8. a 9. c 10. b
- C. 1. False 2. True 3. False 4. True 5. True 6. True 7. False 8. True
9. False 10. False
- D. 1. b 2. a 3. c 4. c 5. a 6. c 7. c 8. b 9. a 10. c
- E. a. Abraham Lincoln b. The Security Council of the UN c. Rani Lakshmbai
d. Sushruta, 'the Father of Surgery' e. Egyptian Hieroglyphics f. Parliament House
g. Bhagat Singh h. A Microscope i. UN Logo
- F. 1. Mass communication can be used by the government to create social awareness about its policies and programmes and how to improve our lives. Secondly, it can help us in times of emergencies and disasters by warning us in time and guiding us to safety. Thirdly, means of mass communication provide us information about new products and services available through advertisements.
2. Airways have become popular because they provide the fastest way to cover long distances, even though they are more expensive than other modes of transport.
3. People first wrote on clay tablets and in India they wrote on palm leaves. The word paper is derived from 'papyrus', which was a weed growing in the Nile delta in Egypt. Ancient Egyptians made paper by cutting the reed into thin films, and this was the only writing material available for about 2500 years. Now paper is made from wood pulp, plant fibre and old rags.
4. Dr Jenner used to talk to his patients about their lifestyles. He learnt from a dairy-maid that she had suffered from cowpox that she caught from the cattle and therefore she would not catch smallpox. This made Dr Jenner experiment with the cowpox bacteria on a boy to see whether he would be immune to the smallpox germs. He proved that this was so, and thus he discovered and developed the vaccine for preventing smallpox.
5. Any reasonable answer is acceptable.
6. Any reasonable answer is acceptable.
7. The British would buy raw material from Indian farmers and traders at very low prices, reducing them to poverty. Then they would take the material to England and manufacture goods like mill-made cloth and sell it at high prices in Europe and elsewhere. This destroyed the work of the weavers also, as they worked on handlooms.

8. The President is not elected directly by the people of India. He is elected by the members of the Lok Sabha, the Rajya Sabha and the State Assemblies. The minimum age for the President is 35 years.
9. The General Assembly is the main organ of the UN. It has one representative from each member country and one vote is permitted to each country. An annual meeting of the General Assembly is held in November.

HERITAGE QUIZ

ANSWERS

- | | | | | |
|---------|---------|---------|---------|---------|
| 1. (b) | 2. (c) | 3. (a) | 4. (b) | 5. (a) |
| 6. (a) | 7. (b) | 8. (d) | 9. (a) | 10. (a) |
| 11. (d) | 12. (c) | 13. (b) | 14. (c) | |