



MyWorld

4

***Teacher's
Resource Book***

For Order : 0320-5899031

✉ info@learningwell.pk 🌐 www.learningwell.pk

Table of Contents:

S. No.	Lesson Name	Page No.
1	Wonders of the Universe	03
2	Climate and its Ongoing Change	05
3	Continents and Oceans	08
4	Where the Water Goes	10
5	Agriculture and Industries	12
6	Cleaning the Environment	16
7	Transportation in our Country	18
8	Culture of Pakistan	21
9	The Branches of Government	24
10	Social Education	27
11	History of Civilisation	30
12	History of Subcontinent: The Indus Valley Civilisation	32

Lesson 1: Wonders of the Universe

Lesson Objectives

The lesson aims to get the following objectives:

1. To let the child learn about the makeup of our universe, including stars, galaxies and planets
2. To let the child learn about the amount and type of stars, including supergiants, giants, medium-sized stars, white dwarfs and neutron stars
3. To let children learn the causes behind formation, evolution and death of stars
4. To let children learn about orbits of various objects in the space
5. To bring to light the startling facts about the solar planetary system, including its debris

Lesson Starters

Focus on background knowledge your students have about the universe. For this purpose, draw a rough chart of universe and its objects on the board, making familiar objects like stars in the way children already know (draw 5-point stars ***). Reserve a good place for our own star, the Sun. For it, use simple round circle showing straight lines coming out of its curves. Then make planets and the moon. Now begin asking questions related to these objects. Ask children to name the objects one after one. Head on and begin the lesson once the students have established mental comfort with the concept of universe.

Teaching

Many students really do not understand that they live on a planet that revolves around the Sun, which is just one of billions of stars in the Milky Way galaxy, which is just one of billions of galaxies in the universe! Actually, a lot of adults don't really understand this either!

Therefore a great place to start is to help them find their place in the universe by explaining the place of Earth in the giant universe. Depending on your students' background knowledge, you may want to spend some time reviewing objects that are in space and how they differ (i.e. how a star differs from a planet, how a solar system is just one of billions of possible solar systems in a galaxy, etc...). One good strategy is to allow other students to share their expertise in this area by calling on them to explain some of these concepts. Most students find space intrinsically

fascinating, but some students may feel the idea as too "difficult" for them to understand. It is good to help them feel successful and intrigued from the start!

You can also make students learn the magnitude or size of the universe. In addition to not really knowing where we fit into our universe, most people are unaware of the vast expanses of empty space in our universe. A good starting point here to have the students demonstrate how far away they think the Sun is from the Earth if the Sun were the size of a basketball and the Earth was the size of a dot at the end of this sentence. After they have demonstrated their predictions, explain to them that the Sun would be about 23 meters away.

It is important that you clear the concept of different star sizes by drawing them in relative proportions and labeling them on the board. The textbook mentions 5 major types: supergiants, giants, white dwarfs, medium-sized stars and neutron stars. Make it in sizes relative to each other. You need not to give more details other than those given in the text.

The concept of formation and deformation of stars is difficult to explain. Create an analogy of candle (the candle is just like the star, when it burns, it sheds light until its wax is consumed. The wax then turns into a matter that cannot be reused in the same way. Black holes, the dead stars, are therefore like the burned up wax of the candle).

For the section of movement of objects, it is important to make it clear that the space has a vast amount of energy which forces solid objects and gases to move in circular paths. The purpose here is not just to amuse your students, but to give them a rather inquisitive thought about the infinity and complexity of our wonderful universe.

Answers to Comprehension Assessment

1. What is Milky Way?
 - A. Milky Way is one of the many galaxies of stars present in our universe. The solar system, of which our planet Earth is a part, belongs to a star of this galaxy.
2. How do stars born and die?
 - A. New stars are born out of matter in space. The matter is made up of star dust which itself is a combination of two basic elements, (or fuels) hydrogen and helium. When a star burns up all of its hydrogen and helium, it dims out and dies to form a black hole.
3. What is the difference between planet and star?



- A. A planet is a small, round body of matter that circles around a star. A star on the other hand is a large, burning body of matter, mainly consisting of helium and hydrogen.

Extended Teaching

Net Extra:

Guide your student about how to use Net Extra for better understanding of the lesson and also to find out meanings of difficult words.

Support Material

1. Check out an amazing article on stars, black holes, exoplanets, Milky Way and other wonders of the universe <http://www.armaghplanet.com/blog/7-must-see-wonders-of-the-universe.html>
2. Get your students enjoy a virtual tour of the universe at <http://www.spacewander.com/USA/english.html>
3. Get detailed information on Universe and its components at <http://www.seasky.org/cosmos.html>

Lesson 2: Climate and its Ongoing Change

Lesson Objectives

The lesson aims to get the following objectives:

1. To know the difference between climate and weather.
2. To introduce types of climate according to their geographical behaviors
3. To let children learn a various conditions and forces of weather change, including temperature, altitude, wind patterns, cloud cover, humidity and rain.
4. To let children realize the importance of changing weather and climate conditions, and helping them learn ways to fight adverse climatic changes

Lesson Starters

Climate and its ongoing change is a great topic for students to study because it integrates so many subjects: energy, environment, geography and more.

Before getting started, make sure that you make the distinctions of weather and climate clear. There's a difference between weather and climate.

Weather refers to the conditions at one particular time and place, and can change from hour to hour, day to day, and season to season. Climate, on the other hand, refers to the long-term average pattern of weather in a place.

Teaching

Once you clear the differences between weather and climate, go ahead into describing the main types of climate: tropical, dry, moderate, continental and polar climates. It would be a better idea that you draw a world map on the board and label these respective climate regions. Take help from the text to get them labeled properly.

Once the students are clear with the differences in global climates, it is time to explain the forces, or factors impacting our climate change, such as altitude, temperature, winds, cloud cover, humidity and rain. You can ask your students to hear weather news to make themselves familiar with the meanings of each of these.

While getting the lesson read, focus extensively on the factors of climate change presented in the text, especially the concept related to rising temperature of our Earth, or global warming. Explain to the students that global warming is caused primarily by carbon dioxide from burning coal, oil and gas. Another gas disturbing Earth's temperature is methane, released from rice paddies, both ends of cows, rotting garbage in landfills, mining operations, and gas pipelines. Third are chlorofluorocarbons (CFCs) and Nitrous oxide (released from fertilizers and other chemicals) are also heating up the earth.

Global warming will have significant impacts on people and nature. As temperatures continue to rise, precipitation is projected to come more frequently in the form of heavy downpours. To stress on this point, ask students some of the possible dangers of heavy rain or no rain at all (for example, floods, droughts, extreme temperatures etc.)

Last, explain a bit of solutions that we can use to tackle adverse effects of climate change. Saving energy and developing alternative energy sources would help. Each of us can reduce our contribution to global warming by using less greenhouse-gas-producing energy: driving less, choosing fuel efficient cars and appliances (like refrigerators and water heaters), and using solar energy where feasible for water and space heat.

Answers to Comprehension Assessment

1. What factors determine Earth's climate?
 - A. The factors that determine Earth's climate include changes in Earth's orbit or in the Sun itself, changes in cloud cover or atmospheric particles, and general weather determinants like rain and temperature.
2. Why climate is different at different places?
 - A. Climate is different at different places because of the changes in landforms, cloud cover, rainfall and altitude.
3. What do you understand by climate changes?
 - A. Climate change occurs when the earth or any of its part experiences unexpected temperatures, winds, or rainfalls. These changes act on to melting of glaciers, rising of ocean waters and drying up of many places.
4. Why is climate change happening?
 - A. Climate on earth is changing due to excessive burning of coal, oil and natural gases as well as increasing pollution due to cutting down of forests and trees.
5. How is temperature on earth changing?
 - A. The Earth is getting warmer because people are adding heat-trapping gases to the atmosphere. These gases, called greenhouse gases, do not allow heat on Earth to escape from the atmosphere, causing temperature on earth to rise.

Extended Teaching**Net Extra:**

Guide your student about how to use Net Extra for better understanding of the lesson and also to find out meanings of difficult words.

Support Material

1. Check out lesson plans and resources for teaching climate change from Environmental Protection Agency (EPA) at <http://www.epa.gov/climatestudents/resources/lesson-plans.html>
2. Explore various teaching resources for climate change at <http://climatechangelive.org/index.php?pid=180>

Lesson 3: Continents and Oceans

Lesson Objectives

The lesson aims to get the following objectives:

1. To help students learn that the Earth's surface can be seen in two major divisions, continents and oceans
2. Ways to look at the world i.e. using flat maps, and, using globe
3. To construct the concept of different continents and oceans with the help of map locations
4. To build a basic geographical (landform) picture of different regions of Earth

Lesson Starters

The lesson adds on to the prior understanding of Earth's geography. As such, you should begin it with a few of the basic ideas and questions related to the makeup of our earth, such as, 'Is the Earth round or flat in shape?' It is round like all planets. 'How is Earth different from other planets?' It has a lot of surface water. Other planets do not have water in liquid form. Which countries are the hottest? Which are coldest?

Remind your students that Earth's surface is covered more with water (in the form of oceans) than land (in the form of continents or islands).

It would be a good idea if you draw a world map on the board or have a large chart showing one to the entire class. You can also have a globe showing the same map to make the concept of a 'round earth' more clear.

Once the children have learnt about the two basic divisions of Earth, i.e. land and water, you can simply bring on the details of continents and oceans.

Teaching

First, get your students tested about the understanding of land and water as major divisions of Earth's surface. Make it clear to students that Earth's surface is made up rock, whether it is the landmass of the continent, or the landmass underneath ocean water.

Next, make students understand the difference between a globe and a flat map. Both are used to show positions of oceans and continents in scale. However, both have advantage and disadvantages depending on their use (refer to the textbook for explanation).

Now that your students are clear with the concept of oceans and continents, head on to describing their unique geographical characteristics, including their size, position on the world map, and overall climate conditions e.g. Pacific is the biggest ocean, North America and South America are between Atlantic and Pacific oceans, Africa is in West of Indian Ocean, Asia is the largest of continents and Australia/Oceania is smallest, Antarctica is almost completely ice covered etc.

You can just highlight the map position of each continent and ocean and describe one of its key characteristics. Keep the rest for students to read.

Answers to Comprehension Assessment

1. What do you know about the surface of the Earth?
 - A. The surface of the Earth is divided into two forms: landmass of the continents or islands, or landmass underneath ocean water. The continental landmass can be divided into seven main sections, or continents, which include North America, South America, Europe, Asia, Africa, Australia/Oceania, and Antarctica. The oceanic landmass has five sections, or oceans, which include Atlantic Ocean, Pacific Ocean, Indian Ocean, Arctic Ocean and Southern Ocean
2. What is the significance of the continent of Antarctica?
 - A. Antarctica is the southernmost of all continents. It is surrounded by southern ocean. All of other continents and the oceans lie above (or to the north of) Antarctica.
3. How formation of continents and oceans occur?
 - A. Geologists think that all continents emerged from the breaking up of one supercontinent known as Rodinia. Before it, the Earth would have only one really big continental landmass surrounded by one really big ocean.

Extended Teaching

Net Extra:

Guide your student about how to use Net Extra for better understanding of the lesson and also to find out meanings of difficult words.

Support Material

1. Explore valuable teaching resources on 'Continents and Oceans' at Brainpop.
<http://www.brainpop.com/educators/community/bp-jr-topic/continents-and-oceans/>
2. More teaching resources at <https://www.tes.co.uk/teaching-resource/continents-and-oceans-ks1-lesson-plan-and-activities-6442157>
3. Quizzes and assessment activities relating to Continents and Oceans are available at <http://lizardpoint.com/geography/world-quiz.php>

Lesson 4: Where the Water Goes

Lesson Objectives

The lesson aims to get the following objectives:

1. To familiarize children with the main bodies of water on Earth, including oceans, rivers, lakes and ponds etc.
2. To familiarize children with the three forms of water on Earth, solid, liquid and gas
3. To build an understanding of the water cycle and its various phases, including evaporation, condensation and precipitation.
4. To build an understanding of the main uses of water by humans, animals and vegetation.
5. To build an understanding of the importance of water conservation

Lesson Starters

The child must already be familiar with the main forms of water and its uses. As such, you can brainstorm the lesson by simply asking questions which the child can easily answer. Why do we need water at home? (For cooking, cleaning, bathing etc.?) What are oceans? (huge bodies of salty water between continents). 'What are rivers?' (large flows of water from a snow-covered mountain).

Once students have enough brainstorming with familiar ideas about water, you can proceed with explaining the water cycle and how it affects life on earth.

Teaching

Get a glass of water and put it on the table next to you. Ask the class to take a good long look at the water. Now ask your students to guess how old it is?

Once you're done with probable answers, it is time to surprise your students. Explain to them that while the water in the glass may have fallen from the sky as rain just last week, the water itself has been around pretty much as long as the earth has!

When the first fish crawled out of the ocean onto the land, the water in the glass was perhaps part of that ocean. When the dinosaurs walked through lakes feeding on plants, water in glass was part of those lakes. When kings and princesses, knights and squires took a drink from their wells, that water in glass was part of those wells.

And that would require pretty much an explanation. And you should therefore put water cycle right in focus. Draw its diagram (as given in the textbook) on the board and explain the meanings of various water cycle phases, including evaporation, condensation and rain.

Once done with the water cycle, you need to explain how humans, animals and plants affect the way in which water cycle works. Though the amount of water on earth remains the same, their relative usable quantities do change. There were no much ocean water in the past than it is now. More lakes have gone dry. New glaciers are formed. Old ones have melted. The water cycle is therefore changing in a way that can damage life on earth, including us. These should render the concept of importance of water conservation, the last of the learning objectives of this lesson.

Answers to Comprehension Assessment

1. What natural facts describe the nature of water?
 - A. Water is the basic resource for all plants, animals and humans. It comes in three forms, solid, liquid and water vapor. It can be found in or above oceans, rivers, lakes and ponds.
2. Why the reservoirs of ocean, river and lake etc. keep on changing?
 - A. Water keeps changing its reservoir forms due to continuous energy from the sun.
3. Why water is needed in everyday life. List down its importance in different sections?

- A. Water is needed in households for the purpose of cleaning, bathing, and washing and in factories for the purpose of manufacturing, cooling or boiling. In addition, water is also used by animals and for farming.
4. How pollution is damaging the reservoirs?
- A. Pollution disturbs the natural flow of water, making our planet warm and changing the course of rivers. Pollution also adds to global warming which means that much of the water is wasted up to oceans and floods.

Extended Teaching

Net Extra:

Guide your student about how to use Net Extra for better understanding of the lesson and also to find out meanings of difficult words.

Support Material

Explore the following online resources for getting ideas on teaching and activities related to Water Cycles and its importance.

http://simple.wikipedia.org/wiki/Water_cycle

<http://www.kidzone.ws/water/>

<http://www.sciencekids.co.nz/sciencefacts/weather/thewatercycle.html>

Lesson 5: Agriculture and Industries

Lesson Objectives

The lesson aims to get the following objectives:

1. To let children learn the importance of agriculture and industries as vital sources of our food and daily use products
2. To make the child familiar with the major agricultural crops and industries of Pakistan
3. To make the child familiar with growing conditions and regions for major food crops, including wheat and rice
4. To make child familiar with regional distribution of industries, including textile, sugar and mining industries.
5. To make child understand the concept of imports and exports



Lesson Starters

Begin by evaluating your students understanding about the life cycle of products they consume every day. Ask questions like ‘What is used in making bread (roti)?’ It uses flour. The flour comes from shops. The shops get it from factories. The factories use wheat crops. Wheat comes from farms. Farmers work on the crops for month before they are able to supply them to factories. You can make similar mind map for milk. ‘The milk they drink comes from animals of a dairy farm. Dairy farmers grow cattle like buffaloes and cows for months before they are able to obtain and supply milk. You can also explain it for clothes. They are stitched by tailors. The tailors use textiles to make clothes. The textiles are made in factories which primarily depend on raw materials like cotton or yarn. Cotton comes from farms, too...

In short, you just need to construct a mind map of ‘agriculture and industries’ as processes which take place to supply us products of our daily use.

Once children have understood the meaning of agriculture and industries as phases of production of almost everything we use, eat or utilize, proceed with their descriptions and explanations in the lesson.

Teaching

The lesson primarily aims to make clear the basic picture of agriculture and industries of Pakistan. As such, you need to stress on the conditions that relish production of specific crops possible in this region. At the same time, you need to emphasize on the magnificence of Pakistani agriculture. Note that Pakistan still has a majority of its workforce earning livelihood from agriculture and related occupations such as fish farming, forestry, cattle growing, dairy and poultry farms etc.

For industries, it is important to focus on the role of agriculture as a source of inputs (or raw materials). Use the life cycle idea (e.g. wheat-flour-bread) to teach why farms are indispensable for a strong industrial base of a country.

Wheat and rice, being two major staple crops of Pakistan, greatly contribute in sustaining food requirements of our country. Make it clear that we produce enough of them so that we need not to get it from other countries.



In the section for fruits, flowers and vegetables, make it clear that they are not produced in as much quantities as wheat and rice, the reason being the delicacy of the crops as well as poor growth conditions. You can also mention that we cannot produce fruits like cherries, strawberries and pineapples in large quantities because our climate, weather and soil do not suit these crops.

With the same idea, connect it with the concept of imports and exports. We make enough mangoes that we need in our country plus a lot more we can sell (or export) to other countries. We do not make enough cherries so they need to be bought (or imported) from other countries.

In the section for industries, the same life cycle concept of farms and factories should work for textiles and sugar. However, when talking about mining, stress on the role of ‘mines’ rather than farms as suppliers of materials. We have mines for natural gas. We have mines for coal and salt from which factories making different products get their materials. It is important to distinguish these materials from crops. Unlike crops, these cannot be renewed or reproduced every season. As such, we need to carefully obtain and use these minerals because they can be we expensive if we try to import them from other countries.

Answers to Comprehension Assessment

1. Economy of our country depends upon which most commonly used crops?
 - A. Our economy depends heavily on food crops like wheat and rice as well cash crops like sugarcane and cotton.
2. In which two sectors working class of Pakistan is divided? Write their ratio also with one example of each?
 - A. The working class of Pakistan is divided into agriculture and industries. Among them, more than 50% work for agriculture. The rest work in industries or provide services.
3. Define the basic concept of staple crops?
 - A. Staple crops are those which are used in manufacturing. In Pakistan, rice, sugarcane and cotton are staple crops.
4. Name some common industries of our country?
 - A. Common industries of our country include:
 - Textile industry
 - Sugar industry



- Cement industry
 - Fertilizer industry
 - Food processing and chemicals industry
 - Mining industry
5. What are the advantages of import and export?
- A. A country cannot always produce everything needed by its citizens. On the other hand, it usually produces some products in excess. Imports help us in buying things we cannot produce at all or cannot produce in enough quantity. Export help us in selling things we have in excess quantities.
6. Name some crops of which Pakistan is an exporter?
- A. Pakistan exports cotton apparel, textiles, sporting goods, medical and surgical instruments, cookware and cutlery, sugar and fruits.

Extended Teaching

Net Extra:

Guide your student about how to use Net Extra for better understanding of the lesson and also to find out meanings of difficult words.

Support Material

1. Get extended information about major crops of Pakistan at <http://pakissan.com/english/allabout/crop/index.shtml>
2. Read Wikipedia entry for agriculture in Pakistan at http://en.wikipedia.org/wiki/Agriculture_in_Pakistan
3. Information about crop seasons of Pakistan is available at <http://www.fatima-group.com/pakarabfertilizers/crop.php>
4. Read Wikipedia entry on Industries of Pakistan at http://en.wikipedia.org/wiki/Industry_of_Pakistan
5. Teaching resources and activities for agriculture can be downloaded from <http://www.lessonplanet.com/lesson-plans/agriculture>

Lesson 6: Cleaning the Environment

Lesson Objectives

The lesson aims to get the following objectives:

1. To make the child aware of many faces of pollution, the land, the air and the water pollution
2. To make the child understand the process of solid waste management, including disposal, reuse and recycling
3. To help children learn healthy recycling habits at home, school and other places
4. To build concept of 'green environment' and green use
5. To build concept of beautification and preservation of environment

Lesson Starters

Before you start the lesson, have a small clean drive in the class, corridor or any other area of school where litter (wrappers, stationary waste, paper etc.) is found. Ask students to collect the garbage and put that in dustbins. (Many schools are littered after break or recess times. You can organize the clean drive right after).

Connect the idea of garbage with land environment and land pollution. Explain to the students that like their school, many places are carelessly littered with trash, sewage water and smoke which causes various forms of pollution. Additionally, mention the role of plants and vegetation as a vital means to control environmental pollution.

Teaching

The lesson aims at breaking the 'why should I?' attitude towards elimination of environmental pollution. As such, you need to focus on the role of humans in polluting our surroundings and ways to fight back pollution.

The lesson has a lengthy section for environment safety tips. Keep introducing various environment safety tips in various stages of your lesson. For instance, instead of using chemicals and paper towels to wash our windows, we can try vinegar and water, reusable cloths and rags to get the job done. Avoid cleaners containing phosphates. When they get into rivers and lakes they cause algae blooms, robbing the water of oxygen and ultimately killing aquatic life.



A more relatable example is that of properly disposing toys. Throwing away old toys results in more waste in the landfill. Instead of tossing the toys that are boring, help kids organize a toy swap. In it, each child brings an unwanted toy (make sure they are clean, safe and in good condition) and the kids swap toys with one another. That way, the children go home with different toys, and nothing ends up in the landfill.

For green environment and green use, focus on the importance of plantation. You need to make it clear to students that plants and trees greatly reduce environmental damage from air pollution.

Answers to Comprehension Assessment

1. How global environment is being affected gradually?
 - A. Global environment is being affected as humans contaminate water, make air smoky, and carelessly litter their surroundings. All these contribute towards pollution.
2. Which types of wastage cause the blockage of sewerage pipeline?
 - A. Sewerage pipelines are not for hard, solid or insoluble substances like plastic, rock, or fat. When we mix all such things with drain water, it blocks or chokes the sewage pipelines.
3. How can we recycle wastage?
 - A. To recycle wastage, we can do the following things:
 - Buy rechargeable batteries
 - Reuse plastic bags
 - Support eco-friendly companies which make products from recycled materials
 - Recycle electronic items, such as cell phone or TV
4. How we can reduce air pollution?
 - A. Air pollution occurs in the form of smoky atmosphere. To reduce air pollution, we should control or reduce the amount of smoke released from our homes, cars or factories. This can be done by using environmental friendly fuels like hydroelectricity or solar energy.
5. What wastage can be recycled for planting tree etc.?
 - A. We can use old jars and tin cans as flower or tree pots.

Extended Teaching

Net Extra:

Guide your student about how to use Net Extra for better understanding of the lesson and also to find out meanings of difficult words.



Support Material

1. Check out this amazing article ‘10 steps how everybody can contribute to a Clean World’ <http://www.letsdoitworld.org/10-steps-to-clean-world>
2. Learn top 10 ways to recycle for better environment at <http://www.kidzworld.com/article/26804-top-10-ways-to-recycle>
3. Get tips about preserving the environment at <http://www.benefits-of-recycling.com/recyclingforkids/>

Lesson 7: Transportation in our Country**Lesson Objectives**

The lesson aims to get the following objectives:

1. To help students grasp the concept of transport as means of everyday commute and logistics
2. To give students the idea of two major classifications of transport, the public transport and the private transport
3. To help students grasp a picture of major forms of road transport, including highways, motorways and expressways
4. To help students learn about the railways, airways and waterways of our country
5. To teach students about the modest transportation modes used in villages

Lesson Starters

Begin your lesson by asking a few basic questions related to transportation e.g. “Does anyone know what the word transportation means?” and “Do you know any types of transportation?” and “How do you get to school each day?”

Go over the meaning with the class and introduce the one given in the book i.e. transportation as long-distance movement of people, animals or goods from one location to another, using fixed installations such as roads, terminals like bus stands and airports, and means like cars, airplanes and trains.

Once clear with the basic meaning and purpose of transportation, it is time to get into details about how it exists in our country and how does it support us in daily life.



Teaching

Draw a chart with three columns on the board, jotting down various responses categorically under ‘Means of transport’ (bus, car, rickshaw) ‘Mediums or ways’ (roadways, railways, airways) and ‘Installation or Terminal’ (railway station, bus stand, airport). This shall construct a general, broad picture of transportation in the minds of children.

Next, get the lesson read in class, stressing extensively on road transport while making clear the differences between public and private transport facilities. You should explain that highways and motorways are used for transport ‘between’ cities. As such, mostly heavy vehicles travel on them. In contrast, for transport ‘within’ cities, we generally use small buses (called mini buses), rickshaws, taxis, cars, bikes sometimes bicycle, horse carts and donkey carts.

The purpose of mentioning names and routes of highways and motorways is just to make it clear that they are used for intercity transport contrary to ‘transport within cities’.

The sections for airports and railway facilities should be elucidated in the context of intercity and international transport. Make it clear that construction of these facilities takes a lot of time, money, people and materials.

Water transport is uncommon in Pakistan. However, you can just present a glimpse of how it functions and why it is not present in Pakistan (we don’t have a lot of stable rivers or population across coastal regions, as such we do not depend on water transport). However, it is important to mention the role of seaports (fixed installations) as ways of transport relevant to Pakistan. We heavily depend on our ports for trading with other countries.

Answers to Comprehension Assessment

1. What do you understand from the word transport? Define different types of transports?
 - A. Transport is movement of people or things over long distances. Different types of transport include road transport, railways, air transport and water transport.
2. Describe the different types of roadways and name them. Give examples of each type relating to our country?
 - A. There are generally 4 types of roadways.
 1. Usual city roads: these are ones on which we usually travel. Our streets and routes to schools are usually on city roads.



2. Highways: They are large public roads with fast moving traffic and a little amount of signals. In Pakistan, they are operated by National Highway Authority.
 3. Motorways. These are networks of multiple-lane, high-speed, limited access or controlled access highways. They are also operated by National Highway Authority.
 4. Expressways: These are similar to motorways with lesser access restrictions. They are operated federally or provincially.
3. How air and land transport are different?
 - A. Air transport includes mediums like airplanes, helicopters and air balloons. These usually have fixed terminals for landing and taking off. Land transport is divided into usual city roads, highways, expressways, and motorways. Land transport needs mediums like cars, bikes, buses, trucks and lorry.
 4. How railway and water transport are different from each other?
 - A. Railway is a form of land transport with fixed rail track installations for trains. They are generally used for intercity transport. Water transport uses waterways like lakes, seas, oceans and rivers on which transport occurs on mediums like ships, boats and cruises.
 5. Which types of transportation are used in villages and for what purposes?
 - A. Villagers mostly use simply, small and modest means of transport. Bicycles, tricycles, horse carts, donkey carts and bullock carts are commonly used as major means of in villages for purpose of commuting and carrying goods.

Extended Teaching

Net Extra:

Guide your student about how to use Net Extra for better understanding of the lesson and also to find out meanings of difficult words.

Support Material

1. Have a look at the Wikipedia entry for Transportation in Pakistan
http://simple.wikipedia.org/wiki/Transportation_in_Pakistan
2. Get extended look into various means of transportation in Pakistan and the main suppliers of our Transport industry
<http://www.virtualtourist.com/travel/Asia/Pakistan/Transportation-Pakistan-TG-C-1.html>
3. Teaching activities for transportation can be seen on
<http://www.kinderart.com/across/trans.shtml>

Lesson 8: Culture of Pakistan

Lesson Objectives

The lesson aims to get the following objectives:

1. To make students learn about the main components of culture, including food, festivals, art, literature, language and lifestyle
2. To familiarize students with Pakistani cuisine, making sure they have clear concept of permitted and prohibited food in an Islamic society
3. To teach students the general pattern of festivals in our country, including Islamic and national festivals
4. To create and understand about the art and architecture of our country, including music and poetry
5. To create a sense of cultural preservation, marking it as an important matter in wake of dying cultural spirit

Lesson Starters

Begin your class by asking a set of questions relating to the culture of Pakistan. ‘When do we have Eid-ul-Fitr? When do we have Eid-ul-Adha?’ What do we celebrate the festival of Independence day? ‘What is our national dress?’

Also encourage brainstorming ideas related to Pakistani languages, arts and architecture. This should help students prepare to learn more about our cultural facets.

Teaching

First, begin by explaining meaning of culture as a collection of attitudes, behaviors and lifestyles. These attitudes and behaviors are related to (and reflected) in our food, festivals, languages, arts and architecture.

Explain to students that each area, country and place in this world has slight differences in the ways they dress, eat, communicate, celebrate and get along with each other. We need to know, understand and appreciate these differences so that we can learn and share our identities to some extent. Tell students that we will learn about Pakistani culture it matters us the most being citizens of this country.



The pictures given in the text should be used as reinforcing elements for the text. For instance, use pictures to stress on how the ways we dress and eat and how we celebrate festivals of Eid-ul-Adha and Eid-ul-Fitr.

You can talk more about arts and architecture of Pakistan. Ask them about their favorite poems in Urdu. Everyone must be familiar with Allama Iqbal, the national poet. Read any of his poems (lub pe aati ha, for example) to bring to students understanding our unique cultural identity.

The section for lifestyle can be stressed freely. You can recall the basic lifestyle differences between people living in city and people living in small towns or villages. Explain to them that while cities have busy lifestyles, villages and small towns have quite and simplistic lifestyles.

In architecture, explain to the students the concept of architectural heritage. Mosques, temples, churches and other places of worship are places where architecture is seen at its best. If possible, take your students to one of these places, so they can practically see the beauty preserved in our architecture.

In the end, you may want to introduce a bit of other cultures as well. Explore culinary traditions from other countries and cultures. Have each student make a recipe from another culture and bring it to class to share. You can also explore decorating traditions from other cultures and countries. These decorations can be made and used to decorate the classroom. You can also have students research their family heritage to see if their ancestors have come from other cultures and countries. Students may want to speak to their parents and grandparents about cultural traditions that they experienced. Discuss as a class what the students found.

Answers to Comprehension Assessment

1. What is culture? Define it briefly.
 - A. The social behaviors of a society form its culture. It shows our habits and attitudes towards food, language, lifestyle, festival, art and architecture.
2. What kind of food is allowed in Pakistan? Define its types also.
 - A. Food in Pakistan is prepared according to our culinary traditions. All food must be prepared with 'halal' ingredients and in 'halal' manners.
3. What do you understand by the word festival? Name different types of festivals.

- A. Festivals are feasting and celebration days. The different types of festivals in Pakistan include Eid, Pakistan Day, Independence Day and Spring Festival.
4. How can we describe literature of Pakistan? What is the most important form of literature in Pakistan?
- A. Pakistani literature comprises of different works written in Urdu, Sindhi, Pushto, Punjabi and English. The most important form of literature in Pakistan is poetry.
5. What are the different types of art in Pakistan?
- A. Pakistan's arts include music, theater and dance. They are popular through Asia.
6. What is the difference between language, lifestyle and architecture? Define them.
- A. Language is the tool for communication. Urdu, our national language, is spoken throughout Pakistan. Lifestyle is the way in which we go out, dress, meet and engage with other people. Most lifestyle in Pakistan follows Islamic culture. Architecture is the design or construction of buildings in our towns, including our homes, mosques, shrines, mausoleums, churches, and temples.
7. Why it is important to preserve our culture?
- A. It is important to preserve our culture because it gives us our Pakistani identity. By preserving our cultural values, we can become proud Pakistanis.

Extended Teaching

Net Extra:

Guide your student about how to use Net Extra for better understanding of the lesson and also to find out meanings of difficult words.

Support Material

1. Have a look at the Customs & Traditions of Pakistan at the National Heritage website of Pakistan <http://nationalheritage.gov.pk/customtraditions.html>
2. Detailed article on cultural facets of Pakistan is available at <http://www.everyculture.com/No-Sa/Pakistan.html>

Lesson 9: The Branches of Government

Lesson Objectives

The lesson aims to get the following objectives:

1. To give children the idea of what makes up a government, and how does a government function
2. To teach children the concept of parliament, its organization, operation and role as promoter and savior of our constitution
3. To teach children the idea of the executive branch of the government, including roles of various ministries as well as roles of Prime Minister and President
4. To teach organization, formation and operation of judiciaries, including our court system

Lesson Starters

Begin with a few brainstorming ideas about government and its structure. Ask questions like ‘Who are the Prime Minister and President of Pakistan? ‘What do you think they do?’.

Encourage students to answer as much as they know.

You can also start by showing a city map of Islamabad, our capital, which shows headquarters of many departments of our government, including secretariats, PM and President house, constitutional avenue (which has National Assembly and Senate), supreme court, and other key government institutions. Just explain to them that these structures are very important places and people who work there plan and control activities for the whole of Pakistan.

Teaching

Most of the lesson is descriptive and self explanatory. The aim of teaching it is to instill in students the importance of a democratic government with which Pakistan is supposed to run. It is thus important that you introduce government as a manager of rules and regulations of the country (tell your students that ‘managing’ by people in government is same as the principal and teachers manage your school. The difference is that principal and teachers are responsible for your school. The government is responsible for the whole of Pakistan, or all of its provinces, cities, towns and villages.

When teaching about parliament, you can make it analogous to the ‘conference room’ or ‘staff room’ of your school. Tell your students that just like principals and staff meeting everyday for school matters, the big managers of government (called MNAs and Senators) sit in parliament and decide how Pakistan has to have its rules and regulations.

When teaching about executive branch, explain to the students that it is the topmost office from which government passes its orders, under Prime Minister, federal ministries and the President.

It is important to focus on the ‘Local Government’ aspect in detail. To give you additional information, the provincial governments promulgated the Local Government Ordinance, 2001 in their respective provinces to install a new integrated Local Government System with effect from 14th August 2001 to function within the provincial framework and adhere to the Federal and Provincial laws. The new system provides three-tier local government structure in which there is only one line of authority in the district and district bureaucracy is responsible to the elected representatives. More operational autonomy is ensured to the district level offices.

Administrative and financial powers of the defunct divisional offices have been, by and large, delegated to the District level. 8 At the top tier, the District, there is a single integrated local government called District Government (click here for website with Organigram) The district government consists of ZilaNazim and District Administration. The District Administration, which comprises district offices including sub-offices at tehsil level of the Provincial Government departments decentralized to the District Government, is responsible to the District Nazim. The administration is now responsible to serve the people. Adequate checks and balances have been introduced in the System. The new System effectively addresses the specific needs and problems of large cities. In addition to declaration of four provincial headquarters as City Districts, the System has provisions to declare a city/tehsil as City District and Towns when it becomes urbanized and fulfills the criteria of a City District. The middle tier, the Tehsil, has Tehsil Municipal Administration headed by the Tehsil Nazim. The Tehsil Municipal Administration includes the offices and sub-offices of the Urban Local Councils established under the repealed Local Government Ordinance 1979, offices and sub-offices of Local Government & Rural Development, Public Health Engineering and Housing & Physical Planning Departments of Provincial Government entrusted to it for administrative and financial management. The organizational structure of a Tehsil Municipal Administration is shown in



here. In a City District, a Town Municipal Administration is organized more or less on the same pattern as Tehsil Municipal Administration in a common District. At the lower tier, the Union Administration, which is a body corporate, covers the rural as well as urban areas across the whole district. It consists of Union Nazim, Naib Union Nazim and three Union Secretaries and other ancillary staff.

Last, explain the role of Judiciary as the overseer of government operations as well as manager of justice in case people break the rules made by the government. Explain organization of judiciary in levels of district, high and supreme courts. For instance, there is a Supreme Court in Pakistan and a High Court in each province, and other courts exercising civil and criminal jurisdiction. The Supreme Court and High Courts have been established under the Constitution and other Courts have been established by or under the Acts of Parliament or Acts of Provincial Assemblies.

Answers to Comprehension Assessment

1. What is the difference between National Assembly and Senate?
 - A. National Assembly and Senate are the two houses of Parliament. The National Assembly is the main part while Senate is the secondary part of the parliament. National Assembly is formed through general elections conducted every five years by a federal institution called Election Commission of Pakistan. National Assembly has 272 elected members, 60 reserved women members, and 10 reserved non-Muslim members. On the other hand, Senate members are elected by members of Provincial Assemblies for 6 years, with a total of 100+ members from different provinces and regions of Pakistan.
2. How Supreme Court is superior to other courts?
 - A. Supreme Court is the topmost court of the country. Its chief justice is selected by President of Pakistan. All courts of Pakistan must follow its rulings because it is the highest court of Pakistan.
3. Who elects the Speaker of National Assembly and Chairman Senate?
 - A.
4. How a bill is approved in Parliament?
5. How many members are there in National Assembly?

Extended Teaching

Net Extra:

Guide your student about how to use Net Extra for better understanding of the lesson and also to find out meanings of difficult words.

Support Material

1. Have a look at the following online resource for learning about how The Parliament, the Executive and the Judiciary operates.
<http://www.pakistantoday.com.pk/2011/12/20/comment/columns/the-parliament-the-executive-and-the-judiciary/>
2. Information about federal and provincial governments of Pakistan can be found on
<http://countrystudies.us/pakistan/65.htm>

Lesson 10: Social Education

Lesson Objectives

The lesson aims to get the following objectives:

1. To make students understand the major social problems of our society, including crime, child abuse, poverty, health and education problems.
2. To bring to their understanding their special rights as children and ways in which many children of our society are deprived of their basic rights
3. To know major effects of poverty, poor education and poor health
4. To make students prepare for fight major social problems presented in the lesson

Lesson Starters

Begin the class by holding a brief brainstorming session related to social problems of Pakistan. Ask questions and invite responses from the students. For instance ‘Why some children are not able to go to school?’ (because they are poor). Why some people get so ill? (because they cannot get treatments from hospitals or reach doctors). ‘How can we help poor people?’ (by teaching them and giving money to deserving, needy people).

You can also ask students if they have ever helped someone they did not know, for example, a child whose parents work in their home.

Once students know what they are being asked of (to be aware and concerned about problems other than their own), it is time to get the lesson begun.

Teaching

First, list down the basic social problems of Pakistan as mentioned in the text. Now get them read one by one, and use bold/underlined text for marking the solution of the problem. For instance, for child abuse, the solution is effective schooling and parenting. For crime, the solution is effective police and law enforcement. For poor education, more and free schools. For health, more and free doctors.

The problem/solution teaching strategy is in fact the best way to deliver a lesson like this. Just follow on the text in this format and leave the rest to students. (the idea is just to make students aware of the problems, not to make them worried!).

Make special focus on the section for poverty, stressing greatly on how it gives rise to all other social problems on the whole. Ask students about how would life be if they were to be poor citizens and had to depend on the government for food, education, health and clothing. Once they provide you with enough answers, you can easily make them feel for the needy and deserving, and possibly building a more social attitude in them.

The emotional uplift is very important in getting this lesson through. You need to explain to the students that being rich or affluent make them responsible to be aware of the socially oppressed people among their surroundings, their neighborhood, and maybe one of their own class fellows who have trouble paying tuition.

Answers to Comprehension Assessment

1. Why education is important?
 - A. Education is important because uneducated people are forced to spend unhappy lives. They are not able to find work and earn decent living. Moreover, they are not able to educate their own children properly.
2. What is child abuse? What are some of the special rights of children?

- A. Child abuse refers to bad treatment of children. Such bad treatment can be physical, like forcing them to work as beggars, or emotional, such as keeping them separated from toys, games or sports. Some special rights of children are listed below:
- A child cannot be forced to work before 18 years of age
 - A child must not be tortured under any circumstances
 - A child must get proper health and education
 - A child must not be discriminated because of his religion, colour or gender
3. Who are criminals? What problems criminals create in a society?
- A. A criminal is someone who breaks the laws of the country. For example, kidnapping a child for ransom is an act of violation, or crime. Criminals create problems of theft, robbery, kidnapping, damaging anyone's property and torture.
4. Why poor education and poverty exist in our country?
- A. Poor education results because many people in Pakistan are not able to afford education. This is due to poverty. These people cannot earn enough to send their children to school. They are instead forced to work and make a living for themselves and their parents.
5. How can we solve the problems of poor health in our society?
- A. We can solve the problems of poor health by offering poor people free health facilities. Doctors can reduce or waive fees for poor patients. At the same time, we need to educate more people as doctors and nurses, and construct more hospitals.

Extended Teaching

Net Extra:

Guide your student about how to use Net Extra for better understanding of the lesson and also to find out meanings of difficult words.

Support Material

1. Have a look at TeacherVision's resource collection for teaching social & emotional Issues <https://www.teachervision.com/emotional-development/teacher-resources/32913.html>

Lesson 11: History of Civilisation

Lesson Objectives

The lesson aims to get the following objectives:

1. To make students learn the concept of civilization as social advancement over time
2. To familiarize students with six broad civilizations in human history, including Greek, Roman, Egyptian, Mesopotamian and Indus Valley Civilizations
3. To help children grasp a glimpse of the culture, lifestyle, religion and politics of the said civilizations

Lesson Starters

The lesson is an important introduction for the history of early civilizations. As such, you should try to create an atmosphere of curiosity and wonder in the class. Ask questions like ‘How would life be in the about 5000 years ago?’ There were no cars or airplanes. There was no electricity. There were no schools, either!

Encourage students to actively participate in the discussion. Ask them about their view of governments, culture, religion, agriculture and industries in the past. Most of the answers may reflect ideas that show relatively newer times. Your task is just to retain the element of confusion and curiosity to prepare them for the lesson.

Teaching

Early civilizations like those of Egypt, Greece, and Rome provide some of the most interesting opportunities for students to explore and learn about ancient cultures. Studies of those regions can lead to some engaging classroom lessons too. For that purpose, you need to depict historical facts in timeline and categories.

While it is not encouraged to present history as ‘stories’, you can nevertheless use the storyboarding style as it is found to be more impactful than mere fact-statement.

The sections for Chinese and Indus Valley Civilizations need special focus as these are very relevant to our own region. For Chinese civilization, explain to students that China is the location of some of the world's earliest civilizations, which developed around the Yellow River and the Yangtze River.



However, its influence did not reach far enough because people did not travel much and were like isolated neighbors.

For Indus Valley Civilization do not forget to mention its relevance to present-day India and Pakistan. If possible you can take the students to one of the museums for a good learning trip.

Answers to Comprehension Assessment

1. What do you understand by the word civilisation?
 - A. Civilization is the social advancement of culture, lifestyle, agriculture and other ways of life over a time.
2. Describe six important civilizations in the history of mankind?
 - A. Following are the six important civilizations in the history of mankind:
 - Egyptian Civilization
 - Mesopotamian Civilization
 - Chinese Civilization
 - Indus Valley Civilization
 - Greek Civilization
 - Roman Civilization
3. What are the important facts of Chinese and Egyptian civilizations?
 - A. Chinese civilizations occurred in the form of different dynasties between Yangtze and Yellow Rivers. Shang Dynasty and Zhou Dynasty are two of the important dynasties in ancient China. Both these occurred over 4000 years ago. People in Chinese Civilizations worshipped many different gods and learned arts and agriculture.
Ancient Egypt Civilization is the most powerful civilization. It lasted for 3000 years between 3150 BC and 30 BC.
The civilization spread around Nile river of Egypt from where it found its agriculture flourish extremely well. Egyptians are known to construct large monuments, temples and pyramids. The kings or rulers of Egypt were known as Pharaohs.
4. What do you know about Greek and Roman civilisation?
 - A. Greek civilization is one of the most advanced civilizations of its time. Occurring about 2500 years ago, this civilization saw emergence of great art. It is also known to give the

concept of democracy, in addition to starting world's first sport competition known as 'Olympic games'. Greek civilization mainly grew along the Mediterranean coast.

Extended Teaching

Net Extra:

Guide your student about how to use Net Extra for better understanding of the lesson and also to find out meanings of difficult words.

Support Material

1. Check out online resource <http://www.kathimitchell.com/ancivil.html>
It has a collection of articles for different civilizations of the world.
2. Get timelines for ancient history and civilizations at <http://ancienthistory.mrdonn.org/timelines.html>

Lesson 12: History of Subcontinent: The Indus Valley Civilisation

Lesson Objectives

The lesson aims to get the following objectives:

1. To make students learn extensively about the most relevant civilization of the sub-continent, the Indus Valley
2. To teach them about the lifestyle, food, arts, languages and living standards of Indus Valley
3. To build the picture of Indus Valley as a vibrant, progressive, orderly and a constantly learning society
4. To explain probable causes about the fall of Indus Valley Civilization

Lesson Starters

This lesson, like the previous one, is devoted to create an understanding of civilizations in their historic sense. As such, you should keep up with the element of wonder during the brainstorming session for the lesson.

Ask questions like 'What do you think the city of Karachi would be like four or five thousand years ago? There were probably no roads or railways. There would not be high tension wires or underground lines, right? But a place, Mohen-Jo-Daro, which is just a few hundred kilometers

away *did* have some form of city systems similar to what we see today. They had tracks of road, although not very concrete as we have now. The people of that time wore jewelry, just like women wear today. The children of those historic cities played with toys made of clay. They had a government building called citadel. Amuse the children as much as possible, asking them questions and inviting their answers.

Teaching

First thing first, explain the concept of civilization once again as ‘a system of social development, culture, agriculture, industries, languages, arts and architecture’. Follow a similar explanation you have made in the previous lesson.

Next, explain to the students that today’s lesson is just a wide, detailed story of life in one of the civilizations we discussed in the last lesson. Tell them that The Indus Valley civilization flourished around 2,500 B.C. in the western part of South Asia, in what today is Pakistan and western India. It is often referred to as Harappan Civilization after its first discovered city, Harappa.

Once the students get an idea of what they are about to learn, it is time to discuss different aspects of given in the text. It is important to reinforce the concept of riverside settlements as a unique geographical characteristic of Indus Valley. The civilization grew around the banks of River Indus and its branches because these supported really fertile lands and had suitable weather conditions.

Focus on the features of street planning, granary and social organization in detail. It should be made clear that people of the valley devoted large resources towards building up a friendly, peaceful and progressive society.

Last, stress on the ambiguity related to fall of Indus Valley as that shown in the text. You should explain the probable underlying causes of the decline as myths especially that of Aryan Invasion and climate change. You should leave an impression that we cannot clearly determine the exact cause of Valley’s destruction. But it is clear that the valley was completely uninhabited by 1700 BC or about 2700 years ago.

Answers to Comprehension Assessment

1. What are the reasons of earliest settlements at Indus valley and from where they started?
 - A. The earliest settlements at Indus Valley took place because of its fertile land and good weather conditions, which allowed people to practice widespread agriculture. It started first in Shanty towns of Mehrgarh, Baluchistan and then spread along the banks of Indus River.
2. What people observed in Harappa and Mohen-Jo-Daro according to town planning and agricultural system?
 - A. People of Harappa and Mohen-jo-Daro extensively planned their towns and agriculture. They had a proper sanitation system, proper streets and proper drainage. There was a high citadel pm each city of Indus Valley. It was used for government gatherings.
3. Which crops were grown in Indus Valley?
 - A. People in Indus Valley grew wheat, cotton, mustard, sesame, peas and barley.
4. What do you know about housing and clothing of Indus Valley?
 - A. In Indus Valley, men and women used to dress in colorful robes. Women wore jewellery of gold and precious stones.
5. When Indus valley fell? Give reasons.
 - A. Indus Valley started to decline by 1700 BC, or about 3700 years ago. Historians think that the civilization fell either of invaders or bad climate.

Extended Teaching**Net Extra:**

Guide your student about how to use Net Extra for better understanding of the lesson and also to find out meanings of difficult words.

Support Material

1. Explore the following teaching resource for Indus Valley Civilization
<http://www.wgte.org/wgte/indusriver/TeacherGuide.pdf>
2. Check out BBC's timeline view of Indus Valley at
http://www.bbc.co.uk/schools/primaryhistory/indus_valley/