# Dawood Public School
# Course Outline 2018-19
# Geography
# Grade IV

**Books:**

Liew, Jeanne; *International Lower Secondary Geography Book 1,* Marshall Cavendish Education.

Monthly Course Distribution

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**August**

**Chapter 1: Introducing Geography** **Pages no: 1-8**

| Content | Learning Objectives |
|---|---|
| **What is Geography?**<br>Geography is the study of the physical features of the Earth and its atmosphere, and of human activities on it.<br>It further divides into three main branches:<br>• Human Geography – the study of humans and their activities on Earth.<br>• Physical Geography - the study of natural environment.<br>• Environmental Geography – a study of the connection between humans and their natural environment. | • Define the term 'Geography'.<br>• Name three main branches of Geography.<br>• Describe the following:<br>➢ Human Geography<br>➢ Physical Geography<br>➢ Environmental Geography<br>• Differentiate between the physical and human features present in our environment. |
| **Physical Geography**<br>The branch of Geography which deals with the natural features on Earth.<br>Physical geography studies the features in the Earth's environment along with the weather and climate of each area. It also studies the different types of vegetation which grow in different areas. | • Define and give examples of:<br>➢ Relief<br>➢ Drainage<br>➢ Weather<br>➢ Climate<br>➢ Soil<br>➢ Natural vegetation<br>• Differentiate between weather & climate.<br>• Identify the physical features shown in flashcards. |
| **Human Geography**<br>This branch of geography deals with population and settlement. It studies how people live and what activities they carry out to earn money. | • Define the following terms:<br>➢ Population<br>➢ Settlement<br>• Differentiate between population & settlement.<br>• List some economic activities.<br>• Explain why economic activities are important.<br>• Identify and differentiate between urban & rural settlements.<br>• Describe some effects of over population. |
| **Environmental Geography**<br>This branch deals with the human activities which affect the environment. These may be harmful or beneficial to the areas where people live. | • State some of the harmful effects of humans on their physical (natural) environment.<br>• State some reasons for the identified harmful activities.<br>• Describe some benefits people make to the environment they live in. |

**Keywords:** environment, relief, drainage, weather, climate, settlement, economic activity

**Practice Questions:**
1. What is Geography?
2. Why is it important to study Environmental Geography?

**Projects, Assignments and Activity:**
- Students will be taken on a 'Nature Walk' around the school to notice all the physical and man-made features in the surrounding.
- Students will collect pictures relating to Physical, Human and Environmental Geography and paste them in the notebook.

***Surf I.T***
- http://www.kidsgeo.com/geography-for-kids/0165-biomes.php
- http://www.worldofteaching.com/geographypowerpoints.html

**<u>September</u>**

**Chapter 2: Our Home: The Earth** **Pages no: 9-22**

| Content | Learning Objectives |
|---|---|
| **The Universe**<br>It is believed that Universe came into being with a gigantic explosion in Space called Big Bang. The Universe consists of all existing matter and space including stars, planets, galaxies, etc. | • Describe the Big Bang Theory.<br>• Identify the elements of the Universe.<br>• Identify the position of Earth in the Solar System.<br>• List the planets in the Solar System.<br>• Develop an understanding of the positions of the planets in distance to the Sun. |
| **Solar system & other celestial bodies**<br>The Solar System consists of the Sun and the collection of eight planets. Smaller bodies such as the moons, asteroids, meteoroids, meteors, comets and galaxies are also present in the Solar System. | • Define the following:<br>➢ Asteroids<br>➢ Comet<br>➢ Meteor<br>➢ Meteoroids<br>➢ Galaxy<br>• Explain why temperatures vary at different planets. |
| **Rotation & Revolution**<br>The movement of Earth on its own axis is called rotation. One complete rotation takes place in 24 hours and causes the changes in day and night. The movement of Earth on its orbit around the Sun is called revolution. One complete revolution takes place in 365 days and causes the span of a year. | • Differentiate between rotation and revolution.<br>• State the time span of a complete rotation.<br>• State the time span of a complete revolution.<br>• Explain the phenomenon of change in day and night. |
| **Why does only Earth support life?**<br>Earth is the only planet which has been found to have water, air and a suitable temperature to support life.<br>Earth has seven continents divided by five vast oceans. | • List the life supporting features of the Earth.<br>• Name and locate on a world map:<br>➢ Seven continents<br>➢ Five oceans |

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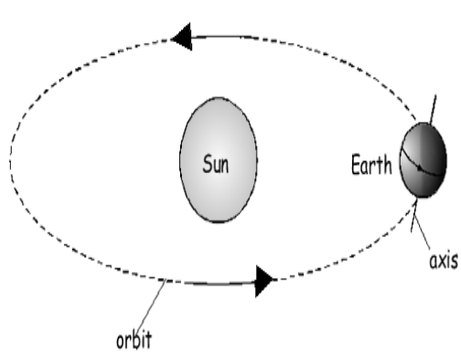
| **Continental Drift Theory**<br>Alfred Wegener proposed a theory which states that all continents were once part of one enormous land mass called Pangaea before drifting to their current locations. | • Describe the concept of Pangaea.<br>• Define the term 'theory'<br>• Describe the Continental Drift Theory.<br>• Name the person who proposed Continental Drift theory.<br>• List the evidence which support the Continental Drift theory.<br>• List the drawbacks of the Continental Drift theory. |
| **Structure of Earth**<br>Earth's inner structure is composed of four layers:<br>• inner core<br>• outer core<br>• mantle<br>• crust<br>Inside the mantle, convection currents cause movement. | • State the number of layers present in the structure of the Earth.<br>• Describe the following layers of Earth:<br>➢ Core<br>➢ Mantle<br>➢ Crust<br>• Define 'convection currents'. |
| **Plate Tectonics**<br>Crustal plates are pieces of the Earth's crust. They move over a very hot substance on the crust. Plate Tectonics is a theory that explains this movement. | • Describe the movement in Earth's layers.<br>• Explain what makes the crustal plates' move. |
| **Fragile Earth**<br>Earth's environment is becoming weak due to certain negative human activities. | • Define the term 'fragile'.<br>• Discuss how we know that the environment of the Earth is weakening .<br>• Name some activities which are casting negative effects on the Earth. |

**Keywords:** Big Bang, Milky way, temperature, Pangaea, fragile, rocks, minerals, axis, orbit, crustal plates

**Practice Questions:**

1. Why do we believe that there is no life on the other planets of the solar system?
2. Label rotation and revolution of the Earth in the given diagram.




3. Our Earth is becoming fragile. Suggest some ways to make it healthier and stronger.

**Projects, Assignments and Activity:**

- Students will view a multimedia presentation to explain the Big Bang theory and the movement of plates in detail.
- Students will make Pangaea using the world map.

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| ***Surf I.T***<br>• http://www.nasa.gov.<br>• http://www.sciencekids.co.nz/sciencefacts/space/definitions.html |

**<u>October</u>**

**Chapter 4: The Earth's Landforms** **Pages no: 35 – 43**

| Content | Learning Objectives |
|---|---|
| **Formation of Landforms**<br>The Earth is not flat. Its surface is spread with hills and mountains, plains and plateaus etc. Each land form is caused by the effects of weather and climate. | • Discuss the appearance of surface of the Earth.<br>• List the different types of landforms.<br>• List some weather conditions which may lead to the formation of landforms. |
| **Mountains**<br>A mountain is the most prominent landform of all. It rises steeply above its surroundings with a peak.<br>Mountains might be 'fold mountains' or 'volcanic mountains' depending on what has caused their formation. | • Define 'mountain'.<br>• Differentiate between 'fold mountains' and 'volcanic mountains'.<br>• Describe the formation of fold mountains.<br>• Describe the formation of volcanic mountains. |
| **Hills and Plateaus**<br>Hills are raised surfaces with slightly steep slopes. They rise above the ground too but are lower than mountains.<br>Plateaus are formed as flat stretches of raised ground. | • Define the following terms:<br>➢ Hill<br>➢ Plateau<br>• Describe the formation of hills.<br>• Describe a plateau.<br>• Name some famous hills, mountains and plateaus. |
| **Plains and Valleys**<br>A plain is a flat land spreading over a wide area. Plains next to rivers are floodplains as the experience flooding during high discharge.<br>A valley is a low lying area between two higher surfaces. Valleys are divided into two types depending on their shape. | • Discuss why most of the population lives on plain surface areas.<br>• Define the following terms:<br>➢ Plain<br>➢ Valley<br>➢ Floodplain.<br>• Describe the formation of valleys.<br>• Describe the different types of valleys.<br>• Differentiate between V and U-shaped valleys.<br>• Differentiate between a 'plateau' and a 'plain'. |

**Keywords:** landforms, folding, mountain, mountain ranges, hill, plateau, valley, magma, volcano, summit

**Practice Questions:**

1. What causes landforms to be formed?
2. Why is population density high on plains while less on mountains?
3. Identify the valleys in the given pictures.


**Projects, Assignments and Activity:**

- Students will observe a working model of a volcano.
- Students will complete research assignment on the landforms of Pakistan.
- Students will view a multimedia presentation on the formation of ridges, mountains and valleys.

***Surf I.T***

- http://www.edu.pe.ca/southernkings/landforms.htm
- http://mocomi.com/landforms/

**November**

**REVISION FOR MID-YEAR EXAMINATION**

**December**

**MID-YEAR EXAMINATION**

**January**

**Chapter 6: Weather & Climate** **Pages no: 64 – 70, 79 – 84**

| Content | Learning Objectives |
|---|---|
| **Weather and Climate**<br>Every planet is surrounded by a layer of gases called 'atmosphere.' The change in atmosphere for a short period of time at a given place is termed as 'weather'.<br>Weather can be further described by different elements:<br>➢ Temperature<br>➢ Precipitation<br>➢ Humidity<br>➢ Wind speed<br>➢ Wind direction<br>➢ Sunshine<br>➢ Cloud cover<br>➢ Air pressure<br>An average weather condition recorded over a long period of time at a particular place is termed as "climate." | • Define the following terms:<br>➢ Weather<br>➢ Climate<br>➢ Atmosphere<br>• List the elements which describe weather.<br>• Define each element of weather.<br>• Describe how each element of weather may be measured.<br>• Differentiate between 'wind speed' and 'wind direction'. |

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| **Temperature fluctuation**<br>Less or no cloud covers over deserts cause rapid rise and fall in temperature. | • Describe the term 'fluctuation'.<br>• Explain why deserts are extremely hot during day and cold at night.<br>• Develop an understanding that the weather of a particular area, depends on the presence or absence of different weather elements. |
| **The Earth's Atmosphere**<br>Earth is surrounded by five protective atmospheric layers:<br>• Troposphere<br>• Stratosphere<br>• Mesosphere<br>• Thermosphere<br>• Exosphere | • Name the different layers of the Earth.<br>• Place the Earth's layers in their order of appearance.<br>• State the importance of Earth's atmospheric layers.<br>• Develop an understanding about the gaseous composition of Earth in the lowest layer of atmosphere. |
| **Hydrologic cycle**<br>The hydrologic cycle begins with the evaporation of water from the surface of the ocean. As moist air is lifted, it cools and water vapor condenses to form clouds. Moisture is transported around the globe until it returns to the surface as precipitation. | • Develop awareness that the water in our atmosphere changes states within a cycle.<br>• Relate the effects of 'cycle' to other lifecycles:<br>➢ Butterfly<br>➢ Frog<br>• Define the terms:<br>➢ Evaporation<br>➢ Transpiration<br>➢ Condensation<br>➢ Precipitation<br>• Identify the four processes of Hydrologic Cycle.<br>• List the types of precipitation. |
| **Climate change – evidence and effect**<br>Climate all over the world is changing due to increasing 'global warming' caused by extreme deforestation, burning of fossil fuels, smoke from factories and vehicles, using of CFCs, etc. | • Develop an awareness for the term 'climate change'.<br>• Describe some activities which are causing climate change.<br>• Identify the evidences (proofs) and the consequences (effects) of climate change on our environment.<br>• Describe some conditions which are a sign of 'global warming' |
| **Flood & Drought**<br>Excess amount of water flowing from river or sea is called flood. Scarcity of water for a long period of time is called drought. | • Define the following terms:<br>➢ Flood<br>➢ Drought<br>• Describe the conditions that exist during flood and drought.<br>• Explain what causes flood and drought. |

**Keywords**: weather, climate, atmosphere, solar radiation, evaporation, transpiration, condensation, precipitation, climate change, drought

**Practice Questions:**

1. State the difference between weather and climate.
2. Fill the following table:

| Elements of weather | Meaning | Instrument for Measure | Units |
|---|---|---|---|
| Temperature | | | |
| Wind Pressure | | | |

**Projects, Assignments and Activity:**

- Students will observe the weather instruments as displayed in class.
- Activity from book page # 83 "how green are you?'

***Surf I.T***

- http://www.weatherwizkids.com/weather-climate.htm
- http://www.bbc.co.uk/schools/gcsebitesize/geography/weather_climate/

**February**

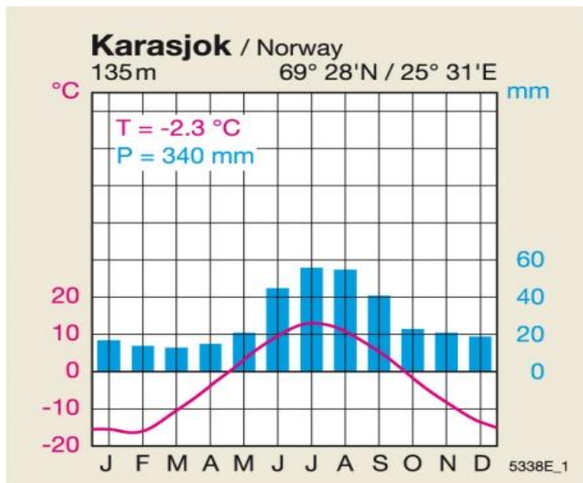
**Chapter 7: Major climate types of world** **Pages no 86 – 90**

| Content | Learning Objectives |
|---|---|
| **Climate types**<br>The world's climate is divided into three broad types:<br>➢ Tropical<br>➢ Temperate<br>➢ Polar | • Name the three major climatic types of the world.<br>• Describe the conditions of each climatic type.<br>• Develop awareness about some neighbor countries and their climactic regions. |
| **Climographs**<br>Weather conditions can be measured on a graph. The bars represent precipitation and the lines represent temperature. | • Define 'climograph'.<br>• Identify the weather condition measured by the bars in a climograph.<br>• Identify the weather condition measured by the lines on a climograph. |
| **Climatic regions**<br>Equatorial region lies with 10$^o$N and 10$^o$S of equator. Warm temperate lies between 30$^o$N and 50$^o$S of equator. Cool temperate is present between 35$^o$N - 55$^o$N of North America and 45$^o$N – 60$^o$N of Europe. Polar region is present from Arctic circle (66.5$^o$N) to the North Pole and from Antarctic circle (66.5$^o$S) to the South Pole. | • State the locations with latitudinal distances from equator for:<br>➢ Equatorial Regions<br>➢ Warm temperate Regions<br>➢ Cool temperate Regions<br>➢ Polar Regions<br>• Identify key characteristics of each climatic region. |
| **Climograph reading**<br>Identification of climatic regions with the help of climate graphs. | • Identify climatic regions by reading graphs. |

**Keywords**: weather, climate, tropical climate, temperate climate, polar climate, climograph, longitude, latitude, equator

**Practice Questions:**

1. Describe the climatic conditions of Polar region.
2. Identify the region with the help of the given climograph.




**Projects, Assignments and Activities:**

- Students will collect weather forecast report of a week and make a report.
- Students will read and interpret the climographs of different regions.
- Students will watch a short video on the life of Eskimos.

***Surf I.T***

- http://www.slideshare.net/chua.geog/sec1-major-climatic-types-of-the-world
- http://en.wikibooks.org/wiki/High_School_Earth_Science/World_Climates

**<u>March</u>**

**Chapter 03: The Physical and the Human Environments** **Pages no: 23 – 34**

| Content | Learning Objectives |
|---|---|
| **Environmental effects on our lives & our effects on the environment**<br>Our lifestyle and activities have a close connection with the environment as we work according to it.<br>Due to some of our activities, our environment is getting polluted and changing year by year. | • Compare daily routine during winters and summers in light of:<br>➢ Food choices<br>➢ Clothing choices<br>➢ Outing choices<br>• Discuss why different regions support growth of different crops.<br>• Identify some human activities which are harming the environment. |
| **Physical – Human relationship**<br>Humans adapt to the changes in their surroundings to carry on with their everyday life. This relation is affected by<br>• Technology<br>• Population<br>• Environmental changes | • List some problems caused by the following occurrences:<br>➢ increasing population<br>➢ uses of technology<br>➢ changes in environment<br>• Develop an understanding for the term 'revolution'.<br>• Describe the Industrial Revolution.<br>• List some of the dramatic changes that Industrial Revolution has brought into our lives. |

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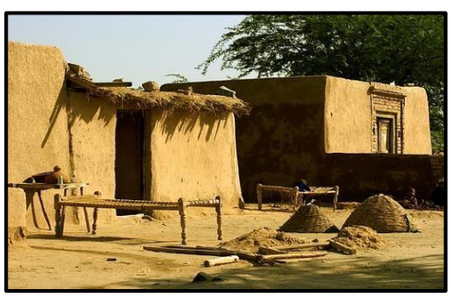
| **Adaptation**<br>To adjust in naturally available resources is termed as 'adaptation.' Farmers living on mountains are engaged in terrace farming, in which terraces or steps are cut into the mountain sides in order to grow crops.<br>Kung Bushmen is the tribal group living in Africa's Kalahari desert. They live in limited or naturally available resources in order to stay eco-friendly with the environment. | • Develop understanding for the following terms:<br>➢ Adaptation<br>➢ Alteration<br>• Describe terrace farming.<br>• Develop awareness for the eco-friendly lifestyle of the people of Kung Bushmen. |
| **City life –Karachi**<br>People in the city live a different life than people who live in another environment. There are many factors which lead to the difference in these lifestyles. | • Locate Karachi on the map of Pakistan<br>• State the climate type in Karachi.<br>• Describe life style of the people living in Karachi<br>• Compare Karachi's life style with Kung Bushmen's life style. |

**Keywords:** environment, technology, human environment, physical environment, terraces

**Practice Questions:**

1. With the help of the given pictures explain how human activity causes changes in the environment.



2. Suppose you are planning an outdoor picnic and it starts to rain, how will you be affected by this change in physical environment? And what will you do to adapt to it?
3. Why is human impact on the environment increasing?

**Projects, Assignments and Activity:**

- Students will work on a project to discover the difficulty that may be faced if they were sent to a village.

***Surf I.T***

- http://www.slideshare.net/DMN072812/geography-ppt-lesson
- http://simple.wikipedia.org/wiki/Geography

**April**

| REVISION FOR FINAL EXAMINATION |
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**May**

| FINAL EXAMINATION |
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