Theme 1: Representation of Geographical Features

Maps are the basic tools of Geography. In this theme children will learn to identify the different types of maps based on scale and also learn about representation of scale, the use of symbols and directions on a map through various methods. The theme would also enable children to understand the significance of diagrammatic representation of geographical features.

Learning outcomes:

Children will be able to:

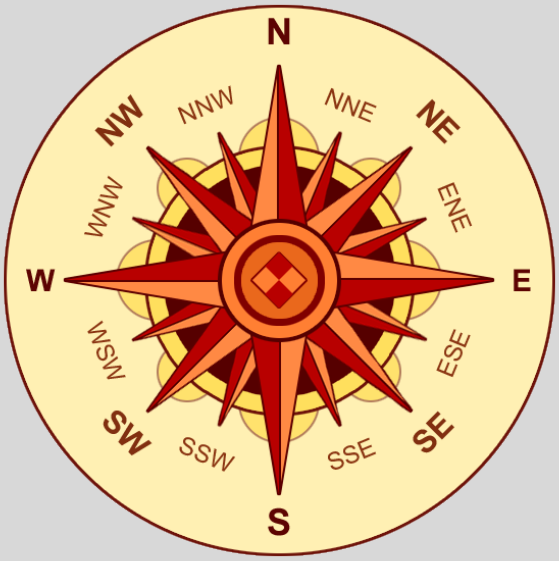
- identify the difference between a map, sketch, plan and globe;
- interpret maps on the basis of scale i.e. large scale, small scale;
- list the elements of a map;
- identify directions and the eight cardinal points;
- know uses of scales and symbols for measurement on a map;
- represent geographical features through diagrams.

Representation of Geographical Features

Key Concepts	Suggested transactional processes	Suggested Learning resources
▸ Maps: introduction, difference between map, sketch, plan and globe. ▸ Importance of maps. ▸ Types of maps based on scale. ▸ Scale: meaning and uses. ▸ Direction: eight cardinal points. ▸ Symbols. ▸ Diagrams (with brief explanation): rivers, meander, anticline, syncline, tributaries, distributaries, delta, block mountain.	▸ Providing opportunities to children for: ☛ observing a map and a globe and listing differences between the two. ☛ using practically and discussing the benefits of a map over a globe. ☛ creating a sketch and a plan of their locality and comparing it with a map. ☛ using a scale, symbols and directions on the sketch of their locality or school. ☛ sharing previous knowledge of the four directions and relating it to the cardinal directions using digital media or black board. ▸ Demonstrating the use of a scale by measuring actual classroom size and its representation on paper. ▸ Making a clay model of the globe with major latitudes and longitudes (Blue, Green and Brown). ▸ Creating a layout or plan of the following on a A3 size paper: building	▸ Mapping skills ▸ Wall map of the world – (political, physical), Topographical Maps. ▸ Clay models. ▸ Layout plans. ▸ Models and diagrams of Geographical features. ▸ Audio-visual materials, smart class modules, etc. ▸ Charts and diagrams.

Representation of Geographical Features		
Key Concepts	**Suggested transactional processes**	**Suggested Learning resources**
	complex, club house, locality or area with garden. - Using the world map and the district map to discuss difference between large scale and small scale. - Identification of different patterns of drainage by children through diagrams on interactive boards. - Explaining diagrammatic representation of physical features through audio visual aids.	

Integration: Mathematics and Arts Education



Theme 2: Landforms

Landforms are natural features of the earth surface. In this theme children will be introduced to and develop an understanding about the forces responsible for the formation of mountains and valleys, plateaus and plains on the earth. Description and spatial distribution of landforms will enable children to locate the same on the world map. Activities such as map based quizzes or group work in the classroom will enhance cooperative learning.

Learning outcomes:

Children will be able to:

- identify different types of landforms in their immediate surroundings and on visuals;
- locate important mountain ranges on the world map;
- differentiate between processes of formation of Fold mountains and Block mountains;
- discuss the process of formation of Volcanic mountains and locate important mountains on the world map;
- appreciate the importance of mountains in our life;
- compare and describe the formation and characteristics of Valleys and Plateaus;
- discuss the effects of geography on the history of our country;
- understand how landforms affect the lives of people.

Landforms

Key Concepts	Suggested transactional processes	Suggested Learning resources
• Types of landforms; • Mountains and Valleys: processes of formation of mountains and valleys – endogenous and exogenous processes • **Mountains:** ☛ Formation of Mountains, folding, meaning and characteristics of Young Fold Mountains, distribution of Young Fold Mountains in the world – Rockies, Andes, Alps, Great Dividing Range, Himalayas and Atlas Mountains; meaning and characteristics of Old Fold Mountains, distribution of old fold mountains in the world (Urals, Appalachians, Aravalis). Location on world map.	• Initiating a discussion about what children already know about different landforms and building on their previous knowledge and learning. • Providing opportunities to children to draw and colour maps and make models and diagrams. • Discussing the meaning, formation and characteristics of fold and block mountains. • Comparing the fold, block and volcanic mountains. • Conducting group /individual activity of children listing things obtained from mountains. • Making a model of an active volcano. • Discussing the formation and characteristics of rift valleys and relating them to the river valley civilizations in past.	• Documentaries. • Models of landforms, World maps and Atlas. • Diagrams • Satellite imageries of different landforms. • Other online resources and videos. • Quizzes. • Children's experiences.

Landforms

Key Concepts	Suggested transactional processes	Suggested Learning resources
☛ Faulting - meaning of faulting, formation and characteristics of Block mountains, distribution of Block mountains in the world (Black Forest, Vosges, Vindhyas) ☛ Importance of mountains ☛ Volcanic mountains: formation and characteristics (Mount. Kilimanjaro in Africa and Mt. Fujiyama in Japan) ➢ **Valleys:** Formation and characteristics of rift Valley, distribution of rift valleys in the world - Rhine, Narmada, Nile ➢ **Plateaus:** formation and characteristics, types of plateaus, distribution in the world (The Deccan plateau in India, Tibet Plateau, The east African Plateaus in Kenya, Tanzania and Uganda), rich in mineral deposits. Location on world map. ➢ **Plains:** formation and characteristics, types of plains, distribution of plains in the world (plains of North America, Gangetic plains of India). Location on world map. ➢ **Landforms and people:** Landforms – impact on the life of people. (comparison between life in the mountains and life in the plains)	➢ Showing documentaries on the life of people living in mountains and plateaus. ➢ Conducting a research on the minerals found in Deccan Plateau in India using technology backed skills. ➢ Conducting a discussion on comparing life in mountains and in the plains. ➢ Conducting a class discussion on how geographical features of India have shaped its history. ➢ Drawing and colouring the map of India showing different physical features and displaying it on class wall magazine. ➢ Discussing the processes of formation of landforms with the help of audio-visual materials. ➢ Encouraging children to locate different landforms on an outline map of India and speak about the same. ➢ Organising quiz competitions in the classroom for locating important landforms on the world map. ➢ Encouraging children to develop clay models of landforms in groups.	

Integration: History, Languages
Life Skills: Conservation of environment, sensitive towards society

Theme 3: Water Bodies

About three fourths of the earth's surface is covered by water. The purpose of this theme is to introduce and make children aware about the various types of water bodies such as seas, rivers, lakes and their spatial distribution in the world. Activities related to location of water bodies on the world map will enhance mapping skills among children. Discussion related to water pollution will enable children to appreciate and understand the linkages between local and global issues.

Learning outcomes:

Children will be able to:

- locate oceans, important seas, rivers and lakes, on the world map and in the atlas;
- describe importance of seas, rivers, lakes for development of any area;
- understand different water bodies and how they relate to river valley civilizations and sea voyages in history;
- discuss problems related to water pollution.

Water Bodies

Key Concepts	Suggested transactional processes	Suggested Learning resources
Oceans, Seas, Lakes and Rivers ***Oceans*** - Pacific Ocean, Atlantic Ocean, Indian Ocean, Arctic Ocean and Southern Ocean; their characteristics and importance ***Sea*** – distribution of marginal and inland seas (Bering sea, Caribbean Sea, North Sea, Black sea, Caspian Sea, Aral Sea, Arabian sea, Red sea and dead sea). ***Lakes*** – distribution of major lakes in the world, their characteristics and importance (Baikal, Five Great lakes of the U.S.A, Lake Omega, Lake Titicaca, Lake Victoria and Chilka lake). ***Rivers*** - distribution of major rivers in the world, their characteristics and importance, (Mackenzie, St Lawrence, Mississippi,	Initiating discussions on children's experiences about different water bodies. Encouraging children to locate various water bodies on the world map with the help of the interactive board and atlas. Promoting discussion among children about water pollution using newspapers clippings and articles. Engaging children (groups/whole class) to discuss causes of water pollution in their own area and what action could be taken to improve the situation) Brainstorming on harmful impacts of water pollution on aquatic life and on human beings. Organizing whole class/group wise quiz competitions in class for locating important rivers, seas, lakes etc. on the world map. Giving project work to children in groups to prepare a report on a dying/ disappearing lake /water body in a nearby area. (Findings can be based on information gathered from the internet; the report could include pictures, reasons, current status,	Discussion Brainstorming Mind mapping World map, interactive board. Newspaper clippings and articles. Quizzes. Project work. Field Visits.

Water Bodies		
Key Concepts	**Suggested transactional processes**	**Suggested Learning resources**
Amazon, Nile, Rhine, Danube, Indus, Ganga, Yangtze, Huang Ho, Ob, Murray). ▸ Causes of pollution of water bodies (in general). ▸ Locating the above on the world map.	involvement of local bodies/ awareness programs organised, etc.) ▸ Organising a class trip to a nearby water body-sea, river or a lake under supervision, followed by discussions on children's observations. ▸ Showing videos on famous voyages and relating them to the voyages of Columbus and Vasco da Gama. ▸ Showing videos and PPTs on oceans, seas, lakes and rivers in the world.	

Life Skills: Conservation of environment.

Integration: Biology, History, Languages

Theme 4: Agriculture

Agriculture is one of the major economic activities in the world. The aim of this theme is to make children aware and understand about various farming practices in the world and relate them to the development of the region. They will also be able to identify various crops, the geographical factors responsible for their growth and distribution of major crops in the world.

Learning outcomes:

Children will be able to:

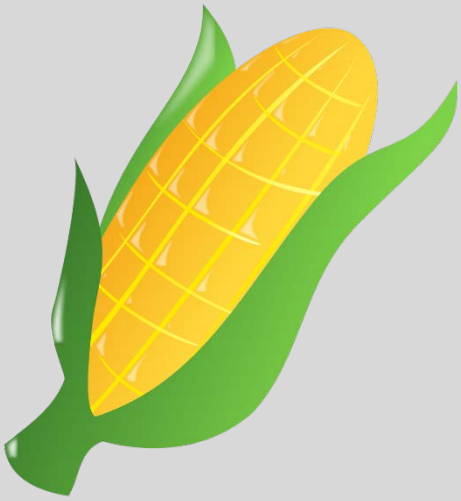
- recognise different types of agricultural practices in the world;
- locate major crop regions of the world.
- differentiate between food and cash crops;
- compare modern methods of farming with the traditional ones;
- relate agricultural development to the economy of a country;
- discuss agriculture in light of their own country – a land of farmers;
- discuss how the green revolution has helped in agricultural development.

Agriculture		
Key Concepts	**Suggested transactional processes**	**Suggested Learning resources**
▸ Introduction to different types of agricultural practices in the world. ▸ Subsistence Farming ☛ Intensive Farming ☛ Extensive Farming ☛ Shifting Cultivation ▸ Food crops and cash crops: meaning with examples –wheat, rice, cotton, jute, sugarcane ▸ Commercial farming: meaning with examples ☛ Plantation Farming: meaning with examples (tea, coffee, rubber) ▸ Locate major crop producing regions on the world map. ▸ Green Revolution: A brief idea of how green revolution helped in agricultural development.	▸ Organising a visit to a field followed by either individual or group work on: ☛ Observing crops, soil, farming tools and machines, etc. ☛ Interacting with the farmer about the different types of crops grown in their area, agricultural output, marketing, help if any, provided by the government, using fertilizers and pesticides, different methods of farming and difficulties involved. ☛ Preparing a report on the visit and presenting it in class. ▸ Providing opportunities for: ☛ Discussing traditional and modern methods of farming practices with children. ☛ Asking children to locate areas of subsistence farming and commercial farming on the world map. ☛ Analysing the differences between cash crops and food crops.	▸ Discussions ▸ Wall maps of the world map, Atlas. ▸ Satellite imageries of plantation ▸ Internet resources ▸ Smart class modules. ▸ Visuals and Articles from Newspapers, journals, magazines, etc. ▸ Reports. ▸ Project work. ▸ Experts/Agricultural Scientists.

Agriculture		
Key Concepts	**Suggested transactional processes**	**Suggested Learning resources**
	➢ Audio-visual materials may be used to discuss different types of agriculture and their relationship with the development of any area. ➢ Preparing a project report in groups /individually on the 'Green Revolution and its Impact' on different regions of the country. ➢ Inviting an agricultural scientist to the class and organising a discussion on the related topic.	

Life Skills: Conservation of environment, sensitive towards society

Integration: Biology, History, Languages



Theme 5: Minerals

The theme aims at providing children the knowledge and developing their understanding about minerals and ores and their distribution in the world. The theme will also create awareness in children about the need to conserve minerals.

Learning outcomes:

Children will be able to:

- differentiate between metallic and non-metallic minerals;
- describe the importance of minerals in daily life;
- locate important minerals on the world map.
- discuss the different types of mining;
- appreciate the need to conserve mineral resources.

Minerals

Key Concepts	Suggested transactional processes	Suggested Learning resources
▸ Minerals and Ores (meaning and examples). ▸ Types of minerals - metallic and non-metallic ☛ Metallic: Iron ore, uranium, bauxite, manganese, gold, silver, copper ☛ Non-Metallic: Lime stone, mica and mineral fuels (coal and petroleum) natural gas ▸ Distribution of these minerals in India and the world, leading producers in the world; uses of these minerals. ▸ Types of mining. ▸ Conservation of minerals. ▸ Location of above minerals on the world map.	▸ Initiating a discussion about what children already know about minerals and their uses on our daily life and building on this. ▸ Asking children to list different items made of metallic minerals, that they see in daily life. ▸ Explaining the meaning of minerals and ores followed by examples. ▸ Providing children opportunities to collect locally available minerals and explain the concept of metallic and non-metallic minerals. ▸ Using the Atlas and wall maps of the world and asking children to locate important mining areas of the world. ▸ Facilitating children in observing and interpreting satellite imageries by NASA and understanding the colour bands for finding reserves of minerals. ▸ Engaging children in discussion about the importance of minerals and their conservation. ▸ Using articles, newspaper clippings, videos, etc. for generating discussion amongst children towards conversation of non-renewable minerals and encouraging them to search for alternatives to these minerals.	▸ Wall maps of the world map, Atlas. ▸ Internet resources. ▸ Samples of different types of minerals. ▸ Visuals and articles from Newspapers, journals, magazines, etc.

Minerals		
Key Concepts	**Suggested transactional processes**	**Suggested Learning resources**
	➢ Asking children (individually /groups) to prepare posters on pollution due to mining activity and conservation of minerals. ➢ Creative expressions while preparing posters.	

Integration: Chemistry, Languages
Life Skills: Conservation of environment

Theme 6: Study of Continents: North America and South America

This theme is an introduction to the study of the Continents of the world which begins with the study of North America and South America. Children will be provided a broad overview of the two continents. They will also get an opportunity to do a case study from each continent.

Learning outcomes:

Children will be able to:

- locate North America and South America on the world map and in the Atlas;
- identify and mark the different countries in North America and South America on their respective maps;
- locate and identify the physical features of North America and South America on the map;
- compare the life in lumbering (Canada) with the life in the Amazon basin;
- understand how the geography of a place affects the life of people (through case studies).

Study of Continents: North America and South America

Key Concepts	Suggested transactional processes	Suggested Learning resources
▸ A brief idea of the formation of continents. **North America** ▸ Introduction ▸ Location ▸ Boundaries ▸ Political divisions (countries and capitals) ▸ Major Physical features ▸ Locating the above on the map. ▸ Case Study: Lumbering in Canada **South America** ▸ Introduction ▸ Location ▸ Boundaries ▸ Political divisions (countries and capitals) ▸ Major Physical features ▸ Locating the above on the map. ▸ Case Study: Life in the Amazon river basin	▸ Showing videos on the location and geography of North and South America. ▸ Sharing children's knowledge about countries in these two continents and building on the same. ▸ locating countries and their capitals in the two continents using audio visuals, maps, atlas or globe, by the teacher followed by children being asked to locate the same. ▸ Showing videos on Lumbering in Canada and life in the Amazon river basin and conducting a discussion afterwards. ▸ Encouraging children in groups, to prepare a comparative study on the two Continents. ▸ Asking children to prepare a chart to show the significance of the Amazon rainforest and the mighty river Amazon on the locals and the flora and fauna of the surrounding countries. ▸ Facilitating Mind mapping on political divisions in the two continents by children. ▸ Analysing and discussing the impacts of physical features of a place on life and occupations with children. ▸ Discussing the impact of geographical features on the history of the continents.	▸ Audio-visuals. ▸ Maps, atlas, globe. ▸ Videos.

Life Skills: Conservation of environment, sensitivity towards society
Integration: Biology, History, Languages, Arts Education