I'm not a robot

According to the ICSM (Intergovernmental Committee on Surveying and Mapping), there are five different types of maps: General Reference, Topographical, Thematic, Navigation Charts and Cadastral Maps and Plans.General ReferenceThink of a regular map, where cities and towns are named, and major transport routes are included along with natural features like lakes and rivers, and youll be thinking of a general reference map. These are the maps that are ideal for helping you to get to your destination they tend to be easy to read and include street and tourist maps, and we cant think of many better examples than HERE maps.TopographicalTopographical maps stand out from the other offerings by showing detailed elevation, with contour lines helping to map the landscape. Ordinance Survey maps are arguably the best-known type of topographical maps, but thousands of other mapmakers have created detailed alternatives, and even if you cant see specific landmarks lakes or roads, for example its still possible to work out your exact location by following the contours and checking out the landscape around you.ThematicRather than attempting to map the landscape or help to show you where to go, thematic maps are designed instead to highlight information on specific topics. It could be anything from geology to population density or weather, and weve even seen thematic maps used to track the locations of whales. Companies like Esri use thematic maps to make a massive difference to businesses, governments and other organizations around the world, combining geography with information like our smart traffic services to allow more efficient decisions to be made. Unlike general reference maps, which can typically be read and understood by pretty much anybody, thematic maps may also require specific knowledge to understand.Navigational ChartsAlong with general reference and topographical maps, navigational charts are another invaluable tool when it comes to actually getting around, whether youre at sea or in the air. Maps for the ocean are typically referred to as charts, and the same applies to air navigation mapping. The charts tend to include information that important to avoiding accidents such as features in and around the water, like submerged rocks along with any specific navigational aids.Cadastral Maps and PlansCadastral maps are a lot more specific, and although theyre widely used, theres a good chance you wont see one every day. The plans map out individual properties, offering details like boundary information when houses or land are surveyed, and can be joined together to create much larger cadastral maps. Youre likely to see a cadastral map when you get a house surveyed, and town planners will also deal with them a lot. Perhaps surprisingly, cadastral mapping is one of the oldest forms of mapping, with ancient Egyptians known to have developed cadastral records to establish ownership of land after the flooding of the River Nile.Image credit: RTimagesThe top of most maps is north and a compass can be used to find which direction north is. Compasses show four directions - north, east, south and west.The needle always points north, so when that is lined up with the map it is easy to see in which direction things are.Maps are not drawn to the same size as the ground because they would be far too big! Instead they are drawn to a smaller scale.The scale on a map is a set of numbers that can be used to compare distances and can be written, for example, as 1:25,000.This means that the actual size of the ground is 25,000 times bigger than it is on the map.The same scale can also be written as 4cm to 1km, so every four centimetres on the map is one kilometre in real life.Sign Up Now &Daily Live Classes3000+ TestsStudy Material & PDFQuizzes With Detailed Analytics+ More BenefitsGet Free Access NowWe see them and we use them often in our everyday life whenever we travel to new location or place, but what is a map? Map is a representation of the spatial distribution of phenomena or objects. Maps are essential to understanding the world around you. They help you navigate unfamiliar terrain, locate nearby amenities and navigate home from a long day of sightseeing. For Example, a map may show the location of cities, road networks, rivers, or natural resources in a given region. Maps present their spatial information to the viewer at a reduced scale. Maps are created by Cartographers. Cartography refers to the study of map making and as well as The Art of Map Making. Maps represent information by using symbols that are identified in a legend of the map. In this article, well demystify the ins and outs of maps and how they can help us. Map and Globe are two of the most fundamental tools for world exploration. A globe (model of the earth) is a map. Globes are some of the most accurate maps that currently exist because the earth is a three-dimensional object that is close to a spherical. Maps lose their accuracy because they are actually projections of an area or the entire Earth. Every Map Projection has some distortion. Maps provide a visual representation of the world, while globes show the relative position of different parts on Earth. They both illustrate information that can help us understand our place in this world. Maps are more compact than the globe. They are easy to store and cheaper to produce. Maps can hold a various range of scales. Can easily be viewed on different sized screens. They can show larger portions of an area at once. Maps can show only one side while globes always show all sides. Globes can be rotated while maps cannot be rotated after they have been drawn. Maps are one of the most significant yet complicated tools that people use on a daily basis. They provide us with important information through colorful visuals and depth, by plotting points to show the way. Maps are an important part of our daily life. They help us find our way to places like hospitals, schools, houses and workplaces. Some people use them for recreational purposes like hiking or hunting. Some of the uses of Maps are: To locate places on the earth surface. To find patterns of distribution. To discover relationships between completely different phenomena by analyzing map information. They are helpful in navigation, recreation activities, or keeping track of where you visited last time. There are many types of maps and these are multiplied by the industries and applications for which they are used, that it can be difficult to classify them into groups. Different types of maps can be found in different categories and used for different purposes. A common classification system divides maps into two categories: General and Thematic. General Maps: These are the maps which show physical features of an area. They summaries the actual landscape. Thematic maps or special purpose map: those which describe on specific features using the landscape as a background. Thematic maps can further divided into two categories: Qualitative & Quantitative. In the recent year, thematic maps are growing in importance and becoming more readily available. The following are the list of most common types of maps that you might need in your everyday life. Political Map is referred to maps that show boundaries of countries, state, countys, small and large towns and cities and they also include significant water bodies typically with blue colors.An example of Political Map would show states and their borders along with the country international border. Physical map is focused on the geography of the area and they generally show features like mountains, rivers, and lakes. Typical colors are Blue for water features, Green for lower elevation and Brown for high elevations.Features are rivers, mountains and lakes are usually labelled. A Topographic map shows height that you can measure, it is similar to a physical map that shows different physical landscape features.This type of maps may use contour lines instead of colors to show changes in the landscape. Contour lines shown on topographic maps are generally spaced at regular intervals to show elevation changes. Topographic maps are most commonly used in geology, geography, engineering, surveying, science education and military operations. Maps adapted for navigation purposes include detailed description of natural or man-made features that can be seen from a given vantage point. A climate map is a depiction of the climate of an area. These maps are used to show climatic zones of a specific area based on the temperature. These maps normally use colors to show different climatic areas. Map Legend helps to identify each climatic zone based on colors. More specifically, a climate map is a set of charts that shows how variables such as temperature and precipitation change over time. These maps are typically depicted using a color scale from blue for cold to dark brown for hot. A roadmap is currently one of the most widely used map types. These maps show major and minor highways and roads as well as other transport features like airports and ports. They can also show city locations and points of interest such as parks, hotels, grounds, open area and monuments. You can use them for travelling, tourism, or navigation purposes. They usually depict roads and landmarks to help you understand the terrain and find your way around. Generally, Red color is used to show Major highways on a roadmap and are often larger than other roads, while lighter color and narrower line are used for minor roads. A thematic map is a map that focuses on a particular(single) theme or special purposes such as population density or average annual income of a particular area. They can portray natural features like rivers, cities, and highways in the background. It is similar to a spreadsheet in that it shows the logical structure of your main points, but it uses visual symbols and images to represent each point. Thematic maps are popular for their easy-to-understand structure and the ability to visually create concepts. Cadastral maps are mainly used to record areas of land belonging to one country, state or municipality. They are also known to be the most comprehensive maps of the world. The term Cadastre originally meant division, referring to the division of land into ownership for taxation purposes. Cadastral maps provide information on land ownership, boundaries, property values, mineral rights, and other assets. These maps are generally useful to taxation agencies, land surveyors, and land co-operatives. Navigational charts, also known as navigation charts and nautical charts, are maps designed for use by sailors and other watercraft users. Navigational charts shows the shoreline or seafloor of a body of water. They show information such as depth contours, depths at points along a route on the chart, tidal elevations (height of the water on parts of the shoreline), tidal streamlines (lines indicating direction and speed), prominent landmarks, navigational aids such as waypoints and beacons, obstructions such as shoals or reefs and routes of safe passage. Time Zone Maps are a great way to see what time it is where you are travelling. They allow a traveler to easily compare the current time in various cities and countries around the world. Every country has their own time zone map. This is different from country time zones like United States, which vary by state. The countries in the same time zone share the same clock time. Time zone maps are created by taking into account standard time zones, Daylight Saving Time, and the International Date Line. A 24-hour clock with 12-hour increments can be used as a time zone map on its own. Geologic maps are maps that show the distribution of rocks, soil, and sediment on Earth. The map also shows the distribution of rock types. They are used in many fields including geology, engineering, mineral exploration, oil & gas exploration, archaeology, and mapping. They also provide a lot of information on the geology and history of a particular area. Bathymetric maps are made by gathering data from ships sonar. The data is then transformed into a digital map to show the depths of the sea floor or other underwater features. Bathymetric maps are used to explore the depths and topography of the ocean floor and support scientific research into marine ecosystems. Maps like these can be used to identify underwater objects, such as shipwrecks and oil platforms. Before creating a map, cartographers decide what space they require to show and what kind of data they require to show the knowledge. They take the requirements of their audience, into account and also the main purpose of the map to be created. These choices confirm what map projection and scale they have, and what varieties of details area unit enclosed. The language of the map is one of the most common issue a cartographer should take into consideration. Lines of latitude, Longitude and meridian unit mathematically premeditated on a flat surface. Choices unit drawn in their acceptable location. Before the use of advanced computer and printing techniques, maps were drawn by hand. Cartographers used to draw, the map on a coated plastic sheet with an etching tool, scraping away the colored coating to go away clear, sharp lines. Many totally different sheets of plastic were stratified on top of every different to feature shading and place names. The plastic sheets were used to create a metal printing plate, or proof, for publication of the map. Today, most mapping is finished with the help of computers. The coordinates of every purpose area unit entered into computer. By feeding every new information into the computer or by deleting previous information, any map changes are often created quickly and simply. The map is an object that many people use on a day to day basis. Its not just for geographers or cartographers anymore. Maps are now used for all sorts of purposes, whether it be for convenience, decoration, or even just as a conversation starter! There are many types of map online that can help you with whatever need you may have. Maps serve as a fundamental tool in understanding the geography of our world, embodying the intersection between art, science, and technology. They not only guide us through unfamiliar terrain but also enrich our comprehension of the earths surface, political boundaries, and natural features. Understanding the various types of maps and their unique purposes is essential for anyone relying on them for education, planning, navigation, or geocoding. These navigational aides have evolved significantly over time, shaped by advancements in technology and the growing need for more accurate and informative depictions of the world around us.This article will explore different types of maps, including political maps, physical maps, topographic maps, weather maps, and geologic maps. Each type serves a unique purpose, from delineating state and national boundaries on a political map to depicting the physical landscape of an area through a physical map. Topographic maps offer detailed representations of the terrains elevation, while weather maps provide crucial meteorological data, and geologic maps focus on the earths material properties. Additionally, the role of geocoding in enhancing the utility and accuracy of various map types will be highlighted, offering insights into how this technology integrates with traditional and digital mapping techniques to support a wide range of applications. Political maps are specifically designed to show governmental boundaries of countries, states, and counties, as well as the location of major cities and significant bodies of water. Such maps emphasize political features and are distinguished by their clear depiction of regional boundaries456. These maps can serve various purposes, from illustrating the distribution of political power, to facilitating a deeper understanding of geopolitical relationships and changes in national borders over time456. Educational Use: In educational settings, political maps are essential tools for teaching students about the political divisions of the world. They help in understanding how countries are organized and bordered6.Election Analysis: Political maps are invaluable during elections, where they are used to illustrate voting patterns and results. They provide insights into political trends and can influence electoral strategies6.Decision Making: Governments and organizations use political maps for planning and resource allocation. These maps assist in urban planning, development strategies, and in the effective administration of services6.Media Reporting: News outlets frequently use political maps to report on geopolitical events, elections, and other political news to help viewers visualize the information being reported6.Travel Planning: For travelers, political maps are useful for identifying border crossings and understanding the geopolitical landscape of their destinations6.Political maps not only depict political boundaries but also include significant geographical identifiers like capital cities and major water bodies. The choice of colors in these maps often varies, with different colors used to represent various political entities like countries or states, enhancing their readability and effectiveness8. Physical maps are designed to display the natural landscape features of the Earth, highlighting topography through various methods like colors, shaded relief, and contour lines14. These maps are particularly detailed in showing elevations and terrain structures, using color gradients from green at lower elevations to gray at the highest points, which helps in understanding the geographical layout14. Features such as rivers and lakes are depicted in shades of blue, enhancing the maps utility for a range of activities14. Contour lines, or topographic lines, connect points of equal elevation, providing a clear visual representation of hills, valleys, and other geographical features15. Physical maps serve several critical roles across different fields. They are essential tools for environmental scientists who use them to identify areas susceptible to environmental threats like erosion, aiding in the development of conservation strategies13. Geologists utilize these maps to study the Earths crust, helping to pinpoint regions prone to natural disasters such as earthquakes and landslides, which is crucial for disaster planning and mitigation13. Additionally, these maps are invaluable in outdoor recreation and professional fields like engineering and architecture, providing detailed geographical data that assists in planning and navigation14. The inclusion of major cities and roads, while not the primary focus, adds to the maps versatility, making them useful for general reference14. Topographic maps are distinguished by their use of contour lines, which are essential for portraying the Earths three-dimensional landscape on a two-dimensional medium. These contour lines connect points of equal elevation, making it possible to visualize hills, valleys, and plains. The spacing and shape of these lines provide crucial information about the terrain: closely packed lines indicate steep slopes, while widely spaced lines suggest gentle slopes161720. Contour intervals, the vertical distance between adjacent lines, are consistent within each map and are key to understanding subtle changes in elevation20. The versatility of topographic maps extends across various professional and recreational fields. Engineers and architects rely on these maps for planning construction projects and landscape design, ensuring that environmental and structural considerations are factored into development plans19. In environmental conservation, these maps help identify vulnerable land areas, aiding in the formulation of strategies to mitigate erosion and other ecological impacts19. Additionally, outdoor enthusiasts find topographic maps invaluable for activities such as hiking, camping, and fishing, as they provide detailed information on terrain and elevation, crucial for safe and enjoyable experiences19. Weather maps are pivotal tools in meteorology, providing a snapshot of atmospheric conditions at a specific time and location. These maps are crafted using data from ground stations and satellites, which meteorologists analyze to predict weather patterns26. Pressure Maps: These maps display atmospheric pressure in millibars, indicating areas of high and low pressure. High pressure often correlates with stable, clear weather, while low pressure can lead to cloud formation and precipitation22.Temperature Maps: Commonly used in media, these maps show current temperatures using color scales or numerical values. They often integrate data on cloud cover and precipitation to provide a general weather overview22.Station-Model Maps: Each station on these maps reports local weather conditions, including temperature, humidity, and wind speed, using meteorological symbols. These local reports are aggregated to represent larger areas22.Aviation Maps: Essential for flight safety, these maps include real-time data on wind, dew point, and potential flight hazards like icing areas and turbulence22.Streamline Maps: These illustrate wind patterns, using data from isobaric pressure readings to depict wind flow rather than just static pressure points22.Weather maps are integral to various daily activities beyond meteorology:Agriculture: Farmers rely on these maps to plan irrigation and harvesting by anticipating weather changes25.Event Planning: Organizers use weather maps to schedule events, avoiding potential bad weather to ensure safety and comfort25.Travel: Both pilots and drivers use specific weather maps to navigate safely, avoiding areas with adverse weather conditions25.Public Safety: Emergency services use weather maps to prepare and respond to weather-related emergencies, helping to mitigate risks and inform the public25.Each type of weather map serves a unique function, making them indispensable tools in both professional fields and everyday life26. Geologic maps are pivotal in illustrating the Earths geological diversity, portraying rock types and geological periods that shaped a region. Each color on a geologic map typically represents a different rock type, providing insights into geological processes like continental collisions or the effects of Ice Ages2829. These maps detail the distribution of rock strata, showcasing their relative ages and physical relationships, which are crucial for understanding the areas geologic history3132. Geologic maps are essential tools across various sectors, significantly impacting economic and societal aspects. They are utilized in land-use planning, assessing geohazards, and developing resources such as water, energy, and minerals31. These maps also play a critical role in national defense, waste disposal, and informing policy decisions at multiple governmental levels31. The creation of digital geologic maps enhances their accessibility and utility, providing detailed data crucial for site-specific projects like the siting of new state facilities or resource exploration31. Additionally, geologic maps serve as a foundation for further geological and environmental research, aiding in the management of natural resources and the assessment of environmental risks32. Throughout this exploration of maps, we have journeyed through the diverse utility and purposes of political, physical, topographic, weather, and geologic maps. Each type of map, with its distinct characteristics and applications, enriches our understanding of complex geographical, political, and environmental landscapes. By delineating boundaries, depicting physical terrains, forecasting weather patterns, and revealing the earths geologic secrets, maps transcend mere navigation aids to become pivotal in a wide array of strategic planning, education, and decision-making processes.As we conclude, its clear that the advancements in geocoding and digital technology not only enhance the accuracy and utility of maps but also broaden their application across various fields. Whether for educators, planners, scientists, or enthusiasts, the various map types discussed serve as essential tools that guide our interactions with and within the world. The significance of these maps extends beyond their immediate utility, suggesting avenues for further research and action, and highlighting their perpetual impact on societys developmental and exploratory endeavors. What are examples of specialized maps designed for specific purposes?Specialized maps, also known as special purpose maps, are designed to focus on particular themes. Examples include precipitation or climate maps, which illustrate rainfall patterns and dry regions; population maps, which highlight densely and sparsely populated areas; and historical maps, which display locations of ancient empires or historical trade routes.What are the primary functions of maps?Maps serve multiple functions such as illustrating the sizes and shapes of countries, pinpointing geographical features, and measuring distances between locations. They are also essential for showing the distribution of various elements across the Earth, like settlement patterns, and for detailing the exact locations of structures and streets within a city.What are special purpose thematic maps?Special purpose thematic maps are types of maps that focus on specific statistical data and include various forms such as choropleth or shaded maps, dot maps, proportional symbol maps, and isarithmic maps. These maps typically concentrate on a singular theme, like the shifting centers of population in the U.S. from 1790 to 2000.What is the function of a political map?A political map is primarily used to display legal or administrative boundaries. These boundaries might be international, such as national borders, or more localized, like counties, states, provinces, cities, or wards. Political maps are commonly utilized for showing Census data and election results. [1] 2] 3] 4] 5] 6] 7] 8] 10] 11] 12] 13] 14] 15] 16] 17] 18] 19] 20] 22] 23] 24] 25] 26] 27] 28] 29] Physical)/The_Environment_of_the_Earths_Surface_(Southard)/03%3A_Topography/3.05%3A_Geologic_Maps_and_Cross_Sections[31] 32] 34] 35] 36] In this article we will discuss about:- 1. Introduction to Map 2. Types of Maps 3. Importance 4. Directions 5. Contour Lines.Introduction to Map: We use globe to understand the actual structure of Earth which represents our planet in right manner but in very small size as compared to its original size. It represents the size, shape, direction, distance and relation between the continents, oceans and other forms found on our Earth.But we cannot use and carry it everywhere. There are certain difficulties related with its use e.g. large size globe is also not able to provide vast information and more over its formation is also quite tough.Map provides the solution of above mentioned problems. Map is a visual representation of an area or selected features of Earth, typically on a flat surface with the help of traditional symbols on the scale which is reduced as compared to actual scale because various types of natural and man-made features are located on Earth and their collective representation is not possible on a single map. An attempt in relation to above mentioned situation will make a map purposeless and unintelligible.Inspite of this, in present era maps are not only used by army and students of geography. These are also used by Governments, Planners, Industrial, Commerce, Trade Sector etc.Types of Maps: Different Types of Maps are designed on the basis of needs of various users: 1. On the Basis of Scale:The scale on the map is shown in same ratio proportionate to the actual distance on the Earth. Meaning thereby, a map is just reduced form of Earth or a part of it, which finds its reduction at same proportionate ratio. The relation of scale of some map also relates with the purpose and information of a map. It is purposefully that maps are prepared on bigger or smaller scale.(a) Land Maps:Such maps are used for Revenue records by land revenue officials and local government departments. These maps are prepared on large scale such as 1cm: 20 m or 1 cm: 40 m. Very small features such as extents of playgrounds situation of wells, trees and houses etc. are shown in such maps, origin of land use maps is found in France, where Cadasters were prepared in French language means revenue record registers were prepared in French language. These are used by the government for collection of taxes and revenue.(b) Physical Map:Physical maps are prepared for detail conformation about land form, natural traits, light vegetation, drainage pattern and other professional needs on the basis of extensive surveys. Generally these maps are prepared to show 1 inch: 1 mile to 1 inch: 4 mile scales. Apart from geographers such maps are very useful for armed forces and land planners.(c) Wall Maps:Such maps are prepared on small scale to show whole of the world, some continents or climate, vegetation, soils, minerals, agriculture, transportation etc. of the world. These maps are used as teaching aids for students in class or labs. Although such maps are prepared on small scale yet related information is printed in large font.(d) Atlas Maps:Various maps formed in the form of a book in an order are known as Atlas. As wall maps, these maps are also prepared on small scale and they represent various features of various countries and continents. These are meant for individual use. School Atlases are prepared for the use of students.These include detailed maps of various regions of countries and maps representing main features of continents are included in these Atlases. Inspite of this, Atlases based on particular subject are also prepared e.g. Population Atlas, Agriculture Atlas, Census Atlas etc. provide information about related topic.2. On the Basis of Purpose:These are divided according to the information provided in them.Especially natural and cultural maps are categorised as follows: (a) Natural Maps:Natural maps show various features related to natural aspects such as: (i) Relief Maps:Relief Maps show various land forms according to their classification on a map. Heights of relief, depth, slopes and drainage are commonly shown in such maps.(ii) Geological Maps: These are prepared according to the structure of the Rocks on the basis of their classification.(iii) Soil Maps:These represent the features of various types of soils and areas where they are found. These maps are very helpful for agriculture sector in particular.(iv) Climatic Maps:These maps represent rainfall, temperature, winds and atmospheric pressure according to the season.(v) Vegetation Maps:These maps represent the division of Forests, Grass plains, Shrubs etc. Natural vegetation and plantation is also depicted in such maps.(b) Cultural Maps:Such maps present various geographic, cultural aspects, such as: (i) Political Maps:These show political boundaries of different political regions e.g. country, state, district etc. These are helpful in planning and administrative purposes.(ii) Historical Maps:These provide information about the historical feature.(iii) Strategic Maps:These help armies in strategic purpose and during war. Information provided by these maps is more accurate and detailed as compare to the commonly used maps.(iv) Social Maps:These provide information about the language, religion, tradition etc. about the people of a country or whole world or any part of it.(v) Classified Maps:In such maps regional classification of any particular characteristic, which has not been covered above, is shown. Such characteristics may be about any natural or human trait e.g. population, agriculture, industries, rainfall, temperature etc.Importance of Maps:Map is an important tool for geographers. It helps in understanding the complications of our large size Earth in an easy way. Obviously single person cannot collect all the information of world himself only. Information about the unseen and distant parts of world presented in the form of pictures, appeal to mind and help to understand the complicated features. Other than of students of Geography, maps are used by various people in different sectors.Like an international tourist who is not able to speak the language of a particular country in which he is touring, can use a map for his/her destinations. In present global era, international trade has been increased a lot and takes place through sea and airways. Navigation charts play an important role in the movement of ships.During war inspite of armed strength of armed forces depends on strategy of war and information about the areas of enemies, barriers and danger. In such situation importance of relief maps is very clear to us. Large countries like India depend upon natural resources, adequate use of these for administrative and planning purposes; maps provide information about the situation and condition of these resources. Maps are used upto great extent by large business houses, who run their trade in different countries of world.Directions of Maps: Directions are very important. Knowledge about directions is necessary for making maps and also for reading them, especially for the army during the war.Mainly we get information about directions from the rotation of Earth. As we all know that sun rises in East and sets in West. Hence North and South directions are diagonally at right angles to East West line. Principally any line on the Earth which touches Northern most part of Axis, points towards North. Same way any line touching southernmost part of axis points towards South.So, out of four directions East, West, North, South, if we know about one direction then we can find out others also. In ancient times travellers and sailors were able to find their routes without compass in sea, forests and deserts.Methods to Find out North Direction:In map and field North direction is easiest to locate because we know that longitudes are the semi circles which join the North and South poles. In maps these are shown as vertical lines and they point towards North in a map. So the upper part of the map depicts north and lower part depicts south. Its right hand side is east and left side is west.These are several ways which have been used to find out North direction in the open areas in India.1. Pole Star:This is the only star which is present above the North Pole of Earth. It does not change its position as other stars and seems to be still. With the help of two groups of stars. We can locate the pole star.First group comprises seven stars, which is also known as SaptaRishi The bright star present at the distance of 41/2 times the distance between the first two stars (Pointers) of this group.Second group is present in the opposite direction of SaptaRishi and it looks likes Alphabet W and have five stars. Its also known as Kaemeopia. This method is not useful during day and cloudy nights.2. With the Help of Watch:In this method clock is placed on a leveled surface and the arm representing hours is pointed towards Sun. For this purpose we can use a pin, its shadow tells us about the direction of Sun. Now half the angle formed by its hour hands position pointing towards 12, shall indicates toward South direction and if we extend it backwards then that line shall point towards North.3. With the Help of a Stick:Place a stick upright into the Earth on a sunny day before noon. Sunlight must fall on that place for whole day without any obstacle. Taking shadow of the stick as radius and stick as centre draw/mark a circle. Suppose this circle meets the shadow at point A Shadow will decrease till noon and start increasing in afternoon. Again the shadow will touch the circle oat another point mark it as B. Centre of the circle and these two points make an angle. By-section of this angle into half shall points toward north.Orientation of Local Map in the Field:The correct use and the method of obtaining or gaining maximum information from a map depend upon the coordination of map with field and actual places situated on Earth. We should be efficient in finding directions so that we would be able to find North direction while moving in real world. Second step is to equate the north shown on the map and actual North of the Earth. This activity shall help us in understanding the information correctly, shown in local map.Third stage is to select that important feature in the local map which we can locate originally also. Such features may be a bridge, a road, railway line, canal, any factory, high power line, a ridge etc. We can easily locate our location if we find more than one features on a local map and in original as well we can draw an angular direction from the original feature on the map. Use of scale can make us aware of original distance also.Representing Earth or its any part on paper is known as a map. Symbols are important part of any map. Various natural and human characteristics that are found on land or relief are shown by some identical set of symbols on a map. Such symbols are known as traditional or cultural symbols.Knowledge of these symbols is an identity of a good map curator because reading and understanding the information provided in map is an art. History has also proved that those countries achieved which expertise in making and using the maps and kept themselves well informed about the forces, relief and resources of other nations, got success also.Methods of Showing Relief on Maps: Surface of our Earth is not leveled Mountains, Plateaus and Plains are situated on it and these three important parts are also not similar. Collectively these low and high regions of earth are known as relief. Maps which represent these different aspects of land surface are known as relief maps.To represent/show the relief on maps various methods have been used e.g. Hachures, Hill shading, Relief colours Bench Mark, Spot height and Contour Lines. Among all these contour lines are used mostly.Contour Lines in Maps: Contour lines are the imaginary lines which are used to connect the areas situated at the similar height from the sea level. This is the best method of understand the details of Relief and variation between slopes of particular region.In Ancient times survey method was used to measure the height and collect information about different places. On the basis of collected data and information. Relief maps were prepared. These days, information is collected about every region with the help of aeroplanes and satellites by using Aerial photography and remote sensing techniques. With the help of this information Relief Maps are prepared by using Photogrammetry which is an advance technology.Commonly contour lines are drawn according to the relief at the gap of 20, 50 or 100 meters. The gap depends on the slope of that region. Low slope is represented by more gaps and for steep gradient gap between lines is reduced.Characteristics of Contour Lines: (1) Height of all the regions is same at one contour line.(2) Shape of contour lines depends on the height and slope of particular region.(3) They extend from one end to another circular shape. They never start or end abruptly.(4) Contour lines drawn at small gaps show steep slope and lines drawn at large gap represent slow slope.(5) Commonly contour Lines do not intersect except in the case of cliff or waterfall.Drawing-Contour Lines: Enjoining places with same height by drawing contour lines on a given map is called drawing a contour map or interpothen of contours.While drawing contours, following points are to be kept in mind: (1) Meaningful contours maps may be drawn if height of maximum places is provided in a map.(2) Note the highest and lowest point on the map.(3) Note the difference between the highest and lowest point because on the basis of this we have to decide the range of contours lines.(4) The interval of contour lines should be at some whole number such as 10, 20, 30, 50 or 100 meters.(5) Value of contour lines are specified keeping in mind range and interval(6) List of all contour with lead height be drawn and then the value in ascending order be drawn, reaching to the contour with maximum height.(7) To find out exact position of contour between two heights, connect two heights with a line and divide it into two equal parts.Drawing of a Cross Section or Profile from Contours:Vertical front view of a relief feature is called a cross section profile from contours. This is same as an apple is cut in two with the help of a knife and its both parts from cut line shall be taken as cross section profile.Drawing of cross section is necessary to understand the landforms shown on map. It helps in identifying height, depth and slope in a cross section.Following methods are used to prepare a cross section: (a) Right Angle Method:This is a simple method. As shown in example, a right angled line is to be drawn which passes through all the contours. This A-B line intersects al the contours at points A,C,E,G,I,J,H,F,D&B respectively. Draw another line A-B parallel to A -B at some distance. Draw two right angled lines enjoining A -B with A-B.Extend these A B and A- B lines more than lowest rated contour extents as shown in the figure highest valued contour here in the given figure is of 500 meters and shown between I & J points but still height between these two points may be lower than 500 meters but certainly more than 400 meters.Now draw perpendiculars from A,C,E,G,I,J,H,F,D & B down wards N,O,P,Q,R,S,T,U,W respectively. Enjoin these points through free hand curves.Point to be noted here is that horizontal scale in such a cross section is maintained while vertical scale is extended 5 times to 10 times so that relief may be represented in clear way.The cross section shown above in showing a hill in North-south direction while we may prepare such cross section from east-west.Identification of Simple Relief Features from a Contour Map: With the help of contours we can identify almost every type of land form found on our mother earth.Detail about some of the important land forms is given below: 1. Slope:An angle formed horizontally with plane relief is called slope. Information about slopes is very important for the study of land forms.Commonly we can divide slopes into different types: a. Gentle Slope:When the contours are situated at large distance in a region of a map and variation in height because of distance is less than 1/10 to 6. This type of slope is known as Normal slope.b. Steep Slope:Abrupt change in the height of relief is represented by contours drawn near to each other. It is different from 1/10 and 6.c. Concave Slope:When a lower part of region has normal slope and upper part has steep slope. Contours of lower part have been drawn at large gap and in upper part these are draw close to each other.2. Volcanic Mountain Peak:The contour map of volcanic Mountain to similar to that of conical mountain in the context that contour lines are marked at regular intervals. As the volcanic eruptions create a dent at the top of mountain, called as crater, central contour shows its value less than that of its adjoining contour value. It means that contour value is lesser at interior most point which rises as we go outer and then starts decreasing as we proceed further.3. Lake:Contour map of a water body known as lake or whatever is similar to that of a conical mountain volcanic mountain but value of contours goes on decreasing as we proceed towards central point or interiors.4. Valley: Valley is a low region situated between two mountains formed by the erosion process of Glacier or River.(a) U Shape Valley:In high mountainous regions valleys are formed by the erosion process of Glaciers. The valley is formed by the erosion process of Glaciers. The Valley is wide with steep slopes and they look like Alphabet U.(b) V Shape Valley: V shape valleys are formed in mountaineous regions due to erosion process of rivers. Contour maps of such valleys show increasing value of outer contours and at regular intervals.(c) Gorge:Gorges are formed in high mountains, having hard rocks. Erosion is higher due to vertical flow of rivers which results in the formation of deep and narrow valleys. These valleys have steep sides.5. Waterfall:When a river falls from a very steep height in any mountainous region, the form is called water fall. Cross section or contour map of water falls shows intersecting contours on a map.6. Cliff:In coastal areas, the slope of mountainous region adjoining the sea looks steep due to erosional process of waves. Contour maps of cliff region also intersect and hence these maps show intersecting contour lines. The field of geography relies on many different types of maps in order to study the Earth's features. Some maps are so common that a child would recognize them while others are used only by professionals in specialized fields. The most common types of maps are political, physical, topographic, climate, economic, and thematic.Simply defined, maps are pictures of the Earth's surface. General reference maps document landforms, national boundaries, bodies of water, city locations, and so on.Thematic maps display specific data, such as the average rainfall distribution for an area or the distribution of a certain disease throughout a county. A political map does not show topographic features like mountains. It focuses solely on the state and national boundaries of a place. These maps also include the locations of cities large and small, depending on the detail of the maps. A typical example of a political map would be one showing the 50 U.S. states and their borders along with the United States' international borders. A physical map documents the landscape features of a place. These types of maps generally show mountains, rivers, and lakes. Bodies of water are commonly shown in blue. Mountains and elevation changes are sometimes shown with different colors and shades to show elevation. On physical maps, greens usually indicate lower elevations while browns usually indicate higher elevations. This map of Hawaii is a physical map. Low-elevation coastal regions are shown in dark green, while higher elevations transition from orange to dark brown. Rivers are shown in blue. World Map 3D Render Topographic Map.FrankRamspot/Getty Images A topographic map is similar to a physical map in that it shows different physical landscape features. Unlike physical maps, though, this type of map uses contour lines instead of colors to show changes in the landscape. Contour lines on topographic maps are normally spaced at regular intervals to show elevation changes (e.g. each line represents a 100-foot elevation change). When lines are close together, it means the terrain is steep. A climate map shows information about the climate of an area. These maps can show things like the specific climatic zones of an area based on the temperature, the amount of snow an area receives, or the average number of cloudy days. These maps normally use colors to show different climatic areas. Thisclimate map for Australiauses colors to show differences between the temperate area of Victoria and the desert region in the center of the continent. Vegetation zones of the world, lithograph, published in 1897.ZU_09/Getty Images An economic or resource map shows the specific types of economic activity or natural resources present in an area through the use of different symbols or colors depending on what is being depicted. This economic activity map for Brazil, for example, uses colors to show different agricultural products of given areas, letters for natural resources, and symbols for different industries. A road map is one of the most widely used map types. These maps show major and minor highways and roads (depending on the degree of detail), as well as airports, cities, and points of interest such as parks, campgrounds, and monuments. Major highways on a roadmap are generally shown with thick, red lines, while minor roads are lighter in color and drawn with narrower lines. A road map of California, for example, would depict Interstate highways with a wide red or yellow line, while state highways would be shown in a narrower line in the same color. Depending on the level of detail, the map may also show county roads, major city arteries, and rural routes. These would be depicted in shades of gray or white. A thematic map focuses on a particular theme or special topic. These maps differ from the six aforementioned general reference maps because they do not just show features like rivers, cities, political subdivisions, elevation, and highways. If these items appear on a thematic map, they are background information used as reference points to enhance the map's theme. This Canadian map, for example, shows changes in population between 2011 and 2016 and is a good example of a thematic map. The city of Vancouver is broken down into regions based on the Canadian Census. Changes in the population are represented by colors ranging from green (growth) to red (loss) based on the degree of change.

What are the different types of maps what do they show. Different types of maps of the world. What are the different types of maps explain them. What are the different types of maps explain a physical map. What is a map what are the different types of maps explain. Different kinds of maps. What are the different types of maps explain with examples. What different types of maps are there. What are the types of maps and explain. What are known as cultural maps explain the different types of cultural maps. Different types of maps and what they are used for.