* Geography started since beginning of humanity (textbooks say since ancient Greece)
* Geography: knowing where we are, characteristics of world, knowledge of who/what lies beyond our world
* Chipewyan people (hudsons bay) map drawn in 1810 by Cot Aw Ney Yaz Zah Churchull river
* Old maps show things of importance only, no correct direction or distance
* Uwalurait: tongue shaped directional snowdrifts
* Inuit woman Iligliuk, early 19th century cartographer
* Polynesian star navigation (fixed position)
* Geography: first coined by Eratosthenes (273-193 BC)
* Geology: deals with earth’s physical structure
* Geophagy: practice of eating earth, eating minerals like chalk or clay (primates)
* Geomancy: divination by means of figures or lines or geographic features
* Geodesy: mathematics that deal with size and shape of earth
* Earliest map of the world: Babylonian world map of Mesopotamian world
  + Circles = cities, parallel lines = rivers
  + Largest rectangle is Babylon
* Maps reflect culture and subjectivity, fundamental tools helping humans make sense of universe
* Land of Punt (Egypt): bottom of red sea, Yemen-Ethiopia
* Ancient greeks:
  + Topographic description
  + Mathematical observation
* Greek geographer Strabo
* Environmental determinism: how environmental features (climate) directly affect human behavior and society
* Climate zones by ancient greeks
* Antikythera mechanism 80 BC
* Greeks: earth is a sphere
* Eratosthenes: calculated circumference of world at 40,000 km, produced earliest maps
* Ptolemy: estimate latitude and longitude to calculate positions of places on sphere
* Earth round? Ships disappeared on horizon
* Syene (modern aswan) and Alexandria used to calculate circumference
* Latitude: length of day
* Longtitude: travel distance

Ancient Greece – Columbus

* Ptolemy’s geography: longitude and latitude
* Ptolemy’s Atlas:
  + Indian ocean = lake (not explored beyond that)
  + List of coordinates, later they were mapped
  + Ex: France
  + Rediscovered in Constantinople
* Renaissance: copy Ptolemy Atlas and calculations used by Columbus
* Peutinger Map (Late roman period): covers india, where greeks and romans sourced pepper
* Dark Ages: knowledge lost after fall of rome, replaced by mappa mundi or T-O maps, less accurate
* T-O map:
  + based on its shape, show compass orientation
  + Mappae mundi = maps of the world
  + Visual narrative of Christian history
  + Jerusalem was the center usually
  + no geographical facts
  + The Hereford man: Europe as T-O map
* Portolano maps:
  + More pracgical maps
  + 1300’s, used for navigation
  + Radiating lines from a point corresponding to a wind direction
* Arab world:
  + Strong geographic tradition
  + Math, astronomy, knowledge of ancient greeks
  + Al-Idrisi
  + Book of Curiosities
  + Ibn Batuta 12th century: visits china and Africa, travelled furthest around world
* Al-Idrisi world map:
  + Ceuta Morocco
  + Made world map for Roger 2 of Sicity: 9th century
  + Follow Ptolemy + arabs + norman
  + Palermo: royal palace
  + Wall of Gog & Magog (not wall of china)
  + Invention of compass, geomancy
  + 2nd century BC to 1500s AD
  + Most advanced
  + Zhu Siben’s map of china, combine traveller’s guides
  + Travellers: Xuangzang, buddhist monk, china to india and back, cultural diffusion
  + Xuangzang crosses Pamir Mountains to Kashgar, made temple in memorial
* Marco Polo: end of T-O maps
  + Born in 1254, died In 1324 in Venice
  + China travelled round: 1271-1295
  + Rise of European Geography, use Greek ideas
  + The travels: describes places, travel stories, coconut of India, city of Xanadu
  + Nicknamed Milione by China
  + France’s problems: polo not refering to great wall, defense: not built at time, no tea drinking, defense: confused with cloves, does not mention Chinese block printing, defense: printing of paper money
  + Other problems: no food binding, chopsticks, Persian origin words, not clear of places he visited, myths and legends
  + He made Europe aware of China, Columbus took notes on Marco Polo’s book
* Christopher Columbus
  + Columbus used polo’s knowledge to calculate china’s distance from Europe
  + Columbus 4 voyages: 2nd lands at St Croix, US Virgin Islands
  + Columbus visits Iceland in 1477
* Martin Behaim
  + Atlas of 1492: flat surfaces that form a globe when folded, no hint of pacific ocean
  + Undersestimted Ptolemy’s calculations
  + Instead of 4,000km, it was actually 14,000km

Christopher Columbus – Now

* Rhubarb: black shredded root, medicine
* Other early explorers: Prince Henry the Navigator, Vasca da Gama, john Cabot to Canada
* Prince Henry: Portugal becomes leader of exploration, help Vasco reach India and Magellan
  + Born in Porto Portugal
* John Cabot: Venice
* Mercator’s Projection: 14th century
  + See whole world
  + Plot compass bearings
  + Distorts areas
  + Antwerp city
* Enlightment: 18th century
  + Kant: divide phenomena into their coordinates in time and space (chronology and chorology)
* Baron Alexander von Humboldt:
  + Wealthy explorer of S. America
  + Book: The Cosmos
  + Comparative framework: ecological framework
* Charles Darwin: biologist (On the Origin of Species book, 1859)
  + Influenced geography
  + How things were related (region, ecosystem)
  + Predict how species evolve
* Environmental Determinism:
  + The environment always dictated what happened
  + Human societies also evolved and ranked
  + Fallacy: human actions determined by consequences of nature
  + Logically flawed: racist ideology
* Paul Vidale de La Blanche (1845-1918)
  + Regional approach
* Carl Ortwin Sauer: regional approach
  + Over time, people and nature adapt to each other, like a snail and its shell
  + Too descriptive, no longer cutting edge
* Fred K. Schaefer: New Geography 1950s
  + Quantitative evolution
  + Locational Analysis in Human Geography
    - More scientific
    - General gravity model
    - Christaller shopping behavior (examine settlement patterns)
    - Threshold (minimum population)
    - Range (max distance travelled)
    - Hierarchy (level of retail activity or goods)
  + GIS = Geographic Information Systems
  + Spatial Science
  + Postmodernism: reject science-based approach, universalism (favor unique and local)
  + Actor-Network Theory: heterogeneous things, humans and non-humans
  + Nonrepresentational Theory: precognition, affect and emotions (music dance)
* No absolute truth on evolution of geography. Ups and downs
  + One paradigm at a time
  + Revolution

Fundamental Concepts of Georgraphy: 1-5

* 9 concepts
* • 1. Location • 2. Distance • 3. Space • 4. Accessibility • 5. Spatial interaction – especially “diffusion” • 6. Scale • 7. Region • 8. Landscape • 9. Place
* Location:
  + Absolute Location
    - Latitude/horizontal: Equator (easy to fix)
    - Longitude/vertical: Greenwich Meridian (all same length) (much harder)
    - Astrolabe: absolute location
  + Relative location (near the bar)
  + Cognitive location (mental map)
* Distance:
  + Absolute distance (measured in kms)
  + Relative distance (measured in time)
  + Cognitive distance (how far it seems)
* Space:
  + Absolute space (longitude, latitude) mathematical
  + Relative space (changeable) (West)
  + Cognitive space (mental map)
  + Representation of space: ownership creates space
  + Personal space
  + Henri Lefebvre (1901-1991) production of space: special practice, representations of space, representational spaces
* Accessibility:
  + Opportunity of contact
  + Effective accessibility
  + “the opportunity for contact or interaction from a given point or location in relation to other locations”
* Spatial Interactions: movement and flows involving human activity
  + Complementarity (meet needs using products from another place)
  + Transferability (move product)
  + Intervening opportunities (can we sell product)
  + DIFFUSION: the way that things spread through time over space
    - People, ideas, diseases
    - Relocation Diffusion: simple spread of a physical object (spice, etc)
      * Chilli in SA
      * Cinnamon in Sri Lanka
      * Cloves in Moluccas
    - Expansion diffusion: contagious diffusion, spread
    - Hierarchical diffusion: flow of information down an urban hierarchy (city to town to village)
    - Mixed diffusion: gravestone design
* Scale:
  + Map scale: ratio between linear distance on a map and linear distance on the Earth’s surface
    - Large scale map has lots of details (regional maps)
    - Small scale map has less details (usually Atlas)
  + Uses representative fraction
    - ex: 1:16,000,000 covers the whole NA in a powerpoint slide
    - The larger the denominator, the more Earth surface is covered, but with less details
    - Ex: large scale map of 1896 was originally at a scale of 1:2500, but reduced to 15 inches to the mile
  + Triangulation:
    - Used to map smaller areas within Ireland
    - Similar system used to work out the heigh above sea level of each key point
  + the concept that there are various levels of scales of analysis (local, regional, national, global), that they are linked, and that the processes operating at one scale can have significance at other scales.
    - Think global, act local
* Region:
  + Large-sized territory that encompasses many places
  + Share similar attributes in comparison with the attributes of places elsewhere
  + The idea of region is used to distinguish one area from another
  + Regions are distinguished on the basis of specific characteristics
  + Regions minimize the variation of the chosen characteristic within their boundaries and maximize the variation of that characteristic across their boundaries
  + Regions can be defined on the basis of any characteristic or group of characteristics
  + Carl Ortwin Sauer (USA), Pail Vidal de la Blanche (France)
    - Human cultures and their physical regions shape each other like a snail in its shell
  + Basque culture
    - Located south of France
    - Distinctive language
    - Own style of cuisine and folk architecture
    - Own sport (pelote)
  + Region and sub-region
    - Carribean can be a region in terms of climate
    - In terms of language, divided into smaller regions (French, Dutch Caribbean)
* Landscape: comprehensive product of human action (every landscape is a complex repository of society)
  + Ordinary (vernacular): the everyday
  + Symbolic: national identity
  + Picturesque landscapes, Sublime landscapes
* Place: concept with two levels of meaning:
  + Objective location (uniqueness and interdependence with other places)
  + Subjective social and cultural construct somewhere that has personal meaning for individuals or groups
    - Personal construct (we have different takes on place)
    - Can be constructed differently by two or more people
    - Layering up on many people’s memories over time
    - Different cultures’ views of place, not just people’s
    - There can be non-places
  + Place vs space?
    - Place is a space filled with meaning (Yi-Fu Tuan)
  + Placemaking: any activity that enables place to acquire meaning:
    - This can be done deliberately (shopping, malls, restaurants, etc)
    - Intentionally, unintentionally
    - Plaques on buildings and statuses (do they give meaning?)
  + Mobility: place as a focus (locus) of movements
    - Capital, people, goods, ideas
    - Places are constituted by the pattern of flows
  + Wallace Stegner (1973, Wolf Willow)
  + “If it’s not down in any map, true places never are.” – Herman Melville, Moby Dick 1981

