

### Study Guide test on maps and resources

- The 3 fossil fuels are coal oil and natural gas
  - Coal is created from the remain s of plants that made up swamps millions of years ago
- Natural Gas produces the least amount of pollutants of the fossils fuels
- Fossil fuels are nonrenewable because they take millions of years to form
- Any resource that is being used up faster than created will eventually be used up
- Solar energy is inexhaustible meaning it will never run out
- Wind energy is indirectly a form of solar energy because the Earth heats up at different rates this can cause pressure differences which lead to wind
- Wood, Ethanol, and garbage are all examples of Biomass energy
- Geothermal energy comes from the heat inside of Earth
- Nuclear power is created from the fission of atoms and releases heat, which is used to create steam.
- Energy conservation is a way to reduce energy which can include reuse, reduce and recycle
- a map scale is used to show distance on a map. For example if the scale says 1 cm = 30,000 cm of ground on the map it is read 1:30,000
- the prime meridian is 0 degrees longitude. The Equator is 0 degrees latitude
- Latitude measures north and south and runs horizontal (sideways) across a globe
- Longitude measures East and West and runs vertically (up and down) on a globe
- Latitude and longitude lines measured in degrees. The highest latitude is 90 degrees at both poles
- Longitude is measured up to 180 degrees and this longitude line is known as the International Date Line
- The equator splits the world into 2 hemispheres the Northern hemisphere which is north of the equator and south of the equator is known as the southern hemisphere
- The prime meridian separates the eastern and western Hemispheres
- Mercator map projections distort areas near the poles because longitude lines need to flatten out on a flat surface. Example Greenland appears much bigger on a Mercator projection then South America but in reality, it is much smaller then South America.
- Topographic maps are different from other maps because they show Elevation, Slope and Relief

closely spaced contour lines indicate a steep slope. Contour lines that are far apart indicate a very gentle or gradual slope.

- V shaped contour lines pointing uphill represent flowing streams, rivers, creeks or a valley.
- Elevation and slope on a contour map, are represented by a contour line.
- Contour lines that represent hills or mountaintops are closed loops.
- Contour lines, that are closed loops and that have small lines inside them, indicate a depression or a decrease in elevation. These are hachure lines.
- Mercator projections are maps that are square or rectangles and have parallel longitude and parallel latitude lines with distorted land areas near the poles.
- A GPS tracking system needs 4 satellites to accurately determine where a user is.

Diagrams are: Reading a topographic map, Reading a graph on energy, reading latitude and longitude