

KEY

Midterm Review - Fill Ins by Topic

Observations are made using the Senses.

Inferences are conclusions based on your observations.

Grouping Objects by observed characteristics is Classification

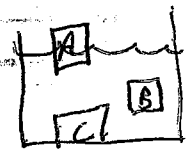
Measurement is Comparison to a known standard.

Mass is the amount of Matter and is measured in grams.

Volume is the SPACE occupied by an object, measured in ML or cm³.

The formula for Density is Density = $\frac{\text{Mass}}{\text{Volume}}$ (g/cm^3) $V = lwh$

More dense objects sink in water, less dense objects float.



As Pressure increase Density increases

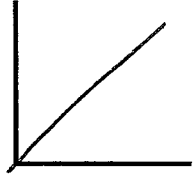
As Temperature increases Density decreases except for water

Relationships

Direct Relationship

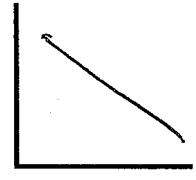
As X increases Y Increases

SKETCH



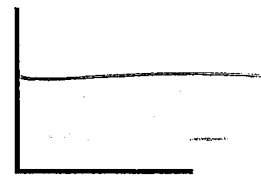
Indirect Relationship

As X increases Y Decreases



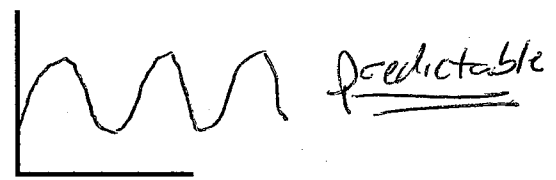
Constant Relationship

As X increases Y stays the same



Cyclic Relationship

As X increases Y repeats a pattern



Examples of cyclic relationships

Tides, Eclipses, Phases of Moon, Seasons, Path of Sun, Sunrise/Sunset

Midterm Review - Fill Ins by Topic

The altitude of Polaris equals the Latitude of the Observer.

Polaris (North Star) is located directly above the North Pole (Earth's Axis).

Latitude is measured in degrees North or South of the Equator.

Longitude is measured in degrees East or West of the Prime Meridian.

15° of Longitude = a one hour time change.

As you go East, time will Increase, As you go West, time will be Less.

West Latitude lines are called parallels.

East Longitude lines are called Meridians.

Later

The Atmosphere is the shell of gases held on by gravity.

The Hydrosphere is water covering 70 % of the surface.

The Lithosphere is the Rocky Shell of the planet. (Crust and rigid Mantle) plastic

The only layer inside the Earth that is completely liquid is the Outer Core.

In this layer the Melting point is Lower than the Interior temperature.

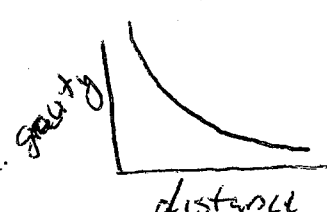
The Asthenosphere (Plastic Mantle) has partial melting and Convection Currents.

The shape of the Earth is an Oblate Spheroid because the Earth rotates.

The Earth is slightly flattened at the poles and bulges at the Equator.

You would weigh more at the poles and less at the Equator.

As distance between objects increases, Gravitational pull will decrease.



Isolines connect points of equal field value.

The interval is the difference in field value between isolines.

- ① Subtract known lines
- ② Count spaces
- ③ Divide.

The closer the isolines, the steeper the gradient.

Contour lines form closed loops or hit the borders of a map.

To Estimate the highest possible elevation, Add the interval, then subtract one.

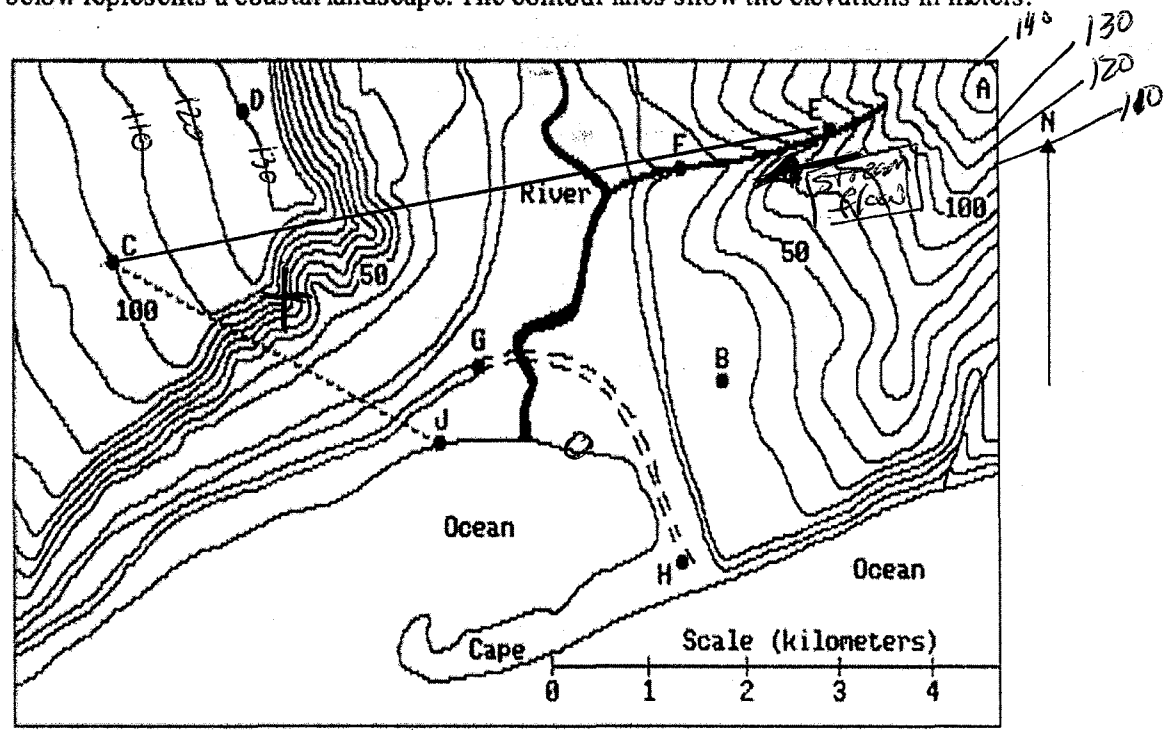
To Estimate the lowest elevation, subtract the interval, then Add one.

Streams will always flow from higher elevation to lower elevation.

Contour lines will bend upstream where crossing a River.

Stream flow is opposite the direction of the bend in the contour line.

The topographic map below represents a coastal landscape. The contour lines show the elevations in meters.



Calculate the interval of the map. $\frac{50}{5} = 10m$

Calculate the gradient between points C and D. $g = \frac{\Delta \text{elevation}}{\text{distance}} = \frac{130m - 100m}{2km} = 15m/km$

What direction is the river flowing on Hill A. The stream flows to the West (E to F)

What is the maximum elevation of Hill A. $\frac{140m}{+10} \quad 150m - 1 = \boxed{149m}$

If you walked from point C to point E you would go Up then Down then Up.

Put an X where the steepest slope is located. (Anywhere along the ridge where the lines are closest together)