

GRADE 9 MAPWORK

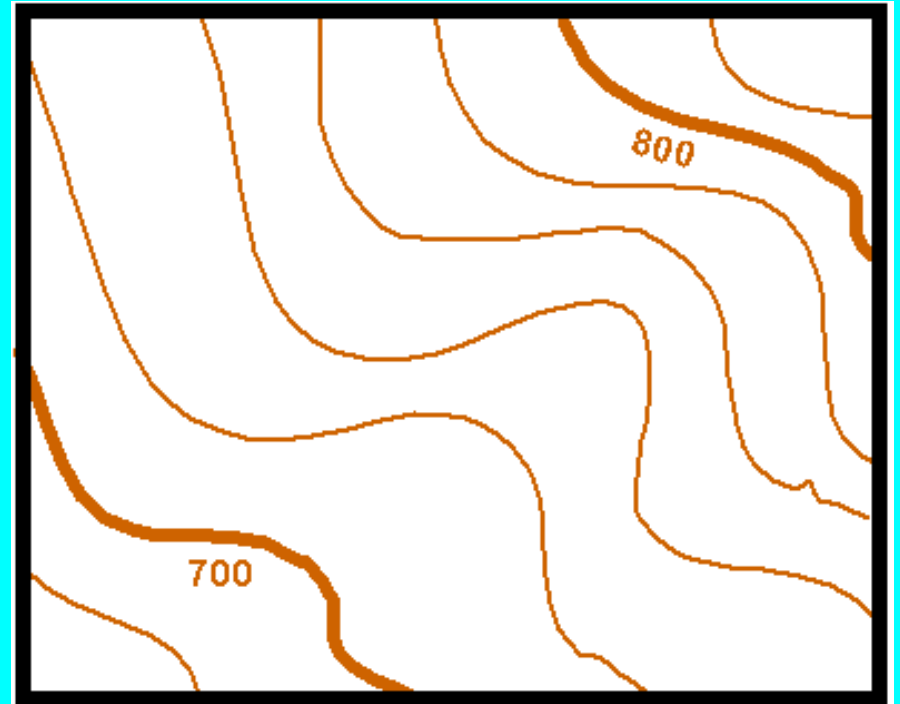
CONTOUR LINES

CONTOUR LINES

- Contour lines connect places of equal altitude
- Contour lines depict various landforms on a map
- By “reading” the contour lines we can determine what the terrain in an area looks like.

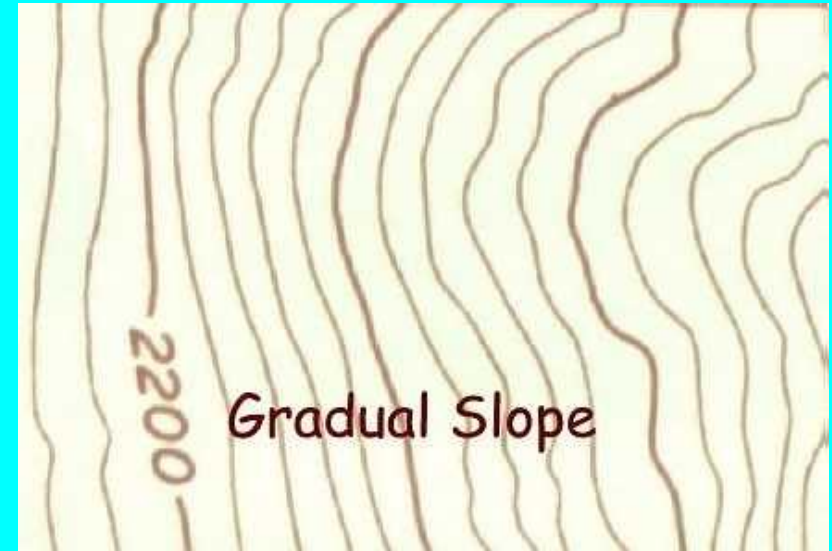
CONTOUR INTERVAL

- Contour interval: The height difference between successive contour lines.
- On 1 : 50 000 Topographic maps the contour interval is 20m.
- Contour interval: 20m



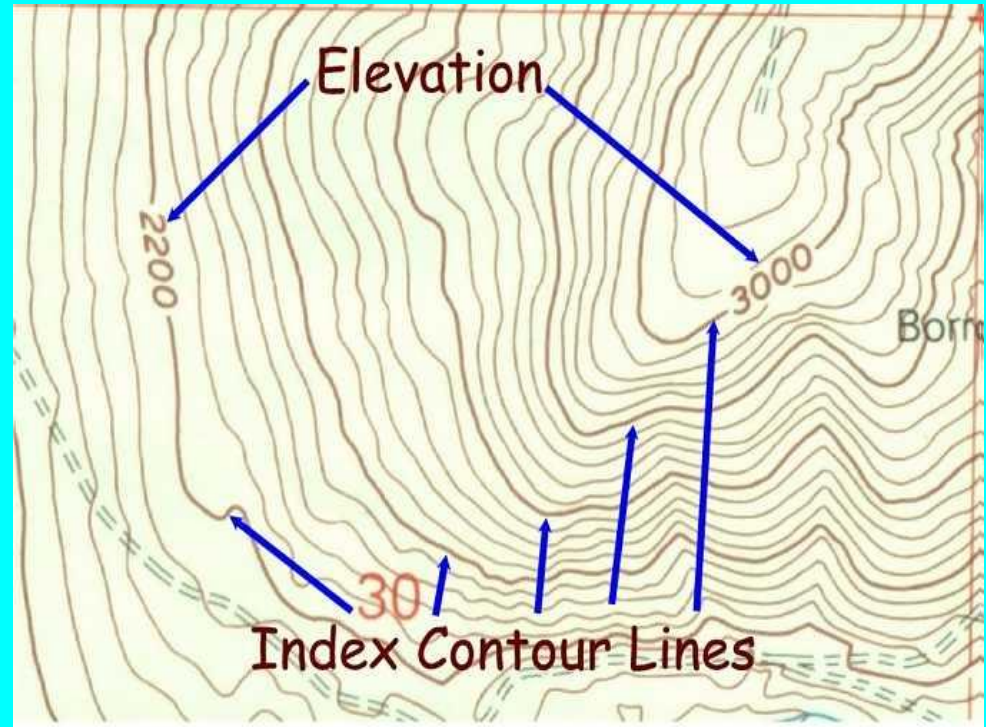
GRADUAL SLOPES

- The further apart the contour lines. The more gradual the slope.



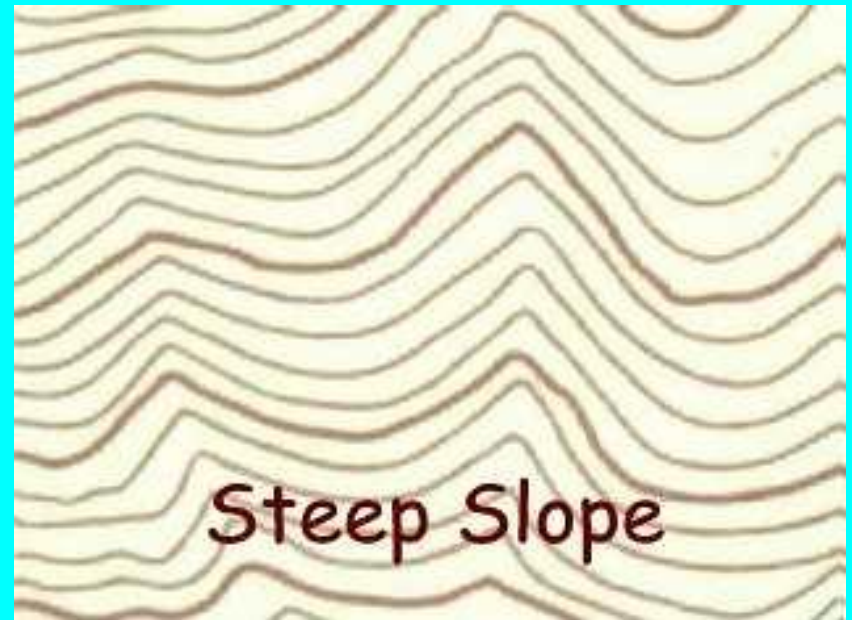
INDEX CONTOURS

- To make it easier to read the terrain, DARK brown index contour lines are drawn on the map.
- These contour lines are always multiples of 100m



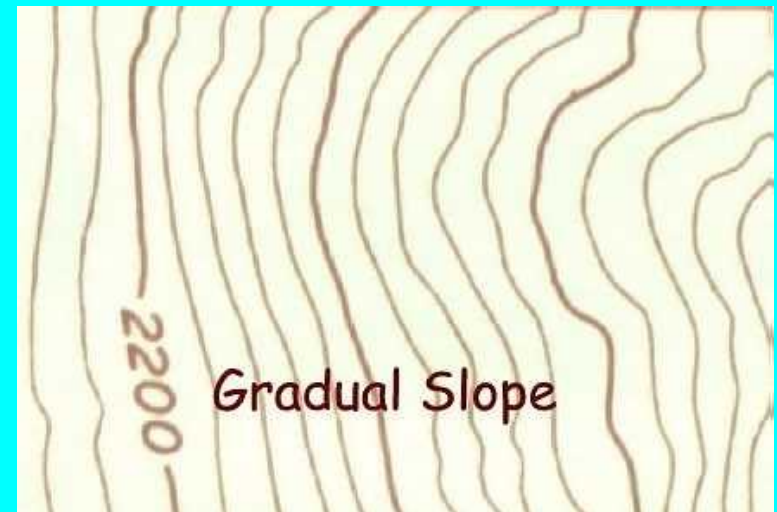
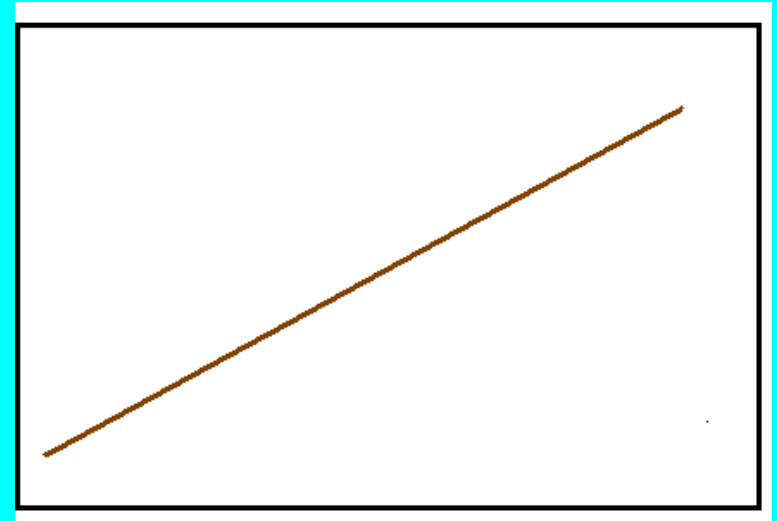
STEEP SLOPES

- The closer the contour lines are together, the steeper the slope



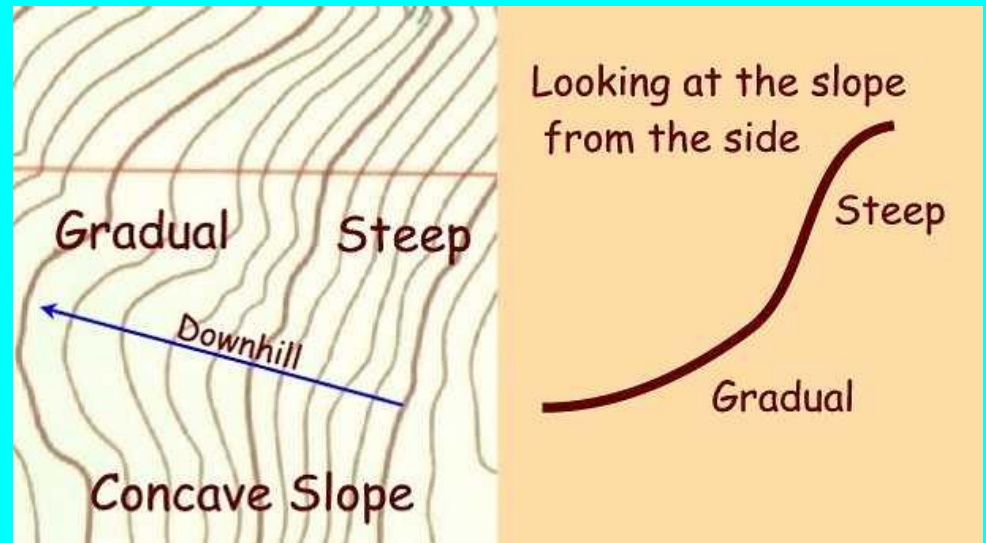
UNIFORM SLOPES

- When the contour lines are evenly spaced, the slope is uniform.
- IE: the gradient of the slope remains the same



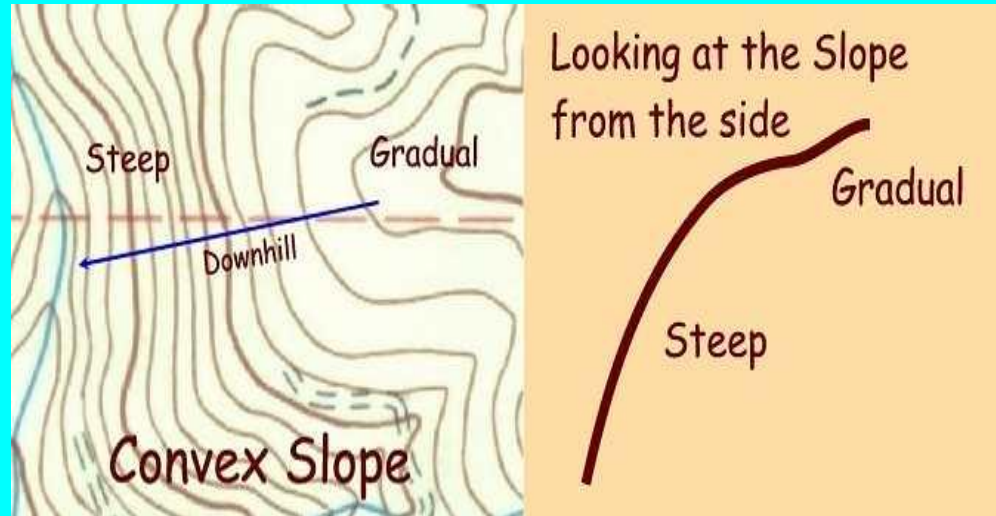
CONCAVE SLOPE

- The slope is gradual at the base but becomes steeper close to the summit.



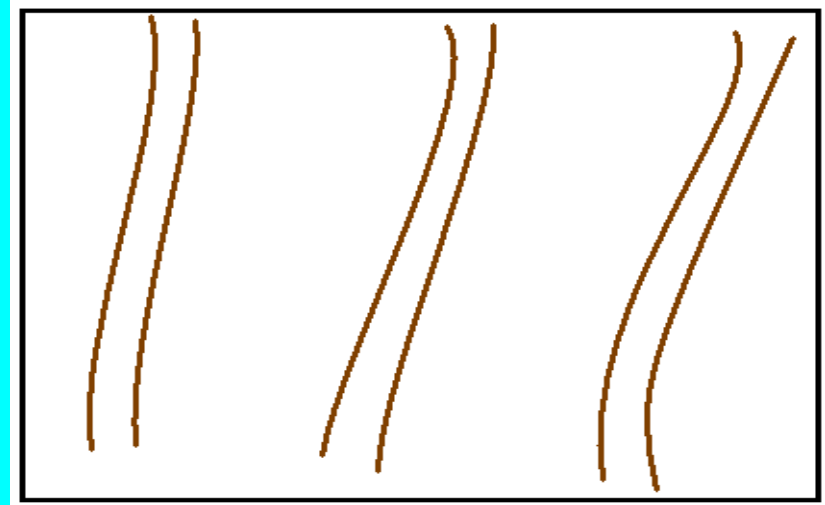
CONVEX SLOPE

- The slope is steep at the base, but becomes progressively more gradual closer to the summit.



TERRACED SLOPE

- A terraced slope resembles “steps”.
- The terraced slope has alternate steep and gradual sections, creating large “steps”
- Terraced slopes may be natural – alternate hard and soft rock layers
- Terraced slopes are sometimes created by farmers in order to create level areas of land to cultivate crops along.

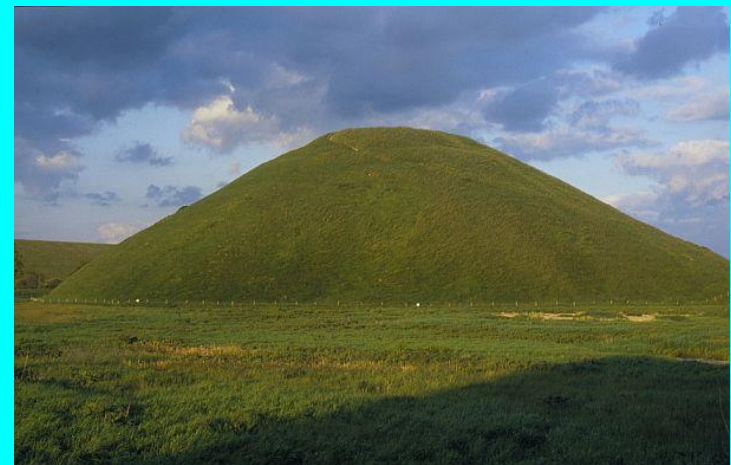
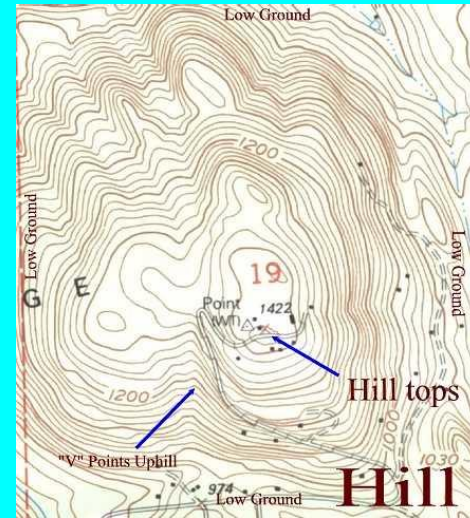


LANDFORMS

- The way in which contour lines are arranged, allows us to identify certain landforms and features in the terrain.
- Using the basic principles of slope, shape and altitude, it is possible to identify a wide range of physical landforms on maps.

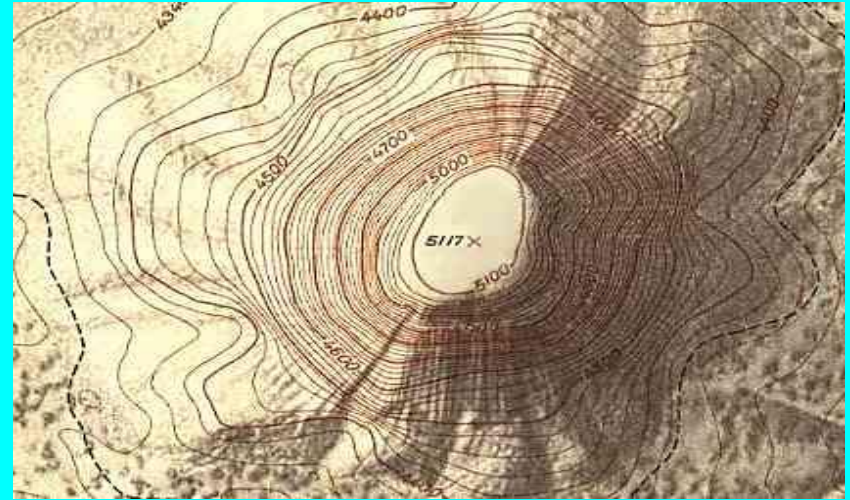
KOPPIE or HILL

- A koppie is a low, free standing hill.
- In it's most basic form, a koppie will be represented by concentric rings of contour lines.



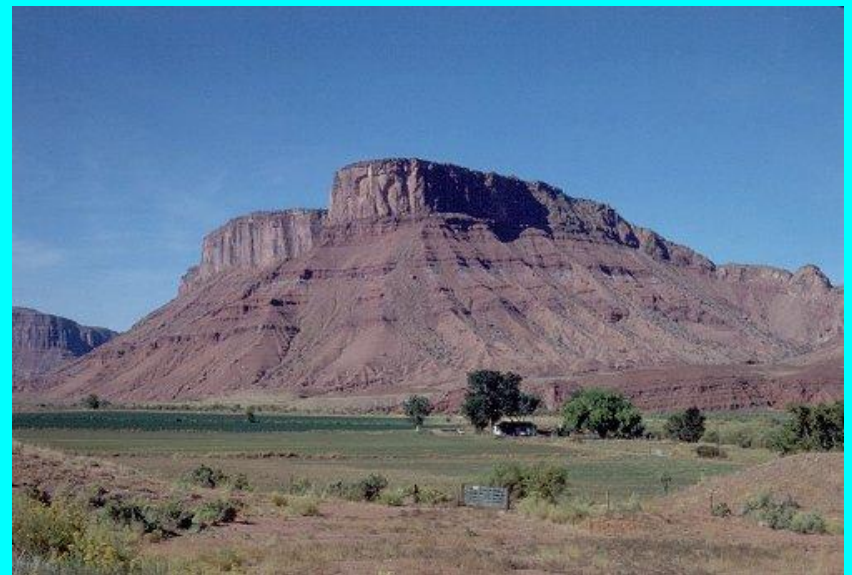
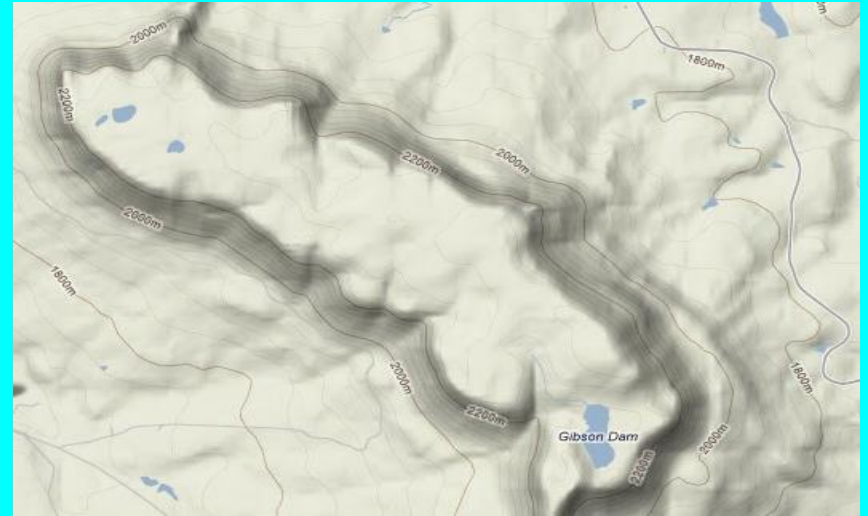
BUTTE

- A BUTTE is a hill that has a very steep section just before the crest, and a relatively flat top.



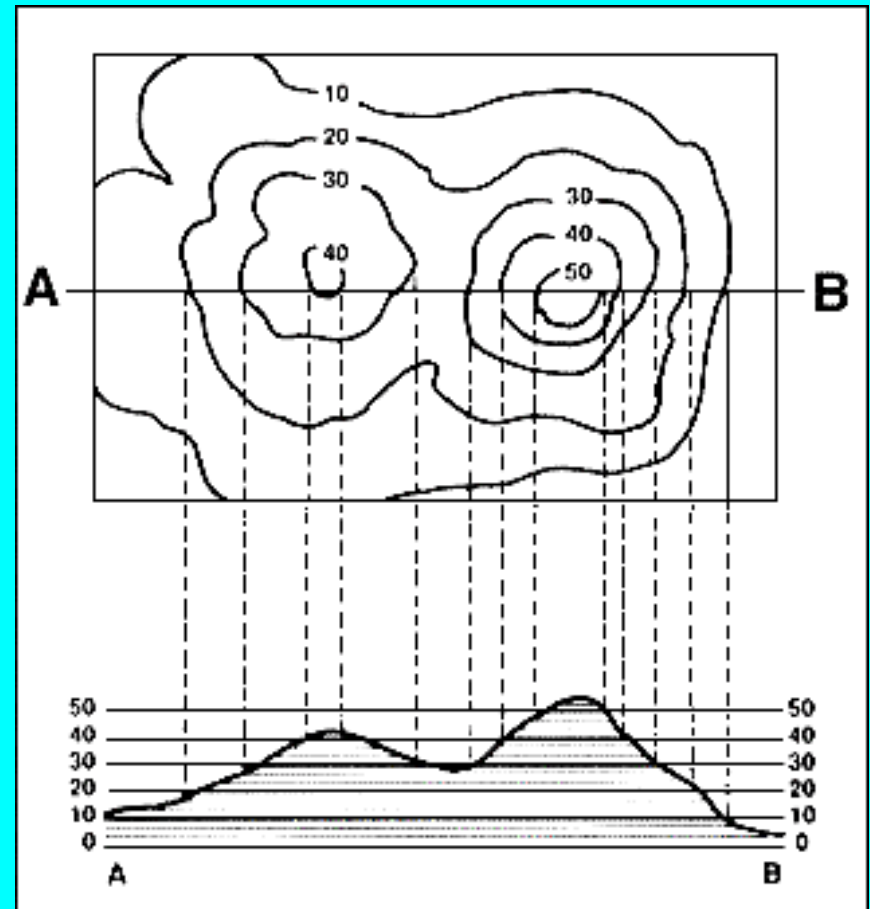
MESA

- A MESA (**tabletop in Spanish**) is an elongated version of the butte.
- It's length is generally greater than it's height.



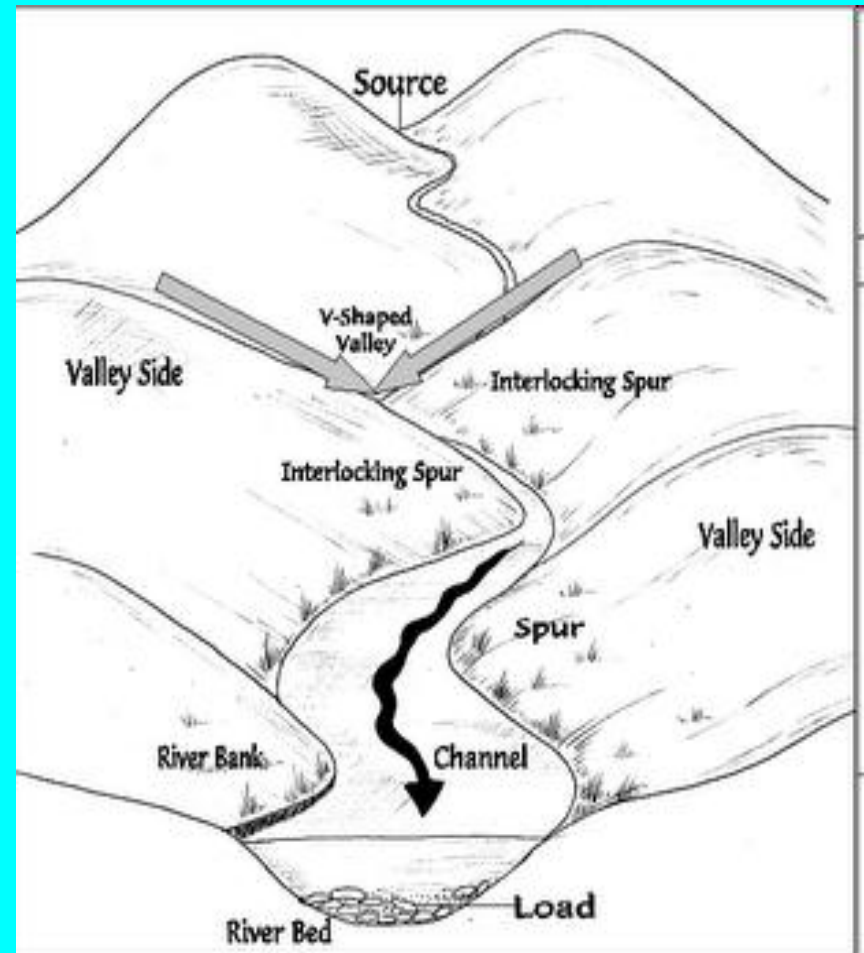
SADDLE

- A low lying area between two peaks.
- Resembles a typical riding saddle, hence the name.



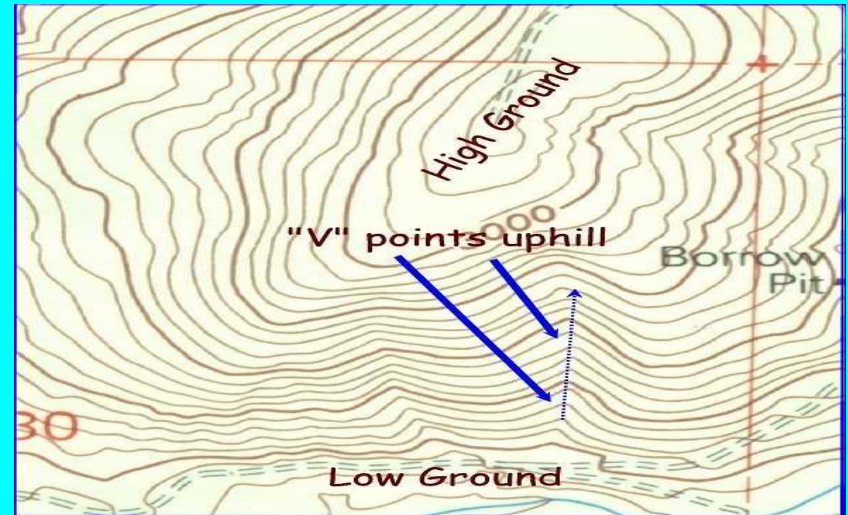
VALLEY AND SPUR

- VALLEY
 - Low lying area carved by flowing water.
 - Usually surrounded by high lying areas known as spurs Or interlocking spurs.



VALLEY

- A valley may be identified in the following manner:
 - The sharp “V-shaped” contours point towards higher ground.
 - A valley usually has some form of river or stream present.



SPUR

- The spur is the higher lying ground adjacent to the valley.
- Spurs are identified as follows:
 - The rounded “U-shaped” contours point towards lower ground.
 - Spurs will not have rivers present.

