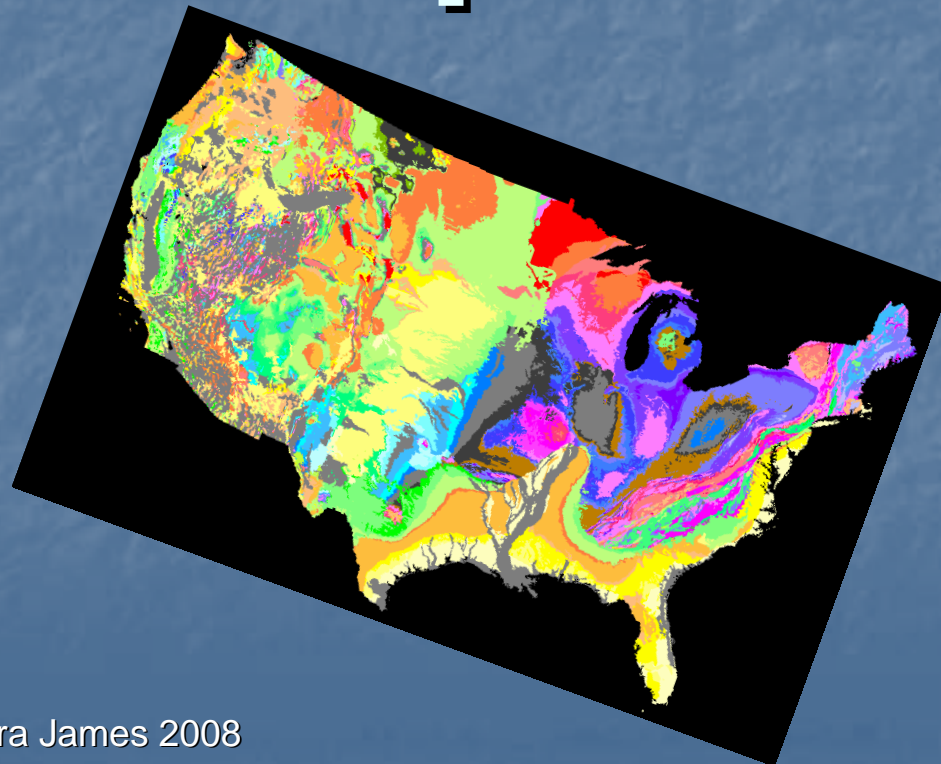
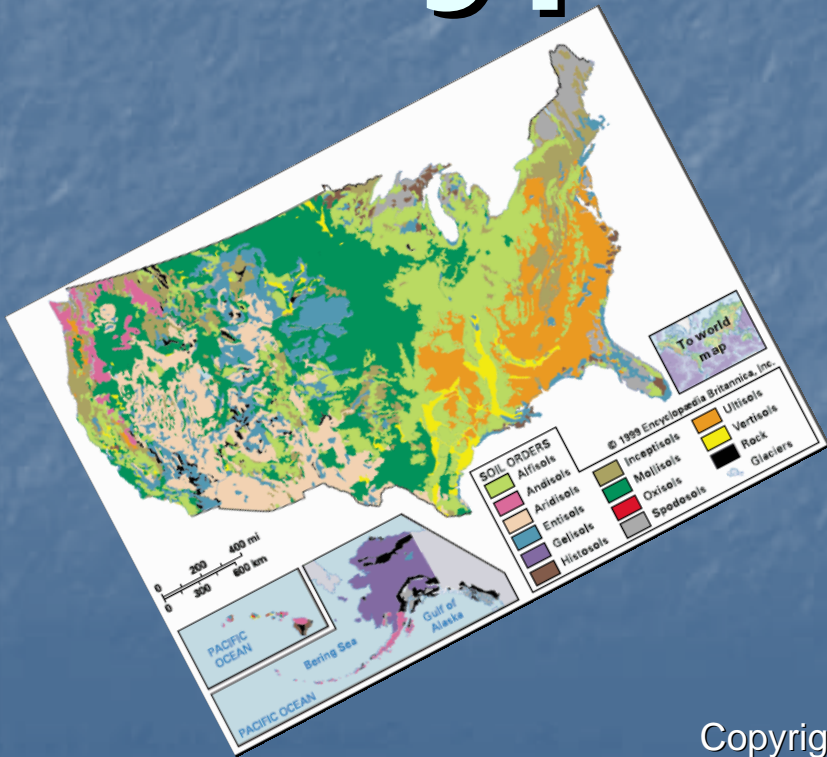


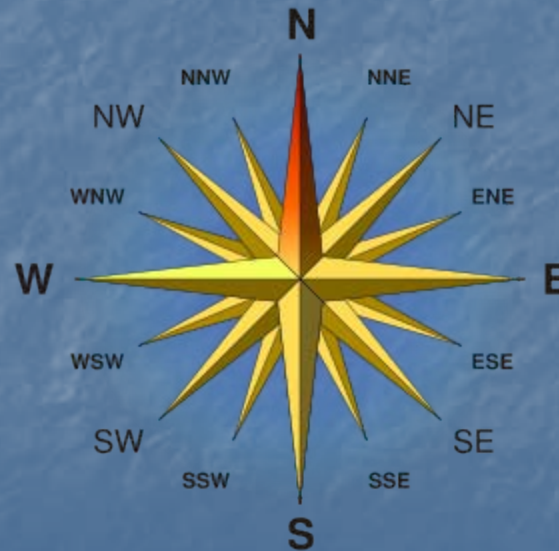


Types of Maps



Components of a Map

- Title
- Compass Rose (North Arrow)
- Map Scale
- Map Legend



LEGEND

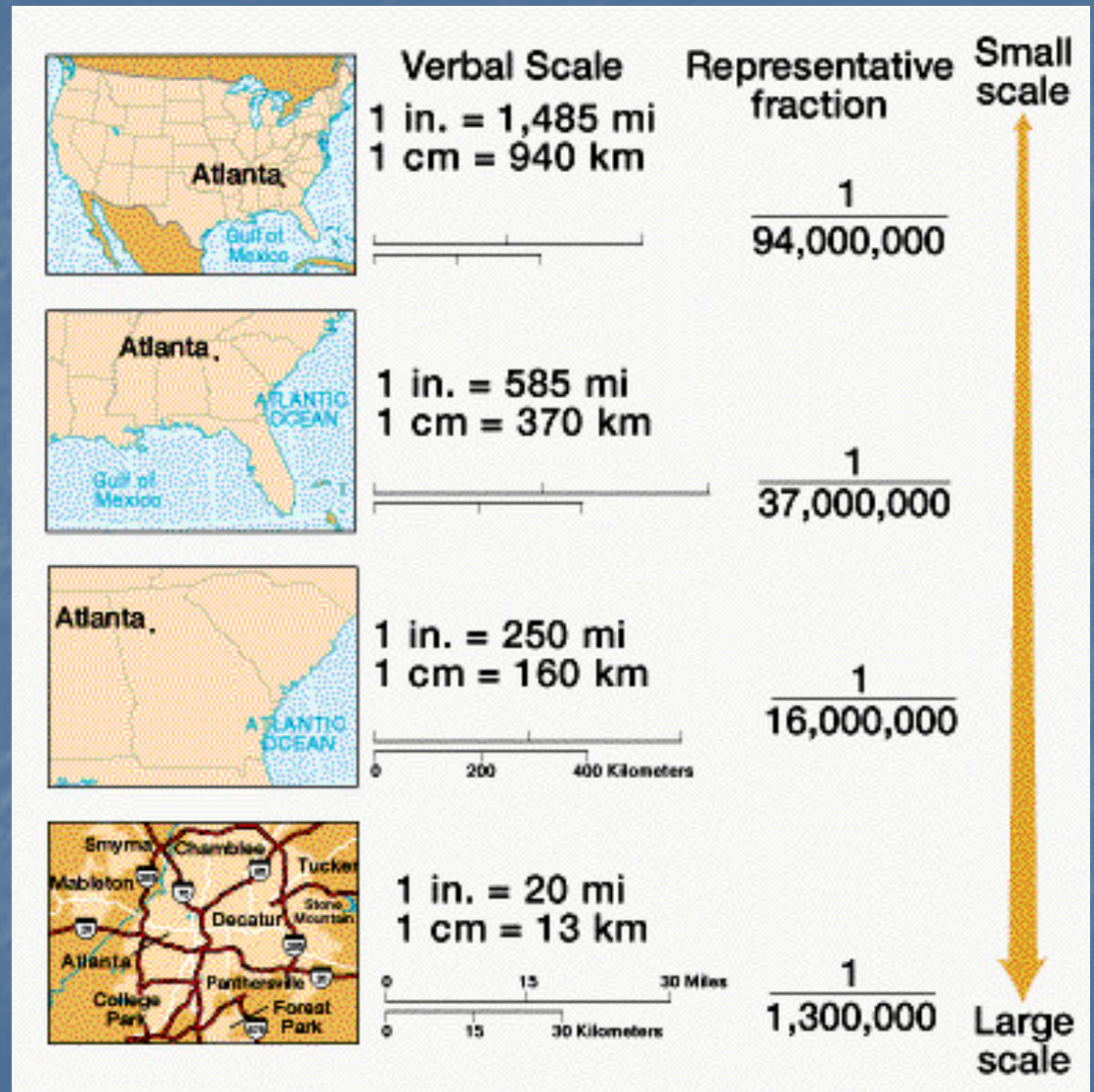
	NATIONAL PRIMARY ROAD		BUILT UP AREA		EMERGENCY HOSPITAL
	NATIONAL SECONDARY ROAD		PUBLIC PARK		CHURCH OF NOTE
	REGIONAL ROAD		WOODED AREA		BUILDING OF SPECIAL INTEREST
	MAIN ROADS/ STREETS		TOURIST OFFICE		3RD LEVEL INST.
	OTHER ROADS/ STREETS		POST OFFICE		GAELIC GROUND
	NARROW / STREET PRIVATE ROADS		PARKING		RUGBY GROUND
	PEDESTRIAN STREETS		GARDA		SOCCER GROUND
	BUS ROUTES		FIRE STATION		CINEMA
	NATIONAL ROAD UNDER CONSTRUCTION		MAINLINE RAIL STATION		SHOPPING COMPLEX
	PUBLIC BUILDING		ONE WAY TRAFFIC SYSTEM		ART GALLERY
	RAIL/ BUS STATION		ANTIQUITY		MUSEUM
	BUILDING OF NOTE		CHURCH		VISITOR CENTRE
	HOSPITAL		BUS ROUTE NUMBER		LIBRARY
	WATER		BUS ROUTE TERMINUS		THEATRE
	CO. BOROUGH BOUNDARY				

Map Legends

Map legends explain what the symbols represent.

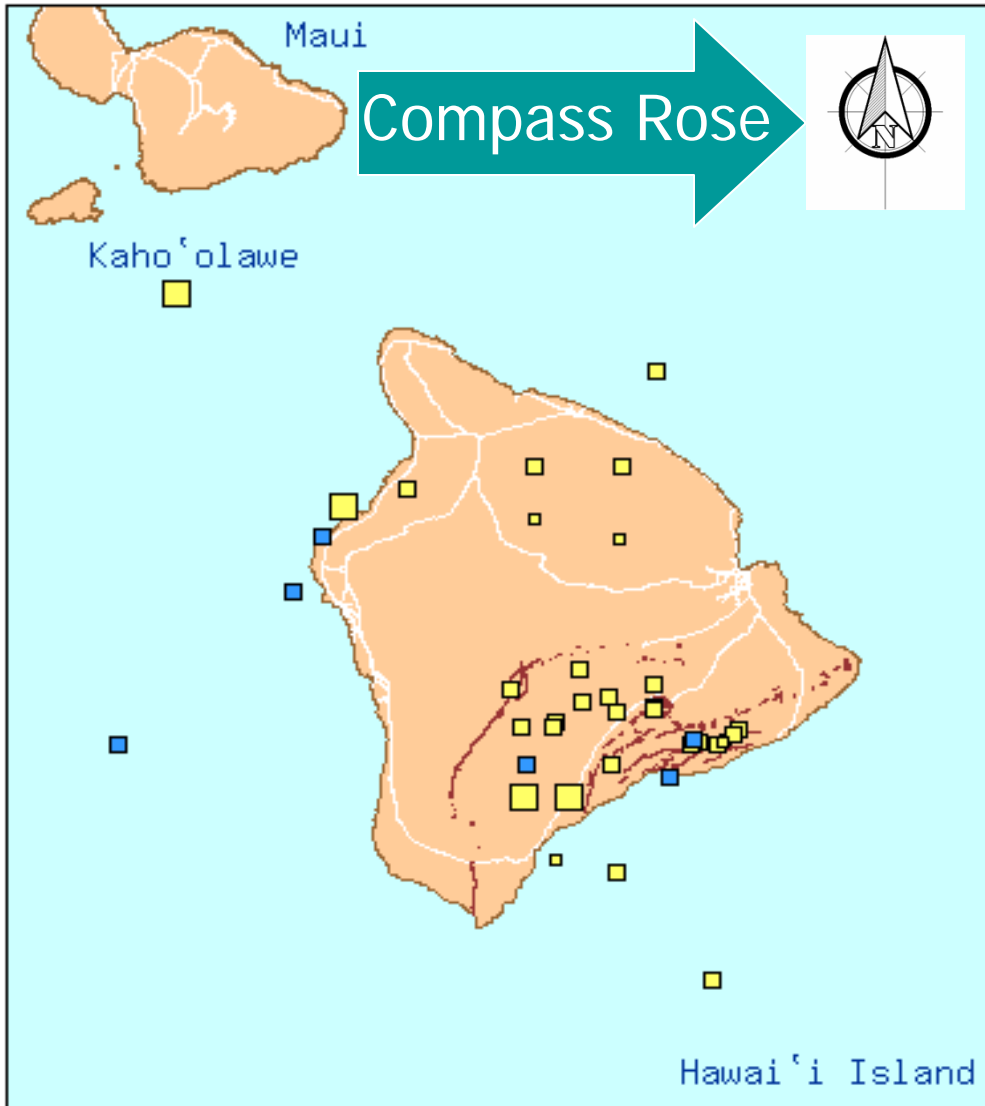
Map Scales

A map scale is the ratio between distances on a map and actual distances on the surface of the Earth.



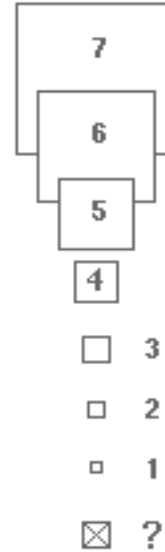
Earthquakes from the Hawaiian Volcano Observatory Network

Title



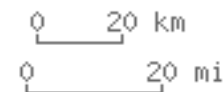
Compass Rose

MAGNITUDE



Legend

- LAST 2 HOURS
- LAST 2 DAYS
- LAST 2 WEEKS



Scale

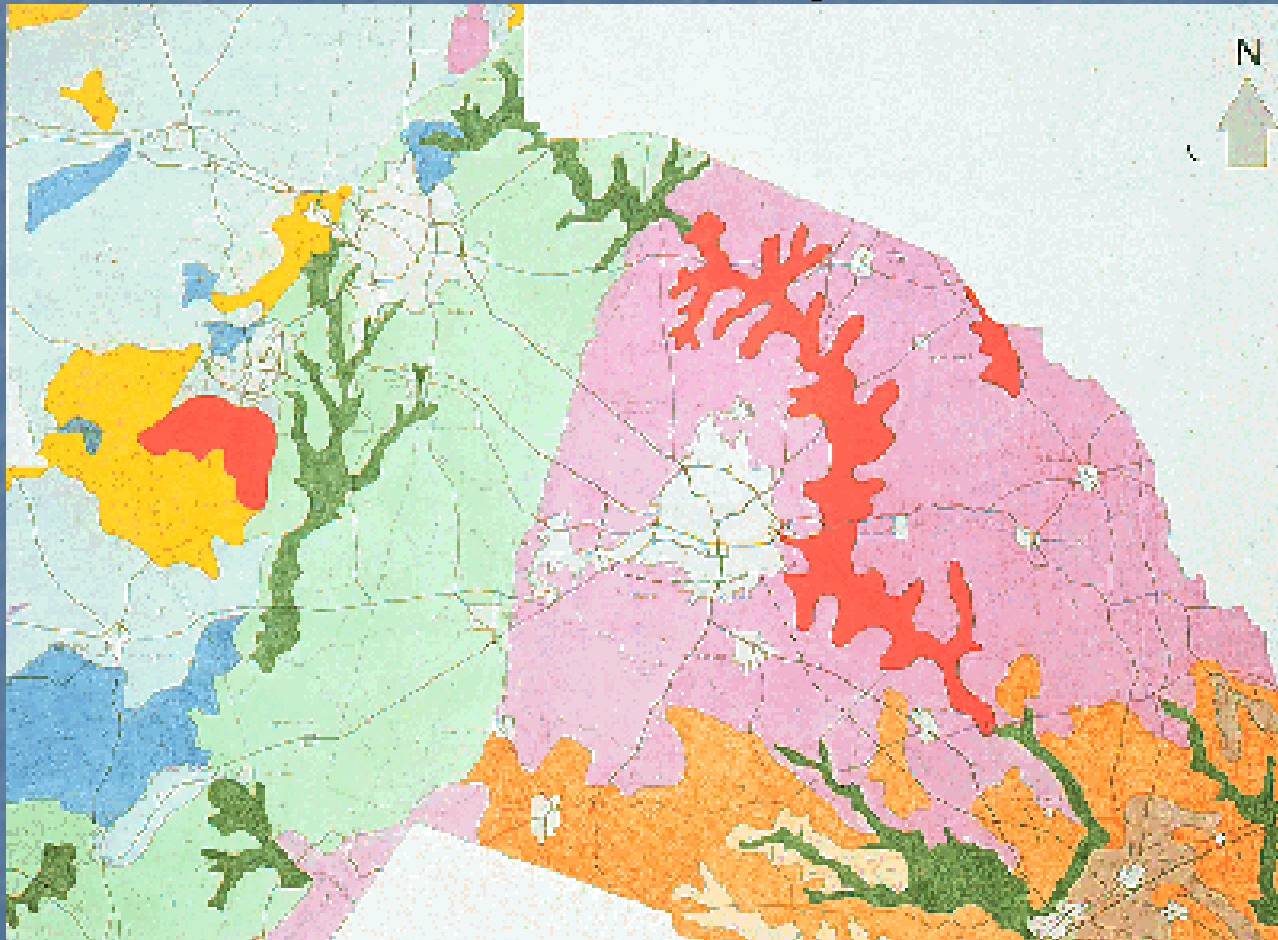
Tue Jul 1 9:00:03 HST 2008

Maps

- Maps are two dimensional models of a three dimensional object, Earth.



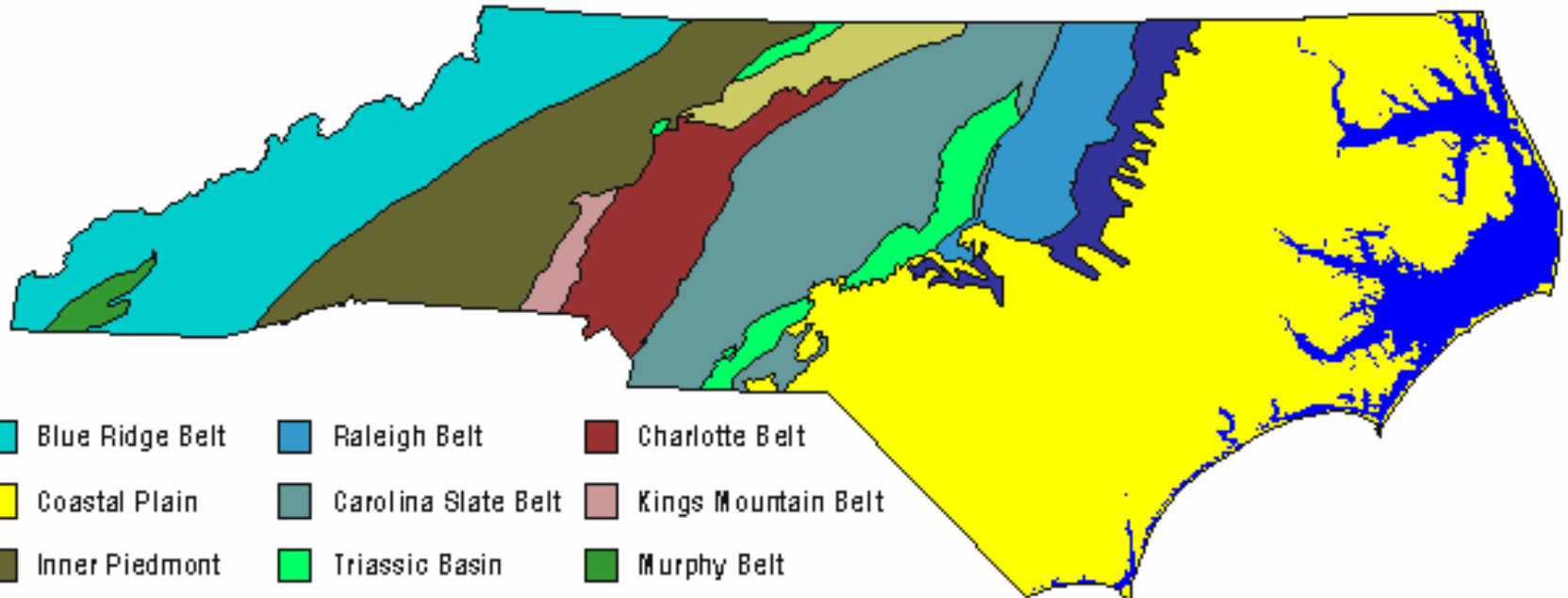
Soil Map



Durham, NC
Copyright Debra James 2008

Geology Map

North Carolina Geology

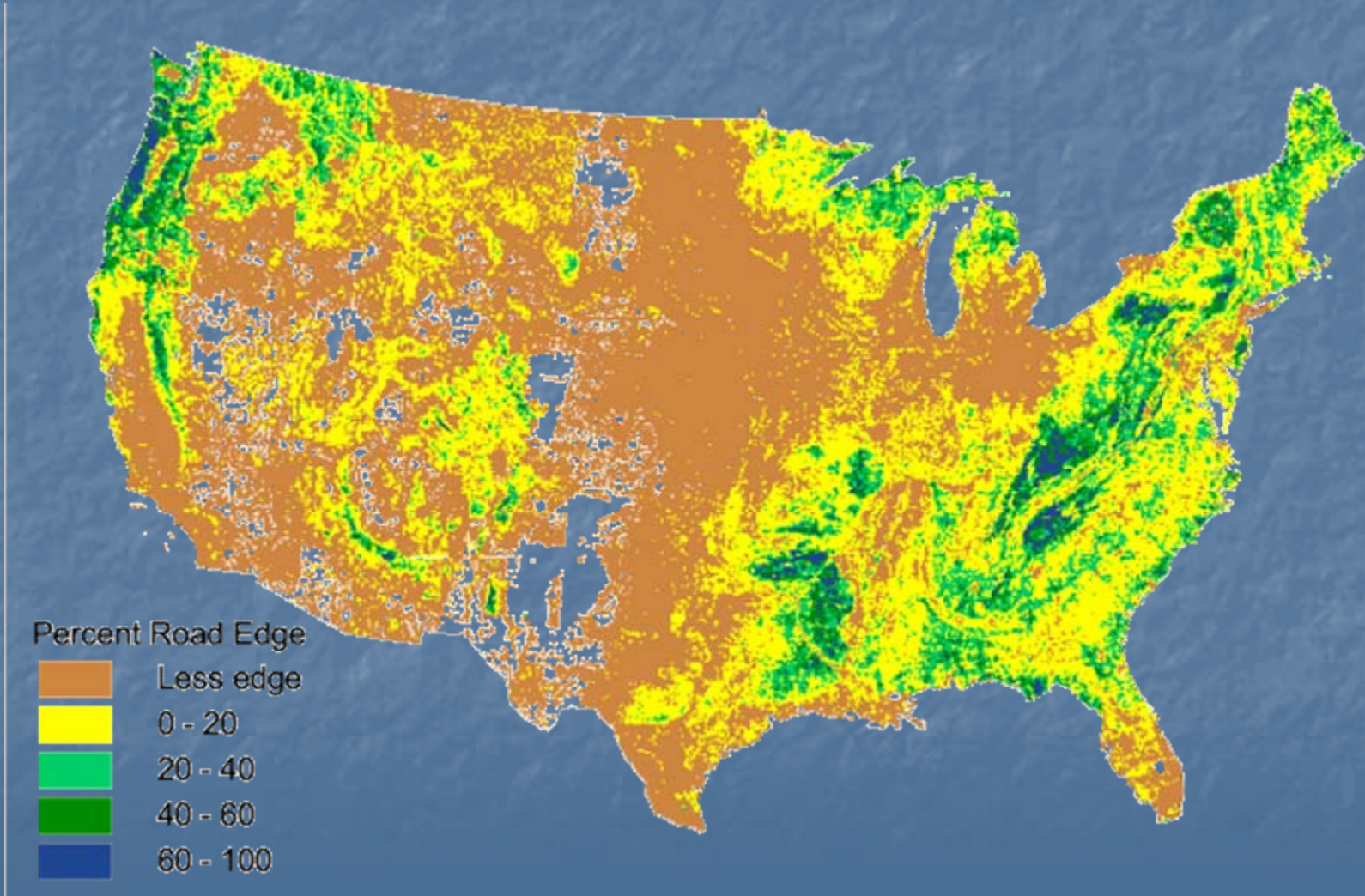


- | | | |
|--------------------|---------------------|---------------------|
| Blue Ridge Belt | Raleigh Belt | Charlotte Belt |
| Coastal Plain | Carolina Slate Belt | Kings Mountain Belt |
| Inner Piedmont | Triassic Basin | Murphy Belt |
| Eastern Slate Belt | Milton Belt | |

Road Map



Land Cover



Topographic Map



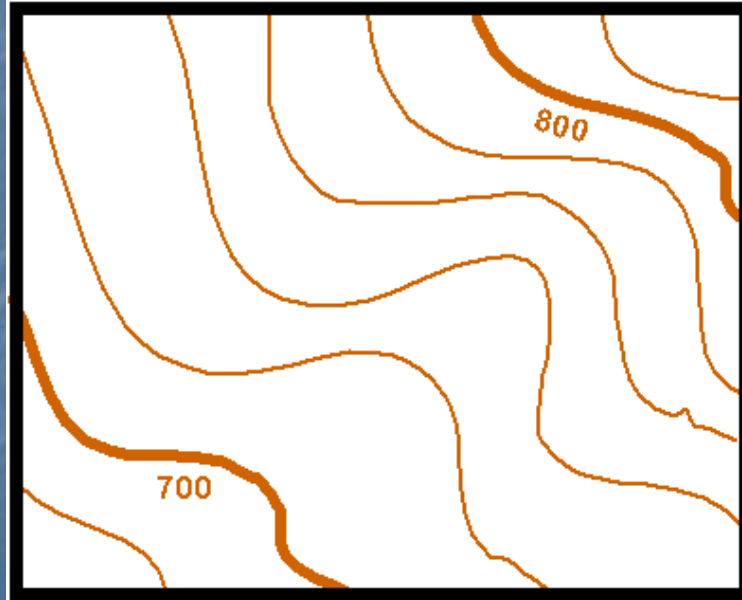
Copyright Debra James 2008

What is a topographic map?

- Topographic maps show the hills, rivers, forests, bridges, and valleys of an area among other features.
- These maps show changes in elevation (height) of Earth's surface.
- Lines, symbols, and colors are used to represent changes in elevation and features on Earth's surface.

Contour Lines

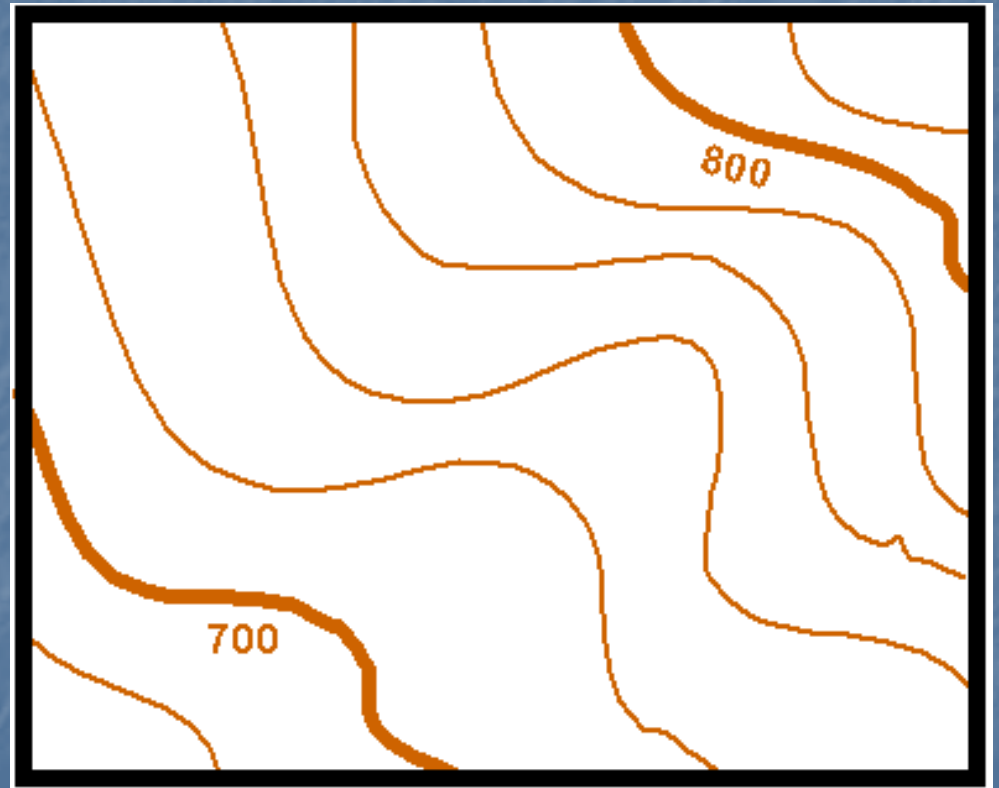
- Elevation on a topographic map is represented by a contour map.
- A contour line connects points of equal elevation.



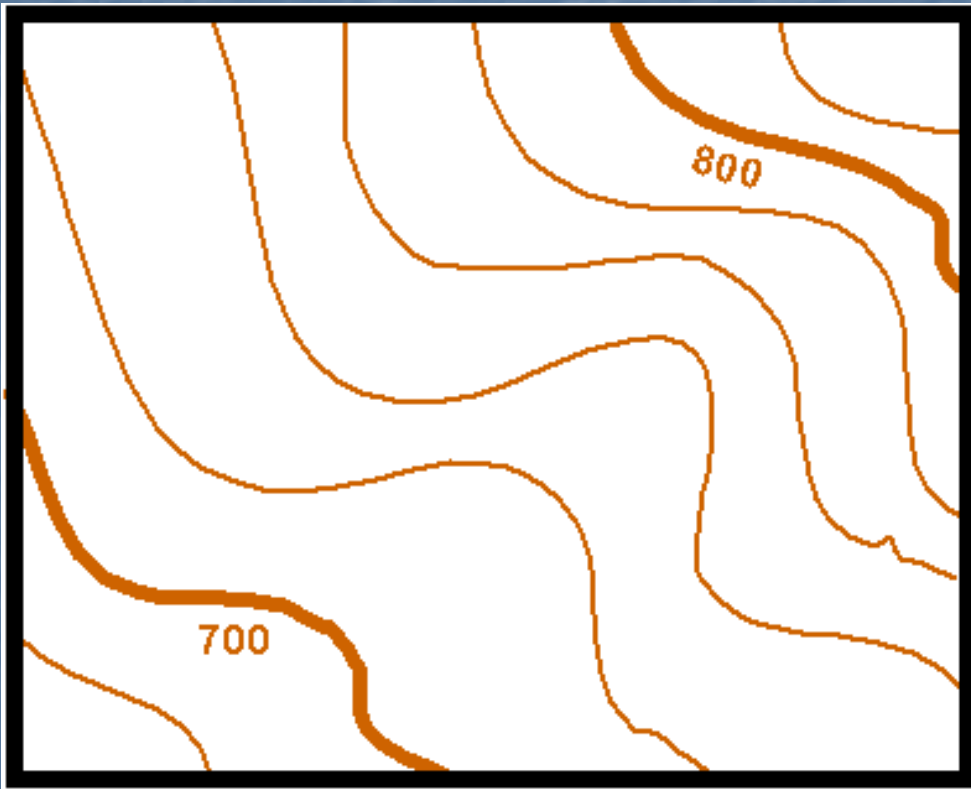
Contour Interval

Contour Interval = 20ft

A contour interval is the difference in elevation between two side-by-side contour lines.



Index Contours



Index contours are contour lines that are marked with numbers to show elevation.

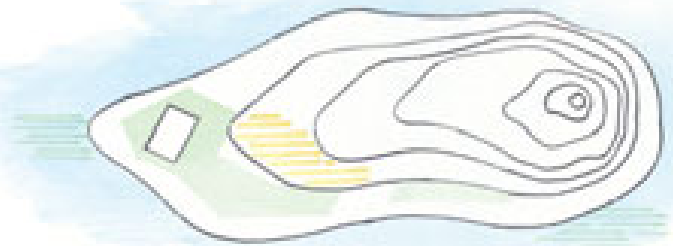
Elevation



The Landscape



A Relief Model

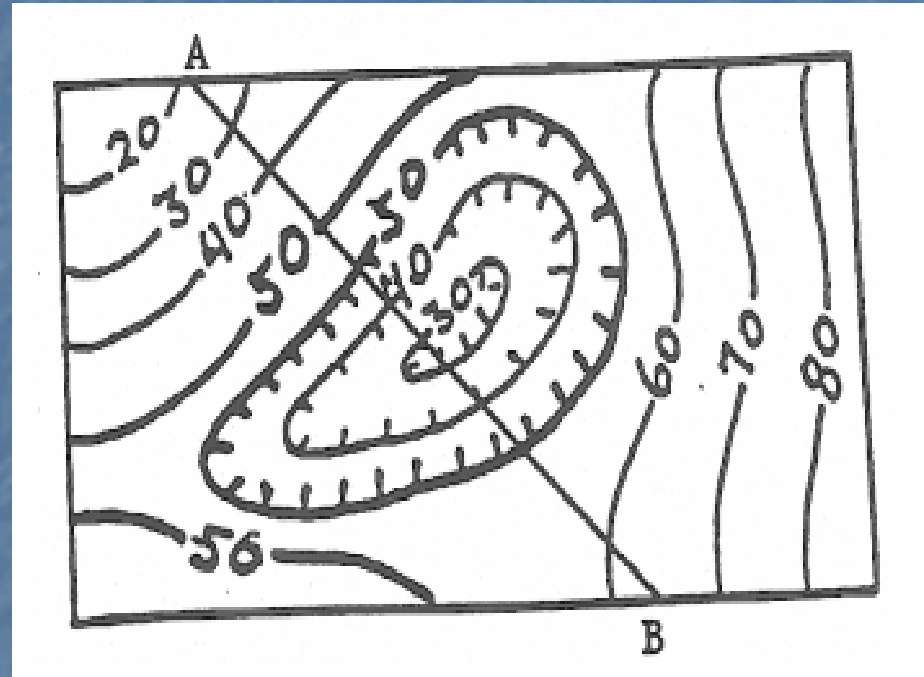


Contour Lines

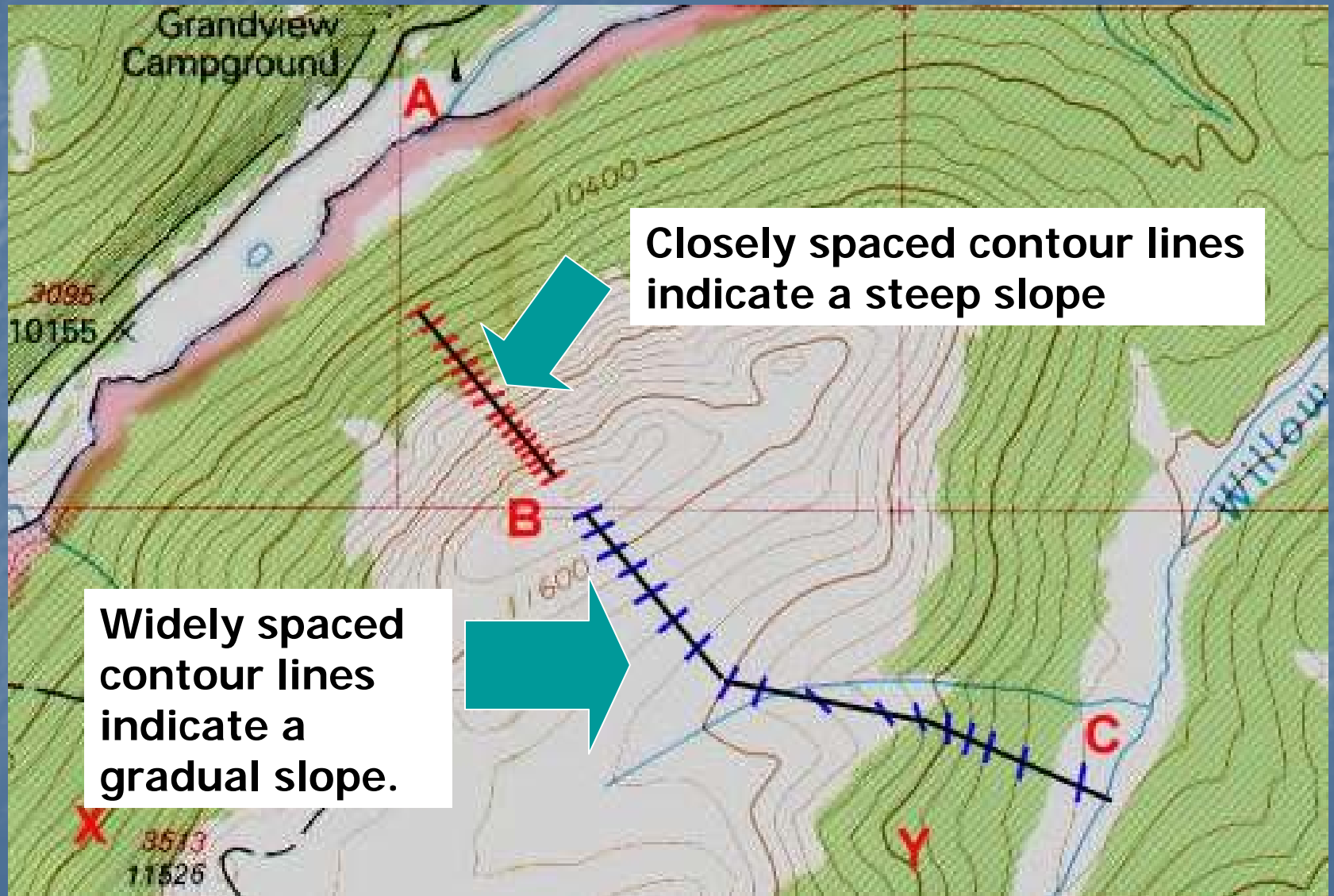
- A closed loop of contour lines indicates a hill or mountain.
- Contour lines never cross each other.

Depression Contour Lines

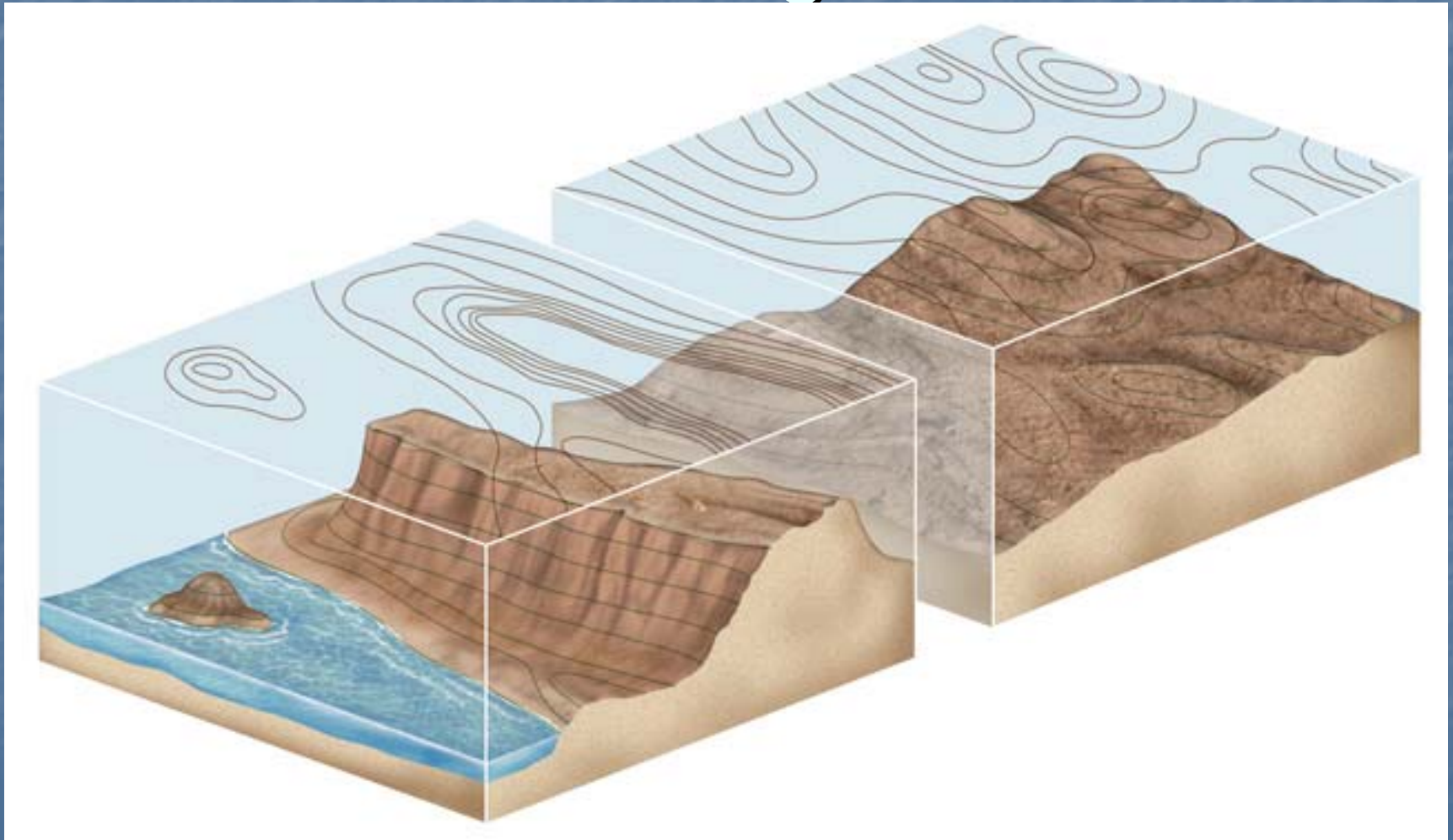
- The elevation of some features like holes, mines, and volcanic craters are lower than the surrounding landscape.
- Depression contour lines have short lines at right angles to the contour line, to indicate depressions.



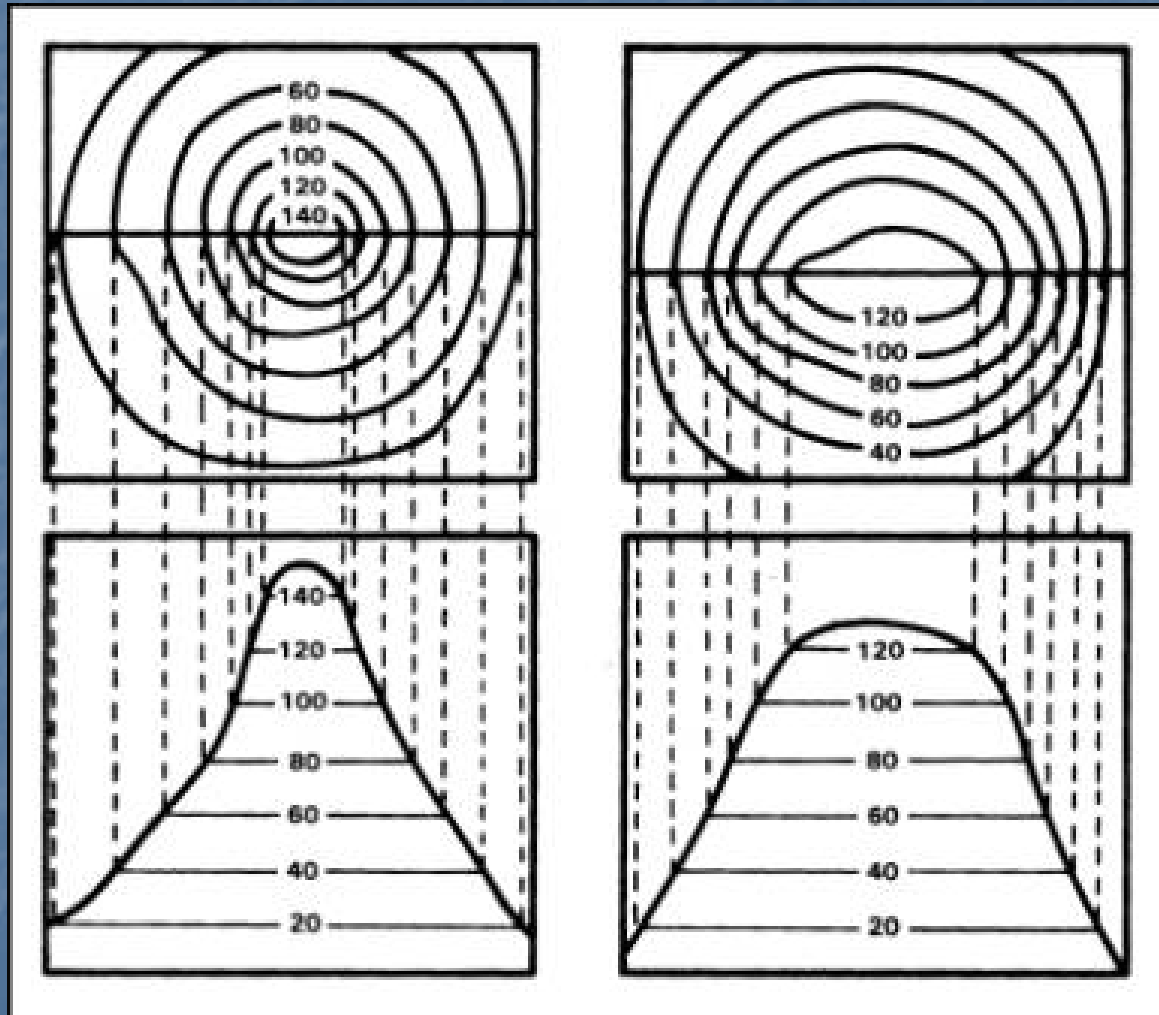
Contour lines show elevation



Topographic maps use contour lines to show changes in elevation.



Contour Lines can be used to make a 3 dimensional model



Likewise, a 3 dimensional model can be used to make contour lines.

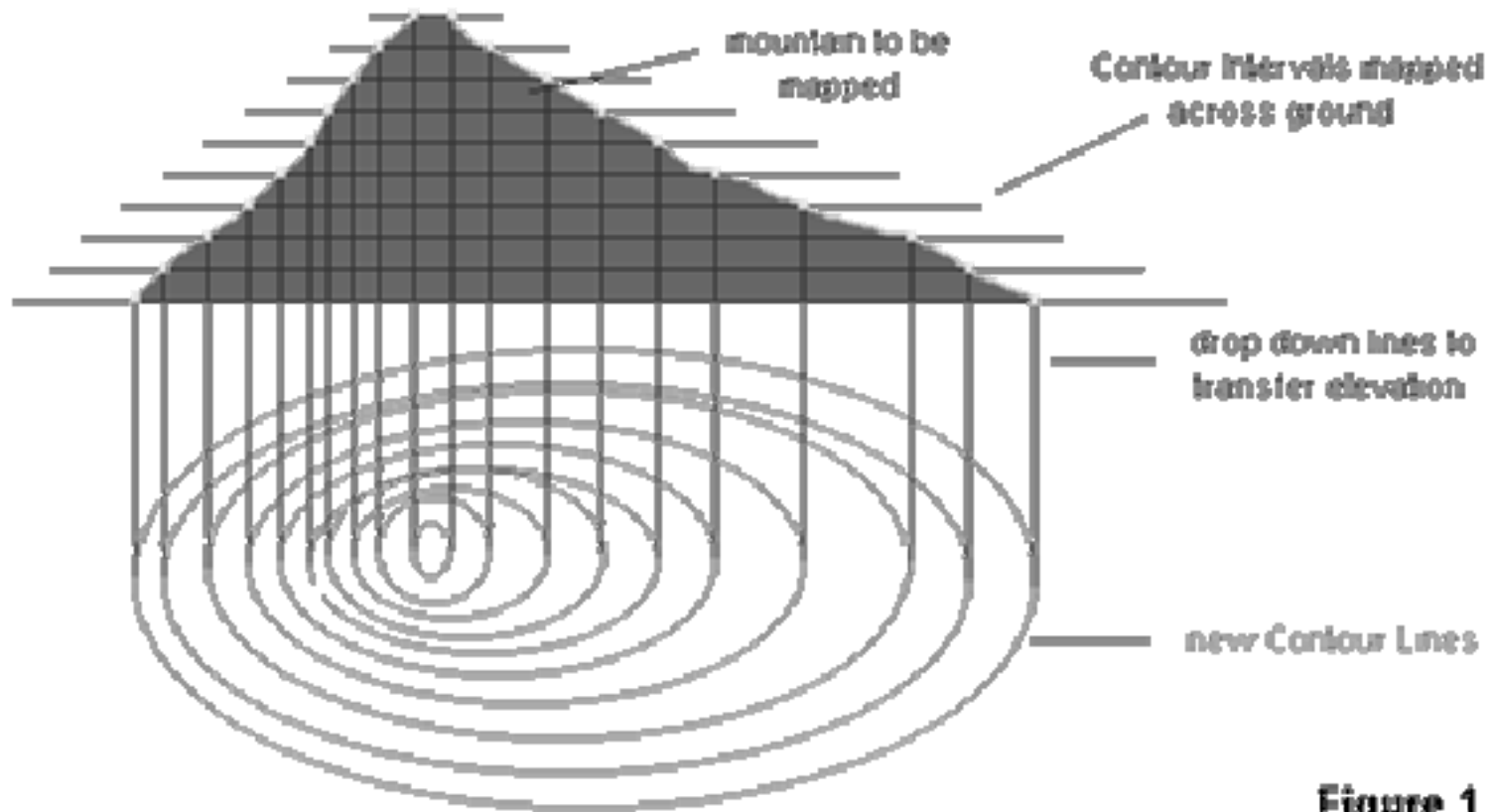


Figure 1