

Daily Routine

- Sit in your appropriate seat quietly
- Have all necessary materials out
- All back packs on the floor
- All cell phones on silent and away in backpacks
- All music devices off and headphones out of your ears
- No food or drink except for water

Bell Work

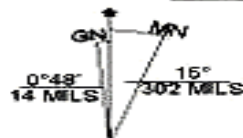
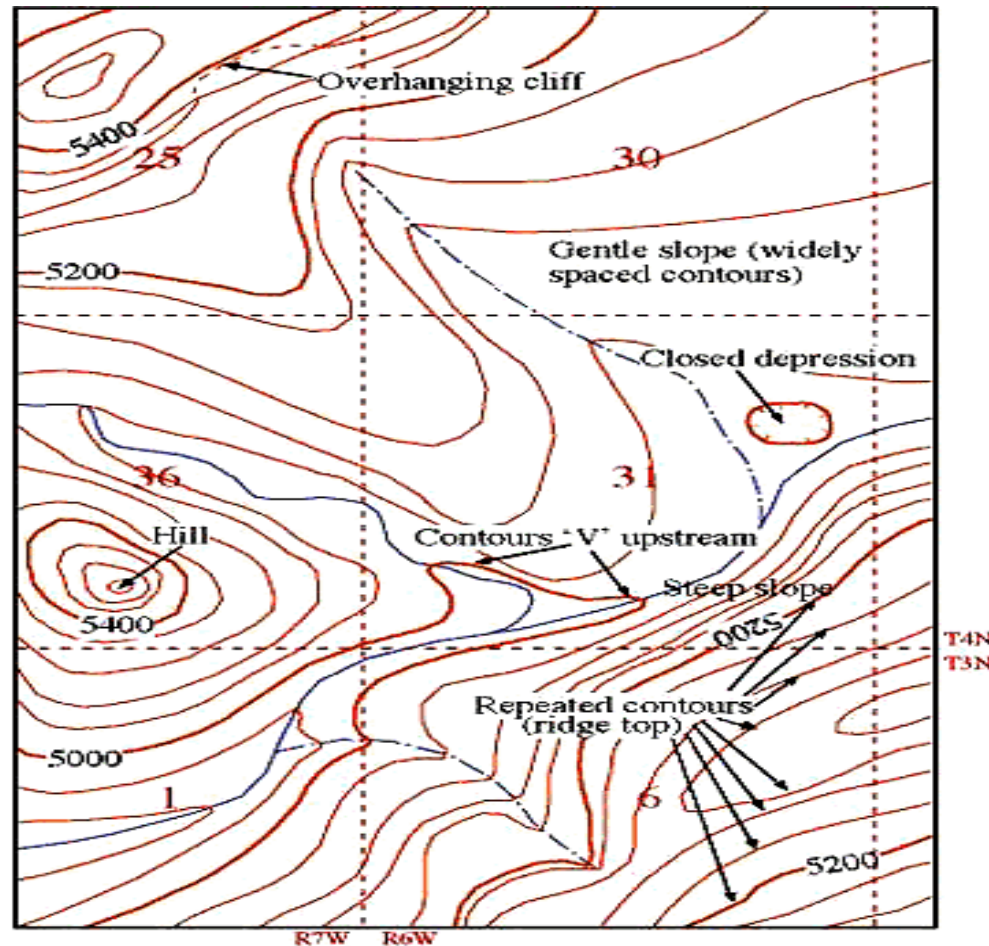
- Compare and contrast latitude and longitude.
- What are the 0 degree lines of latitude and longitude called?

Earth Science Announcements

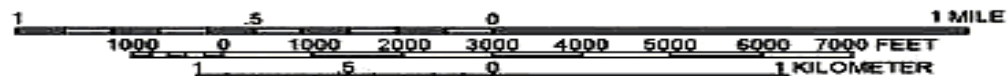
Latitude and Longitude Practice Sheet

Quiz on Friday (Metric, Density, and Latitude and Longitude)

Topographic Maps



UTM GRID AND 1968 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET



CONTOUR INTERVAL 40 FEET
SUPPLEMENTARY CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Unit: **Maps**

Topic: **Topographic maps**

Objectives: *Day 2 of 3*

- To learn about topographic maps
- To learn mapping basics, such as contour lines and intervals
- To learn contour rules

Spend 5 minutes finishing yesterday's
Latitude and Longitude Worksheet

Pass it in when you are done

How do you write the coordinates of latitude and longitude?

- Each point must be labeled with degrees
- Latitude is always the first point given in the coordinate
- The latitude coordinate must state whether the location is in the Northern or Southern Hemisphere
- The longitude coordinate must state whether the location is in the Eastern or Western Hemisphere
- Example: Roseville – 38.7525° N, 121.2894° W

Topographic Map Activity

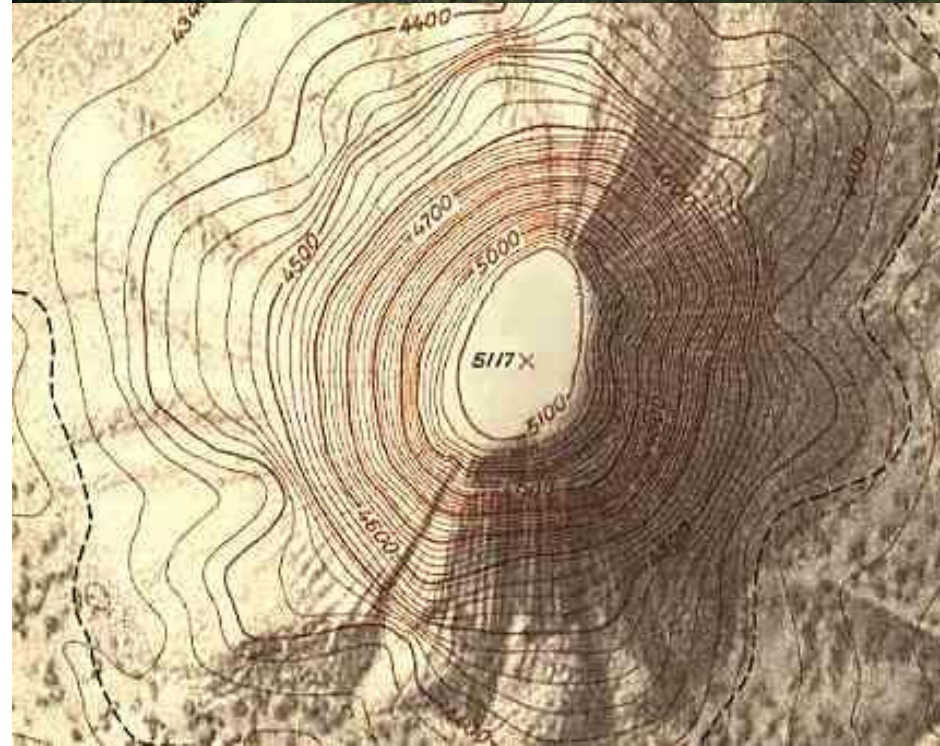
- You will be in groups of 3-4 at a lab station...this is final
- You and your group members will observe the map
- You and your group members will answer the following questions on another sheet of paper

Questions

- What location does your map depict?
- What is the scale of the map?
- What do the brown lines on the map represent?
- Are all the brown lines an equal distance apart?
If not, describe what this could mean?
- Are there any physical features on you map? If so what are they?
- What do the following colors represent: blue and green?

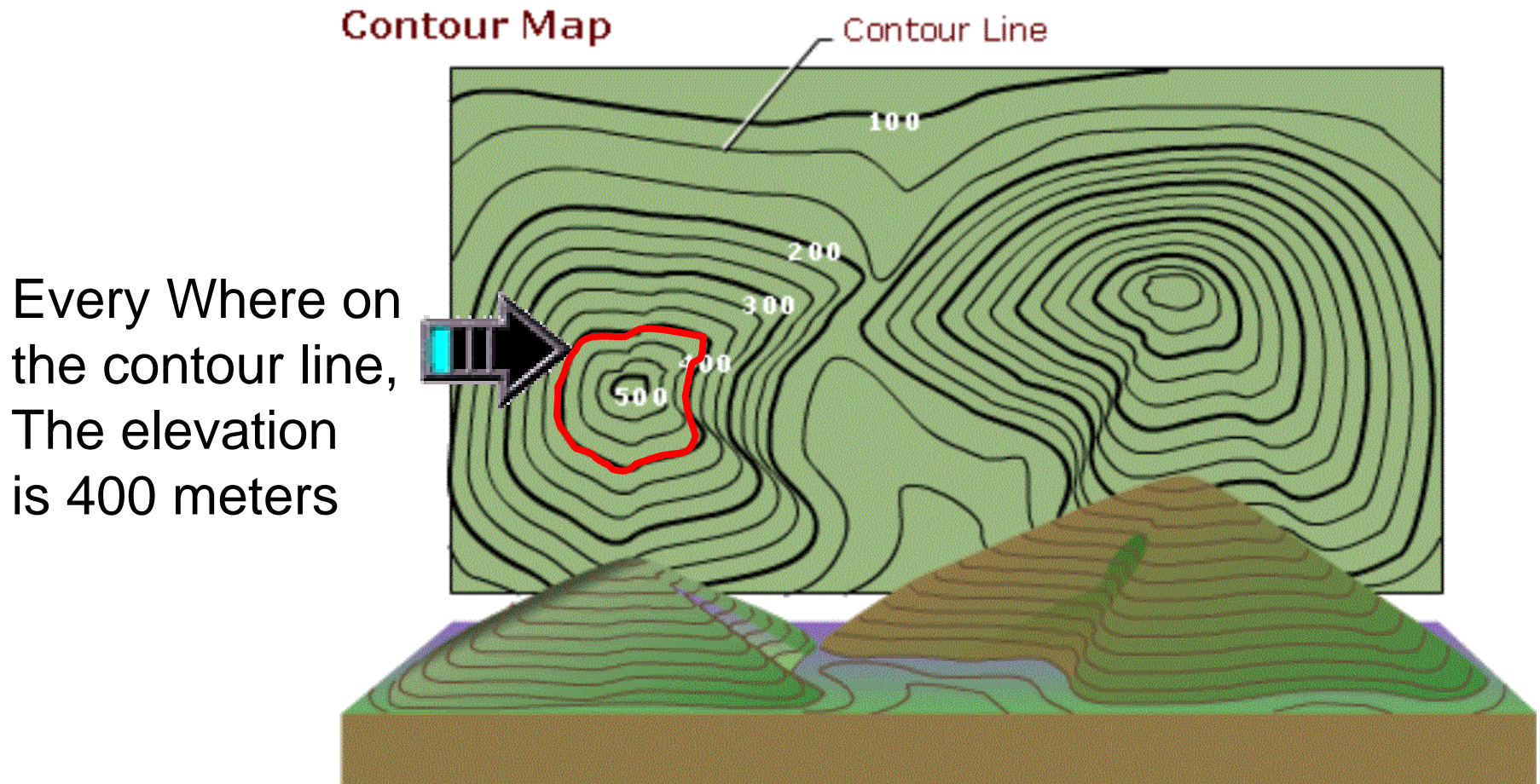
Topographic Maps

- Topography is the shape of the land
- A topographic map shows the shape of the Earth's surface by using **contour lines**.



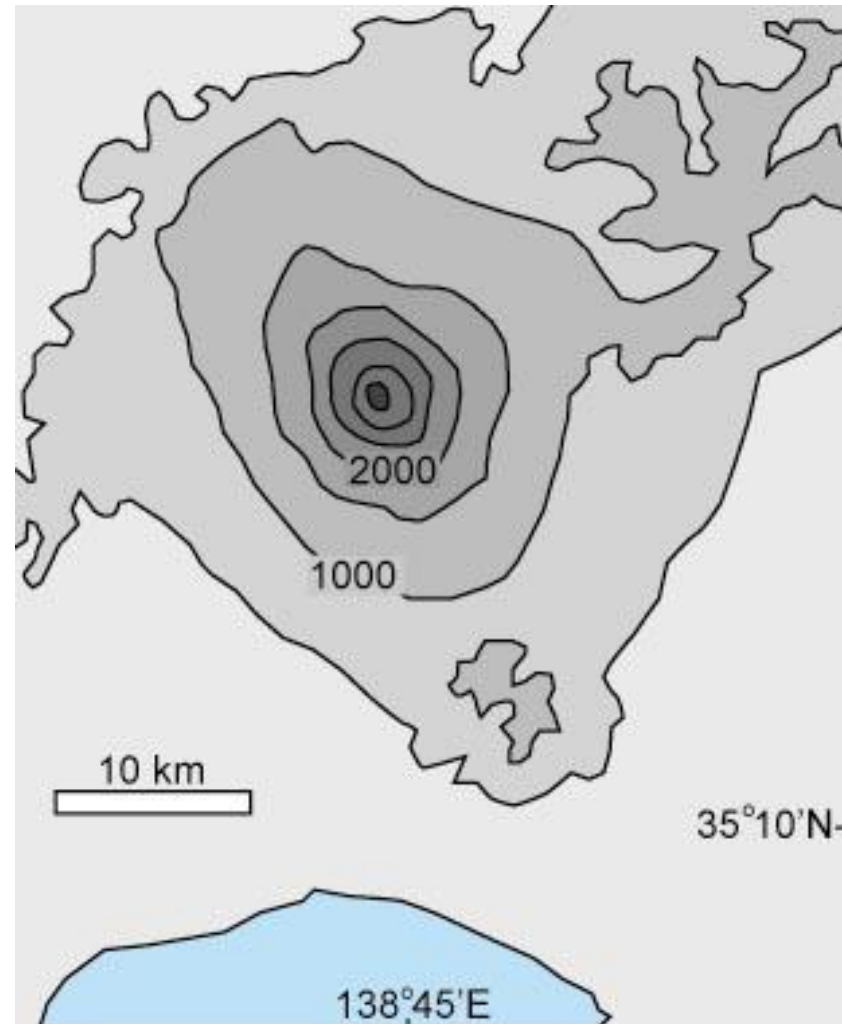
Contour Lines

Contour Lines are imaginary lines that join points of equal elevation above or below sea level.

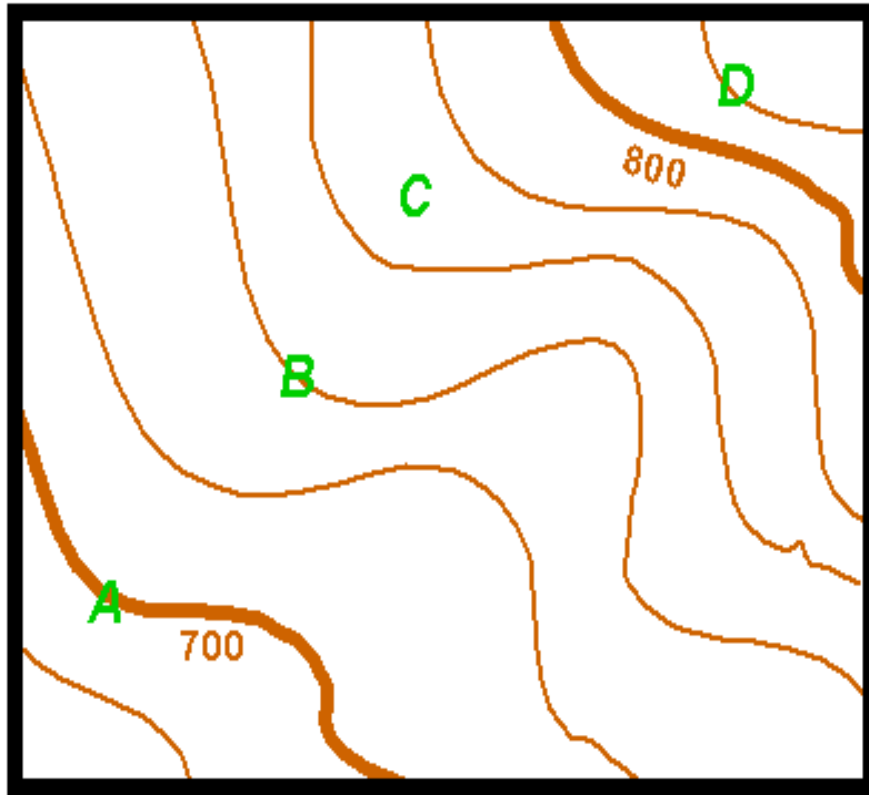


Contour Interval

- The Contour Interval is the difference in elevation between one contour line and the next.
- Can you figure out the contour interval on the map to the right?



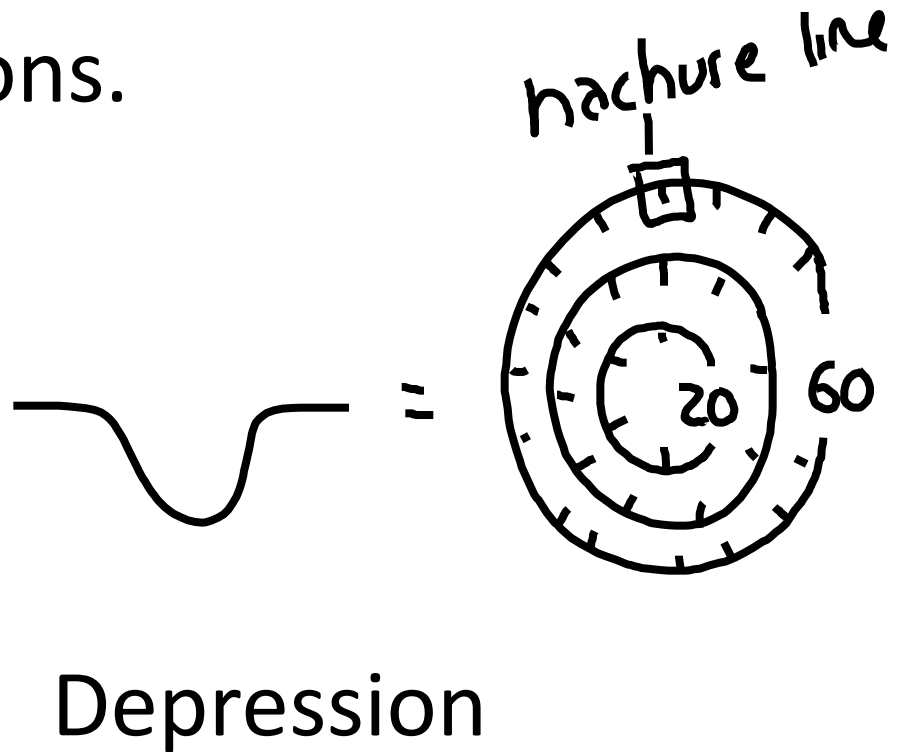
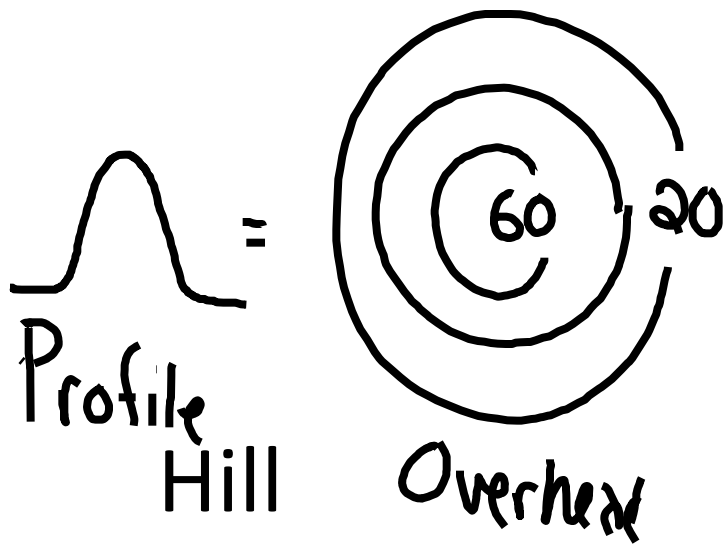
What are the elevations indicated by the letters on the map below?

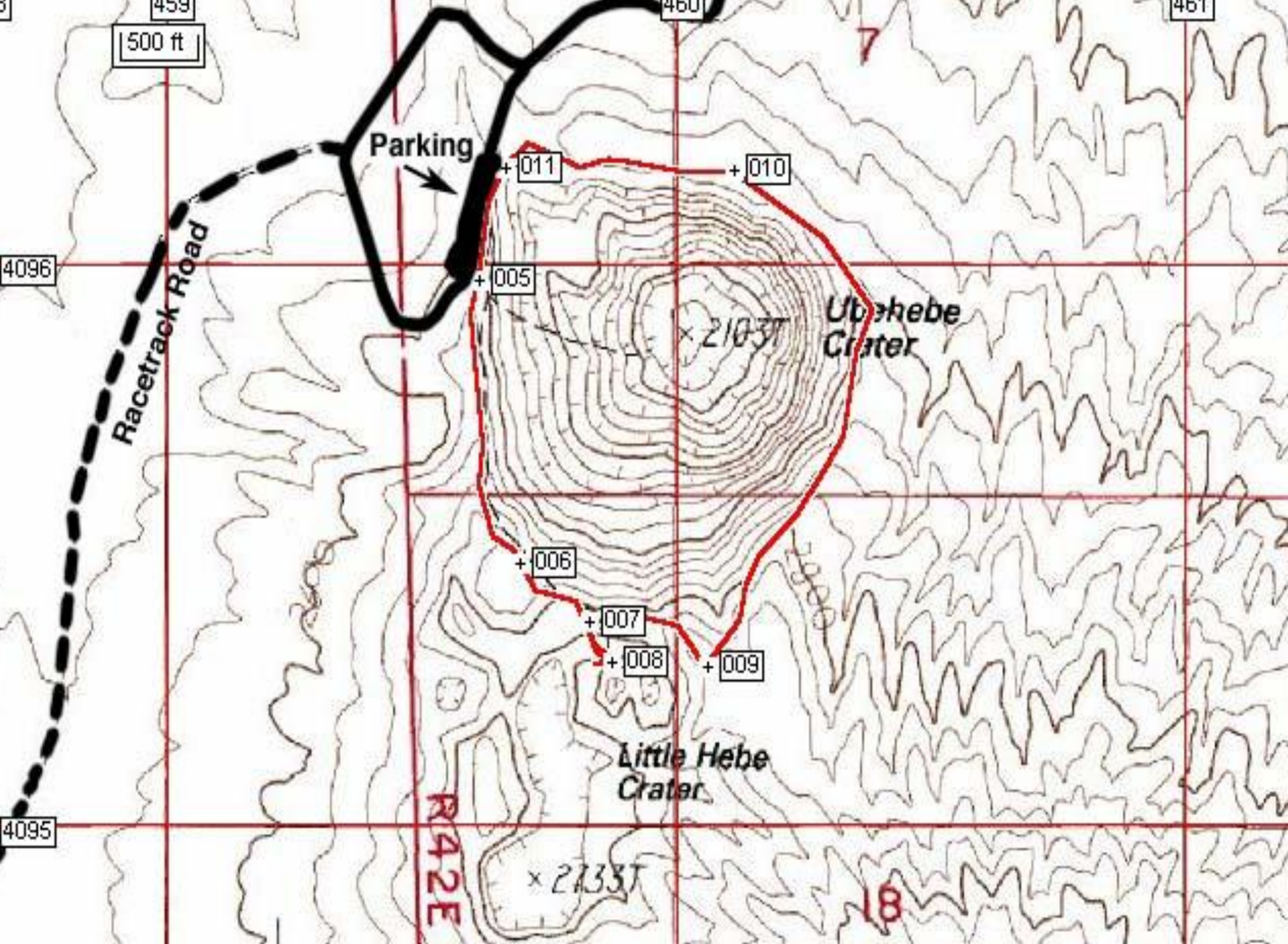


- Contour Interval = 20ft
- A = 700ft
- B = 740ft
- C = 770ft
- D = 820ft

Contour Mapping Rules

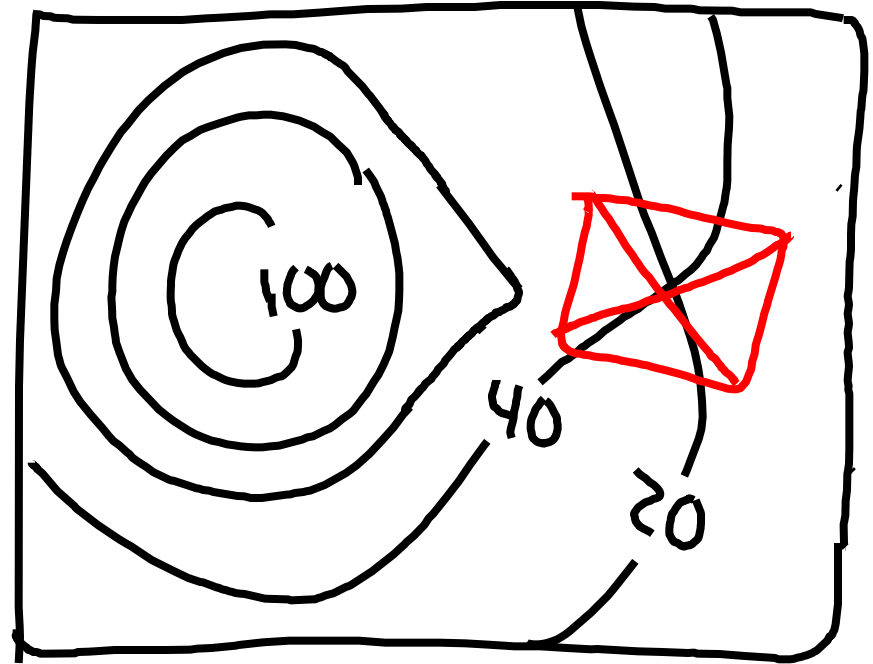
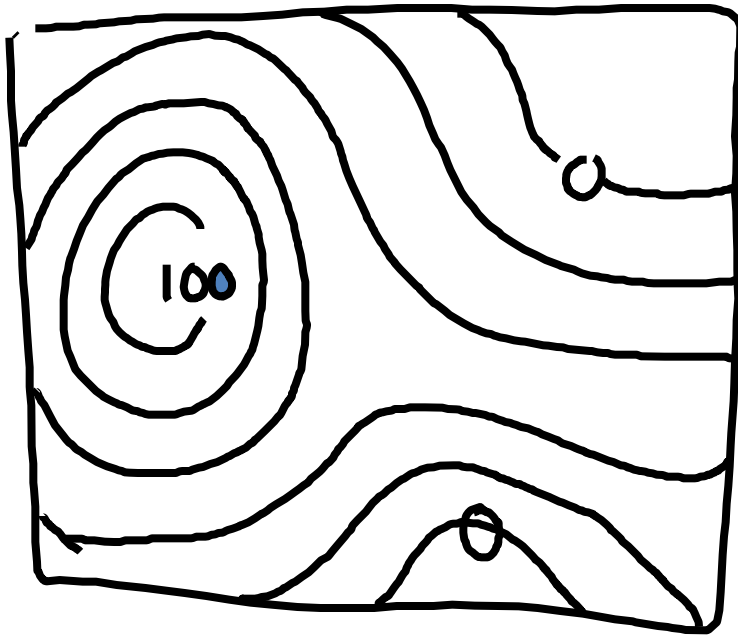
1. Hills and depressions are represented by circles. Hachure Lines are used to show depressions.





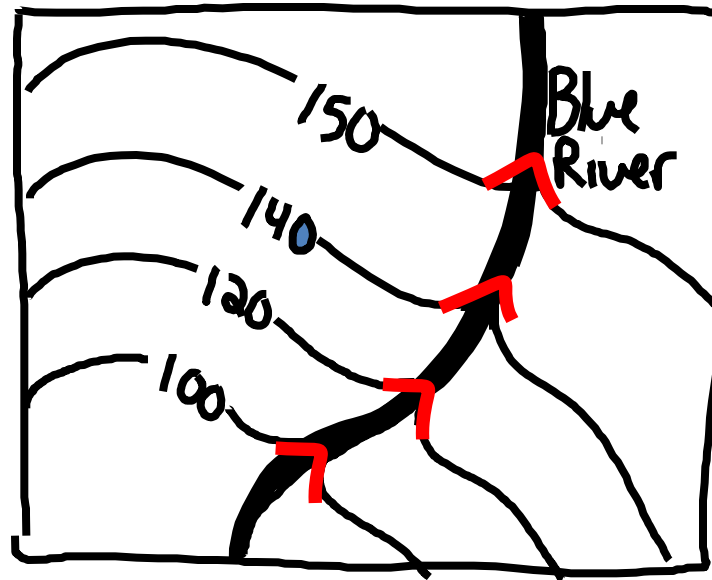
Contour Mapping Rules

2. Contour lines never cross.



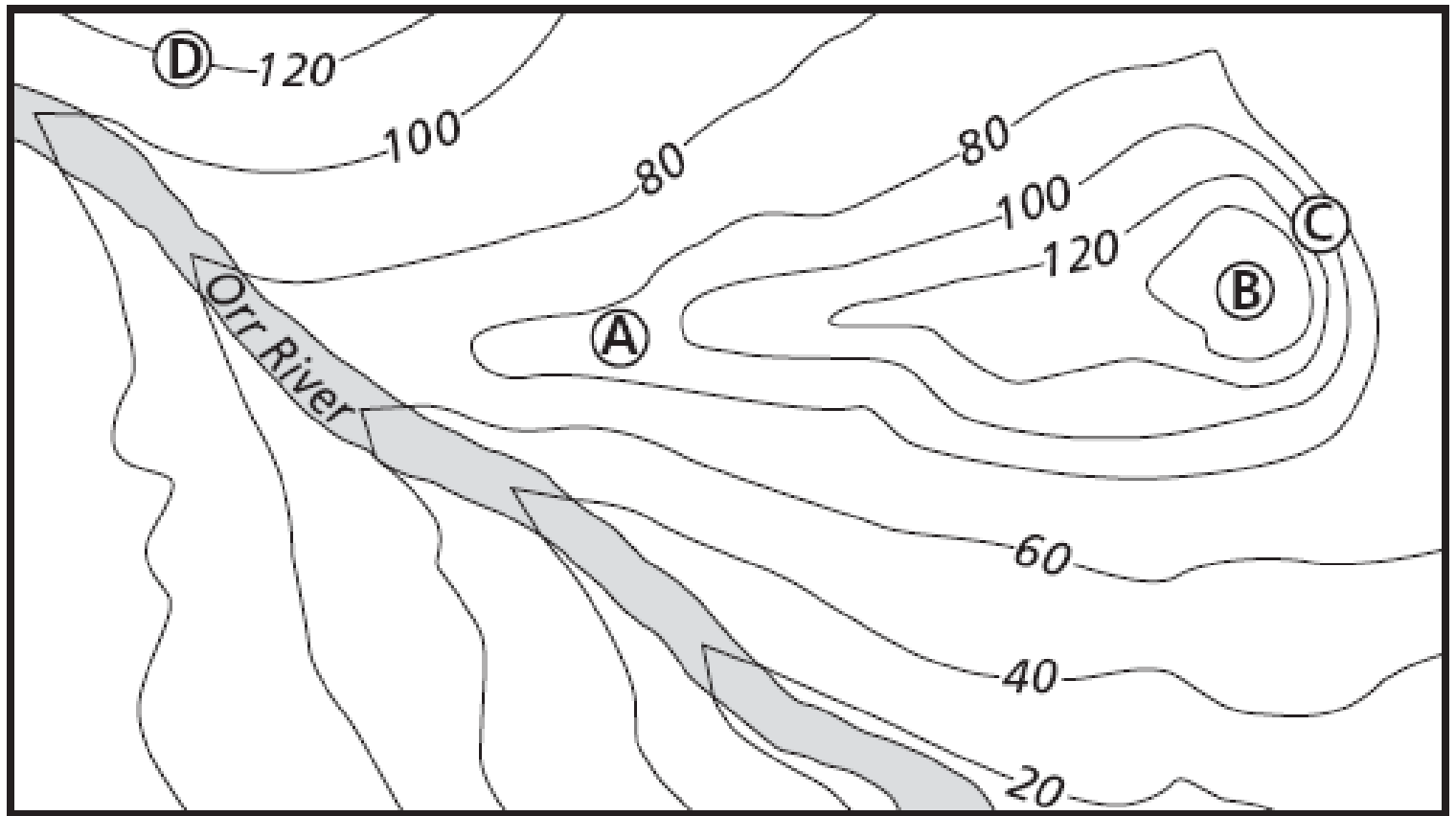
Contour Mapping Rules

3. When contour lines meet a river or a stream they form a “V” that points upstream.



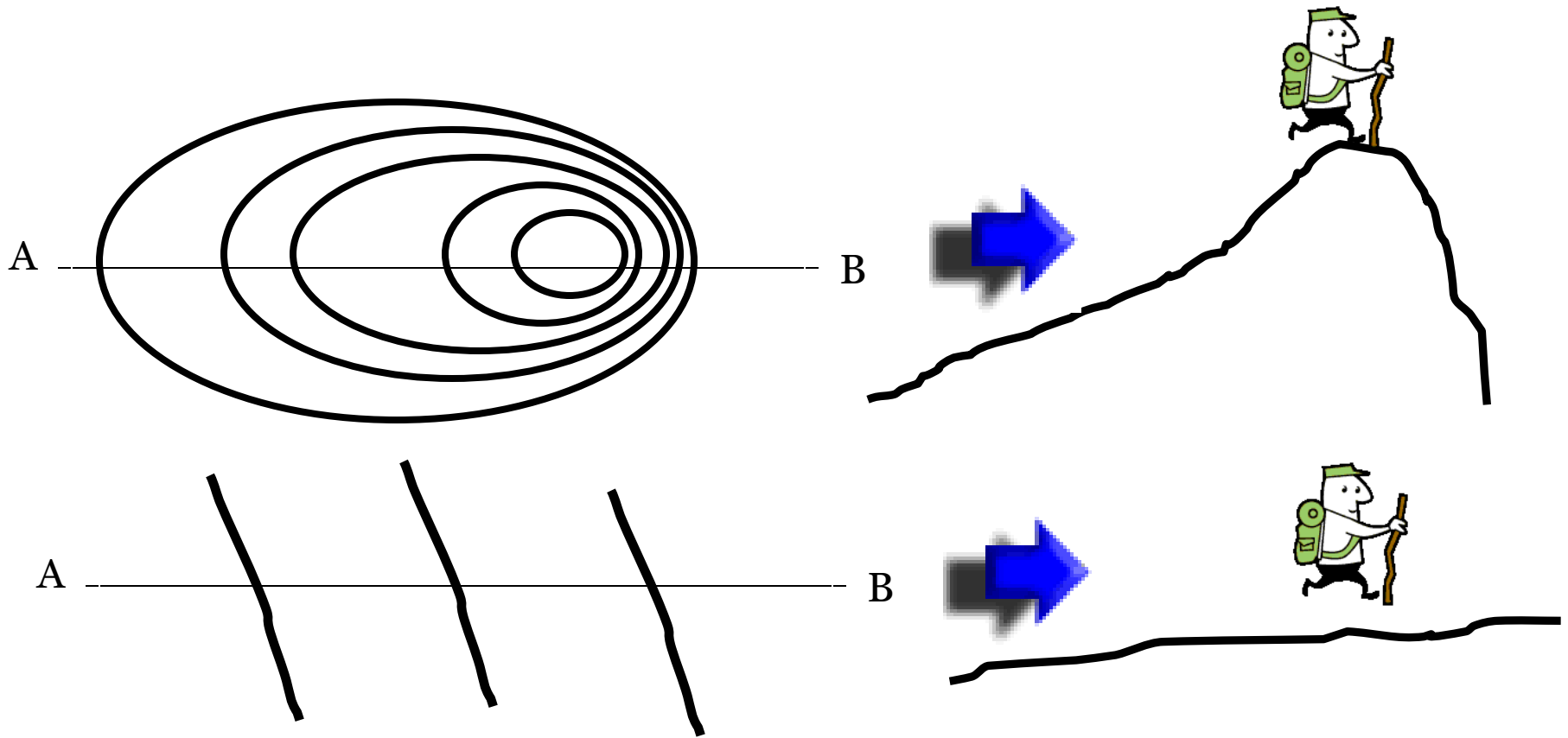
“V” s” Point upstream

Topographic Map of the Orr River



Contour Mapping Rules

4. Contour Lines close together = steep slopes
Contour Lines far apart = flat gentle slopes



Going back to the Topo Maps: Answer in complete sentences!!!

- Describe the topography of your mapped area? Is it steep or gradual sloped? **Be detailed!!!**
- Describe the shape of the contour lines around rivers on the map.
- Try to find the highest point on the map. What is the elevation. Is the land steep or flat? Explain using the contour lines.
- What other symbols do you see on the map? What could these symbols represent?