# Lab 14: Topographic Maps



Summarize main points from each video.

Title / topic		
Title / topic		
Title / topic		

# Topic Introduction

### Summarize your understanding of each paragraph.

A topographic map is a type of map. Many of these show hills and valleys. Sometimes they show more than just hills and valleys. For example, a topographic map might illustrate the deep and shallow parts of a lake.
The word used for terrain when it has ups and downs (hills and valleys) is called "relief." Topographical relief involves the vertical and horizontal dimensions of land surface.
You can think of relief as being "the lay of the land." In physical geography terrain is described in terms of the elevation, slope, and orientation of terrain features. A topographical map is a flat, two-dimensional image that illustrates the three-dimensions of terrain.
Topographic maps show ground relief (landforms and terrain), drainage (lakes and rivers), forest cover, populated areas, transportation routes (including roads and railways), and other manmade features.

# Read/Summarize Text



- 1. Read the passage.
- 2. Underline key expressions in each sentence.
- 3. Re-write each word (or expression) you underlined.
- 4. Summarize the passage.

### Topographic map.

2

A topographic map is a kind of map which uses contour lines or other ways to show elevation and topography. Topo maps are usually very detailed, with a large scale, though some are not. These maps are prepared based on a detailed survey of the areas concerned.

Topographical maps may be used for many purposes. They show relief features, rivers, land use, vegetation, settlements, roads, railway lines and administrative units and their boundaries. These maps are revised periodically to update them. Town guide maps are based on them.

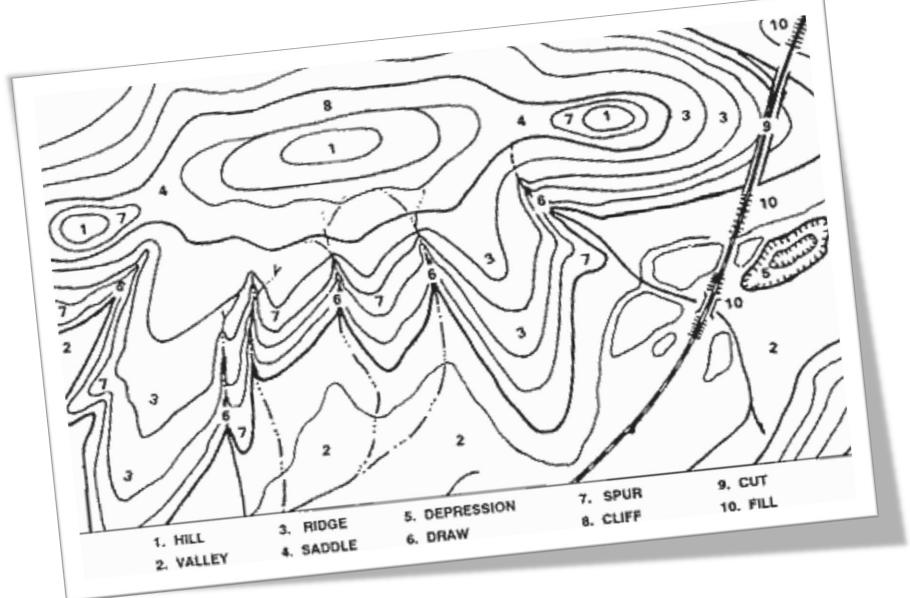
https://simple.wikipedia.org/wiki/Topographic map

e-write words you	ı unaeriinea 			3
Ising a complete s	sentence, summar	<u>rize or rephrase</u>	the passage	4

## Read Text for Comprehension

Read this article for deeper understanding. No summary is required, although you may want to circle, underline, or mark key ideas and words.

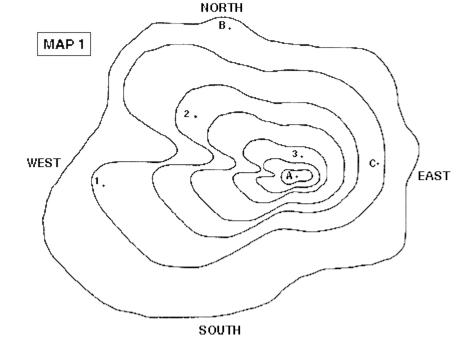
Here is an example of a topographic – or "topo" – map. Notice how the lines on the map curve. There are a few places where the lines make a shape similar to a circle or an ellipse.



### **BACKGROUND INFORMATION**

Topographic maps are used extensively by a variety of people including geologists, field biologists, and hikers. A topographic map is the representation, on a flat surface, of part of the Earth's surface drawn to scale.

**Relief** — The features shown on topographic maps may be divided into three groups: (1) relief, which includes hills, valleys, mountains, etc.; (2) water features, including lakes, ponds and streams; and (3) cultural features, man-made features like bridges, canals, buildings and roads.

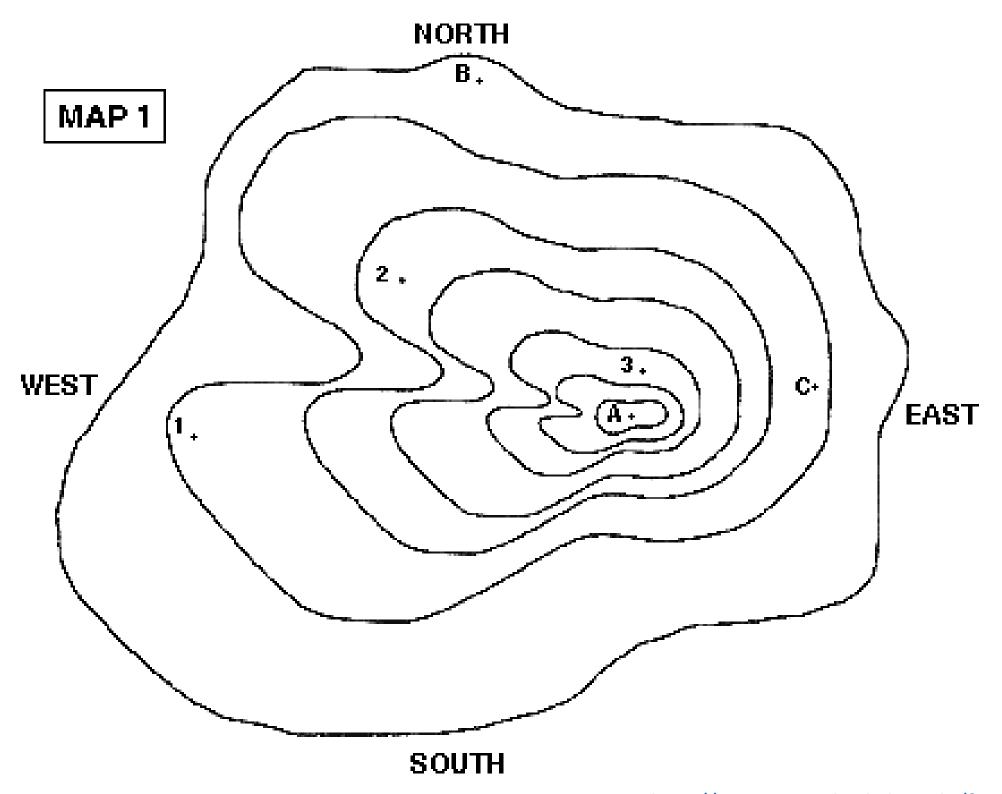


Adapted from: <a href="http://www.ucmp.berkeley.edu/fosrec/Metzger1.html">http://www.ucmp.berkeley.edu/fosrec/Metzger1.html</a>

### Draw Illustration



### Copy and Label the Illustration in the Space Provided



http://www.ucmp.berkeley.edu/fosrec/Metzger1.html

# Draw (Copy) the Illustration Here

## Interpret a Graph



Write the title of the	graph		
Circle the type of chart  Bar Chart	art this repres		Other
If applicable, What does th	ne X-axis repr	esent	
What does th	ne Y-axis impl	<b>y</b>	
Summarize what this	s graph repres	sents or conv	eys

https://bostoncollege.instructure.com/courses/1563771/pages/virtual-lab-1-topographic-maps-contours-and-making-cross-sections

A 50 60 70 70 60 50 4030 3040 40 Profile with 10 X Vertical Exaggeration (plotted with vertical scale same as horizontal scale)

Fig. 1.3 Topographic profile along line A- A' in Fig. 1.2.

(same as topo map scale; Fig. 1.2)

### **Show-Off Your Smarts!**



### **Instructions**

- Complete as an individual or small group.
- Discuss your ideas/answers/responses in a small group.
- Select one person to present your responses to the class.
- Q1. How can information be applied to your life (today, or in the future)?

Q2. How might this information apply to (*or, impact*) communities?

Q3. In the late 19th century (the 1800s), surveyors created topographic maps in the field. What do you imagine these were used for?

# Write a "Topographic Map" Story

Write a 70-word fiction story about a person living in 1878. Consider naming your character one of these names: *Abdalla, Ahanu, Bo, Bourey, Chin, George, Jing, Kiri, Mary, Taabish, or Yaakov*.
