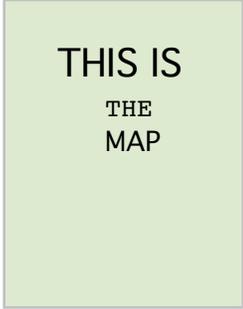


**Ka Lae Topographic Map Quad Lab**

**Names** \_\_\_\_\_

1. From the bottom right, list the **complete name** of your map? \_\_\_\_\_
  2. Magnetic north (MN) is \_\_\_\_\_ ° (degrees) & \_\_\_\_\_ ' (minutes) E / W (Circle one.) of the North Star or Polar North - the star.
  3. Look at the drawing of the state of Hawaii in the lower margin.  
In what part of the big island of Hawaii is this map, N, E, S, or W? \_\_\_\_\_
  4. Look at the lower **left edge** of your map. There is listed the latitude. On the drawing to the right record the latitude of the bottom and top of your map. \_\_\_\_\_°N
  5. This map spans \_\_\_\_\_ minutes.
  6. The contour interval for this map is... \_\_\_\_\_
  7. At the bottom of the map is a numerical scale like 1:43280 or something like that. This map's scale is \_\_\_\_: \_\_\_\_\_
  8. This means moving 1 map inch is like moving \_\_\_\_\_ inches on Earth's ...or \_\_\_\_\_ feet. (There are 12 inches in 1 foot.) \_\_\_\_\_°N
  9. On the left margin <-, mark at least 4 mi. using the scale. Really, make the marks.
  10. **How old** are the data on this map? \_\_\_\_\_
  11. Contour lines are colored \_\_\_\_\_
  - 12 Two things done to every 5th contour line are \_\_\_\_\_ & \_\_\_\_\_
  13. Look all over. What is the elevation of the highest contour line? \_\_\_\_\_
  14. The lowest contour line? \_\_\_\_\_ (See the blue? Don't look ONLY for numbers.)
  15. Find the a really big pali (cliff). The name of this pali is \_\_\_\_\_  
Find the "O" in the name of the cliff. Below that O find the elevation at bottom of the cliff. Find the elevation at the top of the cliff.
  16. The cliff top elevation is \_\_\_\_\_' The cliff base elevation is \_\_\_\_\_'
  17. If August dribbled over the cliff, he would drop \_\_\_\_\_' total feet.
  18. What happened below this cliff in 1868? \_\_\_\_\_
  19. Why are there not are many houses in this part of HI? \_\_\_\_\_
- Walk the road from the Ka Lae astronomic station to the water tank (WT) on the SW corner of Kamaoa Homestead just below the 'H' in Homestead.**
20. This is a climb of \_\_\_\_\_ feet of elevation and a distance of \_\_\_\_\_ mi.  
**Divide the feet of elevation change by the miles travelled to calculate the gradient.**
  22. The gradient of this area is \_\_\_\_\_ ft / mi. (Divide feet by miles.)
  23. In what township, range, and section, is the water tank? T \_\_\_\_\_ R \_\_\_\_\_ S \_\_\_\_\_



**Arizona Map - Starting Easy**

Names \_\_\_\_\_

**Before we start studying landforms through maps, we all should understand distance, scale & direction. To make this easy and interesting, let's look at our home state, AZ.**

**First let's review 1) directions, 2) distance scales, 3) keys/legends.**

1. Using the map's scale, tick off mile marks on the right edge of this paper. Really. Make marks there. ->
2. What type of **road** is I-17 heading north out of Phoenix? \_\_\_\_\_
3. Measure exactly from the center star of Phoenix to Wickenburg circle. This is \_\_\_\_\_ mi.
4. Which direction **from** Phoenix is Wickenburg? (N, E, S, W, NE, NW, SE, SW)
5. Look all over the map. The weirdest sounding name on the map is \_\_\_\_\_

**Write both the name of and elevation of the city in Arizona that is.....**

- ...close to the northern border on the edge of Lake Powell? 6. \_\_\_\_\_ at 7. \_\_\_\_\_' elevation.
- ...the southern border of Arizona on I-19? 8. \_\_\_\_\_ at 9. \_\_\_\_\_' elevation.
10. The color for water is \_\_\_\_\_ and for forests is \_\_\_\_\_
11. The name of the river that runs through the Grand Canyon is the \_\_\_\_\_
12. Name 2 national forests within 100 miles of Phoenix.  
A. \_\_\_\_\_ B. \_\_\_\_\_
13. List 3 "lakes" (reservoirs, usually) on the Arizona map within 100 miles of Phoenix.  
A. \_\_\_\_\_ B. \_\_\_\_\_ C. \_\_\_\_\_
14. An important town is 58 miles ESE of Flagstaff is \_\_\_\_\_
15. What kind of airport does Winslow have? \_\_\_\_\_ (See legend/key.)
16. Look at the topography around Winslow. Why is it easy to put an airport with a really long runway there?  
there? \_\_\_\_\_
17. The AZ-NM border is \_\_\_\_\_ miles long. (Measure carefully! Really. Carefully.)
18. What river is on the western border of Arizona? \_\_\_\_\_
19. Write your own (intelligent and geologically-related) question that could be included on this assignment.