Geography Compelling Question: How are models used to represent physical geography?

During the physical geography class, we first had to ask ourselves, what is physical geography? We determined that physical geography is the natural systems and features of the Earth. To investigate physical geography we studied climate, natural disasters, the atmosphere, landforms, soils, and more. We learned these were all aspects of physical geography. In the lab and lecture we were never able to use physical examples of these concepts. We needed to ask ourselves and discover the best ways to represent these aspects of the Earth. What are the qualities of a map? What is scale or what is a key? Understanding the scale of a map helped me convert distances and the size of landforms. The key allowed me to understand climate maps along with maps of terrains and bodies of water. When we could understand how to read and use models, we were able to understand the concepts of physically geography we could not view concretely.

Much of our physical geography course was problem-based learning. We had to determine what causes problems with climate, landforms, natural disasters, the atmosphere, and the biosphere because of the way they influence humans and nature on Earth. We had to employ our knowledge of other disciplines such as science and math in order to understand the qualities of Earth's physical geography. We had to gather data from several maps or models in order to draw conclusions on matters such as a region's climate or the changes in a landform. We had to apply the data and conclusions drawn from the models to what they mean in terms of effects on the Earth, humans, and nature. We had to use the data and models to compare and contrast the qualities of different regions and what causes these regions to have varying physical geographies. Overall, we needed to learn how to gather and understand the representations of the geography to the impositions they have on the Earth.

The sample work I chose was a lab that required me to employ my understanding and application of models used to represent physical geography. This lab required me to understand contour line degrees and the degrees of latitude and longitude. I had to understand how to read physical maps in order to determine units of length, elevation, and gradience of streams. I then had to draw conclusions based off of the data I gathered from the models provided for me in the lab manual. I determined the shape of lakes and streams along with the way they were developed. I used the stereograms to determine the drainage patterns of a basin and how that would influence the terrain surrounding it. I used the maps and data to make applications to real world problems, such as which area a driver would be best to drive upon based on the angles of contours in the Earth. In this sample work I proved my ability to understand and use models to represent the physical geography of the Earth.

Lab 7

Ex 37 part 1

1. The deposit is darker in color and does not stay the same color throughout but
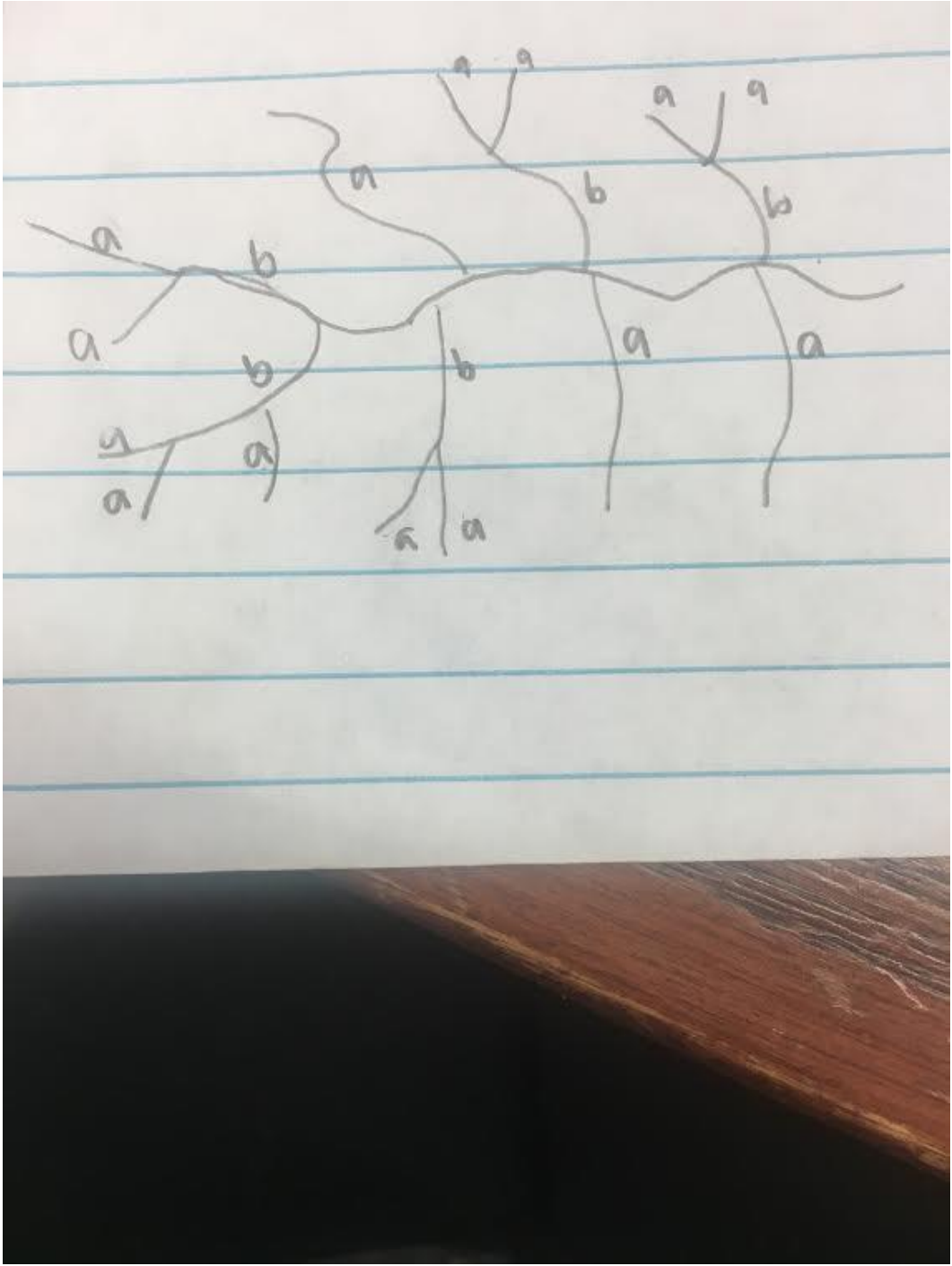   changes.

2a. Earth flow

2b. There is a mass with a scar coming out that leads to another mass.

Ex 37 Part 1

1. 7,480 feet

2. 77, 440, 000 feet

3. 5.79251e11 cubic feet

Ex 38 Part 1

1. It follows the drainage divide.

2.

3a. 14

3b. 5

4.

Stream	Order	Elevation	Length	Gradient

A	1	720	.40	1800
B	1	720	.50	1400
C	2	640	1	640
Ed	3	670	2.20	305

5. "A" 1800 "B" 1400 "C" 640 "Eds" 305

6a. 1, 465

6b. 720

7. They decrease

8. V shaped with steep gradients

9. Ed's creek is wider and closer to a U Shape

Lab 8

Ex 39 part 2

1. ==The lake had to have occurred when the stream meandered tightly and one meander cut off another. This created an oxbow lake from the remaining cut off meander.==

1b. The lake a little below the 1495 line in the middle of the two 1495s. Also, the lake right next to the 1500.

2a. The curve above the Westgaard Cemetery right on the dotted line between 1490 and 1491.

1b. The lake a little below the two "1495". The lake right

2a. The curve above Westgaard line between 1490 and 1491

Beg

b.

End 2C
Beg
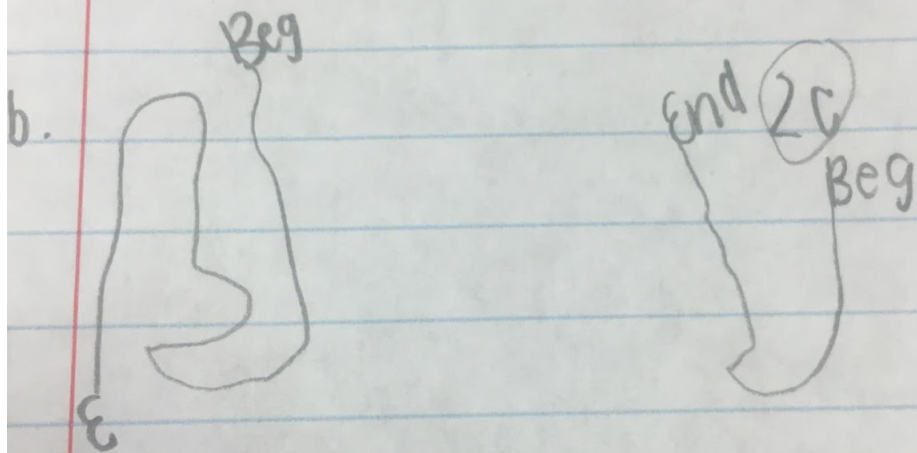
Ex 39 Part 3

1. The water between the two

b. Eagle Lake and Lake Provide

2I 2B and 2C

Ex 39 Part 3

1a. The water between the two and alluvial deposits.

1b. Eagle Lake and Lake Providence

2a. 70 miles

2b. 120 miles

2c. 50 miles

2d. 58.33%

3. Less steep

4. <mark>It has less acute curves so it would be easier to travel.</mark>

Ex 40 Part 1

1a. There are many creeks, ridges, and valleys.

1b. Trellis Damage

1c. It has to wrap around and it only occasionally goes right across the mountains.

2a. There are creeks coming off the mountains and hills.

2b. Dendritic

2c. <mark>One road follows Poor Valley Ridge but the system mostly avoids the mountains.</mark>

3a. No

3b. There are hills and changing elevation.

1.   Radial

1.   Centripetal