Iowa – The Rivers of Her Valleys 4.0

Homework #2 – Geomorphology

\_\_\_\_ 1. Who wrote the Principles of Geology?

A. Sylvia Earle B. Charles Lyell C. Chad Heinzel D. James Hutton

\_\_\_\_2. Who was a civil war veteran, first director of the USGS, first white man to travel down the Colorado River’s rapids?

A. Keene Swett B. G.K. Gilbert C. J.W. Powell D. Mardy Murie

\_\_\_\_3. This drainage pattern is commonly found in Iowa.

A. radial B. rectangular C. trellis D. dendritic

\_\_\_\_4. Which road in Iowa best represents/is closest to a major drainage divide, separating water going toward the Mississippi or Missouri?

A. Hwy 61 B. HWY 71 C. I – 35 D. Hwy 34

\_\_\_\_5. What type/size of sediment is most commonly associated with bedload in Iowa?

A. clay B. boulder C. pebble D. sand

Short answers –

1. What one variable differentiates stream discharge from stream velocity?

2. List then briefly discuss the two primary sources of energy responsible for moving water across the Earth’s surface. Why is it important to document and keep track of energy in these complex systems?

3. Luna Leopold said “A river or drainage basin might be considered to have a heritage, rather than an origin.” Briefly state what you this statement means AND why it is an important consideration when investigating a river.