

<b>ESS 110: Introduction to Geology</b> Dr. Woltemade  Cumberland Valley Geology	<b>Name:</b> _____  <b>Section (circle):</b> <b>8:00 AM</b> <b>9:30 AM</b> <b>11:00 AM</b>
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Instructions

Use your textbook, lecture notes, and linked websites to answer the following questions.

<b>1. General geology of the Shippensburg area.</b>	
What type of rock is the local bedrock? (Note igneous / sedimentary / metamorphic <i>and</i> specific rock type.)	
In what type of environmental setting does that rock typically form?	
That type of rock is composed of what primary mineral?	
How does that mineral (and therefore this type of rock) react with mild acids?	

<b>2. Sinkholes and other karst features.</b> See the Pennsylvania DCNR's website on <a href="#">Sinkholes in Pennsylvania</a> . After reading the intro, link to the <a href="#">Sinkhole Data Interactive Map</a> and zoom in to the area around Shippensburg. Note that the green dots are sinkholes and the orange dots are similar surface depressions.	
Zoom in close to Shippensburg so that you can see the immediate surroundings. How common are sinkholes and surface depressions in that area?	
Zoom back out far enough out to see much of Cumberland and Franklin Counties. Are those karst features distributed everywhere in this region or only in particular areas? Why is that?	
Many local streams in this area are spring-fed (Burd Run, Middle Spring Creek, Big Spring Creek, Yellow Breeches, etc.). How does the large volume of groundwater flowing at those springs relate to the bedrock geology you have described?	