

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

## Mammoth Cave

With over 350 miles of passageways, Kentucky's Mammoth Cave is one of the largest cave systems in the world. Caves are formed when water seeping slowly through the ground dissolves buried layers of limestone or dolomite and carries them away, leaving behind the surrounding rocks which are less soluble.

The unusual landscape that is formed over rocks that are dissolving away is called karst topography. One of the oddest features of karst topography is the apparent lack of a well-developed surface drainage system. The only stream visible in this image is the Green River (C6). Water no longer moves along the surface above this part of Mammoth Cave, rather it tends to seep through numerous cracks directly into the caves. Streams that formed small valleys (L27 to B17) are no longer carrying water.

As the caves grow in size, the ground above these large openings occasionally collapses, forming sinkholes. Two of the deepest sinkholes in the Mammoth Cave area, Double Cellars (I21) and Hunt's Sink (L24), are visible in these photographs. The bottom of Hunt's Sink is 160 feet below the surrounding land.

1. In this view there are at least eight entrances to caves, all of them at an elevation of about 215 meters (700 feet). Why are they all found at similar elevations?

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2. Do you think the cave entrances are more likely to be located on valley slopes or on the high flat areas? \_\_\_\_\_ Why? \_\_\_\_\_

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3. Two roads end across the river from each other at G11. How can cars get across the river here? \_\_\_\_\_ Why is there no bridge here?

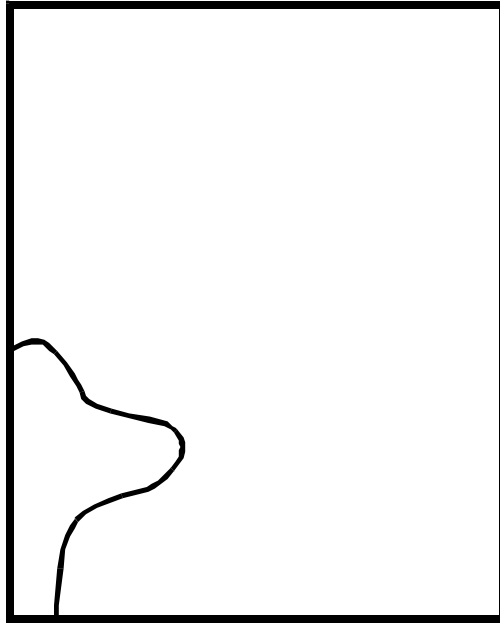
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4. The only ponds in this area are on the high flat areas such as at P24 and S15. Why are there no ponds in the lower areas? \_\_\_\_\_

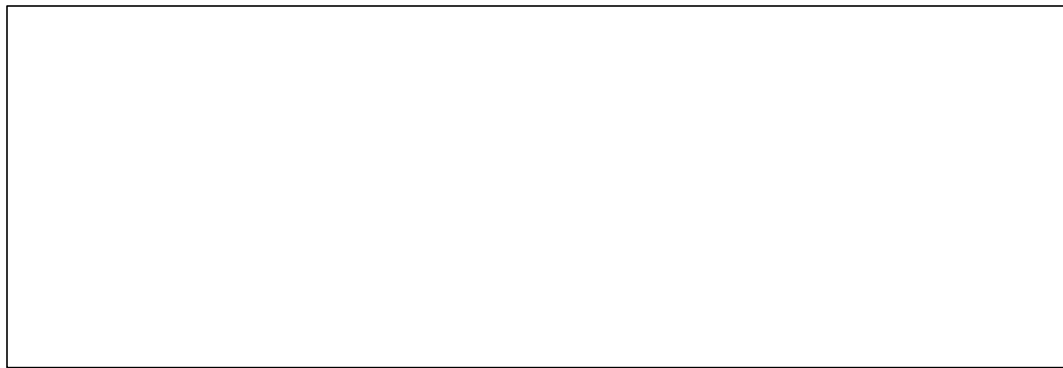
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5. Draw a sketch of the pattern of streams that formerly fed into the Green River.



6. Draw a cross section of this area from J27 to the Green River at G11. Show in your drawing what you think the caves might look like.



J27

G11

7. What happens to the water after it sinks into the ground here? Where does it eventually end up going? \_\_\_\_\_

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