Name _____ Class _____ Date _____

Thacker Creek

This image shows the Thacker Creek Valley of southern West Virginia. Thacker Creek flows through the town of Thacker Mines at M18 and empties at Q3 into the Tug Fork River, which forms part of West Virginia's border with Kentucky.

This is a strip-mining area where coal is collected from two seams, one of which winds its way through much of the image. The other seam is evident at D12. The seams are evident in this image only from the traces left by strip mining. Coal companies have built roads along the sides of the hills where coal is accessible to mine and transport it.

1. What are some possible reasons that there are so few roads that connect the strip mining operation with the roads at the bottom of the valley? _____

   _____

   _____

2. What are two possible reasons that there has been no strip mining around the valley that makes up the upper left corner of this image? _____

   _____

   _____

3. What is the advantage of having the road at P27 follow the tops of the ridges instead of the valley floors? _____

   _____

4. In what stage of maturity is Thacker Creek? _____

   What characteristics of the creek and its valley indicate this? _____

   _____

   _____

(Continued…)

5. What spot that has not yet been mined might be a good place to find coal near the surface? _____

_____

6. What could be the purpose of the straight and narrow strip cleared of trees between A14 and L18? _____

_____

7. The scar left from the strip-mining is at a slightly higher elevation at L23 than at N5. What does that suggest about the rock layers in this area? _____

_____

8. If the rock layers in this area had been squeezed and folded by horizontal pressure, how would this have affected the strip-mining operation? _____

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