Section One. Introduction

1. Describe the basic process of coal formation.

2. During which geological time period was peat deposited in swamps that would later become Indiana’s major coal deposits?

3. Indiana coal is classified or “ranked” in which category?

Section 2. Coal Mine Locations

1. Pennsylvanian-age rocks are located in which general region of Indiana?

2. Please complete the following table:

<table>
<thead>
<tr>
<th>Seismic Data</th>
<th>Region of Indiana having greater number of data points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Mines</td>
<td></td>
</tr>
<tr>
<td>Underground Mines</td>
<td></td>
</tr>
<tr>
<td>Abandoned Mines</td>
<td></td>
</tr>
</tbody>
</table>
3. Using the metadata provided for the *Bedrock Geology* layer, answer the following questions:
   a. The information provided in this layer was digitized from which Indiana Geological Survey publication?

   b. What is the scale of map used to create this layer?

4. If a company wanted to mine the Danville coal deposits along the western border of Indiana, would those mines be surface or underground mining operations? Explain your answer.

5. Should companies desiring to mine Springfield coal deposits along the western border of Indiana use surface or underground mines? Explain your reasoning.

6. Let’s say that you are employed by a company to find a location suitable for a surface mining operation. In which region of the state would you direct your efforts? What coal member would you attempt to locate and why?