Directions: List the order of rock layers from oldest to youngest and write the period in which it existed and how many millions of years ago it existed.

<table>
<thead>
<tr>
<th>Oldest</th>
<th>Name of Fossil</th>
<th>Period</th>
<th>MYA</th>
</tr>
</thead>
<tbody>
<tr>
<td>C + F</td>
<td>Elliptoceratops (A)</td>
<td>Cambrian</td>
<td>~530</td>
</tr>
<tr>
<td>E</td>
<td>Valcourastra (D)</td>
<td>Ordovician</td>
<td>~486</td>
</tr>
<tr>
<td>B + D</td>
<td>Eurypterus (M)</td>
<td>Silurian</td>
<td>~420</td>
</tr>
<tr>
<td>A</td>
<td>Bothrioceras (F)</td>
<td>Devonian</td>
<td>~405</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youngest</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In what rock layers is an index fossil located?

C + F, B + D
1. A rock formation in New York State contains fossils of many trilobites but of no fish. In which general area is this rock formation probably located?
   1) Long Island
   2) south of Lake Ontario
   3) southwestern New York State
   4) northeastern New York State

2. Shark and coral fossils are found in the rock record of certain land areas. What does the presence of these fossils indicate about those areas?
   1) They have undergone glacial deposition.
   2) They were once covered by thick vegetation.
   3) They have undergone intense metamorphism.
   4) They were once covered by shallow seas.

3. The geologic columns A, B, and C in the diagrams below represent widely spaced outcrops of sedimentary rocks. Symbols are used to indicate fossils found within each rock layer. Each rock layer represents the fossil record of a different geologic time period.

   **COLUMN A**
   ![Fossil Diagram A]

   **COLUMN B**
   ![Fossil Diagram B]

   **COLUMN C**
   ![Fossil Diagram C]

   According to the diagrams for all three columns, which would be the best index fossil?
   1) 
   2) 
   3) 
   4) 

4. Which is the best method of determining the relative ages of a layer of sandstone in western New York State and a layer of sandstone in eastern New York State?
   1) Compare the thickness of the two layers.
   2) Compare the colors of the two layers.
   3) Compare the size of sand particles of the two layers.
   4) Compare the index fossils in the two layers.

5. What characteristics of fossils are most useful in correlating sedimentary rock layers?
   1) limited geographic distribution but found in many rock formations
   2) limited geographic distribution and limited to a particular rock formation
   3) wide geographic distribution but limited to a particular rock formation
   4) wide geographic distribution and found in many rock formations

   => Questions on back =>