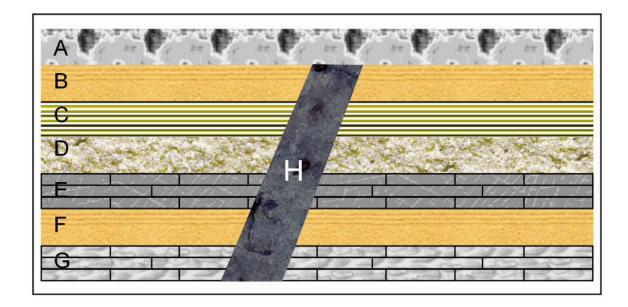
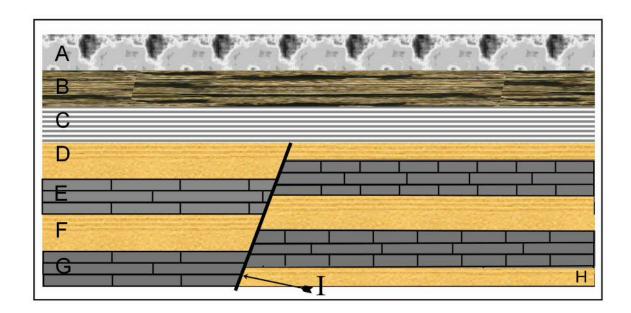
3 Geologic Time

For the following figures, determine the ordering for youngest to oldest for the layers identified with letters:

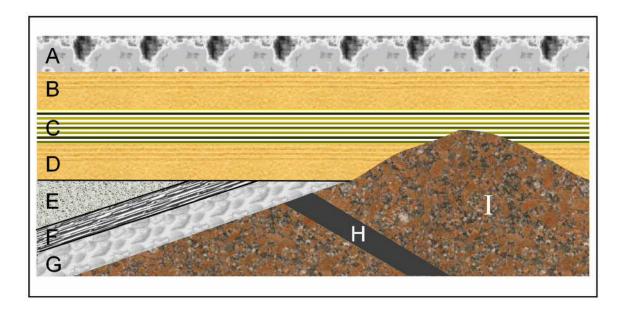
. ._____



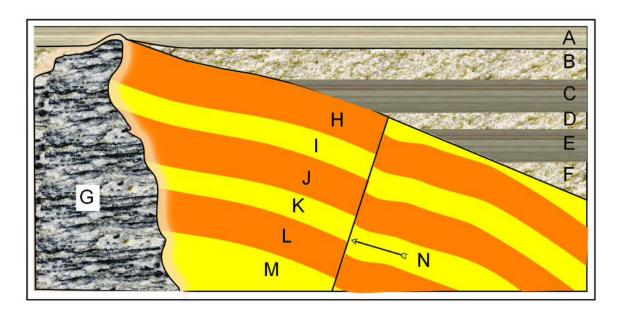
2. _____



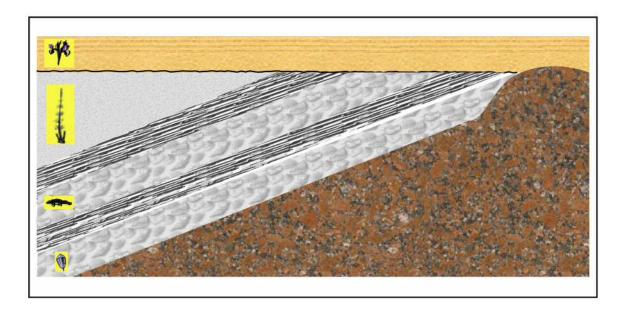
3. _____



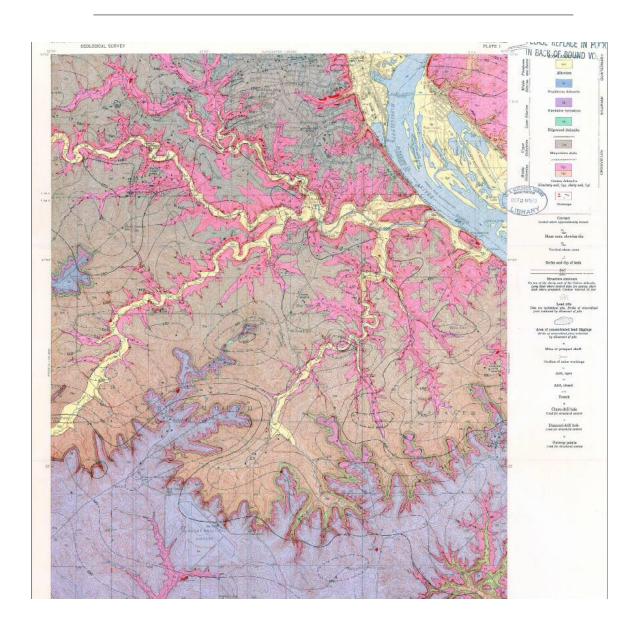
4. _____



5. The following figure shows rocks similar to the distribution of rocks underlying Iowa. It includes fossils to represent the age of the rocks. I'll project a figure to help you with this. What happened during the Mesozoic time period at the location of this figure?



- 6. Examine the geologic map of the area south of Dubuque, shown below.
 - (a) What is the age of the rocks upon which UD sits. Use your book to determine a fossil that is common to that time period.
 - (b) What is the geologic age of the blue formation covering much of the south of the area?
 - (c) How can you recognize it when you drive south from Dubuque?
 - (d) What is the geologic age of the yellow formation on the map? What does it represent?



Out-of-Class Assignment

Familiarize yourself with the following terms, providing a brief definition and an example of their use::

- relative dating versus absolute dating
- parent isotope versus daughter isotope
- \bullet half-life
- unconformity

Define in your own words the following laws and principles:

- Law of Original Horizontality
- Law of Superposition
- $\bullet\,$ Law of Inclusions
- Law of Cross-Cutting Relationships
- Principle of Fossil Succession