

Name: _____ Date: _____ Period: _____

SEQUENCE OF EVENTS LAB

Sequence #1

A. What type of deformation has occurred?

B. What is the name of the rock that was deposited first?

C. What is the name of the rock that was deposited most recently?

Sequence #2

A. What type of deformation has occurred?

B. What is the name of the rock that was deposited first?

C. What is the name of the rock that was deposited most recently?

Sequence #3

A. What processes have caused parts of these layers to be removed?

B. List the rocks layers (by letter) in order from oldest to youngest.

C. Why would the surface of these rocks not be considered an unconformity?

Sequence #4

A. What is the name of the surface feature?

B. Did the igneous intrusion (the rock with the v's) come before or after the layers above it? Explain

Sequence #5

A. What are the processes involved in the formation of the unconformity?

Sequence #6

| | |
|--|-------|
| A. List the rock layers from oldest to youngest, that formed this cross-section. | _____ |
| B. Did the deformation occur before or after the unconformity? Explain | |

Sequence #7

| | |
|---|--|
| A. List the sequence of events from oldest to youngest, that formed this cross-section. | |
| B. How did the Erie coal layer form? | |

Sequence #8

| | |
|---|--|
| A. What do the thick, horizontal black lines represent? | |
| B. What do the thin, vertical black lines (the "whiskers") represent? | |
| C. Is the Palisades Sill younger or older than the Brunswick Sandstone? How can you tell? | |

Sequence #9

| | |
|--|--|
| A. List the sequence of events, from oldest to youngest, that formed this cross-section. | |
|--|--|

Sequence #10

| | |
|--|--|
| A. What is the name of the rock at letter A? | |
| B. Did the fault occur before or after the intrusion? Explain. | |

Sequence #11

A. Did C form before or after B? Explain.

B. Have these layers undergone uplift and subsidence? Explain

Sequence #12

A. What is line XY called? How does it form?

B. What is the predominant type of metamorphic rock that was created by this intrusion?

Sequence #13

A. State the name of the three rock layers found in Box B from oldest to youngest.

B. State the name of the two rock layers found in Box C from oldest to youngest.

B. State the name of the three rocks found in Box D from oldest to youngest.

Sequence #14

A. State the entire sequence of events that formed this cross section

Sequence #15

A. Between the formation of which layers did uplift, erosion and subsidence occur?

B. Explain how the formation of layer A and Layer D might differ despite being composed of the same rock.

Sequence #16

A. Is the fault older or younger than the intrusion? Explain

B. What type of rock likely exists below the layer of shale on the right side of the fault?

Sequence #17

A. What processes likely occurred between the formation of intrusion 7 and layer 4?

B. What is the name of the rock that will likely form where rocks 7 and 8 meet?

Sequence #18

A. Did the Glossopteris live before or after the eruptions that formed the lava flows? Explain

B. What process likely occurred at this location, but is not reflected on the diagram?

Sequence #19

A. Why do you think the Queenston shale is more worn away than the Whirlpool sandstone?

B. What is the name of the youngest sandstone shown in this cross section?

Sequence #20*

A. Now that you've got the hang of this, let's see if you can do something that is really challenging. **List the sequence of events from oldest to youngest.**

(since there are so many events in this example let's make things simple and use "unconformity" instead of listing all the processes that create it)