| Target | $\mathbf{1}$ | 2 (all of 1 plus) | $\mathbf{3}$ (all of 2 plus) | 4 (all of 3 plus) |
| :--- | :--- | :--- | :--- | :--- |
| LE 5.7 <br> Preparedness | Does not complete formative or <br> summative in an effortful and <br> timely manner, is not engaged, <br> does not arrive on time with <br> class materials ready to learn, <br> does not communicate when <br> issues arise | Completes formative or summative <br> in an effortful or timely manner, is <br> sometimes engaged, sometimes <br> arrives on time with class <br> materials ready to learn, <br> sometimes communicates when <br> issues arise | Completes formative or summative <br> in an effortful and timely manner, <br> remains engaged, arrives on time <br> with materials ready to learn, <br> communicates when issues arise | Completes formative or summative in an <br> effortful and timely manner, remains <br> engaged, arrives on time with materials <br> ready to learn, communicates when <br> issues arise, and is reflective on <br> strengths and challenges within your <br> preparedness skill |
| LE 5.6 <br> Precision | Recognizes the importance of <br> products that are planned, <br> edited, and completed with care | Attempts products that are <br> planned, edited, and completed <br> with care | Creates products that are planned, <br> edited, and completed with minimal <br> errors | Creates products that are planned, <br> edited, and completed free from errors <br> or need for revision |
| Geo 4 | I can define the processes which <br> create, alter and/or destroy the <br> rock record | I can identify within a diagram the <br> processes which create, alter <br> and/or destroy the rock record | I can interpret a diagram to <br> determine the sequence of events <br> (relative age) in Earth's history as it <br> relates to past and current <br> movements of continental and <br> oceanic crust | I can interpret a diagram to determine <br> the relative sequence of events in <br> Earth's history as it relates to past and <br> current movements of continental and <br> oceanic crust internally (cross section) <br> and externally (land features) |
| MP1 <br> Geosphere | I can define the processes that <br> create, alter and/or destroy rock <br> formations | (all of 1 plus) I can explain the <br> processes that create, alter and/or <br> destroy rock formations | (all of 2 plus) I can interpret <br> evidence of the past and current <br> movement of crust to explain ages <br> and structures of rock formations | (all of 3 plus) nailed it! |

## Unconformities



1. Below each diagram, indicate the type of unconformity represented in the diagram.
2. For a nonconformity, what types of rock underlie the sedimentary rock?
3. How do angular unconformities differ from disconformities? (use a diagram to help support your answer...)

In the diagram to the right,
A-F are sedimentary rocks. $G$ is igneous.
4. What type of unconformity is represented between B and the layers below
5. Between which layers is a nonconformity represented?

6. Geological time.... What does the presence of an unconformity (ex: between the Hermit Shale and the Supal Group) tell us about when the layer above and the layer below were deposited?

What significant geological events occurred between the depositing of the rock below the unconformity and the depositing of the rock above the nonconformity.
7. Answer the following with respect to the diagram below of a "chunk" of the Grand Canyon.

NOTE: All layers are sedimentary EXCEPT the granite (igneous) and the schist (metamorphic).
Which layer is the oldest? Hint: It is not the Zoroaster Granite.
Which layer is the youngest?
Label a disconformity with a letter $\mathbf{A}$.
Label a nonconformity with a letter B.
Label an angular unconformity with a letter $\mathbf{C}$.
What is the likely cause of the erosion through the Hermit Shale?


