

Grand Canyon simulation  
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Name \_\_\_\_\_



**Objectives:** The Grand Canyon pictured above is an iconic geologic feature. We can also use it as an example of the scientific method. The problem I would like you to consider is why do some of the formations form gentle slopes and why do some form steep cliffs? Put a hypothesis on the line below:

Hypothesis: \_\_\_\_\_

You may also think that the Grand Canyon preserves a complete geologic record, but this is not true. Take a virtual field trip by helicopter of the canyon to explore this magnificent landscape!

Open this website, to get the age in millions of years for each Geologic Time Period:

<http://www.geologyin.com/2016/12/10-interesting-facts-about-geological.html>

To get the fossils that have been found in each formation, go to this website:

<https://www.nps.gov/grca/learn/nature/fossils.htm>

As you explore this region fill in the table below:

Formation	Rock type	Geologic Time Period	Age Millions of years ago	Fossils
Kaibab				
Toroweap				
Coconino				
Hermit				
Supai				
Red Wall				
Temple Butte				
Mauv				
Bright Angel				
Tapeats				
Precambrian				

Questions to be answered:

- 1) Were you correct in your hypothesis?
- 2) Which time periods are missing between the Temple Butte and Muav Limestone?

3) How much geologic time is missing between the Temple Butte and Muav?