The five-panel graphic:

- Respondents immediately thought that the “unconformity” mentioned in the first panel referred to the pink granite. They explained that an unconformity must be something that is different, and this was obviously the thing that was “different” in this drawing.

- The text at the bottom of panel 2 was confusing. Respondents couldn’t figure out how the “older, bottom rock layers” could be eroded because erosion must happen from the top down.

- After studying the wayside panel above, respondents thought that an unconformity is where you have two (or more) different compositions of rock on top of one another. They did not understand that it is missing rock record.

- Respondents’ eyes immediately went to the five-panel graphic first rather than the title or introductory text. This is very typical of behavior in informal settings. Because of this, we need to remember that the first panel to the left will be visitors’ very first encounter with the word/concept unconformity.

- Preliminary findings suggest that the missing pages from a book analogy may work well, but it needs more testing with additional respondents.

**Recommendation: Include the first three panels of this graphic only.**

The five-panel graphic is trying to convey three related but actually different concepts: (a) what an unconformity is, (b) what the Great Unconformity is, and (c) the roles tilting and the GC Supergroup play in the Great Unconformity. In order to understand the second, visitors must first understand the first. There is a strong likelihood that respondents will understand what an unconformity is with just the first three panels. It will be easy to then make the leap to understanding what the Great Unconformity is. But it is too much to try to then take visitors to “the roles of tilting and the GC Supergroup.” These are important concepts but may be best covered in an accompanying brochure.
Dominoes diagram:

- No respondent was able to make sense of this diagram. They explained that they were thinking of dominoes as standing stacked up together, but they didn’t think that’s how layers of rock are formed. They were unable to offer any meaningful explanation about what was trying to be conveyed.

Recommendation: Revise drawing and explanatory text.

Title and lower left text/photo:

- Respondents were not able to pronounce Gneiss, even after studying the panel. They did not see the pronunciation guide in the sub-heading.
- Because they could not pronounce Gneiss, their conversation was inhibited and any discussion was focused on how to pronounce the word rather than on any of the content.
- All respondents thought “the canyon’s oldest known rock” was referring to an individual hunk of rock “like Plymouth Rock” rather than a rock layer.
There was much confusion about whether Gneiss is a type of rock, or Elves Chasm Gneiss is a type of rock. Most respondents eventually decided that maybe Gneiss was a particular type of rock, and that the rock sample they were looking at must have been brought up from a place that was called Elves Chasm. They also thought that they would be looking down into Elves Chasm from where they were standing on the rim. When they read that the rock could “be found deep in the canyon” they thought that meant deep in a vertical sense. They did not read “downstream.”

**Recommendation: Revise the title.**
Label the rock *Elves Chasm Gneiss (nice)* and change the title of the wayside to something like: This is the oldest known rock in the canyon. Then in all the text on the panel, refer to Elves Chasm Gneiss as a *type of rock*, for example: Elves Chasm Gneiss (nice) is the oldest known type of rock in the entire Southwest. It is 1,840 million (1.84 billion) years old.