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Module 1 Origins and Earth Systems
Evidence worksheet_01 "Prokaryotes: The unseen majority"

Learning objectives:

- Describe the numerical abundance of microbial life in relation to the ecology and biogeochemistry of Earth systems.

General Questions:

• *What were the main questions being asked?*

• *What were the primary methodological approaches used?*

• *Summarize the main results or findings.*

 - Main habitats that have the greatest number of prokaryotes is in the subsurface (seawater, soil, sediments)
 - Plants have less nutrients per gram of carbon than prokaryotes do
 - Mutations are more prevalent in prokaryotes because of their sheer number, leading to greater genetic diversity
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• Do new questions arise from the results?
How does the number of bacteria compare to archaea?

• Were there any specific challenges or advantages in understanding the paper (e.g. did the authors provide sufficient background information to understand experimental logic, were methods explained adequately, were any specific assumptions made, were conclusions justified based on the evidence, were the figures or tables useful and easy to understand)?
The author did provide some background information, but it just goes into describing their methodology and the various environments they looked at, which could be confusing as they explain how they know there are lots of prokaryotes in a particular habitat, but not why. However, the tables are easy to read and present an easy way to compare data between the different environments they described