

APPLYING PRACTICES

Earth's Formation and Early History

*Research Report
(Test Grade)*

** 1-2 people **

*Individual = 3-5 pages
2 people = 5-7 pages*

Introduction

Our planet, Earth, is roughly 4.6 billion years old. In that time, it has been bombarded by debris from space and endured countless changes to its physical surface from both internal and external forces. The information stored in sedimentary, igneous, and metamorphic rocks (as well as meteorites and other planetary sources) tells us the story of Earth's past. With this information, we can construct ideas and theories of what Earth was like in past eons.

Task

Your task is to apply scientific reasoning and evidence from ancient Earth materials, meteorites, and other planetary materials to develop an account of Earth's formation and early history.

Process

Use your resources to answer the following questions.

1. What is the geologic time scale? Which eon, era, period, and epoch are we currently living in?

2. Give a basic definition for sedimentary, igneous, and metamorphic rocks.

3. Give an example of each of the rock types defined above.

Include these in your paper

Earth's Formation and Early History CONTINUED

Report *Typed, Double spaced, 12 pt Font*

The report should be 5-7 pages in length. In it you should discuss how the Earth formed, the materials that make up the Earth, how we determine the age of the Earth and its rocks, and how outside forces such as meteorites give us additional clues about the Earth's age.

Resources

Many resources can be used to assist your research. These include journal articles, websites, and scientific news and magazines. You might also visit a university, science museum, or a laboratory or interview an expert in the field.

Evaluation

Read the following rubric to see how you will be scored on your research and presentation.

Criteria					Points
	0	5	10	15	
Task	The tasks were not completed.	Some effort was made to complete the tasks, but the major ideas are missing.	The tasks were completed but some information was omitted or incorrect.	The tasks were completed with great attention to detail.	
Process	The process was not followed.	The process was begun but not all questions were answered.	The process was followed but some answers were incorrect.	The project showed thorough research and a deep understanding of the topic.	
Report	There was no attempt to create a report.	There was minimal effort making the report.	There was good material and ideas in the report.	The report was excellent, and showed knowledge of the topic.	
Total Score					