

Soil Formation and Soil Properties

AP Environmental Science

Name: _____

Date: _____ Block: _____

As we have learned, the topic of soil science is an incredibly intricate and interdisciplinary subject. We will now focus on the formation of soil and the many properties that it possesses. In groups, you will research the following areas of soil formation and its properties. Upon researching your aspect of soil science, you will then share out information so that everyone has a thorough understanding of the properties of soil.

Weathering

Physical
Chemical
Biological

Erosion (*not weathering, but associated with*)

Physical Properties

Particle Percentages (*soil triangle*)
Permeability
Texture
Drainage

Formation

Parent Material
Climate
Topography
Organisms

Chemical Properties

CEC
Soil Bases
Soil Acids
Base Saturation

Soil Horizons

O
A
E
B
C

Biological Properties

Fungi
Bacteria
Protozoans
Macroscopic Organisms (*rodents, earthworms, etc.*)

Once you have researched an aspect of soil science in your group, the following items should be included in the presentation of your topic.

1. Explain the scientific basics of your topic.
2. Explain how the process/property of your topic contributes to soil health.
3. Provide a case study where soil was impacted (positively or negatively) by your topic.
4. Provide an explanation of how your topic contributes to sustainable development.

Once you have completed your research, add information to the provided Google Slides document.

You will be assessed on:

1. Accuracy
2. Thoroughness/details
3. Participation
4. Quality