

Sedimentary Sandwich

Activity 5

Notes on the activity

Clastic sedimentary rocks form when bits and pieces of older rock form layers of sedimentary material. The layers form on the bottom of oceans and lakes. Bedding planes, which are slightly different in color, separate the individual layers because each layer has a slightly different mineral content. Major floods bring in thick layers of mud that contain rocks and boulders. Rainstorms create thinner layers of mud and silt.

In this activity, students will create a sedimentary sandwich that contains a number of sedimentary layers. The chunky peanut butter represents a sedimentary layer formed after a flood that contains rocks and boulders. The jam layer represents a volcanic eruption that flowed over the land leaving behind a layer of lava. The crackers represent the mud and silt from the rainstorms.



Materials

- ◆ Honey graham crackers
- ◆ Chocolate graham crackers
- ◆ Chunky peanut butter
- ◆ Strawberry or raspberry jam
- ◆ Knife
- ◆ Paper plate

Directions

1. Break two rectangular pieces of honey graham crackers in half to form four square pieces of light crackers.
2. Break two rectangular pieces of chocolate graham crackers in half to form four square pieces of dark crackers.
3. Lay one square of honey graham cracker on the plate.
4. Spread a layer of chunky peanut butter on top.
5. Place a square of chocolate graham cracker on top of the chunky peanut butter.
6. Spread jam over the top of the chocolate graham cracker creating another layer for your sedimentary sandwich.
7. Continue to add crackers, jam and peanut butter to your sedimentary sandwich until all the crackers are used.
8. Count the number of layers that form your sedimentary sandwich.
9. How many layers were created by a major flood? To find out the answer to this question count the number of layers of the chunky peanut butter.
10. Count the number of times a volcano erupted and covered the sedimentary layers with lava by counting the layers of jam.

Extending the activity

- ◆ Make a sedimentary sandwich using a variety of pieces of bread with other ingredients layered between the slices.
- ◆ Add animal crackers to your sedimentary sandwich to denote fossils.

Notes and drawings