

Making Metamorphic Sandwiches - - "Bread Rock"

Name: _____

Period: _____

Objective:

To graphically show how metamorphic rock is formed by pressure and heat.

Materials:

- At least 2 loaves of day-old bread (white and something darker if possible)
- wax paper
- heavy books or blocks
- microwave or oven

Procedure:

1. Examine the bread and write a description of what you observe (texture, color, stiffness, etc.).
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2. Stack the bread by alternating slices of different colored bread and wrap the stack in wax paper.
 3. Place heavy books or blocks on top of the bread so that layers squish together, much as the earth's pressure transforms soft rock into denser hard rock.
 4. Place "sandwiches" in a microwave for 30-60 seconds to dry and harden. (If oven is used instead of microwave REMOVE WAX PAPER)
 5. Repeat procedure steps 3 & 4 as many times as you wish.
 6. If used, remove the wax paper and leave overnight to dry. Examine your "rock sandwich." How is it different from what you observed originally?
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Note:

- The end product (rock) is a direct result of how much pressure and heat is applied.