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Title: Metamorphic Sandwiches - - "Bread Rock"
Time: 1 class period
KERA Goals: 2.2, 2.3, 2.4, 2.5

Objective:

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

Materials:

4-6 slices bread per student (white and wheat)
wax paper
heavy books or blocks
microwave (optional)

Activity:

1. Hand out 2 or 3 slices of white and wheat bread to each student. Have them examine the bread and write a description of what they observe. Have students measure the size of each slice of bread.

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. If available, place "sandwiches" in a microwave for 30-60 seconds to dry and harden.

5. Remove the wax paper to obtain the "metamorphic" sandwich. Have the students examine their "rock." How is it different from what they observed originally? How different is the size?

Note:

The end product (rock) is a direct result of how much pressure and heat is applied. If microwave is not available at school, you could have the students do this as a homework assignment and see who brings back the most metamorphosed sandwich and what they did to get it.

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