**Changing Rocks**

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This lesson comes from Visual Learning Company – Earth Science-The Rock Cycle (elementary).

**Materials:**

Safety goggles Different colored crayons or candles

Paper Plastic knives

Small clear plastic vials Aluminum foil cut in 6 inch squares

Electric hot plate (I used a warming tray and the burner on a 4 cup coffee pot.)

**Activity:**

1. Put on safety goggles
2. Choose 3 - 4 different colored crayons or candles (take the paper off).
3. Using a plastic knife, scrape off thin shavings of wax onto the paper. Keep each color in a separate pile.
4. Carefully layer the colors in the plastic vial one layer at a time, packing them gently with your finger.
5. Observe the layers of shavings through the side of the plastic vial. This “rock”

symbolizes a **sedimentary rock**.

1. Carefully take the “rock” from the vial.
2. Hold the sedimentary rock in the palm of your warm hand and close your fingers

over it so it is completely covered by your hand. Tightly hold and occasionally squeeze it for 2 – 3 minutes.

1. Take the “rock” and fold it. Tightly hold it in your hand another two minutes.

This represents a **metamorphic rock.**

1. Place the metamorphic rock on a piece of aluminum foil and fold up the edges.
2. Place the foil on the hot plate and turn the heat to medium-low.
3. Observe how the rock changes over several minutes. The liquid wax represents molten rock.
4. When the rock has completely melted turn off the hot plate and remove the

foil. Observe the rock as it cools. This type of “rock” represents an

**igneous rock.**

**Questions:**

1. What were the characteristics of the sedimentary rock?
2. How was the sedimentary rock changed into a metamorphic rock?
3. What did the liquid wax represent, and what happened when it cooled?

**Notes:**

This activity was done in a fifth grade science class. It is one of the students’ favorites. It takes some time shaving the crayons (I ended up using a blade from a pair of scissors to help students that were struggling with this part of the process – it goes much faster), but once that part of the process is complete, it doesn’t take too long to finish.