# Metamorphic Crispy Treat



## **Objective**:

To apply heat and pressure to edible sediments (cereals and candies) to simulate the metamorphic process to rock layers.

### Materials:

- 1. Small tart tins or pie plates
- 2. Heavy Duty Aluminum Foil
- 3. Assorted small cereals-allow the students to form a list (Take into account any allergies or restrictions) Rice Krispies<sup>TM</sup>, Cheerios<sup>TM</sup>, Flakes, Fruit Loops<sup>TM</sup>
- 4. Small marshmallows, chocolate and butterscotch chips
- 5. Sprinkles (nuts & coconut optional)
- 6. Wax Paper
- 7. Napkins or Paper Towels
- 8. Plastic Knife
- 9. Soup can or weight
- 10. Oven (something to heat the wrapped pan like a toaster oven, ask the cafeteria or Home Economics' Teacher or send them home)
- 11. Paper to and pencil to record before and after diagrams and descriptions (Data Record)

### Procedure:

- 1. Layer the ingredients with a cereal layer on the bottom, followed by candy chips, followed by cereal and mini marshmallows and sprinkles or nuts. Top with a layer of cereal in the tart pan.
- 2. Draw and describe the layers from a side view.
- 3. Wrap the tart pan with the treat layers in Aluminum foil and place a weight on top. ( Keep the soup can sealed with the soup inside)
- 4. Bake at 200 225 degrees for 15 20 minutes.
- 5. Take out of oven with oven mitt and apply pressure.
- 6. Allow to cool completely.
- 7. Unwrap and remove treat from the tart pan.
- 8. Have the students cut the treats in half and have them draw and describe the side view.

### **Analysis Questions:**

- 1. How are your before and after diagrams alike? How are they different?
- 2. What type of rock does the before diagram represent?
- 3. What type of rock does the after diagram represent?
- 4. What are the two factors that produced the after treat?
- 5. In what way might the treat not fully represent a metamorphic treat?

**Follow-Up:** Enjoy observing other student's treats and if allowed enjoy eating and rating the taste of your treats