



Rio Grande Educational Collaborative Before and After School Program Lesson Plan

TITLE OF LESSON: Baking Soda Volcano

DATE:

SITE NAME:

CLASS SIZE:

NAME(S) OF INSTRUCTOR:

DURATION OF LESSON:

CREDIT (website used/name of author):

<https://www.persil.com/uk/dirt-is-good/arts-crafts/how-to-make-a-paper-mache-volcano.html>

COMMON CORE STANDARDS: SL.K.2, 3.1.C, SL.5.1.C, SL.5.5

LEARNING OBJECTIVES:

Students will understand the following:

- Collaborate to create a sculpture with its aesthetic informed by their previous artistic explorations.
- Familiarize themselves with introductory chemistry knowledge

ACTIVITY:

Instructional Sequence:

(Step by step instructions, should another instructor pick up and teach the lesson successfully)

Work through the process together with students:

1. Cut a large square out of your cardboard box to make the base board (if you have particle board or plywood, that would be even better).
2. Using masking tape, tape the bottom of the bottle to the base board.
3. Rip half of the newspaper into inch-wide strips.
4. In a bowl, create a mixture of thin white glue and water.
5. Use masking tape in strips from the bottle's opening to the base to form the volcano's cone shape.
6. Next, dip strips of newspaper into the glue mixture and lay them on top of each other, covering the tape, from the bottle opening to the cardboard base.
7. Add several layers of torn paper until the shape resembles a volcano.
8. Leave to dry for at least 24 hours.
9. Once the paper mache is completely dry, use paint to decorate the volcano.
 - a. Mixing glue with water to coat the volcano will allow you to pour dirt on top, and this can then be sealed with a similar mixture in a spray bottle.
 - b. Once dry, the mixture can be dry brushed with paint for a realistic effect. Dip a brush in the paint, wipe off most of it on a paper towel, then lightly paint the raised areas with what's left over.
10. Optionally, make dinosaurs or foliage to make the volcano look more realistic.

11. Using a funnel or rolled up paper add two or three tablespoons of baking soda to the bottle in the center of the volcano.

12. Add the white vinegar to see the volcano erupt.

MATERIALS:

The following materials or equipment needed for this lesson:

(Include special equipment request)

- Empty water bottle
- Newspaper
- White glue
- Bowls
- Water
- Cardboard
- Scissors / box cutter
- Acrylic paint
- Brushes
- Baking soda
- Vinegar
- Masking tape

SIGNATURE: _____ **DATE:** _____

SITE SUPERVISOR'S SIGNATURE: _____ **DATE:** _____

INSTRUCTOR'S REFLECTION:

Reflection on the lesson given:

1. How many students participated in the lesson given? _____
2. Name(s) of instructors participated. _____
3. How long did your lesson take? (Amount of time) _____
4. How did the students feel about the lesson? _____
5. Did the students like the lesson? _____
6. What part of the lesson did the students like? _____

7. What part of the lesson did the students not like? _____

8. Were the students interested in the topic of the lesson? _____
9. Was the content of the lesson difficult for the students? _____
10. What could you have changed to make the lesson interesting? _____

11. Did you have any trouble getting your lesson together? (Idea & Materials) _____

12. How do you rate your lesson? (1-10) Why? _____

SITE SUPERVISOR'S REFLECTION:

Reflection on the instructor's lesson:

1. How many students participated in lesson? _____
2. How many instructors participated in lesson? _____
3. Did the students enjoy the lesson? _____
4. What part did the students enjoy? _____

5. What part did the students NOT enjoy? _____

6. What could have been changed to make the lesson interesting? _____

7. Was the content of this lesson difficult for students to understand? Why? _____

8. What part of STEAM or literacy was used? (Science, Technology, Engineering, Art, Mathematics or Literacy)

9. Comments: _____

