

**Project FOCUS
Best Lessons
SECOND GRADE**

Title of Lesson: Life of a Colonist (Social Studies- 2nd grade)

Theme:

Unit Number: **Unit Title:**

Performance Standard(s) Covered (enter codes):

SS2G2: The students will read and learn about the lives of historical figures in Georgia history.

B: Describe how everyday life of these historical figures is similar to and different from everyday life in the present.

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

States of matter, Precipitation, Chemical versus Physical changes, Difficulty of obtaining food during Colonization Period, Food production, challenges faced by Colonists

Learning Activity (Description in Steps)

Abstract (limit 100 characters): The students will make butter and try to grind rice into flour to experience life as a colonist.

Details: Before the lesson, we filled the cups with 3 marbles and half way up with cream. We double checked the lids to make sure they were tight. A powerpoint was made to open the lesson and get the children thinking about how Colonists obtained food. I asked the students where they obtained food and if these places would have been available for the Colonists. I then asked them what the Colonists would have had to eat and where they might have found it. We also went over the details of the experiment and over the safety guidelines. These guidelines were when shaking the lid is not to be pointed at anyone, the lid is to remain tight anytime during shaking, there is no eating of the materials, and no throwing or dropping rocks on anyone. I then had the students return to their desks (during the powerpoint, I had the students sit on the floor in front of the board). When the students were seated, I passed out the jars with instructions not to touch them or theirs would be taken away. Once they were all passed out, I had the students describe what they saw without touching the jars. We then opened them together and observed the liquid closer. After I double checked everyone's lid, we started shaking the jars. You have to shake them for quite a long time approximately 15 minutes. We initially let the students open the jars to observe the inside once they

observed a change on the outside but this did not work well so I decided to let them look every 5 minutes. After the cream begins to thicken, it gets very difficult to shake the contents. If you take the jar and hit it on the desk to bring everything back to the bottom, it makes it easier to continue shaking. The butter will precipitate out of the liquid and cause the formation of butter milk. So you are left with a solid and a very thin liquid. After the butter was made, we collected those jars and exchanged them for paper plates. On the plates, I put about a handful of rice (we used rice because I could not find any unprocessed grain) and gave each student a rock. They tried to ground the rice. This is super hard and we did not get much of anything but it got the point across that making flour was super hard and therefore took a lot of work to make bread. After about 5 minutes of trying to ground the rice, I took the rice back and the rocks and gave each student biscuits I baked and store bought butter. During the shaking and grinding times, I asked the students questions about colonization and about the science behind butter making like why they thought the cream was becoming solid.

Materials Needed (Type and Quantity):

1. Plastic Cups (I used Bell preserving plastic jars) - # of children= 20
2. Heavy whipping cream - 1 cup for each jar X 20 = 20 cups
3. Marbles - 3 for each cup x 20 = 60
4. Rice/ Grain - 1 20 oz bag
5. Paper Plates- 1 for each child = 20
6. Flat rough rocks - 1 for each child = 20
7. Biscuits - 1 for each child = 20
8. Butter - 1 tub
9. Paper towels

Notes and Tips (suggested changes, alternative methods, cautions):

I decided to let the children open the jars whenever they noticed a change in the cream. This turned out to be a bad idea and we had several spills and you do not want spilled milk on your teacher's carpet because it starts to smell quite bad. It worked much better when I started setting a time and we opened the jars together at a certain times interval.

There is a safety concern with the lids of the jars being pointed towards others while being shaken also the lids need to be kept very tight and will loosen when shaken vigorously.

It is important to point out not to throw the rocks or drop them on someone else.

Do not eat any of the butter unless you have kept the cream sufficiently cold due to threat of bacteria growth.

Some of the children complained about their arms starting to hurt. It is okay to let the jar sit for a while for them to rest. You could put on fun music to make the shaking into a dancing kinda movement.

The whipped cream that forms during the early stages of shaking can become really thick and in order to allow the marbles to keep moving, you may need to hit the jar on the desk until they are freed and move again.

Sources/References:

- 1) <http://pbskids.org/zoom/activities/sci/butter.html>
- 2) <http://www.socialstudiesforkids.com/articles/ushistory/13coloniesfood.htm>
- 3) <http://blog.hmns.org/?p=3551>

