EGG CHEMISTRY

Kitchen

Grade 5 • 110 mins • Fall, Winter, Spring

NEW! GRADE 5 | SCHOOL PARTNER LESSON PLAN

SUBMITTED BY
Noah Welsh • noah_welsh@bcaemail.org

ESSENTIAL QUESTIONS

- How do we know if something is a chemical or physical change

VOCABULARY

- Chemical change
- Chemical reaction
- Physical change
- Atoms
- Molecules

ASSESSMENT

Students will write a claim-evidence-reasoning response at the end of class where they explain whether a given phenomenon illustrated in a table is a chemical or physical change.

- **Observational Checklist**

MATERIALS

Materials for Introduction

- Kahoot Game: Is this a chemical reaction?
- Scrambled Egg Recipe

Equipment

For each group of 10

- Whisk
- Spatula
- Pan
- Bowl

For whole class

- Plates
- Forks!

Ingredients

From store

- Butter
- Eggs

From garden

- Garnishes including but not limited to chives or green onions

Materials for Enjoying the Food

- Salt
- Pepper
- Plates
- Forks

Materials for Cleaning Up

- Sponge/cleaning brush
- Paper towels
- Soap
- Trash can

CREATED BY
Belle Chasse Academy in 2022

PREPARATION (ESTIMATED TIME VARIES)

Purchasing of eggs and butter. Setting up cooking stations with materials.

TEACHER BACKGROUND

The teacher should understand the difference between chemical and physical changes as well as how to properly cook eggs.

LESSON DESCRIPTION

Students will start a lesson with a Kahoot game where they have to identify whether various pictures illustrate chemical or physical changes. They will then learn to cook eggs and see how this is a perfect example of a chemical reaction.

LEARNING OBJECTIVES

- I can conduct an investigation to determine whether the mixing of two or more substances results in new substances.
- I can follow multi-step directions.
- I can work in a team.

Life Skills Learning Objectives

Community Life Skills

CLS.2 Students cooperate and communicate well with each other.

ACADEMIC STANDARD CONNECTIONS

5-PS1-4: Conduct an investigation to determine whether the mixing of two or more substances results in new substances.

HEALTH STANDARD CONNECTIONS

5-E-1.1: Analyze elements of effective decision-making model. Student will have to work on decision making strategies as they cook eggs in teams.

Lesson Sequence

Prepare to Cook (15 mins):
Before beginning to prepare students will play a Kahoot game where they have to identify whether various images reflect physical or chemical changes. Student will then wash their hand,
tie their hair up, and put aprons on.

Recipe Introduction (5 mins):
Students will orally compare and contrast raw eggs and scrambled eggs.

Review Familiar Skills (5 mins):
Students will review how to beat eggs, use a spatula, keep eggs from burning, and basic safety techniques.

Demonstrate New Skills (15 mins):
The chef or the teacher will perform a quick step by step walk through of how to scramble eggs. The chef or teacher will specifically demonstrate the skills.

Divvy Up Tasks (5 mins):
Students will choose team roles for egg preparation.

Cook (15 mins):
Students will cook eggs. Early finishers will proceed ahead to the next cleaning step.

Enjoy (10 mins):
Eggs will be plated and garnished with miscellaneous vegetables or herbs from the garden.

Clean Up (10 mins):
Students will split into washing and drying groups and clean the dishes. Other students will sponge the surfaces and throw away trash.

Reflect (15 mins):
Students will write a claim-evidence-reasoning response at the end of class where they explain whether a given phenomenon illustrated in a table is a chemical or physical change.

CONNECTIONS TO GARDEN LESSONS

Eggs will be garnished with vegetables and herb from the school garden.

POSSIBLE EXTENSIONS

Students are now capable of cooking eggs for parent and community involvement events.

ADDITIONAL RESOURCES

Pictures of miscellaneous chemical and physical changes to be used in the introductory Kahoot game.

OTHER COMMENTS

This lesson will take a little more than one class period so the claim-evidence-write portion of the lesson will likely need to take place on the second day.