

■ Amount of time for lesson: 45 minutes

■ Standards of Learning:

Grade 2:

Oral Language

2.2 The student will continue to expand listening and speaking vocabularies.

Use words that reflect a growing range of interests and knowledge.

Clarify and explain words and ideas orally.

Give and follow oral directions with three or four steps

Grade 3:

Mathematics

3.17 The student will read temperature, to the nearest degree, from a Celsius thermometer and a Fahrenheit thermometer. Real thermometers and physical models of thermometers will be used.

Oral Language

3.1 Ask and respond to questions from teachers. Explain what has been learned.

Science

3.1 The students will plan and conduct investigations in which ...temperature is measured to the nearest degree Celsius.

■ Goal of Lesson:

Students will be able to identify and practice safe food handling practices.

■ Learning Objectives:

1. Name the four conditions necessary for the growth of bacteria (Time, Temperature, Moisture, and Food)

2. Demonstrate the correct procedure for washing hands.
3. List four times you need to wash your hands.
4. Evaluate current food handling practices using a checklist.

Supplies:

- Germs! Germs! Germs! By Bobbi Katz
- Fight BAC Poster
- Black light, Soap, Water, Sink, Nail Brush, and Hand Sanitizer
- Food Safety items: Fresh fruit and/or vegetables, wipes, lunch containers (paper bag, plastic bag and insulated lunchbox with ice pack)
- Ham sandwich made with food models
- Thermometers, cutting board, milk carton, kitchen towel and dishcloth, sponge, ice cream box and scoop, vegetable brush, cake mix box, pot, large spoon and teaspoon, BAC puppet, cup, dish detergent bottle, Fight BAC poster

Introduction of Lesson:

Today we will talk about the importance of safely handling foods and proper hand washing for food safety and to reduce the spread of disease. To help Rainbow Parrot and Pyramid Pup have safe food, what are some things we do? Regularly change their water, keep their bowls clean, give fresh food, refrigerate canned dog food once opened, and keep the parrot's cage clean. It is a good idea to wash our hands prior to feeding them so we do not spread germs to them and to wash our hands after feeding them so we will not get their germs.

Teacher's Guide

Introduction Activity

We will start by reading the book Germs! Germs! Germs! By Bobbi Katz

Student Activities

Students listen to the book about germs.

Teacher's Guide

Student Activities

Main Lesson and Activities

1. Name the four conditions necessary for the growth of bacteria: Time, temperature, moisture, and food.

Let's review the conditions bacteria or germs need to grow: Food, Moisture, Time, and Temperature.

I brought my Fight BAC puppet (show puppet) and poster to remind us of four things we need to do to keep food safe from bacteria. (Use pointer to identify these points: clean, separate, chill and cook.)

Use a ham sandwich made from food models to discuss how bacteria multiply rapidly when food is left out at room temperature.

Use packaged dry beans to illustrate how germs replicate when moist. Protein rich foods are left at room temperature. Bacteria or germs are present on the foods, and they multiply under the right conditions. Illustrate this by showing dry beans in re-sealable bags.

At present: 5 beans	1.5 hours: 320 beans
1/2 hour: 20 beans	2 hours: 1280 beans
1 hour: 80 beans	

2. Demonstrate the correct procedure for washing hands.

Another way to reduce the spread of germs or bacteria is properly washing our hands. Demonstrate how to properly wash hands. Stress these points: Soap, agitate for 20 seconds, nail brush, rinse, and dry.

Hand sanitizers are not nearly as effective as hand washing. Wipes are the next best substitute if you can't wash your hands.

Select two students to do a hand washing experiment using Glo-germ and a black light.

Students observe puppet.

Students will roll up their sleeves and pretend to wash their hands. They will sing "Row, Row, Row Your Boat" twice to see that they are washing for the recommended 20 seconds.

Students will rub Glo-germ on their hands. Then the lights will be turned off and the black light used to replicate what germs would look like if they were visible to us. Both students will then wash their hands. One student will use a nail brush. After washing, the black light will be turned on to see where they missed.

Teacher's Guide

Student Activities

3. List four times you need to wash your hands.

Can you tell me when it is most important to have clean hands?

4. Evaluate current food handling practices using a checklist.

Show items related to food safety and discuss special handling required to prevent food borne illness and reduce the spread of disease.

Display each item and discuss special handling required to keep them safe. Be sure to cover all food handling practices described on Kids' Food Safety Checklist.

Show a sponge and ask students why these should not be used in the kitchen.

Now we will watch a video "BAC Attack! How Our School Fought BAC for Food Safety".

Review of the Lesson:

Let's review what we learned today.

- Name the four conditions necessary for the growth of bacteria: Time, temperature, moisture and food
- How long do we need to wash our hands? 20 seconds.

Demonstrate how to correctly wash your hands.

Handout:

Kids Food Safety Checklist (VCE 348-068)

Students will identify when they need to wash their hands:

- Before eating
- Before preparing food
- After flush
- After sneezing or coughing
- Play with pets
- After play outside
- After School
- After handling money

Sponges usually are moist, at room temperature, and contain food for long periods of time so they are a perfect breeding ground for germs or bacteria.

Watch and listen to identify all the food safety hazards you see in this video/

Some food safety problems in video:

- Food in refrigerator cross contaminated.
- Food not in refrigerator
- Hands not washed
- Chicken on top of refrigerator
- Cross contamination
- Eaten food without rinsing.
- Hands not washed.

Students take home the checklist and go over it with their parents.

Support Materials for Teachers:

Video: “BAC Attack! How Our School Fought BAC for Food Safety”.

Children’s Books:

Germs! Germs! Germs! By Bobbi Katz

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