

**Ben Franklin Unit**  
**Lesson 4: Protection in Severe Weather--Science**  
**Created by: Ryan Adams**

**Lesson:** Protection in Severe Weather

**Length:** 45 minutes

**Age or Grade Level Intended:** 3<sup>rd</sup> grade

**Academic Standard(s):**

**Science: 3.3.6**—Describe ways human beings protect themselves from adverse weather conditions.

**Social Studies: 3.1.7**—Chronological Thinking, Historical Comprehension, Analysis and Interpretation, Research: Distinguish between fact and fiction in historical accounts by comparing documentary sources on historical figures and events with fictional characters and events in stories. {Not assessing at this time}

**Performance Objective(s):**

**Science:**

After discussing several ways humans can protect themselves during a thunderstorm, students will create posters identifying at least 5 ways to stay safe during thunderstorms.

**Assessment:**

The assessment will take place after students create their posters identifying at least 5 ways to stay safe during thunderstorms. A check list will be used to assess whether or not students met the objective.

**Advance Preparation by Teacher:**

- Locate copy of the book *How Ben Franklin Stole the Lightning* by Rosalyn Schanzer
- Gather appropriate supplies—poster boards, scissors, glue, crayons, etc
- Create lightening graphic organizer
- Create self-made checklist

## Procedure:

### Introduction/Motivation:

1. “Students, remember how yesterday we talked about our almanacs and began writing them? Who can remind the class of some different features that are included in almanacs?” Allow time for sharing. “As we all know, almanacs provide readers with a variety of information, such as descriptions of current weather patterns and conditions. Today we are going to read a story concerning how Ben Franklin developed a way to protect his community during thunderstorms. Afterwards, you all will get the opportunity to create posters identifying different ways you can stay safe during thunderstorms.”  
(Gardner: Verbal/Linguistic, Intrapersonal, Interpersonal)

### Step-by-Step Plan:

1. Have students gather at the reading rug with their clipboards and pencils handy. Once students are quiet, share the book title and author with them. Have them predict what they think the story might be about by taking a look at the front cover and title of the book. Have students share some of their predictions. **Bloom: Synthesis**  
(Gardner: Verbal/Linguistic, Intrapersonal, Interpersonal, Visual-Spatial)
2. Before you begin to read the book aloud, tell students that as you read, they are to find 2-3 facts about Ben Franklin and write them on their clipboards. As you read the book to students, ask them some of the following questions:  
(Gardner: Verbal/Linguistic, Visual-Spatial, Interpersonal, Intrapersonal)
  - a. What are some of the interesting things Ben Franklin did during his lifetime? **Bloom: Comprehension**
  - b. Why do you think Ben Franklin helped create so many new things for people in his community? **Bloom: Analysis**
  - c. How did lightening cause so many problems in Ben Franklin’s town? **Bloom: Comprehension**
  - d. How did Ben Franklin improve swimming for people? **Bloom: Comprehension**
  - e. What did the odometer tell people? **Bloom: Knowledge**
  - f. Why is it better that the Franklin stove was invented for people? **Bloom: Evaluation**
  - g. What might have happened if Ben Franklin would have never invented the lightening rod? **Bloom: Synthesis**
3. After reading the story, have some of the students share the facts they wrote down from the story on their clipboards.  
(Gardner: Interpersonal, Verbal/Linguistic)

4. Have students return to their desks. The teacher will hand out the students the lightening graphic organizer. The students will write down at least three things they know about how to stay safe during thunderstorms. Once students have completed this part of the organizer, the class will help the teacher create a list on the board to see what students already know about thunderstorms and how to stay safe during them.  
(Gardner: Visual-Spatial, Verbal/Linguistic, Intrapersonal, Interpersonal)
5. The teacher will allow the students to explore the following thunderstorm/lightening website in the school's computer lab. During this time, students will complete their thunderstorm organizer at this time adding between 3-4 things they learned about thunderstorms and lightening through their research:
  - a. <http://www.weatherwizkids.com/weather-thunderstorms.htm>(Gardner: Visual-Spatial, Bodily/Kinesthetic, Intrapersonal, Verbal/Linguistic)
6. Have students reconvene in the classroom in their seats. The teacher will explain the directions for completing the thunderstorm posters. In groups of 3-4, students will create posters that include at least 5 ways to stay safe during thunderstorms. (Students' posters should include NEW ways that they learned as they explored the thunderstorm website. Students will be allowed at least 20 minutes to work on their posters. The teacher will place students in groups before the activity begins. The teacher will walk around the room while students are working to answer any questions.  
(Gardner: Visual-Spatial, Verbal/Linguistic, Interpersonal, Intrapersonal)

**Closure:**

7. Several of the groups will present their posters to the rest of their classmates. Any groups who did not finish will be given the chance to finish their posters during recess or study time near the end of the school day.  
(Gardner: Visual-Spatial, Verbal/Linguistic, Interpersonal, Intrapersonal)
8. The teacher will have one last discussion with students about why it is so important that people know of several different ways to protect themselves during thunderstorms. Any last comments by students or the teacher will be made at this time. Before the lesson is over, teacher will inform students that tomorrow, they will all be learning about some of the ways Ben Franklin did community service for his community.  
(Gardner: Verbal/Linguistic, Interpersonal, Intrapersonal)

## **Adaptations/Enrichment:**

### **Student with Learning disability in reading comprehension**

- Read the directions with the student
- Re-read the book with the student and ask them several comprehension questions as the book is being re-read.
- If this student gets stuck while working with their partners on the poster, help them brainstorm some ideas where they can contribute to the project.
- This student may also work with a paraprofessional or be pulled out into the resource room.

### **Student with ADHD**

- This student will receive one direction at a time so they do not feel over loaded.
- This student will be placed in a group with other students that are trustworthy and that they have worked with in the past.
- While working in their group, this student will be allowed to have two breaks to prevent them for feeling overwhelmed.

### **Autism**

- Provide direct instruction for student
- Repeat the directions several times to be sure the student understands the directions.
- Use a positive behavioral support with this student by offering them incentives to work cooperatively.
- This student will also be placed with trustworthy students that they have worked with in the past.
- During group work, allow this student to work with the paraprofessional and the classroom teacher. These adults will guide the student through their group work.

## **Self-Reflection:**

### **Write out the questions that you will use to evaluate yourself.**

- How can I improve this lesson the next time I teach it?
- What other websites could I have the students go to about thunderstorms to learn more about them?
- Were the students given enough time to complete their posters?
- Could I have supplied the students with any other supplies to make their posters better?
- Were the students able to identify several ways to stay safe during thunderstorms after they did their research and created their posters?



Thunderstorms



**K**

What I Already **KNOW**

**W**

What I **WANT** to Find Out

**L**

What I **LEARNED**

