Lesson 1: Katrina Strikes

Lesson Description
During ordinary times, people with financial knowledge and skills contribute to a stable economy by consuming wisely, saving, and investing. In the face of a natural disaster such as a hurricane, tornado, or earthquake, or in the face of a personal crisis or tragedy, the financially prepared are generally able to recover more quickly, which helps the economy remain stable. This lesson is an introduction that sets the groundwork for developing the skills to create a plan for emergency and financial preparedness.

The PowerPoint-based lesson is designed for personal finance and other related classrooms.

Time Required
One 50- to 55-minute class period for entire lesson.

Concepts
- Emergency fund
- Natural disaster
- Emergency preparedness
- Planning
- Financial preparedness
- Managing risk

Objectives
The students will be able to:
- Define natural disaster.
- Develop an emergency plan for their family.
- Recognize the need for financial preparedness in the face of a disaster.
Materials

- Presentation: Katrina’s Classroom Lesson 1, Part 1
- Infographic: Why Prepare for the Unexpected? (https://www.frbatlanta.org/education/katrinasclassroom/lesson1/infographic.aspx) Display infographic prior to starting the lesson
- Ready.gov Family Communication Plan for each student

National Curriculum Standards

COMMON CORE STANDARDS

<table>
<thead>
<tr>
<th>College and Career Readiness Anchor Standards for Reading</th>
<th>Grades 6–8 students</th>
<th>Grades 9–10 students</th>
<th>Grades 11–12 students</th>
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<tbody>
<tr>
<td>Integration of Knowledge and Ideas</td>
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<td>7. Integrate and evaluate content presented in diverse formats and media, including visually and quantitatively, as well as in words.</td>
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<td>7. Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.</td>
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<td>7. Integrate quantitative or technical analysis (e.g., charts, research data) with qualitative analysis in print or digital text.</td>
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<td>7. Integrate and evaluate multiple sources of information presented in diverse formats and media.</td>
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<td>Writing Standards for Literacy in History/Social Studies 6–12 Research to Build and Present Knowledge</td>
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<td>7. Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.</td>
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<td>7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.</td>
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<td>Financial Responsibility and Decision Making</td>
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<td><strong>Standard 1: Take responsibility for personal financial decisions.</strong></td>
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<td>Identify ways to be a financially responsible young adult. Give examples of the benefits of financial responsibility and the costs of financial responsibility.</td>
<td>Explain how individuals demonstrate responsibility for financial well-being over a lifetime.</td>
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<tr>
<td><strong>Standard 2: Find and evaluate financial information from a variety of sources.</strong></td>
<td>Given a scenario, identify relevant financial information needed to make a decision.</td>
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<th>Planning and Money Management</th>
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<td><strong>Standard 2: Develop a system for keeping and using financial records.</strong></td>
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<th>Risk Management and Insurance</th>
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<td><strong>Standard 1: Identify common types of risks and basic risk management methods.</strong></td>
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Lesson Procedures

Specific instructions for PowerPoint are highlighted with a dotted border.

SLIDE 1. KATRINA STRIKES (TITLE PAGE)

During ordinary times, people with financial knowledge and skills contribute to a stable economy by consuming wisely, saving, and investing. In the face of a natural disaster—such as Hurricane Katrina, tornados, or earthquakes—or a personal tragedy, the financially prepared are generally able to recover more quickly, which helps the economy remain stable.

SLIDE 2. LESSON OBJECTIVES

This lesson will cover natural disasters and financial and emergency preparedness.

SLIDE 3. NATURAL DISASTER

According to the U.S. Department of Health and Human Services, natural disasters are defined as naturally occurring events that can cause severe threats to the public health.

Natural disasters occur all around the world and range in impact.

Tornadoes, hurricanes, volcanoes, and earthquakes each have classification systems that gauge the intensity of an event by assessing a number of set factors. These classification methods help researchers study disasters’ patterns and help educate the public so they can plan and prepare for potential disasters.

Click the picture to take you to the National Oceanic and Atmospheric Administration’s webpage on Historical Hurricane Tracks. To display data for Hurricane Katrina, search under “Storm Name/Year” for Hurricane Katrina 2005.

www.csc.noaa.gov/hurricanes/index.html?years=default&sel=selected&cats=default&scale=18489298&press=default%2Cdefault&storms=2005236N23285&qType=ids&mos=default&il=%2D82%2E350000%2C31%2D992304#app=3d30&3e3d-selectedIndex=1

ASK THE STUDENTS

Why is the path of Hurricane Katrina shown in different colors?

Answer: The different colors indicate a change in intensity of the storm.

Scroll over the colored key at the top of the page to reveal classification and wind speed information.
Lesson 1: Katrina Strikes

What were the highest maximum sustained winds reported?

**Answer:** 150 kts (This can be found in the bottom left hand corner. The left side of the graph indicates in red that winds peaked on August 28, 2005, over the Gulf of Mexico.)

What does “kts” stand for?

**Answer:** Knots (A knot is a unit of speed equal to one nautical mile, which is approximately 1.151 miles per hour.)

If the wind speed was 150 knots, what is the equivalent in miles per hour? How did you calculate this?

**Answer:** 172.65 miles per hour. Calculated by multiplying 150 knots by 1.151 (150 x 1.151 = 172.65).


During Hurricane Katrina and in other recent natural disasters, we have learned valuable lessons about the importance of planning.

**Ask the Students**

Why is it important to prepare for life events or activities in which you want to be successful? Take for example, the skydiver, track athlete, or mountain biker.

**Possible responses:** to be prepared, to be successful, to avoid injury

Are there sports or activities that you have to prepare for before you can participate? How do you prepare?

**Possible responses:** 1) equipment preparation for sports like soccer, baseball, or football; 2) most athletes need to warm up or stretch to help prevent injury; 3) even in an activity like band, there may be the risk of not performing well if you do not practice an instrument and if you haven’t coordinated with others about which song to perform; 4) cheerleading requires many hours of practice to avoid injuries while performing routines.

The common threads among these activities are 1) they all involve risk, and 2) the participants took steps to prepare for what they were trying to accomplish.
SLIDE 5. RISK MANAGEMENT

Risk is the uncertainty about the outcome of a situation or event. To manage risk, you must identify the sources of risk and estimate potential losses. We take risks every day. The risk from natural disasters, while it cannot be completely eliminated, can in some cases be minimized with adequate planning and preparation.

With advanced planning, you can help reduce the risk associated with natural disasters. Click the picture and it will take you to FEMA’s Ready.gov website for risk planning. www.ready.gov/plan-for-your-risks

ASK THE STUDENTS

Consider the scenario of living in a coastal area that has frequent hurricanes. What are some ways that you can manage the risk of property damage from natural disasters?

Possible responses: board up windows, have insurance, move vehicles away from the coast

To manage risk, you must choose to accept, avoid, reduce, or transfer the risk. You accept the risk by choosing to live in this region. You could avoid the risk by deciding to move from the region. You can reduce the risk by settling further inland. Or you can transfer the risk by purchasing property insurance.

Distribute a copy of the Ready.gov Family Communication Plan to each student (this document is available at www.fema.gov/media-library/assets/documents/34330). Have students work in groups to discuss and create an emergency plan for their individual families. Students should discuss the plans with their families and fill in any hard-to-find information. Ask students not to include the social security information on the form since they should keep that information confidential and in a safe place. Students will need to write down any terms they do not understand and look up the definitions. Review and discuss the important components and terms associated with an emergency plan.

SLIDE 6. PLANNING

Planning helps people make decisions to accomplish their goals. Planning involves managing decisions related to education, earning income, spending, and saving in order to achieve goals. Planning also includes keeping yourself safe in an emergency situation. One of the first important decisions you will need to make is whether to stay where you are or evacuate to a safer location. You should understand and plan for both possibilities.

Have one student from each group volunteer to report on his or her family’s plan. Each student should be given a time limit of two to three minutes to condense what he or she developed into a brief verbal report.
ASK THE STUDENTS

Why it is important to plan ahead for an emergency?

Possible responses: safety, knowing how to react and where to meet, may not have power or telephone reception so a plan is necessary

Have students refer to the Why Prepare for the Unexpected? infographic, specifically the section about making a plan. Tell students that planning may be important for them not only to accomplish their goals but also for them to keep safe in an emergency.

Natural disasters give little advance warning. There are many types of natural disasters that can affect you.

By clicking each picture, you will be taken to video clips on YouTube that explain how each of these disasters occurs.

- How a Tornado Forms - www.youtube.com/watch?v=2GWtfb5l8iA
- How a Hurricane Is Born - www.youtube.com/watch?v=4f45jA5UxB0
- Earthquake Fault Lines in America - www.youtube.com/watch?v=o0tVbjrbkp8

Many natural disasters happen without warning. Now, consider why it might be important to plan ahead and be prepared for an emergency. When we consider the previous sports examples, athletes’ success is similar to what you will want to achieve with your disaster preparations. That is, take steps that allow you to mitigate risk, be at the top of your game, and be ready to react when the situation arises.

SLIDE 8. IN SUMMARY

In this lesson, we learned that:

- Natural disasters are naturally occurring events that can cause severe threats to the public health.
- In the face of disaster, it is important to take steps for emergency and financial preparedness.
Katrina’s Classroom was developed by a team of senior economic and financial education specialists at the Federal Reserve Bank of Atlanta.

Claire Loup, New Orleans Branch • Julie Kornegay, Birmingham Branch • Jackie Morgan, Nashville Branch

For additional classroom resources and professional development opportunities, please visit www.frbatlanta.org/education