



Welcome to FEMA's **Be a Hero** curriculum, an empowering educational journey into emergency preparedness! This standards-based, cross-curricular program is designed to provide students in grades 6 through 8 with the knowledge, awareness, and life-saving skills needed to prepare for a variety of emergencies and disasters.

By engaging in three project-based lessons, students will gain a personal and meaningful understanding of disaster preparedness by creating solutions for real-world hazards. All inquiry-based activities lead to important learning through independent and collaborative work, research, investigations, discussions, and presentations.

By the final lesson, students will become "heroes" as they develop their own emergency preparedness campaign project. Using communication skills and creativity, they will generate awareness of emergency preparedness among friends, families, and the community at large.

Knowledge empowers! We hope this program will help you, your students, and their families feel prepared.

Sincerely,

Your Friends at FEMA



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Essential Questions:

What is a disaster/emergency? How do natural disasters happen? What role does geography play in disasters? What impact can a disaster/emergency have on a community?

Learning Objectives:

Students will...

- Identify various emergencies and natural disasters that could impact communities by geographic area (local & national)
- Explain the causes or risks of various disasters based on geography, climate, or season
- Describe the environmental and human impact of disasters and emergencies

Teacher Tool:

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Essential Questions:

Why is preparing for a disaster important? How have other teens/communities prepared for a disaster? How can I help my family prepare for a disaster? Why is it important to have a family communications plan and an emergency kit? How can I prepare for home fires?

Learning Objectives:

Students will...

- Work with their families to create a family communications plan
- Identify what is required in an emergency kit
- Identify safe and proper responses to emergency situations

Student Handouts:

Emergency Kit Checklist
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Essential Questions:

How can I help my community prepare for and respond to a disaster or emergency?

Learning Objectives:

Students will...

 Communicate information and knowledge of emergency preparedness and response in a clear and engaging way, using a variety of media, that considers and empowers their target audience (e.g., peers, younger children, families, communities)

Student Handouts:

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Flexible & Teacher-Vetted

Experienced teachers have developed and reviewed the curriculum to ensure that it is aligned to current standards and incorporates current education practices. Knowing each classroom is unique, lessons were designed to be flexible. You may want to adapt activities to your needs and student population, or collaborate with a colleague who teaches another subject.

21st-century

Lessons are designed for students to develop and exercise important 21st century skills such as: critical thinking, creativity, problem solving, communication and collaboration, independent thinking and research, information and media literacy, and leadership and responsibility.

Project-Based

Activities are student-centered and inquiry-led. The three lessons build upon one another, answering the following questions: What is a disaster? How can I prepare myself? How can I help prepare others? Students get to demonstrate their understanding of the material through various assessments and a culminating project.

Multidisciplinary & Cross-Curricular

Learning activities cover various topics and connect to several core subjects, including history, math, English language arts, science, social studies, and Technology. For example, the research project in Lesson 1 can be done in a humanities or science class; Lesson 2 can be done in language arts; while the final graphic novel project in Lesson 3 can be done in language arts, health, or a digital media or design class. (See page 33 in the Appendix for a full list of standards met by each lesson.)

A Real-World Focus That Empowers

The education approach is based on the belief that students are motivated to learn, and understand more, when they can connect a topic to their lives. Lessons offer students an opportunity to gain awareness about the world around them and then impact their world in a positive and real way!

We want to hear from you!

Share your learning experiences and student work, and connect with other educators across the country by visiting http://community.fema.gov or contacting FEMA at Ready@fema. dhs.gov. You can also tweet us with your experiences, using the hashtag #ReadyKids @ReadyGov!





Be a Hero has developed several components to support your teaching, broaden your students' understanding, and inform parents and communities about emergency preparedness. Many of the following are already integrated into the lessons and can be found on FEMA's website (**www.ready.gov/kids**). Explore and familiarize yourself with them before teaching the first lesson:

Map Locator Page

http://www.ready.gov/kids/maps

An interactive map of the U.S. that lets you learn more about recent events and what types of disasters each state is at risk for

Build a Kit

http://www.ready.gov/kids/build-a-kit

Information about why we need an emergency kit, and downloadable checklists for both kids and adults

Parent Pages

http://www.ready.gov/kids/parents

Tips and useful links for parents to involve kids in emergency preparation, and advice from child psychologists on how to help children cope during and after a disaster

Curriculum

http://www.ready.gov/kids/educators

In addition to lessons for middle school, the program includes curricula for elementary and high school students.



Get Your Kids on Your Team

Being a Hero is Fu

Know the Facts Disaster Factsheets

http://www.ready.gov/kids/know-the-facts

15 downloadable factsheets with information about what to do before, during, and after specific disasters

Make a Plan

http://www.ready.gov/kids/ make-a-plan

Information on the importance of developing a family communications plan, and tips for kids and adults on how to develop one

Two Online Games*

http://www.ready.gov/kids/games

Test student know-how in a wide range of emergencies, and help teach how to build the perfect emergency kit!

*Designed for younger audiences, but still fun to play!

Partner Sites and Links

Additional resources and useful information can be found in the Appendix on page 32.





Time Required:

Three 30-minute class periods

- First Class Blackout! Introduction: KWL Chart "What is FEMA?"; Disaster Brainstorm
- Second Class Disaster Research Project
- Third Class Breaking News Report!; Disaster Vocabulary Trivia; KWL Revisit

Note: Extra class periods can be added to accommodate more time for research.

Supplies/Preparation:

- Copy and cut out **Emergency Lingo** cards
- Timer
- Download and print copies of the 15 **Disaster Factsheets** from http://www.ready.gov/kids/know-the-facts. Create classroom sets for students to share or make enough copies for each student
- Secure access to the Map Locator feature on http://www.ready.gov/ kids/maps
- · Make copies for each student of student handout
- Access to computer lab, computers, and Internet connection



Student Handouts:

Disaster Vocabulary

Lesson Overview:

Disasters and emergencies can be scary, but understanding more about them is the first step toward student empowerment. In this introductory lesson, students will explore various disasters that can impact them and their communities, and become experts about disasters unique to their area.

Communication and Collaboration

21st-century Learning Skills

- Information Literacy
- · Creativity and Innovation



Learning Objectives:

Students will...

- · Identify various emergencies and natural disasters that could impact communities by geographic area (local & national)
- Explain the causes or risks of various disasters based on geography, climate, or season
- Describe the environmental and human impact of disasters and emergencies

Essential Ouestions:

What is a disaster/emergency? How do natural disasters happen? What role does geography play in disasters? What impact can a disaster/ emergency have on a community?





Test your students' knowledge with trivia questions found on the **Disaster Factsheets.**



FEMA stands for Federal **Emergency Management Agency**. FEMA's mission is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.

Did you know?

After a major disaster, FEMA will deliver "Meals Ready to Eat," or MREs, to people who have been affected. These meals come fully prepared, so they don't need a microwave or a stove! They even come with plastic ware.

1. Introduction Discussion:

Blackout! Turn off all of the lights in your classroom so that you are welcoming students into a dark room. Ask students to share whether they have ever experienced a power outage. What was it like? How long did it last? Have students close their eyes and imagine the power suddenly went off. What would you do? How would you eat? How would you stay warm or cool? How would you take care of your hygiene? How would you stay entertained? Now ask students to imagine that the power went off and they were disconnected from their families. How would you get in touch? Have students generate a list of communication methods they use on a typical basis and write them on the board. Then, ask students to come up to the board and cross out items that might become unavailable to them during a blackout. Explain to students that a blackout is an emergency that could happen in any community, sometimes as a result of another emergency/disaster.

2. Disaster Brainstorm

Ask students to think, pair, share, and brainstorm a list of every disaster they can think of. Keep track of the list on the board. After the list is generated, have students discuss which disasters they think might affect their community the most. Circle the disasters they select as region-specific.

Emergencies and Natural Disasters

- Blackouts
- Drought
- Earthquakes
- Extreme Heat
- Floods
- Home Fires
- Hurricanes
- Landslides/Debris Flows

- Space Weather
- Thunderstorms and Lightning
- Tornadoes
- Tsunamis
- Volcanoes
- Wildfires
- Winter Storms and Extreme Cold

3. Know, Want to Know, Learned!

Create a KWL chart about disasters to complete as a class. First, ask students to generate a list of things they already know about disasters for the K column. Then, ask students to brainstorm a list of things they would like to know about disasters for the W column. Tell students to keep those questions in mind as they set out to learn more about disasters. Let students know that they will revisit the chart at the end of the lesson to review everything they will have learned about disasters.

4. What Is FEMA?

Write FEMA on the board, and ask students what it stands for. Have students work in groups and explore the FEMA website (http://www.fema.gov) to inform themselves about FEMA.

Provide each group with a blank sheet of poster board or chart paper. Ask each group to write one interesting fact about FEMA and pass it to the neighboring group. Continue to have each group add to the list of facts, until each piece of chart paper has at least five different facts. Return the posters to their original group for a quick share out. After the groups share their posters, hang them up in the classroom or display around school to share their knowledge with other students.

_Instruction Steps (cont'd)

5. Disaster Research Project:

Break students into teams and assign each team a disaster to research that could occur in its own region. Share with students the criteria for their projects (see below). Encourage the collection of information and evidence (images, articles, videos, interviews). Provide the Disaster Factsheets (found at http://www.ready.gov/kids/know-the-facts) and resources listed in the Appendix on page 32 to get students started. They may also visit the library or use the Internet to conduct research.



Direct students to the Map Locator feature at http://www.ready.gov/kids/maps to find out which disasters occur in their communities and regions.

Breaking News Report!

Have the groups take their research and prepare a "Breaking News Report!" skit about their disasters, pretending that they are news reporters. Presentations must include a definition of the disaster, how it happens, where it happens, what impact it has, and one interesting fact. Encourage students to write scripts for their skits and practice them ahead of time to prepare. They may also want to incorporate visuals to enhance their report.

"Breaking News Report!" Criteria

List these on the board for students to reference as they work:

- · Definition of the disaster
- How the disaster happens
- Where the disaster can happen
- The impact the disaster can have on people and the environment
- What people should do to stay safe during and after the disaster
- · One interesting fact about the disaster

Give each group five minutes to share its "Breaking News Report!" skit with the class. After each presentation, ask students to reflect and share one thing they learned that surprised them about the disaster.



During the presentations, ask students to keep track of and note new words that they would like to add to a classroom disaster vocabulary word wall.

6. Emergency Lingo

To introduce students to general and specific disaster vocabulary, have them play a round of Emergency Lingo. Divide the group into two teams. Similar to the popular game Taboo, give students 25 seconds to describe as many vocabulary words on their cards as possible without using the word itself or any hand gestures. If students are unable to identify the word after 25 seconds, have them return the card to the bottom of the pile. Students can use the 15 Disaster Factsheets to look up the definition of any unknown words. Alternate teams after each word, and keep score on the board. The first team to correctly identify 20 vocabulary words wins! Use the blank cards to create your own!





_Instruction Steps (cont'd)



- Have each group come up with a creative team name that incorporates emergency preparedness.
- Laminate the vocabulary cards used in *Emergency Lingo* to help prolong their use! **Modification:**
- Challenge students by adding extra words to each card that students are not allowed to use. For example, FEMA's words that are off limits could be "emergency," "federal," and "government."
- Have students sort vocabulary into piles of related terms. For example, the words
 seismic activity, Richter scale, and fault line could go in the same pile. Once the
 piles are made, challenge students to create a sentence for each pile that includes
 every term in the pile.
- Turn the cards into a study tool for students by giving them each a copy, and writing the definition on the back.

7. Reflection: KWL Revisit

Have students return to the class KWL chart and generate a list of things they learned through their research. Use this to check for understanding. Plan to review any missed concepts at the start of next class.

8. Homework

Have students complete the *Disaster Vocabulary* handout at home to test their knowledge and to reinforce some of the more challenging vocabulary discussed during the lesson.



- When electric companies shut down power to an area for a certain amount of time in order to avoid a total blackout of the power system. rolling blackout
- 2. Another word for earthquakes, along with "tremors," "quakes," and "shakes." seismic activity
- 3. Saving and protecting a natural resource, like water. **conservation**
- Floods that happen very quickly. They can happen in just minutes, even if it's not raining. flash floods
- 5. The center of the storm and the time when winds and rains die down. eye
- 6. Scale by which earthquakes are measured. Richter scale
- 7. A sudden, violent outburst in nature like an explosion. eruption

Extension Activities

Disaster Postcards:

Have students create and write postcards for another community that has recently been hit by a disaster to show their support and encouragement for people affected. Identify a school, fire department, or recovery center in that community where the postcards can be sent.

Blog:

Have students create and contribute to a class blog to share research, information, and class projects online. They can also "report" on emergency-related events happening in their communities or across the country.

Current Events:

Have students pick a disaster currently in the news and read an article about it. Students can prepare a short current events presentation or report about the disaster.

Disaster Vocabulary

disaster relief readiness recovery preparedness evacuation vulnerable hazard utilities nonperishable conservation natural resource seismic activity Richter scale fault lines humidity heatstroke flood watch flood warning flash floods eye tropical storm surge debris slurry slope low-lying area electric grid blackout electrocution power surge heat lightning funnel hail storm shelter inland seismic sea waves lava molten eruption smoke alarms frostbite hypothermia freezing rain sleet oxygen electric grid



energy conservation rolling blackout

Utilities

Emergency Lingo

Preparedness

Emergency Lingo

Disaster

113:04

Emergency Lingo

Nonperishable



Emergency Lingo

Evacuation



Emergency Lingo

Relief



Emergency Lingo

Conservation



Emergency Lingo

Vulnerable



Emergency Lingo

FEMA



Natural Resources



Emergency Lingo

Hazard



Emergency Lingo

Recovery



Emergency Lingo

Slurry



Emergency Lingo

Eye



Emergency Lingo

Heatstroke



Emergency Lingo

Seismic Activity



Emergency Lingo

Slope



Emergency Lingo

Tropical



Flood Watch

Emergency Lingo

Richter Scale

Emergency Lingo

Low-Lying Area



Emergency Lingo Emergency Lingo

Emergency Lingo

Storm Surge

Flood Warning

Fault Line



Emergency Lingo

Emergency Lingo

Debris

Emergency Lingo

Electric Grid

Flash Floods







Humidity

HEROL

Emergency Lingo

Smoke Alarms



Emergency Lingo

Seismic Sea Waves



Emergency Lingo

Funnel



Emergency Lingo

Blackout



Emergency Lingo

Fire Sprinklers



Emergency Lingo

Lava



Emergency Lingo

Hail



Emergency Lingo

Electrocution



Frostbite

113:0/

Emergency Lingo

Molten



Emergency Lingo

Storm Shelter



Emergency Lingo

Power Surge



Emergency Lingo

Hypothermia



Emergency Lingo

Eruption



Emergency Lingo

Inland



Emergency Lingo

Heat Lightning



Emergency Lingo

Energy Conservation



Emergency Lingo
Freezing Rain

Rolling Blackout

Emergency Lingo

Emergency Lingo

Sleet





Emergency Lingo

Oxygen



Emergency Lingo

Electric Grid



Emergency Lingo



Emergency Lingo

HERO!

Emergency Lingo



Emergency Lingo



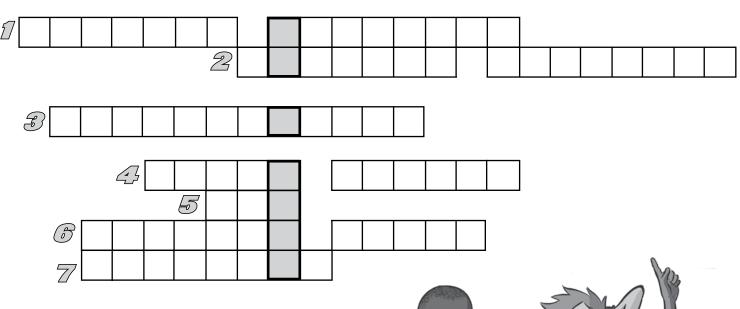




Name:	Date:	

Disester Vocabulary

Directions: Uncover a special disaster message from the FEMA Heroes by filling out the vocabulary below. Use your **Disaster Factsheets** and notes as references.



- \mathcal{I}_{σ} When electric companies shut down power to an area for a certain amount of time in order to avoid a total blackout of the power system.
- **2** Another word for earthquakes, along with "tremors," "quakes," and "shakes."
- \mathfrak{Z}_{a} Saving and protecting a natural resource, like water.
- Floods that happen very quickly. They can happen in just minutes, even if it's not raining.
- The center of the storm and the time when winds and rains die down.
- 📆 Scale by which earthquakes are measured.
- \mathbb{Z}_{μ} A sudden, violent outburst in nature, like an explosion.





Time Required:

Three 30-minute class periods

- First Class "Are you Prepared?" Four Corners Activity; Preparedness Discussion; Home-Fire prevention and safety
- Second Class Emergency Kit scavenger hunt; Text, Don't Talk!
- **Third Class** Think fast! Preparedness game; Reflection: 3-2-1 Exit Ticket

Supplies/Preparation:

- Make a copy of the student handout for each student
- · Hide different emergency kit items throughout the classroom (see FEMA Emergency Kit Checklist sidebar on page 18 for a list of possible items)
- Label each corner of the room with signs that read "Strongly Agree," "Agree," "Strongly Disagree," and "Disagree."

Student Handouts:

- Emergency Kit Checklist
- · Family Communications Plan





Lesson Overview:

We might not be able to predict when all disasters or emergencies will happen, but we can be prepared for them. Using disaster research from the previous lesson, students will realize how important it is to be prepared, and will take the necessary steps towards emergency preparedness by creating their own family communications plan and emergency kit.

21st-century Learning Skills

- Communication and Collaboration
- Information Literacy
- · Critical Thinking and Problem Solving

Learning Objectives:

Students will...

- · Work with their families to create a family communications plan
- · Identify what is required in an emergency kit
- Identify safe and proper responses to emergency situations

Essential Questions:

Why is preparing for a disaster important? How have other teens/communities prepared for a disaster? How can I help my family prepare for a disaster? Why is it important to have a family communications plan and an emergency kit? How can I prepare for home fires?





Did you know?

During an emergency, you might be living without power for a while. FEMA recommends having your own **food**, water and other supplies in sufficient quantity to last for at least 72 hours. Local officials and relief workers will be on the scene after a disaster but they cannot reach everyone immediately. You may get help in hours or it can take days!

1. Introduction Discussion

"Are You Prepared?" Four Corners Activity

Point out the "Strongly Agree," "Agree," "Strongly Disagree," and "Disagree" signs to students. Ask students to move around the room to the corner that most appropriately matches their response to the following questions: "Are you prepared for ?" "Is your family prepared for ?" "Is the school prepared for _____?" "Is the community prepared for _____?" (Fill in the blanks with different disasters. Make sure to include home fires and blackouts.) After each question, have students share why they agree or disagree.

Preparedness Discussion

Ask students to turn and talk to their partner about what "preparedness" means to them. Can they think of other instances where it helps to be prepared? (e.g., making a list before going to the grocery store, studying for a test, fire drills) Ask students to share what the benefits are of being prepared.



Ready, Year-Round

Reinforcing preparedness doesn't have to end with this lesson! Incorporate it into your class year-round by celebrating Fire Prevention Week, Flood Safety Awareness Week, National Hurricane Preparedness Week, and by revisiting important concepts like winter weather safety and heat safety when seasonally appropriate. Visit http://www.ready.gov for accurate dates.

2. Home-Fire Prevention and Safety

Explain to students that home fires are an emergency that can happen anywhere, to anyone, and that they kill more Americans each year than all natural disasters combined. Ask students to brainstorm what can be done to prevent and prepare for home-fires. Create a web on the board to keep track of their responses. Next, split the class into 2-4 teams and play a quick "Jeopardy-style" game using the Fact Check sidebar questions to test student knowledge. Make sure that students plan to have two ways out of every room, practice home-fire escape drills with their families twice a year, check for home fire hazards, and ask their parents to install, test, and maintain smoke alarms. Remind students that, above all, the most important thing to do is get out quickly!



What is a smoke alarm and how does it work? (A: It's a tool that can sense if there is smoke in the air. When it senses smoke, it makes a very loud beeping noise to warn you that a fire has started.)

How many smoke alarms (detectors) should you have in your home? (A: At least one on every level of your home, and inside and outside sleeping areas. Many fires start at night when we are sleeping. Having alarms inside and outside all sleeping areas increases the likelihood of waking up during a fire and getting out of your home safely.)

How often should you test and replace the batteries in your smoke alarms? (A: Test batteries once a month, and replace them at least once a year. If your alarm has a 10-year battery, test once a month. Replace the entire smoke alarm after 10 years.)

What should you do if you are the first one out of a burning building? (A: Go to the outside meeting place you and your family decided on and call 911.)

You should have at least ____ escape routes from each room. _ Zero _ One _ Two (A: c. Two)

True or False: Fires create toxic gases that can make you sleepy, confused, and short of breath. (A: True. That's why it's important to stay low to the ground, and get out fast!)

True or False: Cooking fires are the leading cause of home fires. (A: True)

What should you do if you catch on fire? __T__P, D____P, and __O L __. (A: Stop, Droll, and Roll)

What should you do before opening a door in a fire? (A: lightly touch the doorknob with the back of your hand to check if it's hot. If it is hot, use your second escape route.)

EEA HERO/

_Instruction Steps (cont'd)

Did you know?

During an emergency, phones lines are often jammed, just when they are most needed by emergency workers. Texting or using social media are good alternatives, as they use less bandwidth and can quickly reach a wider audience. Phone calls should be used for emergencies only so that responders (like 911) can get to those who need urgent help. Check out http://www.ready.gov/ get-tech-ready for more tech-ready tips!



Alerts received at the right time can help keep you safe during an emergency!

WEA stands for Wireless

Emergency Alert. WEAs are emergency messages sent to cell phones by authorized government agencies to let you know about dangerous weather conditions, emergencies, and other local hazards. WEAs are set straight to a phone without a need to download an app or subscribe to a service.

- Read the Alert
- Take Action
- Follow the Directions!

Learn more at:

http://www.ready.gov/alerts

3. Emergency Kit Scavenger Hunt

Ask students if they have ever heard of an emergency kit? Do they know anyone who has one? Why could it be important to have one? Have students turn and talk to their neighbor for a few minutes, then have pairs share with the rest of the class.

Reveal to students that you have hidden some emergency kit items throughout the classroom. Instruct each student to move around the room and find an item that they think belongs in an emergency kit. Have each student share the item they selected, and reveal whether it goes in the kit or not. Encourage debate and discussion. Make sure to emphasize that an emergency kit must be prepared *ahead of time*, not right before or during an emergency. As homework, assign students to go home and pack an emergency kit with their family using the **Youth Emergency Kit Checklist** found at **http://www.fema.gov/media-library/assets/documents/34326.

Note:** This may require a trip to the store for families, and may be costly, so while it is important, you may want to make this homework assignment optional.

FEMA Emergency Kit Checklist

- Nonperishable food (dried fruit, canned tuna fish, peanut butter, etc.)
- Manual can opener
- · First-aid kit
- Sleeping bag or warm blanket for everyone in your family
- Change of clothes, including sturdy shoes
- Matches in a waterproof container (let an adult handle these)
- Toothbrush, toothpaste, soap

- Paper plates, plastic cups and utensils, paper towels
- Water at least a gallon per person, per day
- Battery-powered or hand-cranked radio
- Flashlights
- Extra batteries
- Whistle to signal for help
- Local maps
- Pet supplies
- Books, games, or puzzles

4. Text, Don't Talk!

Ask students what they would do right after an emergency has occurred. If they have a cellphone, explain that they should text their parents or family members to let them know they are okay. Ask them to discuss why it may be better to text instead of call during an emergency (see sidebar).



Tell your students about WEAs (see sidebar Words to Know). Have any of them or their parents ever received a WEA on their cellphone?

Remind students to listen to parents, teachers, or other adults for more guidance. Tune in to a radio or TV station for more information after receiving a WEA.

If they have a cellphone, give students time to put emergency contacts in their phones. Ask them to consider what they would do if their phone ran out of juice or got lost. How would they let their parents know that they were okay? Have students identify important numbers that should be memorized, just in case. Ask if students have any tricks for memorizing important information, like phone numbers, that they can share with the group. Remind students that their parents will be worried about them if they are apart during an emergency, and they should text their parents to let them know they are all right. Provide students with the *Family Communications Plan* handout to take home and fill out with their parents.



Introduce students to the concept of "ICE" (In Case of Emergency). Entering important emergency contacts (like a parent or guardian) in your phone as "ICE" allows a bystander to reach your emergency contact on your behalf if you are unable to.





_Instruction Steps (cont'd)

5. Think Fast! Preparedness Game

As a reflection and assessment for the lesson, engage students in a fast-paced preparedness game about safe responses to various emergencies. Have students stand in a circle. Ask a volunteer to go in the middle and shout out the name of an emergency while passing a ball to someone on the outside of the circle. Whoever gets the ball needs to respond with one thing they would do to prepare for the emergency (e.g., "Blackout – Don't open the fridge," "Tornado! – Take shelter"). If the person in the middle stumps the person with the ball on the outside, they switch places and the outside person is now in charge of calling out emergencies. To add a level of difficultly, challenge students not to repeat any actions or steps they would take to prepare.

Did you know?

During an earthquake, you should DROP to the ground, take COVER under a sturdy table or other heavy furniture (or cover your face and head with your arms and crouch near an inside wall), HOLD ON until the shaking stops, and STAY AWAY from windows, glass, lighting fixtures or furniture that could fall – like bookcases.

Check out the Fact Check! trivia on other Disaster Factsheets to test your students' knowledge.

6. Reflection: 3-2-1 Exit Ticket

Ask students to write 3 things they learned about disaster preparedness, 2 things they still have questions about, and 1 thing they are going to do immediately to be prepared. Have them turn in this task before they leave class as their exit ticket.



Are there any new disaster vocabulary words that could be added to the classroom word wall? Allow students time at the end of class to add any new words they've learned.

7. Homework

Remind students that they need to create their own **Emergency Kit** using the **Emergency Kit** Checklist.

Extension Activities

· Safe Map!

Have students create a map of their community by printing out and tracing a map of where they live. Ask students to locate important places, like home and school, and identify a safe meeting place for their families during an emergency. In addition, they can research and map designated shelter locations for their communities, and any evacuation routes or evacuation zones.

Book Report*:

Have students expand their understanding of emergency preparedness with a nonfiction-book report. Good books about emergencies include: *The Volcano Disaster* or *Earthquake Terror* by Peg Kehret, *Trapped* by Michael Northrup, *Night of the Howling Dogs* by Graham Salisbury, *Ninth Ward* by Jewell Parker Rhodes, and *The Killing Sea* by Richard Lewis.

(*Mention of these materials is not an endorsement by FEMA over other materials that may be available on this subject.)

My Emergency Kit:

Have students photograph their emergency kit once it's completed and bring the picture in to share with the class. Have students share their photos on a class bulletin board, class blog, wiki, or school website. Students can also share via social media with the hash tag #ReadyKids.

· Challenge!

Have students challenge another class in their school in a race to see who can have everyone in the class fill out the *Family Communications Plan* first. Keep track of the progress in the hallway or a place where both classes can see. Offer a fun incentive like a pizza party for the winning class.



Time Required:

Three 30-minute class periods

- First Class Intro to Project; Graphic Novel Planning; Create Your Own Emergency Hero!; Call to Action
- Second Class Peer Review; Write
- Third Class Share Graphic Novels **Note to teacher:** Extra class periods can be added to accommodate more time to create the graphic novel.

Student Handouts:

- Disaster Graphic Novel Planner
- D.I.Y. Disaster Graphic Novel Creator
- Disaster Graphic Novel Character Guide
- Disaster Graphic Novel Grading Rubric







Supplies/Preparation:

· Markers, Colored Pencils, Crayons

Post-it notes

Scissors

Glue

Construction Paper



• Make a copy of the student handout for each student

Access to computer lab, computers, and Internet connection



Lesson Overview:

Now that students know how to respond to disasters and emergencies, and have prepared themselves and their families by creating an emergency kit and a family communications plan, it's time to spread the word and help those around them! This lesson will focus on students becoming emergency heroes in their communities. In this summative assessment, students will create a graphic novel to educate others about emergency preparedness and safe disaster responses, and share it with their community.

21st-century Learning Skills

- Communication and Collaboration
- Information Literacy
- Critical Thinking and Problem Solving
- · Creativity and Innovation

Learning Objectives:

Students will...

Communicate information and knowledge of emergency preparedness and response in a clear and engaging way, using a variety of media, that considers and empowers their target audience (e.g., peers, younger children, families, communities)

Essential Questions:

How can I help my community prepare for and respond to a disaster or emergency?





1. Introduction to Project: Disaster Graphic Novel

Now that students have become "Disaster Masters," challenge them to share what they know with others by writing and illustrating their own disaster graphic novel. Ask students to think about how they can help their community learn about emergency preparation and response through the graphic novel.

Students will pick one disaster to focus on, and create Emergency Heroes based on themselves and their friends, who will lead the community to be prepared and make smart emergency decisions. Provide students with the *Graphic Novel Rubric* before they start working on the project so they can see what they will be graded on. Review the requirements and ask if students have any questions.



Share and provide exemplars or "mentor text" of graphic novels that students can reference before and during the creation of their novels. Discuss and look at samples to see how graphic novel writers can communicate a character description and emotion through dialogue and illustrations



Have students reference the classroom disaster vocabulary word wall for words to include when writing their graphic novels.

2. Create Your Own Emergency Hero!

Have students use the *Emergency Hero to the Rescue! Character Guide* to illustrate themselves as community leaders by modeling safe disaster actions and responses, and showing how they can work together as a team with their peers, families, and communities. Have students make up names and personas based on themselves. Remind students to use descriptive adjectives for the character.

Descriptive Adjectives:

Adventurous	Energetic	Knowledgeable
Bold	Expert	Mature
Brave	Helpful	Organized
Calm	Hardworking	Realistic
Cautious	Humble	Tireless
Courageous	Imaginative	Trustworthy
Confident	Intelligent	
Cooperative	Inventive	

Graphic Novel Checklist

Title

Author/Illustrator Focus on one disaster Characters (Including yourself as a Hero) Setting Captions

Dialogue (speech bubbles and thought bubbles) Illustrations

Plot (beginning, middle, and end)

Share at least three facts about the disaster from the **Disaster Factsheets**. Make sure to site your sources! (FEMA-recommended websites and resources can be found on page 32.) Use at least three different emergency vocabulary words.

Include what someone should do before to prepare, during to stay safe, and after to recover.



Have students take a look at the FEMA characters at http://www.ready.gov/kids/ make-a-plan and on the Disaster Factsheets for inspiration!

After viewing example campaigns, ask students to think about who the target audience might be for each. What was the call to action? Have them discuss whether they thought it was an effective campaign or not, and why.



__Instruction Steps (cont'd)

3. Plan It Out

Have students use the Plan It Out! Graphic Novel Planner to outline their stories. Ask: Who are the main characters? Where will the emergency adventure take place? What disaster will it focus on?

Call to action examples:

- Don't delay! Create an emergency kit today!
- Emergency preparedness begins with you! Help your family make an emergency plan.
- Stay S.A.F.E.! (Students **Alert For Emergencies**)
- · Fire Stops with You!
- · Don't be scared, be prepared!

Call to action!

Have students think about their call to action. (A call to action is something that prompts a reader to do something.) In pairs, ask students to brainstorm different slogans, acronyms, or a rap to help them, their peers, and their families remember what to do in an emergency. Provide Post-it notes for them to jot down different ideas.

4. Peer Edit and Review

After students have completed their *Plan it Out! Graphic Novel Planner*, have them partner up and share it. Students can use the *Graphic Novel Rubric* to grade one another. Ask each student to provide one 'glow' (something the student did well) and one 'grow' (something the student could work on) for his or her partner. Allow students time to incorporate any feedback and edit their planning sheets.

Peer Review Prompts:

- Did they use descriptive adjectives when describing the character?
- Was there a clear beginning, middle, and end?
- Did the Hero respond to the emergency in a safe and responsible way?
- Was there a call to action?
- Were there any spelling or grammar errors?

5. Write!

After students have completed their planning sheets and received peer feedback, have them use the **D.I.Y Graphic Novel Creator** to start writing! Provide students with any art supplies they might need to create their graphic novel (such as markers, colored pencils, crayons, construction paper, scissors, glue).



If students are struggling with using transitions in their writing, post the following examples on the board for them to reference:

Suddenly

- Nevertheless
- However

• Before

- Immediately
- Consequently

· As soon as

Next

Finally

- Meanwhile
- Even though
- · As a result

6. Share

Have students share their novels with the class. Use the *Graphic Novel Rubric* to assign them a grade for the project.



If possible, have students share with a younger class or younger students to get feedback from another audience.

Instruction Steps (cont'd)

7. Reflection

Have students write a journal entry reflecting on the graphic novel they created. Ask them: Do you think it will inspire others to be prepared? Was the call to action clear? What would you do differently next time?



The Adventure Continues!

Do you have students who have shown a special interest in learning about disasters and promoting preparedness to others? FEMA offers lots of ways for youth and community members to get involved.

Citizen Corps:

Their mission is to harness the power of every individual through education, training, and volunteer service to make communities safer, stronger, and better prepared to respond to the threats of terrorism, crime, public health issues, and disasters of all kinds. For more information, visit http://www.ready.gov/citizen-corps.

Fire Corps:

Promotes the use of citizen advocates (volunteers) to support and augment the capacity of resource-constrained fire and emergency service departments at all levels: volunteer, combination, and career. For more information, visit http://www.firecorps.org.

Teen Community Emergency Response Team (CERT):

Is a national program making communities and schools safer by having educated and trained teens capable of preparing for and responding to disasters and emergencies. This training program prepares youth to help themselves, their families, and their schools in the event of a disaster. Members of TEEN CERT respond to disasters, participate in drills and exercises, and take continuing training. The Teen CERT program, though adapted for adolescent learners, covers the same curriculum as the CERT program that was originally designed for adults, while reinforcing existing learning areas for teen students. For more information, visit http://www.fema.gov/community-emergencyresponse-teams/teen-community-emergency-response-team.

Youth Preparedness Council:

Provides an opportunity for young leaders between the ages of 12 and 17 to serve as members of a distinguished national council. Council members learn about youth disaster preparedness from the leadership at FEMA and other national organizations dedicated to youth preparedness, and they complete a youth preparedness project of their choosing. For more information, visit http://www.ready.gov/kids/get-involved.

Extension Activities

Make copies of the graphic novel for each student to bring home and share with his or her family.

· Launch Party!

Have students plan and hold a graphic novel launch party and reading for the community at their school or local library. Invite younger students, families, and community members. Community leaders can also participate by sharing what plans they have put in place.

• Publish: Have students publish the graphic novel they create on their class blog or school website for the public to download.





Name: Date:

Disaster Graphic Novel

Title:	Facts about the Disaster:
Disaster:	
Characters: Who are the main characters? Include yourself as the Emergency Hero!	
	Sources:
	Setting: Where will the adventure take place?





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Introduce the characters, setting, and the disaster.

Call to action!

What do you want people to do after they read your graphic novel? Come up with a catchy slogan, acronym, or rap.

Middle

How do your characters safely react to the disaster? What is the climax? (Look at the **Disaster Master Game** at **http://www.ready.gov/kids/games/disaster-master** for examples of different scenarios.)

End

How does the story get resolved?

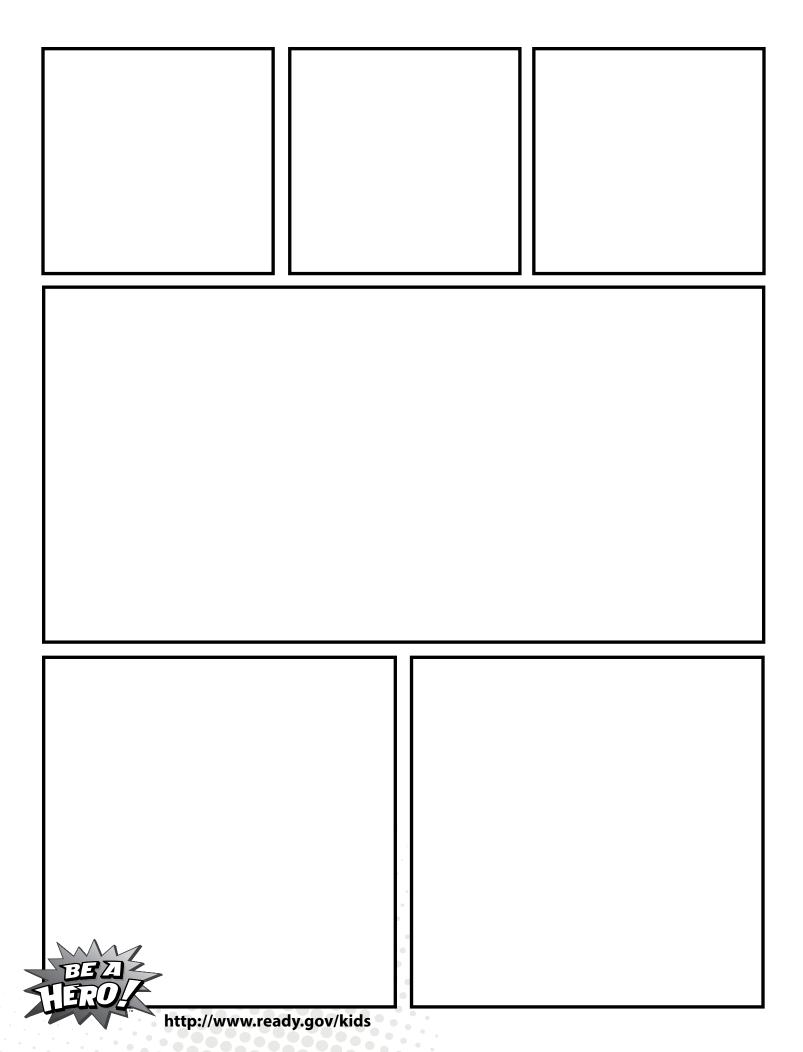


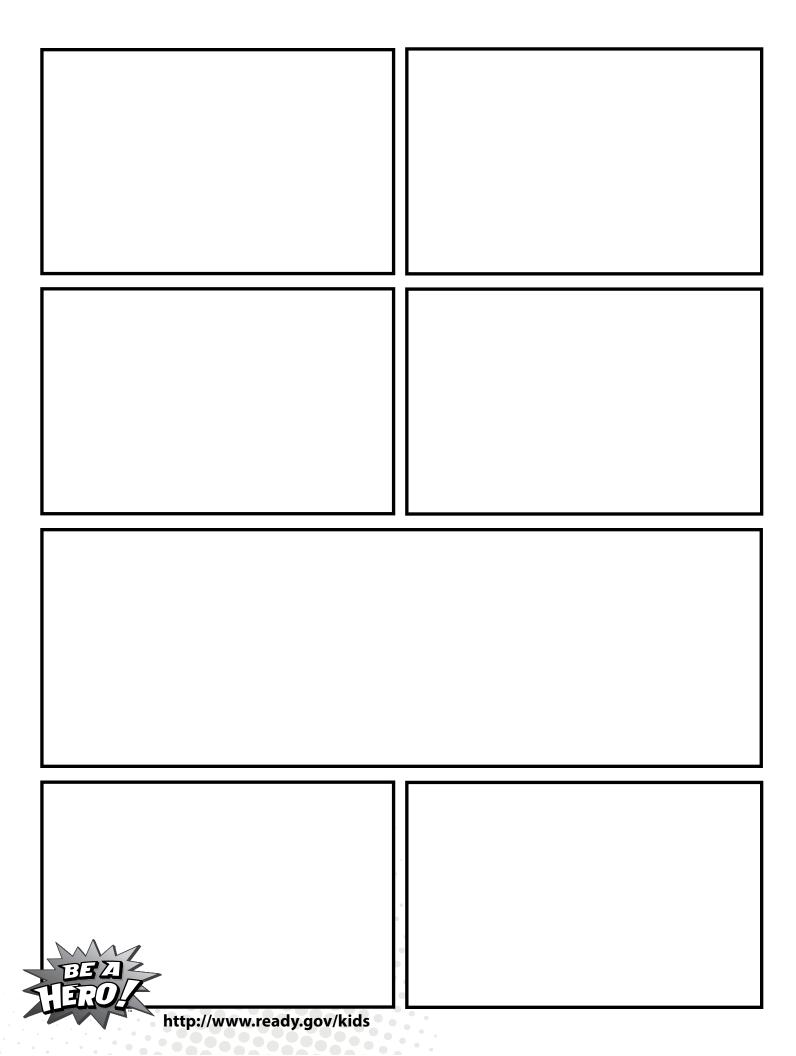


Name:	Date:	
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DIFASter Graphic Novel Disaster Graphic Novel

Title:		_
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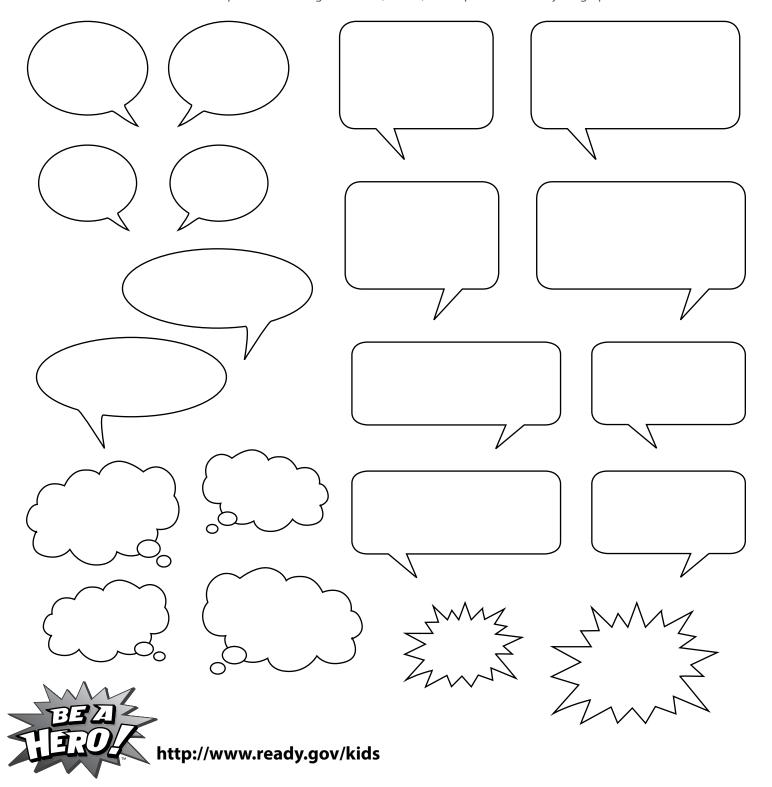




Name:	Date:
Name:	Datc

DIFASter Graphic Novel Disaster Graphic Novel

Directions: Cut out these speech and thought bubbles, bursts, and captions to use in your graphic novel.





Name:	Date:	

Disaster Graphic Novel Disaster Graphic Novel Religion Religion

Directions: This is what your teacher will use to grade your graphic novel. Review before you start it to help make sure you have everything covered!

	Gold Hero	Silver Hero	Bronze Hero
	Meeting Expectations: 30	Approaching Expectations: 20	Developing Expectations: 10
Characters	Characters are explained using descriptive adjectives	Characters are explained but adjectives are not descriptive	Characters are not described at all
Spelling, punctuation, and grammar	Spelling, punctuation, and grammar are correct throughout	There are some spelling, punctuation, and grammar errors	There are so many spelling, punctuation, and grammar errors that it is hard to read
Beginning	The characters, setting, and disaster are clearly introduced	Not all of the characters, setting, and disaster are introduced	The characters, setting, and disaster are not introduced at all
Middle	The characters react safely to the disaster	The characters do not react safely to the disaster	The story is missing a middle
End	The story is resolved with a call to action	The story is resolved but the call to action is missing	There is no resolution or call to action
Transitions	Appropriate and varied transitions are used to guide the reader through the story	Transitions are used, but not correctly	Transitions are not used at all
Vocabulary	At least 3 different emergency vocabulary words are used	Fewer than 3 different emergency vocabulary words are used	Emergency vocabulary words are not used at all
Facts	Relevant, well-chosen emergency facts are used and sources are cited	Emergency facts are used, but sources are not cited	Emergency facts are not used at all

TOTAL SCORE:

Feedback and Comments:





Name: ______ Date: _____

Disaster Graphic Novel

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What will my Emergency Hero be called?

Characteristics:

What special powers will my Emergency Hero have? Use powerful adjectives!

Actions:

What safe disaster actions and responses will he/she demonstrate in the book? Use powerful verbs!

Draw:

What will my Emergency Hero look like? What will he/she wear?



Check out the following links for additional information about each organization, additional disasters, and emergencies.

FEMA

- http://www.ready.gov
- http://www.fema.gov/

Citizen Corps

http://www.ready.gov/citizen-corps

Teen Community Emergency Response Team (CERT)

 http://www.fema.gov/community-emergency-response-teams/ teen-community-emergency-response-team

Youth Preparedness Council

http://www.ready.gov/youth-preparedness-council

More Information on Natural Disasters & Emergencies:

Blackouts

- http://www.ready.gov/blackouts
- http://www.bt.cdc.gov/disasters/poweroutage/needtoknow.asp

Drought

- http://www.ready.gov/drought
- http://waterwatch.usgs.gov/index.php?id=ww_drought

Earthquakes

- http://www.fema.gov/earthquake
- http://earthquake.usgs.gov/learn/topics/
- http://pubs.usgs.gov/gip/2006/21/
- http://emergency.cdc.gov/disasters/earthquakes/index.asp

Extreme Heat

- http://www.ready.gov/heat
- http://emergency.cdc.gov/disasters/extremeheat/
- http://www.noaawatch.gov/themes/heat.php

Floods

- http://www.ready.gov/floods
- http://www.osha.gov/SLTC/emergencypreparedness/guides/ floods.html
- http://emergency.cdc.gov/disasters/floods/
- http://waterwatch.usgs.gov/index.php?id=ww_flood

Home Fires

- http://www.usfa.fema.gov/
- http://www.cdc.gov/features/fireprevention/

Hurricanes

- http://www.ready.gov/hurricanes
- http://www.nhc.noaa.gov/prepare/ready.php
- http://emergency.cdc.gov/disasters/hurricanes/
- http://www.osha.gov/SLTC/emergencypreparedness/guides/ hurricane.html

Landslides/Debris Flows

- http://www.ready.gov/landslides-debris-flow
- http://emergency.cdc.gov/disasters/landslides.asp
- http://landslides.usgs.gov/

Space Weather

- http://www.ready.gov/space-weather
- http://www.noaawatch.gov/themes/space.php
- http://www.nasa.gov/mission_pages/sunearth/spaceweather/index.html
- http://geomag.usgs.gov/

Thunderstorms and Lightning

- http://www.ready.gov/thunderstorms-lightning
- http://m.fema.gov/thunderstorms-lightning

Tornadoes

- http://www.ready.gov/tornadoes
- http://emergency.cdc.gov/disasters/tornadoes/index.asp

Tsunamis

- http://www.ready.gov/tsunamis
- http://www.tsunami.noaa.gov/
- http://www.stormready.noaa.gov/tsunamiready/ resources/Tsmi_Brochure10.pdf
- http://emergency.cdc.gov/disasters/tsunamis/index.asp
- http://wcatwc.arh.noaa.gov/?page=tsunamiFAQ
- http://walrus.wr.usgs.gov/tsunami/CIHH.html

Volcanoes

- http://www.ready.gov/volcanoes
- http://volcanoes.usgs.gov/
- http://emergency.cdc.gov/disasters/volcanoes/index.asp

Wildfires

- http://www.ready.gov/wildfires
- http://www.usfa.fema.gov/
- http://www.fws.gov/fire/
- http://www.smokeybear.com/
- http://www.fs.fed.us/
- http://www.stateforesters.org/
- http://www.nifc.gov/
- http://firewise.org

Winter Storms and Extreme Cold

- · http://www.ready.gov/winter-weather
- http://emergency.cdc.gov/disasters/winter/index.asp



Common Core English Language Arts Standards:	Lesson 1	Lesson 2	Lesson 3
R.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.	X	X	
R.7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.	X	X	
R.10 Read and comprehend complex literary and informational texts independently and proficiently.	X	X	
W.3 Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.			X
W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.			X
W.6 Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.			X
W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.	X	X	
W.8 Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.	X	X	
W.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.	X	Х	
SL.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.	X	X	х
SL.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.	X	X	
SL.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.	X	Х	

Standards (cont'd)

National Curriculum Standards for Social Studies:	Lesson 1	Lesson 2	Lesson 3
Learners will understand concepts such as: chronology, causality, change, conflict, complexity, multiple perspectives, primary and secondary sources, and cause and effect;	X		
Learners will understand the theme of people, places, and environments involves the study of the relationships between human populations in different locations and geographic phenomena such as climate, vegetation, and natural resources;	X		
Learners will understand past and present changes in physical systems, such as seasons, climate, and weather, and the water cycle, in both national and global contexts;	X		
Learners will understand human modifications of the environment;	X		
Learners will understand the use of a variety of maps, globes, graphic representations, and geospatial technologies to help investigate the relationships among people, places, and environments.	X		
Learners will be able to ask and find answers to geographic questions related to regions, nations, and the world in the past and present;	X		
Learners will be able to research, organize, analyze, synthesize, and evaluate information from atlases, databases, grid systems, charts, graphs, maps, geospatial technologies, and other tools to interpret relationships among geographic factors and historic events;	X		
Learners will be able to acquire, organize, and analyze information and use geographic tools to draw conclusions about historic or current national and global environmental change;	X		
Learners will be able to evaluate the consequences of human actions in environmental terms;	X		
Learners will understand that learning about the past requires the interpretation of sources, and that using varied sources provides the potential for a more balanced interpretive record of the past;	X		
Learners will understand the contributions of key persons, groups, and events from the past and their influence on the present;	X		
Learners will be able to formulate questions about topics in history, predict possible answers, and use historical methods of inquiry and literacy skills to locate, organize, analyze, and interpret sources, and present supported findings;	X		
Learners will be able to identify and use a variety of primary and secondary sources for reconstructing the past, such as documents, letters, diaries, maps, textbooks, photos, and other sources;	X		
Learners will be able to research and analyze past periods, events, and issues, using a variety of primary sources (e.g., documents, letters, artifacts, and testimony) as well as secondary sources; validate and weigh evidence for claims, and evaluate the usefulness and degree of reliability of sources to develop a supportable interpretation;	X		
Learners will be able to use methods of historical inquiry to make informed decisions as responsible citizens to propose policies and take action on an issue of importance today;	X		
Learners will be able to evaluate how groups and institutions work to meet individual needs and promote or fail to promote the common good;	X		
Learners will understand the ways in which governments meet the needs and wants of citizens, manage conflict, and establish order and security;	X		
Learners will understand the importance of becoming informed in order to make positive civic contributions;			X
Learners will be able to ask and find answers to questions about how to become informed and take civic action;		х	X

Standards (cont'd)

National Association of Science Standards:	Lesson 1	Lesson 2	Lesson 3
Structure of the Earth System			
Global patterns of atmospheric movement influence local weather. Oceans have a major effect on climate, because water in the oceans holds a large amount of heat.	X		
Populations, Resources, and Environments			
Causes of environmental degradation and resource depletion vary from region to region and from country to country.	X		
Natural Hazards			
Internal and external processes of the earth system cause natural hazards, events that change or destroy human and wildlife habitats, damage property, and harm or kill humans. Natural hazards include earthquakes, landslides, wildfires, volcanic eruptions, floods, storms, and even possible impacts of asteroids.	X		
Human activities also can induce hazards through resource acquisition, urban growth, land-use decisions, and waste disposal. Such activities can accelerate many natural changes.	X		
Natural hazards can present personal and societal challenges because misidentifying the change or incorrectly estimating the rate and scale of change may result in either too little attention and significant human costs or too much cost for unneeded preventive measures.	X		
Personal Health			
The potential for accidents and the existence of hazards imposes the need for injury prevention. Safe living involves the development and use of safety precautions and the recognition of risk in personal decisions. Injury prevention has personal and social dimensions.		X	
Hazards and the potential for accidents exist. Regardless of the environment, the possibility of injury, illness, disability, or death may be present. Humans have a variety of mechanisms – sensory, motor, emotional, social, and technological – that can reduce and modify hazards.			X
Risks and Benefits			
Students should understand the risks associated with natural hazards (fires, floods, tornadoes, hurricanes, earthquakes, and volcanic eruptions).	X		
Individuals can use a systematic approach to thinking critically about risks and benefits. Examples include applying probability estimates to risks and comparing them to estimated personal and social benefits.		X	
Important personal and social decisions are made based on perceptions of benefits and risks.		X	
American Cancer Society Health Standards	Lesson 1	Lesson 2	Lesson 3
1.8.3 Analyze how the environment affects personal health.	X		
2.8.5 Analyze how messages from media influence health behaviors.	X		
3.8.2 Access valid health information from home, school, and community.		X	
5.8.4 Distinguish between healthy and unhealthy alternatives to health-related issues or problems.		X	
5.8.5 Predict the potential short-term impact of each alternative on self and others.		X	
7.8.2 Demonstrate healthy practices and behaviors that will maintain or improve the health of self and others.		X	X
7.8.3 Demonstrate behaviors to avoid or reduce health risks to self and others.			X
8.8.1 State a health-enhancing position on a topic and support it with accurate information.			X
8.8.2 Demonstrate how to influence and support others to make positive health choices.			X
8.8.3 Work cooperatively to advocate for healthy individuals, families, and schools.			X
8.8.4 Identify ways in which health messages and communication techniques can be altered for different audiences.			Х