

Disaster Diaries

TEACHER'S GUIDE

The impact of natural disasters on humans can be catastrophic. The Disaster Diaries series highlights six natural disasters—earthquakes, floods, hurricanes, tsunamis, volcanoes, and wildfires—and explores the impact they have on communities around the world. Each book in the series merges nonfiction and fiction text to show both how natural disasters occur and tell the fictional story of a child affected by a natural disaster. The Disaster Diaries Teacher's Guide includes engaging lessons that help students learn more about natural disasters, their impact, and how communities prepare for and respond to them.

The lesson plans in the Disaster Diaries Teacher's Guide are tailored towards students in grades 4 and 5. These lessons require students work both independently and collaboratively, and think critically about natural disasters in the world around them. Students will be able to share their new learning with their classmates in different ways throughout each lesson of the Teacher's Guide.

The lesson plans in this guide follow a sequential order that works to scaffold understanding. Reproducible worksheets and assessment tools accompany each lesson plan. The titles in Disaster Diaries include:

Surviving the Earthquake

Surviving the Flood

Surviving the Hurricane

Surviving the Tsunami

Surviving the Volcano

Surviving the Wildfire

PACING CHART AND VOCABULARY

Lesson Plan Title	Pacing	Vocabulary
Defining Natural Disasters	3 to 4 class periods	atmosphere carbon monoxide charred climate change crater debris engulfed erosion erupts evacuated fault lines fault plane flammable global warming intensity lava magna magnitude natural disasters pollution precipitation seawalls sediment tectonic plates water displacement
Experiencing Natural Disasters	1 to 2 class periods	awareness buoys charity charred cinder community contaminants debris deposits embankments engulfed evacuated fictional potential predict reservoir seawalls survival instinct toxic water displacement
Natural Disaster Diary	3 to 4 class periods	fictional natural disasters

* 1 class period = 40 to 60 minutes

ACCOMMODATION STRATEGIES

Accommodations provide equal access to learning and equal opportunity to demonstrate what is learned. Accommodations allow a student access to the subject or course without any changes to the knowledge and skills the student is expected to demonstrate.

Educators are encouraged to adapt the instructional approach, activities, and assessments included in this guide to best meet the diverse interests, needs, and abilities of their students. Possible accommodations may include:

Instructional Strategies

- Break tasks into parts with accompanying time lines
- Provide extra time for processing of oral information
- Pair oral instructions with visual ones (writing or symbols)
- Pre-teach new vocabulary and regularly review previously taught vocabulary
- Provide model of completed work
- Frequently check with the student to get him/her started
- Provide oral and visual instructions and examples
- Provide a checklist of tasks for the student

Environmental Strategies

- Proximity to teacher
- Strategic seating
- Flexible or mixed-ability grouping
- Provide an alternative setting for learning that is free from visual and auditory distractions

Assessment Strategies

- Build in extra time to allow student to process questions asked and answers given
- Provide written instructions and rubrics for assignments
- Offer a choice of assessment activities so that the student can choose one suited to their strengths
- Space out or extend assignments to prevent student feeling overwhelmed
- Reduce the number of tasks used to assess skill or concept
- Allow students to use assistive devices or technology

LESSON 1

Defining Natural Disasters

Curriculum Correlations

Common Core State Standards

RI.4.1
RI.4.2
RI.4.4
RI.4.7
RI.5.3
RI.5.4
RI.5.6

Ontario Language Arts Standards

Grade 4 Reading
1.3, 1.4, 1.5, 1.6, 1.7
Grade 5 Reading
1.3, 1.4, 1.5, 1.6, 1.7

Materials

- Chart paper
- Markers
- Class set of computers, laptops and/or tablets
- *What are Natural Disasters Checkbrick*
- Disaster Diaries series
 - ▶ *Surviving the Earthquake*, pg. 4-5, 8-9, 10-11, 14-15, 18-19, and 20-21
 - ▶ *Surviving the Flood*, pg. 4-5, 8-9, 10-11, 14-15, 18-19, and 20-21
 - ▶ *Surviving the Tsunami*, pg. 4-5, 8-9, 10-11, 14-15, 18-19, and 20-21
 - ▶ *Surviving the Volcano*, pg. 4-5, 8-9, 10-11, 14-15, 18-19, and 20-21
 - ▶ *Surviving the Wildfire*, pg. 4-5, 8-9, 10-11, 14-15, 18-19, and 20-21

Objectives

Students will be able to:

- Understand what a natural disaster is
- Identify six different types of natural disasters
- Create a media text that describes one natural disaster.

Setting the Stage

Begin the lesson by writing the phrase “natural disaster” on a piece of chart paper at the front of the classroom. Ask students to take a minute or two to independently brainstorm what a natural disaster is.

After students have had time to brainstorm, ask them to raise their hand if they would like to share an idea. On the chart paper, create a word web around the phrase “natural disaster” by recording the responses shared by students. Once students have had the opportunity to share their ideas, explain that **a natural disaster is a natural event that has a significant impact on humans.**

Explain to students that there are six different types of natural disasters that will be explored together. Ask students to raise their hand if they think they know the name of any of these disasters.

On a separate piece of chart paper, record responses that indicate one of the five natural disasters that will be discussed. By the end of the exercise, the following natural disasters should be noted on the chart paper: earthquake, flood, hurricane, tsunami, volcano, and wildfire. If students do not come to these answers as a class, ask probing questions to guide them to the correct responses using relevant examples and/or display images of the disasters that students may be able to identify based on prior knowledge.

Activity

Divide the class into six equal groups, and assign one of the six natural disasters to each of the groups. Provide each student with a copy of the Disaster Diaries series book associated with their assigned disaster (one of *Surviving the Earthquake*, *Surviving the Flood*, *Surviving the Hurricane*, *Surviving the Tsunami*, *Surviving the Volcano*, and *Surviving the Wildfire*). Each small group should have access to technology (a computer, laptop, or tablet per person if possible).

In their groups, students will read the following pages; 4-5, 8-9, 10-11, 14-15, 18-19, and 20-21. Depending on the number of students in each group, it would be ideal if each group member is assigned one section to summarize. If this is not possible, divide the outlined sections as you see fit in your classroom.

Using the technology provided, each group will be responsible for creating an infographic or slideshow presentation summarizing the information in the designated sections of their assigned book. Each group must ensure that the following information is included in their digital resources:

- Type of natural disaster
- The trail of destruction
- How the natural disaster is caused
- Three common effects of the natural disaster
- Where the natural disaster happens most often
- Who is most at risk.

Ask students to provide 2 additional examples of their natural disaster, not included in their book using online resources, newspapers, magazines, and/or news clips.

Extensions

- Students can research an example of their natural disaster not discussed in their book, and create an additional section in their infographic or slideshow presentation that outlines their chosen example.

Wrap-Up

Once complete, each group will be asked to present their infographic or slideshow presentation to the class. After each group has had the opportunity to present, house the files in a digital format that is accessible to all students.

Assessment

Assess student understanding during group work task through observation. Travel around the classroom to each group to ensure students are on task, and that students understand the content being addressed. Clarify misunderstandings as needed.

After students have completed their group work, use the *What are Natural Disasters Checkbrick* to ensure the infographic or slideshow presentation covers the required information outlined. Review student work to clarify misunderstandings as needed.

What are Natural Disasters Checkbrick

GROUP 1

Names: _____

	Yes	No
Indicated type of natural disaster		
Described the trail of destruction		
Explained how the natural disaster is caused		
Identified three common effects of the natural disaster		
Explained where the natural disaster happens most often		
Explained who is most at risk		

Additional comments:

GROUP 2

Names: _____

	Yes	No
Indicated type of natural disaster		
Described the trail of destruction		
Explained how the natural disaster is caused		
Identified three common effects of the natural disaster		
Explained where the natural disaster happens most often		
Explained who is most at risk		

Additional comments:

GROUP 3

Names: _____

	Yes	No
Indicated type of natural disaster		
Described the trail of destruction		
Explained how the natural disaster is caused		
Identified three common effects of the natural disaster		
Explained where the natural disaster happens most often		
Explained who is most at risk		

Additional comments:

GROUP 4

Names: _____

	Yes	No
Indicated type of natural disaster		
Described the trail of destruction		
Explained how the natural disaster is caused		
Identified three common effects of the natural disaster		
Explained where the natural disaster happens most often		
Explained who is most at risk		

Additional comments:

GROUP 5

Names: _____

	Yes	No
Indicated type of natural disaster		
Described the trail of destruction		
Explained how the natural disaster is caused		
Identified three common effects of the natural disaster		
Explained where the natural disaster happens most often		
Explained who is most at risk		

Additional comments:

GROUP 6

Names: _____

	Yes	No
Indicated type of natural disaster		
Described the trail of destruction		
Explained how the natural disaster is caused		
Identified three common effects of the natural disaster		
Explained where the natural disaster happens most often		
Explained who is most at risk		

Additional comments:

LESSON 2

Experiencing Natural Disasters

Curriculum Correlations

Common Core State Standards

RI.4.1
RI.4.2
RI.4.4
RI.5.3
RI.5.4
RI.5.6

Ontario Language Arts Standards

Grade 4 Reading
1.3, 1.4, 1.5, 1.6, 1.7
Grade 5 Reading
1.3, 1.4, 1.5, 1.6, 1.7

Materials

- Chart paper
- Markers
- *The Human Experience Exit Card*
- Disaster Diaries series
 - ▶ *Surviving the Earthquake*, pg. 6-7, 12-13, 16-17, 22-23, and 28-29
 - ▶ *Surviving the Flood*, pg. 6-7, 12-13, 16-17, 22-23, and 28-29
 - ▶ *Surviving the Tsunami*, pg. 6-7, 12-13, 16-17, 22-23, and 28-29
 - ▶ *Surviving the Volcano*, pg. 6-7, 12-13, 16-17, 22-23, and 28-29
 - ▶ *Surviving the Wildfire*, pg. 6-7, 12-13, 16-17, 22-23, and 28-29

Objectives

Students will be able to:

- Understand basic characteristics of fiction and non-fiction texts
- Understand and describe human experiences of natural disasters.

Assessment

Assess student understanding during lessons using observational and anecdotal notes. Travel around the classroom as group work takes place to ensure students are engaged and on-task. Review student work to clarify misunderstandings as needed. Assess *The Human Experience Exit Card* for understanding of how fictional texts contain valuable information.

Setting the Stage

Begin the lesson by asking students to recall the types of natural disasters that were presented in the previous lesson. Allow students to share responses, ensuring they identify the following natural disaster types: Earthquake, Flood, Hurricane, Tsunami, Volcano, and Wildfire. Remind students that **a natural disaster is a natural event that has a significant impact on humans.**

Remind students that the information they read previously about natural disasters is called non-fiction. This means that the information they read is made up of facts. Advise students that for today's lesson, they will have the opportunity to read fictional stories about six different characters, each having experienced a different natural disaster.

Explain that while the characters and their stories are fictional, the information is based on factual information. These stories are examples of what someone's experience might be like if faced with an earthquake, flood, hurricane, tsunami, volcano, and/or wildfire.

Activity

Similar to the previous lesson, divide the class into six equal groups, and assign one of the six natural disasters to each of the groups. Provide each student with a copy of the Disaster Diaries series book associated with their assigned disaster (one of *Surviving the Earthquake*, *Surviving the Flood*, *Surviving the Hurricane*, *Surviving the Tsunami*, *Surviving the Volcano*, and *Surviving the Wildfire*). Note that students should be assigned to a different natural disaster than they were for the previous lesson.

In their small groups, students will read pages 6-7, 12-13, 16-17, 22-23, and 28-29 of their assigned book. You can decide if you would like to further divide each group and assign sections, or if each group can tackle the pages together.

As each group reads through the assigned pages of their book, ask them to record the name of their character, and any important information about their character's experience with natural disasters on the chart paper provided. Students will then prepare to present their findings to the class.

Extensions

- Students could present their findings in the form of a skit, taking on the various roles of the characters in their stories.

Wrap-Up

Once students have had an opportunity to prepare, each group will present their chart paper to the class. These charts will then be displayed in the classroom for students to reference.

Advise students that as they listen to the information shared by their classmates, they must choose one natural disaster that interests them to research further in the next lesson.

Hand each student one *The Human Experience Exit Card*.

Name: _____

Date: _____

The Human Experience Exit Card

1. Describe two new pieces of information you learned about the natural disaster after reading the fictional story.

2. In your opinion, why is it important to read stories that describe how people experience disasters?

Name: _____

Date: _____

The Human Experience Exit Card

1. Describe two new pieces of information you learned about the natural disaster after reading the fictional story.

2. In your opinion, why is it important to read stories that describe how people experience disasters?

LESSON 3

Natural Disaster Diary

Curriculum Correlations

Common Core State Standards

RI.4.1
RI.4.2
RI.4.3
RI.4.4
RI.4.5
RI.4.9
RI.5.3
RI.5.4
RI.5.5
RI.5.6
RI.5.9

Ontario Language Arts Standards

Grade 4 Reading
1.3, 1.4, 1.5, 1.6, 1.7
Grade 4 Writing
1.2, 1.3, 1.4, 1.5, 1.6, 3.8
Grade 5 Reading
1.3, 1.4, 1.5, 1.6, 1.7
Grade 5 Writing
1.2, 1.3, 1.4, 1.5, 1.6, 3.8

Materials

- Computer/iPad for research and writing (with Internet, word processing, and printer access)
- Disaster Diaries books
- *Natural Disaster Diary Rubric*

Objectives

Students will be able to:

- Research one type of natural disaster
- Create a fictional diary entry based on research and understanding of one natural disaster and how it impacts humans.

Setting the Stage

Display the character charts from previous lesson for students to review. Remind students to choose the natural disaster type that they are most interested in researching. Encourage students to choose a natural disaster type that they have not yet focused on in their small groups. Remind students of the six types of natural disasters studied in the previous two lessons: earthquake, flood, hurricane, tsunami, volcano, and wildfire.

Activity

Explain to students that for this activity, they will be using what they have learned in the last two lessons and apply this knowledge for the upcoming task.

Students will research their chosen natural disaster, and create a diary entry from the perspective of a fictional character they create. Remind students that like the stories read previously, the experiences of their fictional characters must be based on non-fictional/factual information.

Advise students that they may use the books in the Disaster Diaries series, as well as other research tools (Internet, books, magazines, media, etc.) to help with their research. After students have completed their research, they will write their diary entry from the perspective of their fictional character.

Extensions

- If students do not have an understanding of how to write a diary entry and/or how to develop fictional characters, you may want to include an additional lesson outlining these steps.
- Students could participate in scaffolded peer evaluation to aid in the development of their diary entry. Peer feedback could assist with spelling and/or grammar, as well as idea development.

Wrap-Up

Students will exchange completed diary entries with one other student in the class. Once complete, students will have the opportunity to discuss their new learning with a partner. Following this discussion, students will submit their diary entry to be evaluated.

Assessment

Assess diary entries using the *Natural Disaster Diary Rubric*.

Natural Disaster Diary Rubric

Student name: _____

Natural Disaster Type: _____

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Knowledge and Understanding	Student demonstrates little understanding of their chosen natural disaster	Student demonstrates some understanding of their chosen natural disaster	Student demonstrates good understanding of their chosen natural disaster	Student demonstrates thorough understanding of their chosen natural disaster
Application	Student does not identify the implications of human disaster on human experience	Student identifies some implications of human disaster on human experience	Student identifies many implications of human disaster on human experience	Student identifies all implications of human disaster on human experience
Organization	Diary entry is disorganized and difficult to follow	Diary entry is somewhat disorganized and difficult to follow	Diary entry is well organized and easy to follow	Diary entry is very well organized and easy to follow
Thinking	Experience of fictional character is not believable, and is not based on factual information	Experience of fictional character is somewhat believable, and is somewhat based on factual information	Experience of fictional character is believable, and is mostly based on factual information	Experience of fictional character is very believable, and is completely based on factual information

Additional comments:
