



EXPEDITIONARY
LEARNING

Grade 5: Module 4: Unit 3: Lesson 2

Building Background Knowledge: Jigsaw to Build and Share Expertise about the 2010 Haiti Earthquake, Part 2



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Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)

- I can determine two or more main ideas of a text and explain how they are supported by key details. (RI.5.2)
- I can determine the meaning of academic words or phrases in an informational text. (RI.5.4)
- I can determine the meaning of domain-specific words or phrases in an informational text. (RI.5.4)
- I can compare and contrast multiple accounts of the same event or topic. (RI.5.6)
- I can accurately synthesize information from multiple texts on the same topic. (RI.5.9)

Supporting Learning Targets

- I can determine two main ideas and supporting details from an informational text about the 2010 earthquake in Haiti.
- I can determine the meaning of words and phrases in an informational text about the 2010 earthquake in Haiti.
- I can synthesize information about the 2010 earthquake in Haiti by comparing and contrasting multiple accounts of the event.

Ongoing Assessment

- 2010 Haiti earthquake concept maps
- Vocabulary glossaries in student journals
- Main Ideas and Details note-catcher



Agenda	Teaching Notes
<ol style="list-style-type: none">1. Opening<ol style="list-style-type: none">A. Homework Review and Engaging the Reader (8 minutes)2. Work Time<ol style="list-style-type: none">A. First Read: Jigsaw Expert Groups Read for the Gist (12 minutes)B. Second Read: Jigsaw Expert Groups Read for Main Ideas, Details, and Vocabulary to Deepen Understanding (15 minutes)C. Compare, Contrast, and Synthesize Information from All Articles (17 minutes)3. Closing and Assessment<ol style="list-style-type: none">A. Debrief (5 minutes)B. Review Learning Targets (3 minutes)4. Homework<ol style="list-style-type: none">A. Complete synthesis statement.B. Read three texts that weren't read during the lesson.C. . Add details for each text to the Main Ideas and Details note-catcher.D. Add key vocabulary to the glossary in the student journals from the article read during class	<ul style="list-style-type: none">• As in Lesson 1, students participate in a Jigsaw (see Appendix), where they transition from regular small groups to expert groups to read and explore a certain text, then return to regular small groups to share what they have learned.• Students remain in the same expert groups from Lesson 1. Try to strategically assign each text based on students' needs to offer more support to struggling readers, while stronger readers can work more independently.• Each expert group reads one of four texts about the earthquake in Haiti to determine and record two main ideas and supporting details on their Main Ideas and Details note-catchers. Although students have worked with standards RI.5.2, RI.5.4, RI.5.6, and RI.5.9 in previous modules, the texts on Haiti are new, complex, and asking students to simultaneously compare, contrast, and synthesize.• While sharing information from each of the four articles, students record information shared by their group members onto their individual Main Ideas and Details note-catchers. This allows them to compare and contrast details from the four articles and prepares them to write a synthesis statement.• In advance: Review: Jigsaw, Back-to-Back, Face-to-Face, and Gallery Walk protocols; Glass, Bugs, Mud in Checking for Understanding Techniques (see Appendix).• Post: Learning targets; 2010 Haiti earthquake concept maps (from Lesson 1).



Lesson Vocabulary	Materials
<p>determine, main ideas, synthesize, comparing, contrasting, multiple, accounts, event</p> <p>“Surface Amplified Haiti Earthquake”: intensified, topography, seismometer, detects, adjoining, severe, amplifying, withstand</p> <p>“A Rocky Road Ahead”: recover, devastating, collapsed, countless, cope, common, in their hour of need, epicenter, volunteer</p> <p>“Help for Haiti”: crumbled, homeless, urgent, pledged, getting in on the act, holding, fundraisers, volunteer</p> <p>“On Shaky Ground”: magnitude, epicenter, geologist, violent, victims, homeless, gathering, support</p>	<ul style="list-style-type: none">• Journals• 2010 Haiti earthquake concept maps (from Lesson 1; one per regular small group)• “Surface Amplified Haiti Earthquake” (one per regular small group, for Reader 1)• “A Rocky Road Ahead” (one per regular small group, for Reader 2)• “Help for Haiti” (one per regular small group, for Reader 3)• “On Shaky Ground” (one per regular small group, for Reader 4)• Main Ideas and Details note-catcher (specific to each of the four texts; one per student for the text they are reading in their small group)• Main Ideas and Details note-catcher (answers, for teacher reference)• Lesson 2 Vocabulary Defined (answers, for teacher reference)• Compare, Contrast, and Synthesize task card: The Haiti Earthquake of 2010 (one per student)• Compare, Contrast, and Synthesize task card: The Haiti Earthquake of 2010 (answers, for teacher reference)• Lesson 2: Homework task card (one per student)



Opening	Meeting Students' Needs
<p>A. Homework Review and Engaging the Reader (8 minutes)</p> <ul style="list-style-type: none"> • Ask students to take out their journals and sit with their regular small groups. They should turn to the page where they recorded similarities and differences about the four chunks of President Obama's opening remarks. • Briefly review the Back-to-Back, Face-to-Face protocol. Clarify directions as needed, then ask students to find a partner and sit back-to-back. • Read the following prompt: <ul style="list-style-type: none"> * "Share one way all chunks of the president's opening remarks about the Haiti earthquake were similar." • Cold call a few students to share their partner's thinking aloud. Listen for ideas like: "All four chunks discuss how the Haitian people need relief, aid, assistance." • Ask students to find a new partner and, again, sit back-to-back. Read the following prompt: <ul style="list-style-type: none"> * "Share one way each chunk of the president's opening remarks about the Haiti earthquake were different." • Cold call several students to share whole group. Listen for comments such as the following : <ul style="list-style-type: none"> – "The first chunk is mainly about how the Americans are offering assistance through their generosity." – "The second chunk is mostly about the difficulty in delivering aid quickly because of the scope of destruction." – "The third chunk is about how Presidents Bush and Clinton are working to offer assistance." – "The fourth chunk is about the remarkable determination of the Haitian people despite all their suffering." • Focus students' attention to the 2010 Haiti earthquake concept maps. • Staying in their regular small groups, invite students to participate in a Gallery Walk of the concept maps. As they walk, tell students to think about: <ul style="list-style-type: none"> * "What patterns do I notice?" * "What questions do I have?" • Give students 3– to 4 minutes to participate in the Gallery Walk. Ask students to return to their seats and focus attention whole group. • Cold call a few students to share out the patterns they notice and questions they have. 	<ul style="list-style-type: none"> • Distribute visuals to represent patterns and questions for students to place on the concepts map. A sticky note with a P could stand for pattern and a sticky note with a question mark could stand for questions.



Work Time	Meeting Students' Needs
<p>A. First Read: Jigsaw Expert Groups Read for the Gist (12 minutes)</p> <ul style="list-style-type: none"> • Tell students they will continue to build their background knowledge about the earthquake in Haiti in the same expert groups from Lesson 1. Like the previous lesson, they will read one of four texts with their expert groups and return to their regular small groups to share what they learned. • Within each regular group, give each group member a different article: Reader 1: “Surface Amplified Haiti Earthquake” Reader 2: “A Rocky Road Ahead” Reader 3: “Help for Haiti” Reader 4: “On Shaky Ground” • Ask students to calmly and quietly move to sit with classmates given the same article. • Say: “As you read today, you will underline important details about the earthquake in Haiti, then review the ideas you underline to determine the gist.” • Invite expert groups to do the following in the next 10 minutes: <ol style="list-style-type: none"> 1. Read their assigned text. 2. Underline three to five important details about the earthquake in Haiti. 3. Discuss the details you underline with your group members. 4. Refer to the details you underline to help you determine and record the gist in the margin of the text. • Circulate to offer support. • Cold call members from each group to share out the gist of their article whole class. Listen for comments such as the following: <ul style="list-style-type: none"> – Expert group 1: “The ‘Surface Amplified Haiti Earthquake’ article is about the destruction in Haiti, and how geologists are using seismometers to study the earthquake in Haiti.” – Expert group 2: “The ‘Rocky Road Ahead’ article is about how this was the worst earthquake in the region; Haitian people need aid to recover; many people suffered.” – Expert group 3: “The ‘Help for Haiti’ article is about all the people contributing to the relief efforts in Haiti; kids are raising money to help the Haitian people. – Expert group 4: “The ‘On Shaky Ground’ article is about how the earthquake in Haiti caused more damage than the one in Chile; teens in U.S. schools are trying to help the victims of the Haiti earthquake.” 	<ul style="list-style-type: none"> • Display instructions for students to refer to as they work • Consider providing struggling students with a list of details from their texts from which they choose to share and add to their group’s concept map



Work Time (continued)	Meeting Students' Needs
<p>B. Second Read: Jigsaw Expert Groups Read for Main Ideas, Details, and Vocabulary to Deepen Understanding (15 minutes)</p> <ul style="list-style-type: none">• Direct students' attention to the learning targets and read the following ones aloud:<ul style="list-style-type: none">* "I can determine two main ideas and supporting details from an informational text about the 2010 earthquake in Haiti."* "I can determine the meaning of words and phrases in an informational text about the 2010 earthquake in Haiti."• Ask students to think about terms used in these targets they are already familiar with. Ask for volunteers to share out.• Listen for: determine (decide; find out) and main ideas (what the text is mostly about; big ideas).• Cold call one to two students to restate these two learning targets in their own words.• Distribute the Main Ideas and Details note-catcher to each student and display one copy.• Explain to students that each article has two main ideas, and each main idea is supported by three to five details. Tell students that as they read their article, they should do the following:<ol style="list-style-type: none">1. Review details you underlined during Work Time A and underline additional key details you locate as you read the article more closely.2. Locate and circle key vocabulary listed at the top of your Main Ideas and Details note-catcher. Try to determine the meaning of words and phrases from context.3. In groups, discuss key details you underlined and what you think are two of the main ideas presented in the article.4. Record two main ideas from the article in your Main Ideas and Details note-catcher. Make sure to include key and previous vocabulary.5. Record three to five supporting details for each main idea in your note-catcher. Make sure to include key and previous vocabulary.• Allow students 8 to 10 minutes to complete these tasks. Circulate to support as needed. See Main Ideas and Details note-catcher (answers, for teacher reference), and Lesson 2 Vocabulary Defined (answers, for teacher reference).	<ul style="list-style-type: none">• Write synonyms for key vocabulary words in the learning targets above or below the words for students to refer to throughout the lesson• Consider providing students who struggle with complex text and writing a partially filled-out Main Ideas and Details note-catcher .• Consider providing text with vocabulary words pre-highlighted or circled for students who struggle with locating the words on their own.• Display the instructions so students can refer to them as they work .



Work Time (continued)	Meeting Students' Needs
<p>C. Compare, Contrast, and Synthesize Information from All Articles (17 minutes)</p> <ul style="list-style-type: none">• Ask students to rejoin their regular small groups.• Direct students' attention to the posted learning targets and read the following learning target aloud:<ul style="list-style-type: none">* "I can synthesize information about the 2010 earthquake in Haiti by comparing and contrasting multiple accounts of the event."• Ask for volunteers to recall and share out the meaning of the words synthesize (combine; integrate), comparing (locating similarities), and contrasting (locating differences).• Invite students to share the main ideas and details they recorded on their note-catchers. Remind them to record information that group members share, as they will need this to write a synthesis statement.• Distribute the Compare, Contrast, and Synthesize task card: The Haiti Earthquake of 2010 to each student and display one copy. Read the directions aloud and provide clarification as needed.• Give students 12 to 13 minutes to complete the steps on their task card. Circulate to support as needed.• Cold call members from each group to share their synthesis statements aloud. See Compare, Contrast, and Synthesize task card: The Haiti Earthquake of 2010 (answers, for teacher reference).	<ul style="list-style-type: none">• Consider providing a partially filled-in Venn diagram for students who struggle with comparing and contrasting evidence from complex text



Closing and Assessment	Meeting Students' Needs
<p>A. Debrief (5 minutes)</p> <ul style="list-style-type: none">• Ask students to share their synthesis statements with their regular small group members.• Invite each student to add one detail from their notes and synthesis to their group's 2010 Haiti earthquake concept map.• After 3 to 4 minutes, cold call members from each group to share out one detail they added to their concept maps.	<ul style="list-style-type: none">• Direct students who struggle with determining key details to specific areas in the text• Note students who show Bugs or Mud, as they may need more support identifying main ideas and details, determining the meaning of unfamiliar vocabulary from context, or comparing, contrasting, and synthesizing information.
<p>B. Review Learning Targets (3 minutes)</p> <ul style="list-style-type: none">• Direct students' attention back to the learning targets and read them aloud. Ask students to use the Glass, Bugs, Mud Checking for Understanding Technique to demonstrate their mastery of each target.• Distribute the Lesson 2: Homework task card to each student.	
Homework	Meeting Students' Needs
<ul style="list-style-type: none">• Complete your synthesis statement if necessary.• Read the three texts you did not read during today's lesson.• For each of those three texts, add details that support each main idea to your Main Ideas and Details note-catcher.• For the article you read during the lesson, add the key vocabulary to the glossary in your journal. Write a short definition or synonym for each word.	<ul style="list-style-type: none">• Provide audio recordings of the texts for students who struggle reading complex text independently .• Consider allowing students who struggle with reading complex text to read only one or two of the articles instead of all four .



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Supporting Materials



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“Surface Amplified Haiti Earthquake”



Even this well-constructed hotel could not withstand the amplified shaking that occurred on the ridge in Port-au-Prince where it was built.

DISCOVERIES

“When the earthquake happened, it went dancing around on its little feet. It did make a record, but it wasn’t very useful,” one of the scientists, Susan Hough, told *The New York Times*. Hough works for the U.S. Geological Survey.

After the quake, Hough installed more seismometers in the country. She placed two on a prominent ridge in the city and two in an adjoining valley. Those four seismometers recorded the quake’s *aftershocks*. Aftershocks are small tremors that occur hours, days, or weeks after an earthquake.

Hough found that the tremors were more severe along the ridge than they were in the valley. Those findings suggest that the shock waves produced by the original earthquake bounced back and forth within the ridge, amplifying the amount of shaking there, she says.

The ridge happened to be one of the few places in the city where the buildings were well constructed. Even those buildings could not withstand the quake’s vibrations, intensified as they were by the ridge, says Hough. ■

From left: Berkeley Lab; James King Holmes/Photo Researchers, Inc.; Shutterstock

Surface Amplified Haiti Earthquake

▶ earth **PORT-AU-PRINCE, Haiti**—Strong earthquakes occur around the world every year. So why was the one that struck Haiti a year ago this month so destructive? First, a large city, Port-au-Prince, is located near the center of the quake. Second, most buildings in Port-au-Prince are poorly built, and many crumbled when the quake shook them. Third, the city lies on soft ground, which intensified the shaking.

Now a team of U.S. geologists has discovered a fourth factor: the *topography* of the region. Topography is the shape, height, and depth of land’s surface. Physical features that make up the topography of an area include mountains, valleys, plains, and bodies of water.

Only one *seismometer* existed in Haiti when the earthquake struck. A seismometer is an instrument that detects and records vibrations and movements in the ground.

awarded the prize last fall for their discovery of a wonder material called *graphene*. Both men are physicists at the University of Manchester.

Their discovery evolved from a “fun Friday afternoon project” several years ago, says Geim. The two men were doing a low-tech investigation of graphite’s ability to conduct electricity. Graphite is a mineral form of carbon. The lead in pencils is graphite.

To accomplish their goal, Geim and Novoselov had to shave off very thin flakes of graphite. They had no luck

until a lab technician showed them how to strip off layers of graphite with the aid of transparent tape. The scientists refined their technique until they were able to peel off a layer of graphite just one atom thick. Graphene was born.

Geim and Novoselov first tested the superthin carbon’s electric properties. *Electricity* is the flow of electrons through a conductor. In most conductors, the electrons flow in a haphazard way, bouncing around like pinballs. In graphene, the electrons sail through like bullets. That property opens up the use of graphene for a new generation of superfast electronics, the physicists say. Graphene could one day replace silicon as the standard material for semiconductors.

Thousands of scientists are now studying graphene. They’ve discovered that the material conducts heat better than any known material. It’s also stretchy and superstrong. A hammock made of a single, superthin sheet of graphene could support a cat, yet it would weigh less than one of the cat’s whiskers. ■



Left: The atoms in a layer of graphene are linked in a pattern like that of chicken wire. Right: Andre Geim, one of graphene’s discoverers

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“A Rocky Road Ahead”

news zone

A Rocky Road Ahead

Haiti, one of the U.S.'s nearest neighbors, struggles after quake

People in the nation of Haiti are struggling to recover weeks after a devastating earthquake. The powerful 7.0-magnitude quake caused massive destruction in the Caribbean nation (see map).

Tens of thousands of people were killed, and many more were hurt. The Presidential Palace, which is like the White House here in the U.S., was among the many government buildings that collapsed. Countless homes were destroyed, along with schools and hospitals. The disaster added to the suffering of a people already struggling to cope with everyday life. Haiti is one of the poorest nations in the world.

Aid groups from the U.S. and around the world rushed to provide food, water, and medical supplies to Haiti. People

The January 12 earthquake left Haiti's Presidential Palace in ruins.

A boy sits amid the rubble of a school.

worldwide are donating money. The U.S. has sent money and troops to help with relief efforts, and to police the streets. "This is a time when we are reminded of the common humanity that we all share," President Barack Obama said. "With just a few hundred miles of ocean between us . . . Haitians are neighbors . . . we have to be there for them in their hour of need."

The earthquake's **epicenter** was about 10 miles from Haiti's capital, Port-au-Prince. Experts say it was the worst earthquake in the region in more than 200 years.

Americans have pitched in. They have donated money and collected food and clothes. Some have traveled to Haiti to volunteer their medical or search-and-rescue services. Many Haitian-Americans are especially concerned—they have loved ones there. More than 700,000

Americans are of Haitian descent. "I'm thinking about if my sister's all right," Kathleen Saint Amant, 10, of Brooklyn, told the *Daily News* of New York. ■

FAST FACTS:
HISTORY: A slave uprising led to Haiti's gaining its independence from France in 1804.
LOCATION: Shares the Caribbean island of Hispaniola with the Dominican Republic.
SIZE: Slightly smaller than the state of Maryland.
MAJOR LANGUAGES: French and Creole.
POPULATION: 9 million; 38 percent are kids under 15.
ECONOMY: Haiti is the poorest nation in the Western Hemisphere. Most people live on less than \$2 a day.

Word to Know
epicenter (EP-uh-sent-uh-noun). The area directly above the place where an earthquake occurs.

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“Help for Haiti”

Help for Haiti

The world brings aid to earthquake survivors.

COVER STORY WR



This boy's town was destroyed by the earthquake.

People in Haiti need your help! On January 12, a powerful earthquake shook the country. The quake had such force that many homes and schools were destroyed. Even parts of the president's palace crumbled.

Haiti is in Latin America. It is about 700 miles southeast of Florida. About 200,000 people died in the earthquake. It also caused millions of dollars' worth of **damage**, or harm. Officials estimate that 2 million Haitians were left homeless.

Many of those people now live outdoors. Families sleep in tents in Port-au-Prince. That is the capital of Haiti. People there need **urgent**, or immediate, aid. "I can't continue sleeping outside with



KEY
 U.S.
 HAITI
 CUBA
 DOMINICAN REPUBLIC
 capital
Port-au-Prince, HAITI
Center of the earthquake

the children," says Rose-Marie Dedieu, a mother in Haiti.

The United States and other countries are helping Haitians. The United States has **pledged**, or promised, \$100 million in aid for Haiti. Former U.S. Presidents George W. Bush and Bill Clinton are leading the efforts. Americans are giving food, supplies, and millions of dollars to Haiti. Even kids are getting in on the act. Many students have been holding fund-raisers at their schools to collect money.

Winnie Romeril flew to Haiti a few days after the earthquake. She is a volunteer with the American Red Cross. Romeril and other workers are giving the people in Haiti blankets, water, and other basic items.

She says they're making small changes every day. "And we're going to keep making things get better ... until people are really back on their feet again," Romeril told *WR News*.



THINK ABOUT IT: Why might the United States want to help Haiti?



A member of the U.S. military carries an injured Haitian girl.

Spotlight on Haiti

<p>Population About 9 million</p> 	<p>Size 10,714 square miles (Haiti is about the same size as Massachusetts.)</p> 	<p>Main languages French and Creole, a mix of languages</p> 	<p>History Haiti is the second-oldest country in the Americas, after the United States. It won its independence from France in 1804.</p> 
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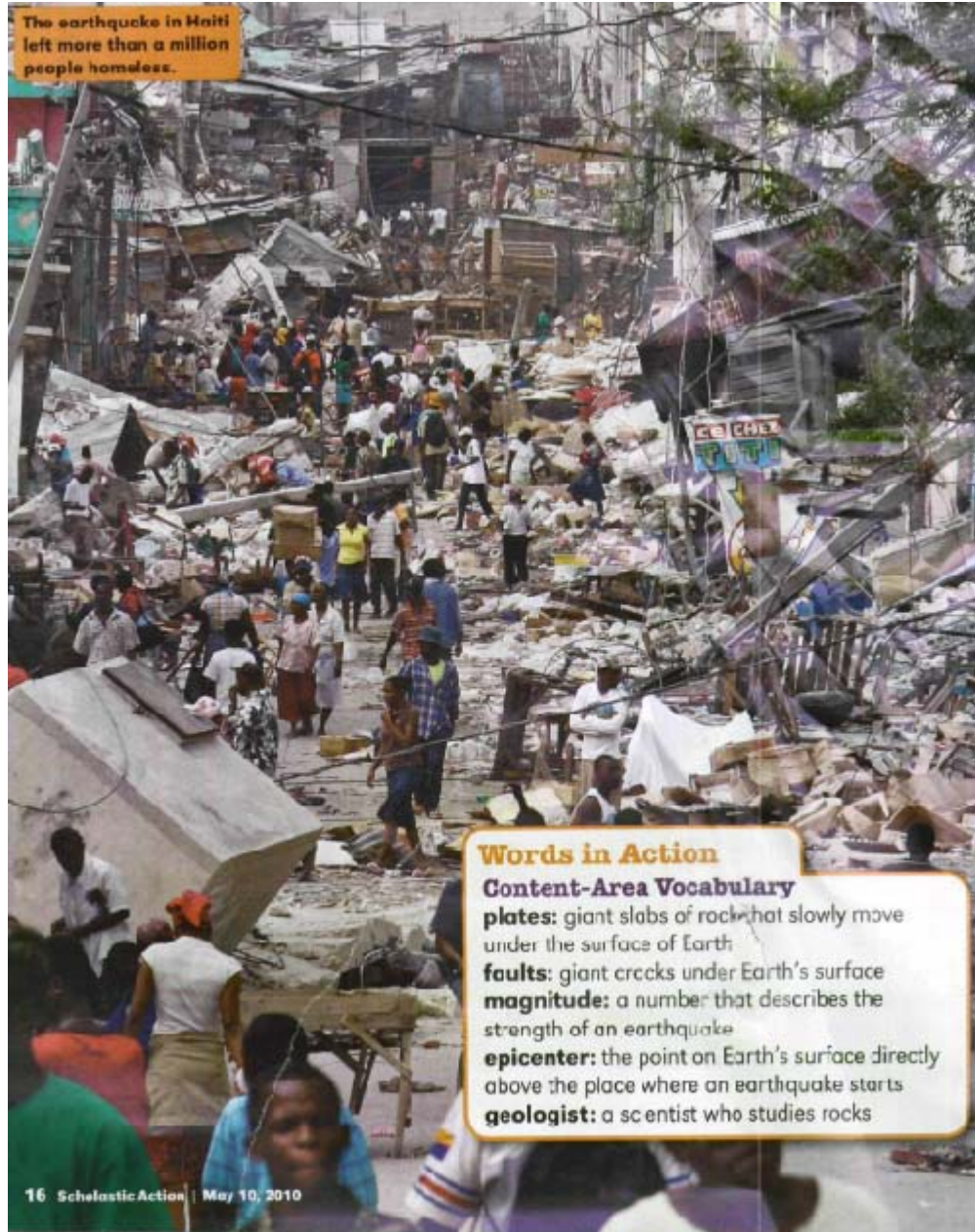
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“On Shaky Ground”

By Britt Norlander





“On Shaky Ground”

By Britt Norlander

On Shaky Ground

Powerful earthquakes struck Haiti and Chile this year. Find out what caused them, and how teens are helping survivors.

Darlene Etienne was 16 years old when she almost died. She was at her cousin's house in Haiti when a powerful earthquake struck. The house crashed down around her.

Darlene was trapped. Fifteen days passed before neighbors heard her calling. A rescue team dug her out.

Darlene was lucky to survive. More than 220,000 people died in the earthquake that struck Haiti in January.

Less than two months later, another earthquake shook the ground in Chile. The quake was more powerful than the one in Haiti. But fewer than 1,000 people died.

The two earthquakes were very different. But they both started the same way.

Moving Rocks

Underneath the Earth's surface are rock **plates**.

These giant slabs of rock are always slowly moving. The shifting rocks meet along the edges of the plates. Where they meet, there are underground cracks called **faults**. Both Haiti and Chile are located near faults.

The rocks don't move smoothly along a fault. They rub against each other and get stuck. Over time, pressure builds up along the stuck parts of the fault.

When the pressure becomes too high, the rocks snap. The sudden breaking apart shakes the ground, causing an earthquake.

Built to Last

Scientists measure the strength of an earthquake based on how much shaking occurs. The earthquake in Haiti had a **magnitude** of 7.0. The earthquake in Chile had a magnitude of 8.8. Even though the quake in Chile was stronger, it caused less



Rescue workers pulled Darlene Etienne from the rubble.

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“On Shaky Ground”

By Britt Norlander

damage than the one in Haiti.

One reason for the difference in damage is that the buildings in Chile are stronger. Quakes hit Chile often. Buildings there are made to stand up to shaking. There hadn't been an earthquake in Haiti in more than 200 years. Buildings there weren't as strong.

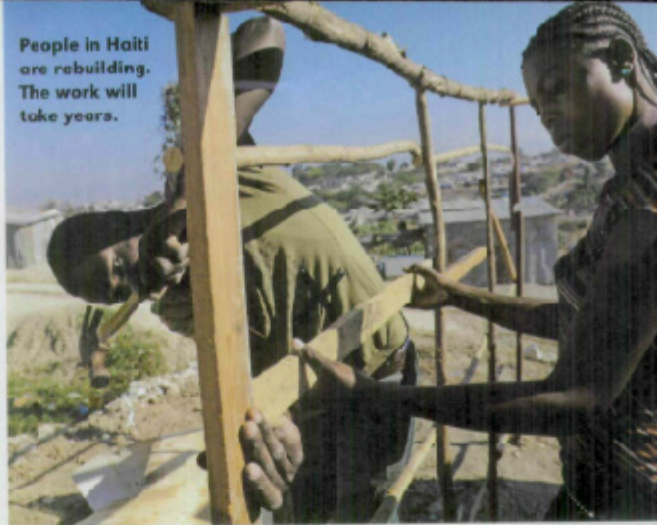
Danger Zone

The Haiti earthquake also caused more damage because of its location. An earthquake's **epicenter** is the point on Earth's surface directly above the spot where the quake starts.

“Usually, the epicenter is where the shaking is the strongest,” explains Michael Hamburger, a **geologist** at Indiana University.

The epicenter of the Chile earthquake was located away from places where many people live. In Haiti,

People in Haiti are rebuilding. The work will take years.



the epicenter was only 10 miles from the capital city of Port-au-Prince. “The area of highest shaking was very close,” says Hamburger. The violent shaking destroyed more than half of the city's buildings.

Helping Hands

People in Haiti and Chile are trying to clean up the ruins and help the victims.

In Haiti, the quake left about 1.5 million people homeless. All those people need food and other supplies.

Teens at schools around the U.S. are working to help the victims. At Evans High School in Orlando, Florida, students have been gathering supplies to send to Haiti. “We have collected a lot of canned goods, water, and other items,” says Rosemonde Emile, 17.

Many students in the school are originally from Haiti. Others, like Rosemonde, have family members who live there. “Everyone is coming together to help,” says Rosemonde.

You can help too. Visit www.scholastic.com/actionlink. There, you'll find out how to support organizations that are helping earthquake victims.

—Britt Norlander

This house in Chile crumpled from the force of the quake.



“On Shaky Ground”
By Britt Norlander

READING A MAP

Shaky Spots

Earthquakes shook Haiti and Chile this year. The greatest damage happened closest to the epicenter of each earthquake. Look at the maps to see where the epicenters were. Use the maps to answer the questions.

Earthquakes in Haiti and Chile

MAP KEY
• = city
★ = capital city

CHILE
Santiago
Concepción
Pacific Ocean
Atlantic Ocean
Date of earthquake: February 27, 2010

HAITI
Port-au-Prince
Atlantic Ocean
Caribbean Sea
Date of earthquake: January 12, 2010

- Which country is closest to Haiti?
Ⓐ Cuba Ⓒ U.S.
Ⓑ Argentina Ⓓ Dominican Republic
- What city was close to the epicenter of the earthquake in Haiti?
Ⓐ Concepción
Ⓑ Port-au-Prince
Ⓒ Bahamas
Ⓓ Santiago
- The earthquake in Chile happened closest to which body of water?
Ⓐ Atlantic Ocean
Ⓑ Caribbean Sea
Ⓒ Pacific Ocean
Ⓓ Arctic Ocean
- What city was just south of the epicenter of Chile's earthquake?
Ⓐ Concepción Ⓒ Bahamas
Ⓑ Port-au-Prince Ⓓ Santiago

Answers are in the Teacher's Edition.

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Main Ideas and Details Note-catcher:

“Surface: Amplified Haiti Earthquake”

Name:

Date:

Key vocabulary: *responding, scenes, common, scope, service, aid, relief, efforts*

Previous vocabulary: *devastation, destruction, disaster*

“Surface Amplified Haiti Earthquake”	Main Idea #1:	3–5 Supporting Details:
	Main Idea #2:	3–5 Supporting Details:
“A Rocky Road Ahead”	Main Idea #1:	3–5 Supporting Details:
	Main Idea #2:	3–5 Supporting Details:
“Help for Haiti”	Main Idea #1:	3-5 Supporting Details:
	Main Idea #2:	3-5 Supporting Details:



Main Ideas and Details Note-catcher:

“Surface: Amplified Haiti Earthquake”

On Shaky Ground	Main Idea #1:	3–5 Supporting Details:
	Main Idea #2:	3–5 Supporting Details:



Main Ideas and Details Note-catcher:
“A Rocky Road Ahead”

Name: _____

Date: _____

Key vocabulary: *recover, devastating, collapsed, countless, cope, common, in their hour of need, epicenter, volunteer*

Previous vocabulary: *destruction, disaster, suffering, aid, supplies, relief effort*

“Surface Amplified Haiti Earthquake”	Main Idea #1:	3–5 Supporting Details:
	Main Idea #2:	3–5 Supporting Details:
“A Rocky Road Ahead”	Main Idea #1:	3–5 Supporting Details:
	Main Idea #2:	3–5 Supporting Details:
“Help for Haiti”	Main Idea #1:	3-5 Supporting Details:
	Main Idea #2:	3-5 Supporting Details:



Main Ideas and Details Note-catcher:
“A Rocky Road Ahead”

On Shaky Ground	Main Idea #1:	3–5 Supporting Details:
	Main Idea #2:	3–5 Supporting Details:



Main Ideas and Details Note-catcher:
“Help for Haiti”

Name:

Date:

Key vocabulary: *crumbled, homeless, urgent, pledged, getting in on the act, holding, fundraisers, volunteer*

Previous vocabulary: *earthquake, destroyed, damage, harm, aid, efforts, supplies*

“Surface Amplified Haiti Earthquake”	Main Idea #1:	3–5 Supporting Details:
	Main Idea #2:	3–5 Supporting Details:
“A Rocky Road Ahead”	Main Idea #1:	3–5 Supporting Details:
	Main Idea #2:	3–5 Supporting Details:
“Help for Haiti”	Main Idea #1:	3-5 Supporting Details:
	Main Idea #2:	3-5 Supporting Details:



Main Ideas and Details Note-catcher:
“Help for Haiti”

On Shaky Ground	Main Idea #1:	3–5 Supporting Details:
	Main Idea #2:	3–5 Supporting Details:



Main Ideas and Details Note-catcher:
“On Shaky Ground”

Name:

Date:

Key vocabulary: *magnitude, epicenter, geologist, violent, victims, homeless, gathering, support*

Previous vocabulary: *earthquake, trapped, plates, faults, damage, ruins, supplies*

“Surface Amplified Haiti Earthquake”	Main Idea #1:	3–5 Supporting Details:
	Main Idea #2:	3–5 Supporting Details:
“A Rocky Road Ahead”	Main Idea #1:	3–5 Supporting Details:
	Main Idea #2:	3–5 Supporting Details:
“Help for Haiti”	Main Idea #1:	3-5 Supporting Details:
	Main Idea #2:	3-5 Supporting Details:



Main Ideas and Details Note-catcher:
“On Shaky Ground”

On Shaky Ground	Main Idea #1:	3–5 Supporting Details:
	Main Idea #2:	3–5 Supporting Details:



Main Ideas and Details Note-catcher:
Answers, For Teacher Reference

“Surface Amplified Haiti Earthquake”	<p>Main Idea #1: There are several reasons the earthquake in Haiti was so destructive.</p>	<p>3–5 Supporting Details:</p> <ul style="list-style-type: none">• A large city, Port-au-Prince is near the center of the quake.• Most buildings in Haiti are poorly built.• Because the city is on soft ground, the shaking was intensified.• The quake was destructive because of the topography of the land.
	<p>Main Idea #2: Geologists are setting up more seismometers in Haiti to learn more about the earthquake.</p>	<p>3–5 Supporting Details:</p> <ul style="list-style-type: none">• Seismometers detect vibrations from the earthquake.• Susan Hough placed seismometers on a ridge and in an adjoining valley.• Hough discovered tremors were more severe along the ridge than in the valley.• Hough learned the shocks in the ridge bounced back and forth which amplified the shaking.• Even better constructed buildings could not withstand the earthquakes vibrations.



Main Ideas and Details Note-catcher:
Answers, For Teacher Reference

“A Rocky Road Ahead”	Main Idea #1: People in Haiti are struggling to recover from the devastating earthquake that took place.	3–5 Supporting Details: <ul style="list-style-type: none">• Tens of thousands of people were killed.• Buildings and homes collapsed and were destroyed.• Added to people’s suffering as they were already struggling to cope with living in the poorest nation in the Western Hemisphere.
	Main Idea #2: Aid groups from around the world are working to provide necessary supplies to the Haitian people.	3–5 Supporting Details: <ul style="list-style-type: none">• Groups from the U.S. and around the world provided food, water, and medical supplies to the people in Haiti.• People all over the world are donating money and troops to help with relief efforts.• President Obama said we share a common humanity and must help Haiti in their hour of need.• Volunteers have traveled to Haiti to offer their services.



Main Ideas and Details Note-catcher:
Answers, For Teacher Reference

“Help for Haiti”	Main Idea #1: The people of Haiti need help to recover from the earthquake that destroyed so much of the country.	3–5 Supporting Details: <ul style="list-style-type: none">• The quake destroyed homes and schools.• About 200,000 people died in the quake.• The earthquake caused millions of dollars in damage.• Two million Haitians were left homeless by the quake.• Families have to sleep outside in tents because their homes were destroyed.
	Main Idea #2: The U.S. and other countries are helping Haiti.	3–5 Supporting Details: <ul style="list-style-type: none">• The U.S. has pledged \$100 million in aid to Haiti.• Americans are giving food, supplies, and money to Haiti.• Kids are getting in on the act to help Haiti by holding fund-raisers to raise money.• Volunteers for the Red Cross are giving people in Haiti blankets, water and other basic items.



Main Ideas and Details Note-catcher:
Answers, For Teacher Reference

On Shaky Ground	Main Idea #1: The earthquakes that struck Haiti and Chile were similar and different.	3–5 Supporting Details: <ul style="list-style-type: none">• Both Haiti and Chile are on faults where pressure built up to cause the earthquakes.• Both earthquakes were strong; Haiti’s was a 7.0 magnitude and Chile’s was an 8.8 magnitude.• Because Haiti hadn’t experienced an earthquake in over 200 years they did not make buildings as strong as the ones in Chile that are made to stand up to the shaking.• The earthquake in Haiti caused more damage than the one in Chile because the violent shaking at the epicenter of the quake in Haiti was closer to more people.
	Main Idea #2: People are trying to help rebuild the ruins and help victims of the earthquake in Haiti.	3–5 Supporting Details: <ul style="list-style-type: none">• 1.5 million people are homeless in Haiti, and they need food and other supplies.• Teens in the U.S. are gathering supplies to send to Haiti.• Everyone is working together to offer help and support to victims of the Haiti earthquake.



Lesson 2 Vocabulary Defined
Answers, For Teacher Reference

“Surface Amplified Haiti Earthquake”

intensified—made stronger; increased

topography—“shape, height, and depth of land’s surface; physical features of the land” (definition from article)

seismometer—“an instrument that detects and records vibrations and movements in the ground” (definition from article)

detects—senses; becomes aware of; identifies

adjoining—next to; bordering; adjacent

severe—brutal; difficult; harsh

amplifying—intensifying; increasing; strengthening

withstand—hold out; resist; hold up

“A Rocky Road Ahead”

recover—get back; regain; return to a former state

devastating—destructive; harmful; damaging

collapsed—fell down abruptly or suddenly; cave in; give way

countless—very many; immeasurable; limitless; numerous

cope—handle; deal with; manage; get by

common—shared; joint; for all; collective

in their hour of need—at a time when someone needs help very much

epicenter—“the area directly above the place where an earthquake occurs” (definition from article)

volunteer (v.)—offer free help; do something by choice

“Help for Haiti”

crumbled—fell down; fell to pieces; fell apart; collapsed

homeless—(home) place to live; (less) without; without a place to live

urgent—requires immediate attention; vital; urgent

pledged—promised; guaranteed

getting in on the act—become involved

holding—organizing; having

fundraisers—activities to raise money to help people/someone in need

volunteer (v.)—offer free help; do something by choice

“On Shaky Ground”

magnitude—a measure of the energy an earthquake produces

epicenter—“the point on Earth’s surface directly above the spot where the quake starts” (definition from article)

geologist—a scientist who studies rocks and minerals, the structure of an area

violent—forceful; intense; powerful

victims—people who are injured; people who have been harmed, are suffering

homeless—(home) place to live; (less) without; without a place to live

gathering—collecting; accumulating

support—provide for; take care of; look after; care for



Compare, Contrast, and Synthesize Task Card:
The Haiti Earthquake of 2010

Name:

Date:

Part A:

- With other members of your regular group, share the two main ideas and details you recorded in your note-catcher from the article you read.
- After each person shares, give other members in your group time to ask clarifying questions as needed, then record the main ideas and details onto their own note-catcher for each article they did not read.

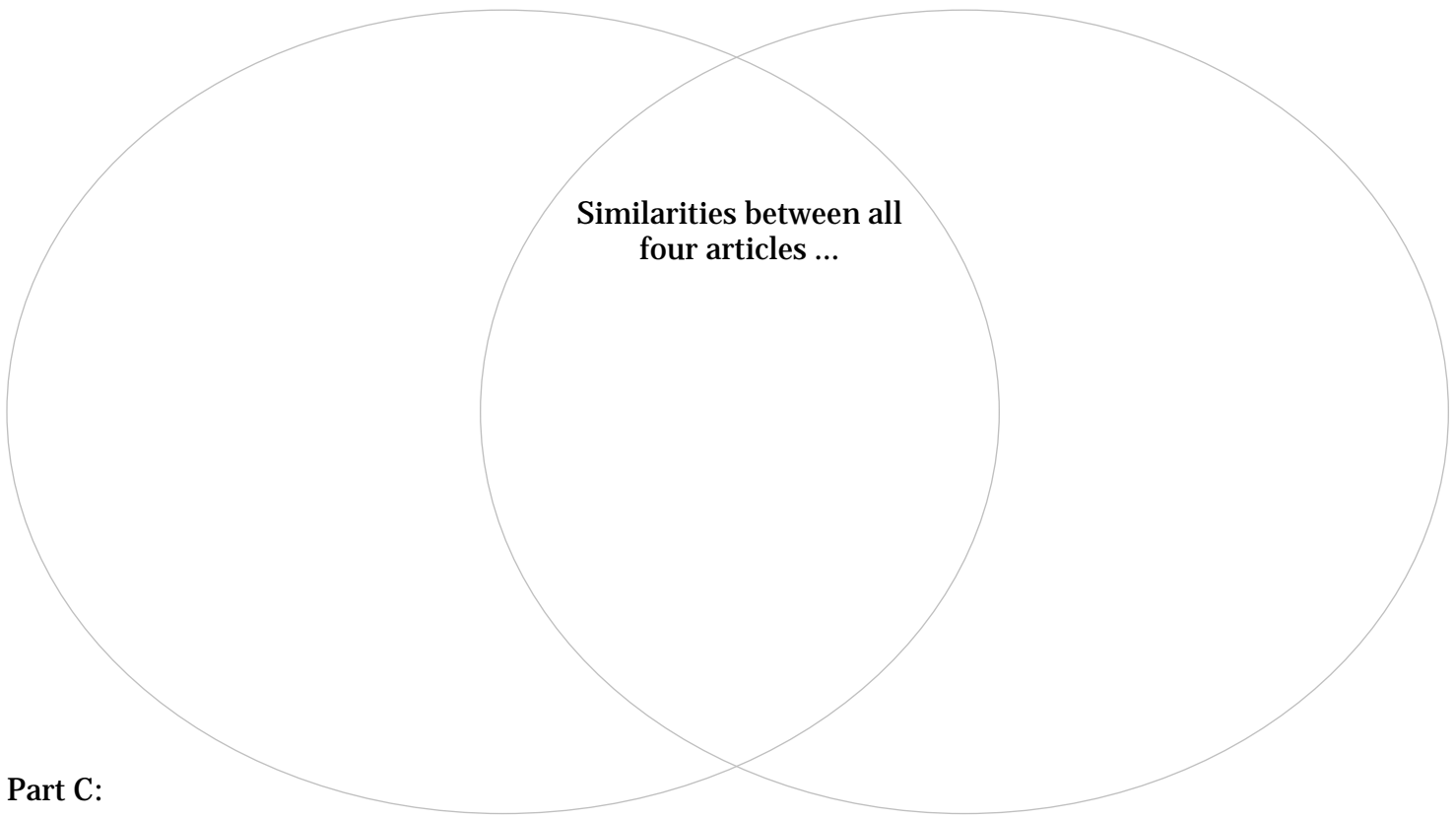
Part B:

- As a group, fill out the Venn diagram below. First, in the center of the oval of the Venn diagram, use the information from your note-catcher to list at least two similarities between the article “Surface Amplified Haiti Earthquake” and the other three articles.
- Then, in the outer spaces of the Venn diagram, use the information in your note-catcher to list at least two differences between the article “Surface Amplified Haiti Earthquake” and the other three articles.

Compare, Contrast, and Synthesize Task Card:
The Haiti Earthquake of 2010

“Surface Amplified Haiti Earthquake”

“A Rocky Road Ahead,” “Help for Haiti,” and “On Shaky Ground”



Part C:

Use the information from your Venn diagram to complete the synthesis statement:

All four articles about the earthquake in Haiti explain ...

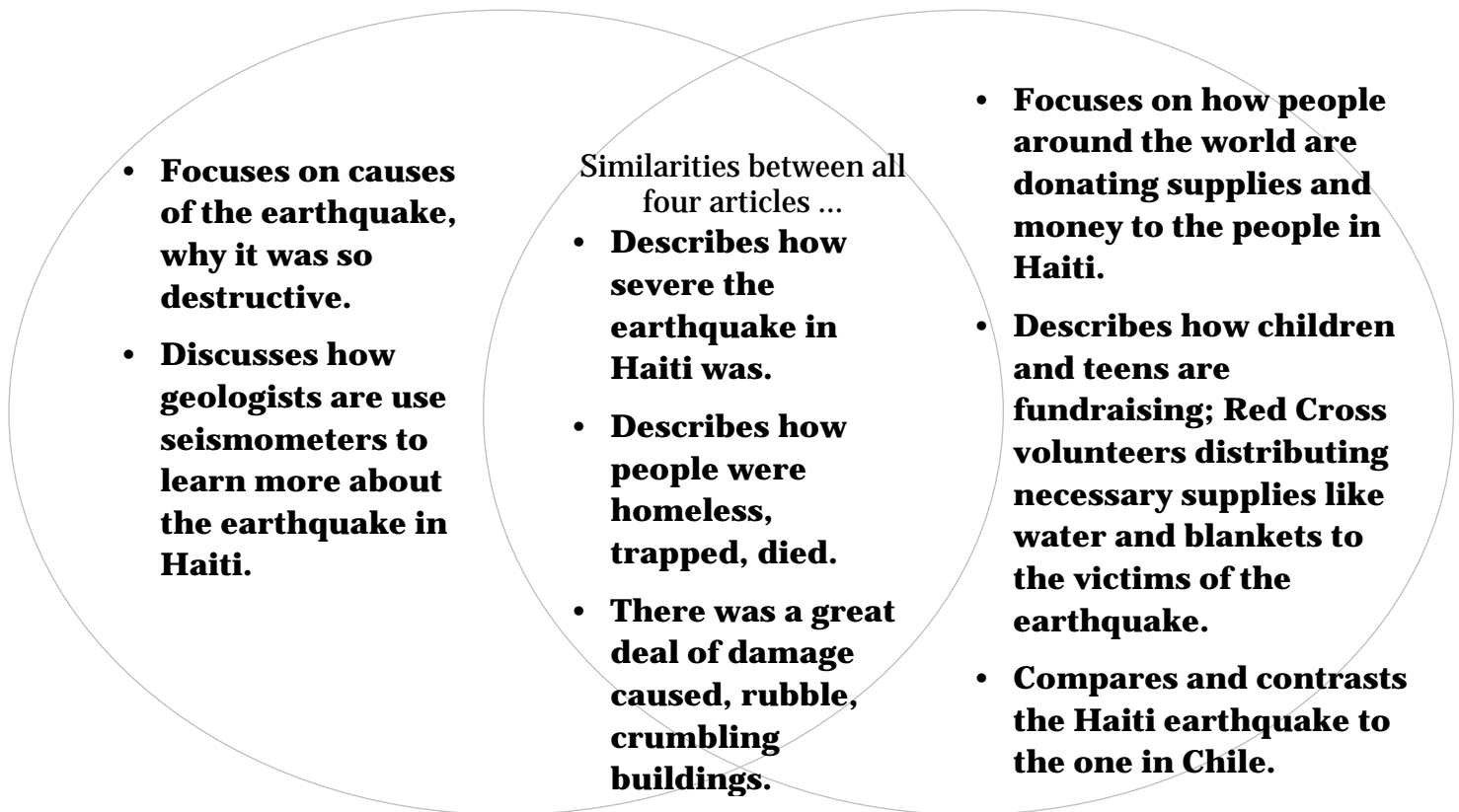
The articles also describe different information about the earthquake, such as ...



Compare, Contrast, and Synthesize Task Card:
The Haiti Earthquake of 2010 Answers, For Teacher Reference

“Surface Amplified Haiti Earthquake”

“A Rocky Road Ahead,” “Help for Haiti,” and “On Shaky Ground”



Part C:

Use the information from your Venn diagram to complete the synthesis statement:

All four articles about the earthquake in Haiti explain ...

how destructive the earthquake in Haiti was and the suffering of the Haitian people due to death, destruction, and rubble left by the quake.

The articles also describe different information about the earthquake, such as ...

how geologists are setting up seismometers in Haiti to learn more about the earthquake, and all the ways people around the world are donating supplies and money to help the people of Haiti recover from the disaster.

Lesson 2:
Homework Task Card

Name:

Date:

1. Complete your synthesis statement if you were not able to do so during work time today.
2. Read the three texts you did not read during today's lesson.
3. For each of those three texts, add details that support each main idea to your note-catcher.
4. For just the article that you did read during the actual lesson, add the key vocabulary below to the glossary in your journal. Write a short definition or synonym for each word.

“Surface Amplified Haiti Earthquake”: *intensified, topography, seismometer, detects, adjoining, severe, amplifying, withstand*

“A Rocky Road Ahead”: *recover, devastating, collapsed, countless, cope, common, in their hour of need, epicenter, volunteer*

“Help for Haiti”: *crumbled, homeless, urgent, pledged, getting in on the act, holding, fundraisers, volunteer*

“On Shaky Ground”: *magnitude, epicenter, geologist, violent, victims, homeless, gathering, support*