

Name: \_\_\_\_\_ Due \_\_\_\_\_

### Natural Disaster Preparedness

#### Learning Goals:

- ✓ We are learning to think critically when identifying issues within natural disaster preparedness planning in order to be ready for future events.
- ✓ We are learning to use spatial technology skills (ArcGIS Online Story Map), so that we can communicate the results of our research in an everyday context.
- ✓ We are learning to evaluate impacts of various types of disasters to local communities.
- ✓ We are using the geographic inquiry process and the concepts of geographic thinking when investigating physical systems, natural phenomena, and natural events.
- ✓ We are analyzing the influence of physical processes and features on human activity.
- ✓ We are analyzing the influence of human settlement choices and the earth's physical processes in order to assess the impacts of disasters.
- ✓ We are learning to assess the role and effectiveness of various options for reducing the impacts of disasters on human populations to be better prepared for the future.
- ✓ We are analyzing the impacts of physical processes and disasters on human and natural systems, locally, nationally, and globally in order to assess and reduce damages.

There are many natural disasters around the world that negatively impact local communities. You will choose **the first 4** of the following natural disasters and create a story map outlining the problems and solutions of a recent event **from the last 5 years**.

#### Natural Disasters can include:

- Earthquakes
- Volcanoes
- Tsunamis
- Mass Wasting (avalanches, mudslides, rockslides)
- Hurricanes, storm surges
- Tornadoes
- Climate changes or Wild Weather (drought, wildfires, El Nino)
- Flooding
- Meteorite



**Due on: Monday, March 8th @ 12:30pm**

**PART 1 – Plan and create your story map:** Your plan should be well distributed around the world. There are **no duplications** of a type of natural disaster.

You will need to use an organizer to establish the following criteria:

- **What is Where?** - *LOCATE* what area the natural disaster affected (*Use specific cities, provinces, countries, etc.*) and facts about the event (*i.e., Name of Disaster, Date, Deaths/Injuries, Cost, etc.*)
- **Why There?** - Briefly DESCRIBE why the natural disaster occurred there and why the location is susceptible to that type of disaster.
- **Why Care?** - Explain *WHY* the natural disaster is important. **Outline the social, environmental, political and economic implications from your natural disaster.**
- **What Next?** What ACTION needs to be taken next? IDENTIFY the strategies that you feel individuals, communities, businesses, and/or governments should take to prepare for and to help reduce the negative impacts of that natural disaster.

\*You will need to consider visuals/images, maps, graphs, charts, GIF's and or videos for each of your natural disasters.\*

## **Part 2: Plan your Story Map.**

Once your map and principles are created create a **story map about Natural Disaster Preparedness**. This should highlight a minimum of **6 different types of natural disasters that have happened around the world in the last 5 years (preferably the last year)**. You need to address the general facts on the disaster (date, time, magnitude, location, etc.), the impacts to the population and how to better prepare for a future disaster.

Complete the following organizer to prepare your Story Map:



**Part 2a - Track Sources. \*This is only meant to help you organize your sources.**

Use the following boxes to record as much data as is available for each different type of resource you use in your assignment. Remember to follow the format in the Note below, and to **write your citations at the end of your assignment in alphabetical order in your Reference List (APA).**

B o o k S o u r c e	Author(s)
	Title:
	Place of Publication:
	Publisher:
	Copyright Date      Page(s) Used
	Dewey Call No.

**NOTE:**

This template is adapted from Research Success @ Your Library (TDSB, 2012). Refer to pg. 75 & 79 for information on how to format your Reference List for book sources and photographs using APA.

**Author(s)/Name of sponsoring institution or organization. (Date). Title of Site or Page. Editor. Retrieval information**

National Geographic. (2019). *Tornadoes, explained*. Retrieved from <https://www.nationalgeographic.com/environment/natural-disasters/tornadoes>

Howard, B. (2015). *How Tornadoes Form and Why They're so Unpredictable*. Retrieved from <https://www.nationalgeographic.com/news/2015/05/150511-tornadoes-storms-midwest-weather-science/>

D i g i t a l S o u r c e	Author(s)/Organization:
	Title:
	Date Created:
	Type of Media:
	Web Address:

D i g i t a l S o u r c e	Author(s) Organization:
	Title:
	Date created:
	Type of Media:
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	Title:
	Date Created:
	Type of Media:
	Web Address:

## Strategy for Action for preparedness for Global Natural Disasters

<p><b>WHAT is WHERE?</b></p> <p><i>LOCATE affected populations/areas from the natural disaster (Use specific city, country, etc.) and facts about the event (i.e., Name of Disaster, Date, Deaths/Injuries, Cost, etc.)</i></p>	<p><b>WHY THERE?</b></p> <p><i>Briefly DESCRIBE why the natural disaster occurred there and why the location is susceptible to that type of disaster.</i></p>	<p><b>WHY CARE?</b></p> <p><i>Explain WHY the natural disaster is important.</i></p> <p><i>Outline the potential social, environmental, and economic implications for local and global communities.</i></p>	<p><b>WHAT NEXT?</b></p> <p><i>What ACTION needs to be taken next? IDENTIFY the strategies that you feel individuals, communities, businesses, and/or governments should take to prepare for and to help reduce the negative impacts of that natural disaster.</i></p>	<p><b>VISUALS</b></p> <p><i>List IMAGES that would best illustrate your impact/adaptation AND/OR</i></p> <p><i>Paste web addresses to the photos you would like to use.</i></p>
1				
2				
3				

<b>WHAT is WHERE?</b>  <i>LOCATE affected populations/areas from the natural disaster (Use specific city, country, etc.) and facts about the event (i.e., Name of Disaster, Date, Deaths/Injuries, Cost, etc.)</i>	<b>WHY THERE?</b>  <i>Briefly DESCRIBE why the natural disaster occurred there and why the location is susceptible to that type of disaster.</i>	<b>WHY CARE?</b>  <i>Explain WHY the natural disaster is important.</i>  <i>Outline the potential social, environmental, and economic implications for local and global communities.</i>	<b>WHAT NEXT?</b>  <i>What ACTION needs to be taken next? IDENTIFY the strategies that you feel individuals, communities, businesses, and/or governments should take to prepare for and to help reduce the negative impacts of that natural disaster.</i>	<b>VISUALS</b>  <i>List IMAGES that would best illustrate your impact/adaptation AND/OR</i>  <i>Paste web addresses to the photos you would like to use.</i>
4				
5				
6				

### Part 3: Create Your Story Map

As an informed natural disaster expert and citizen, it's time to share your strategy on how the world must prepare for future natural disasters.

A **STORY MAP** can be a powerful tool for situating issues in a spatial context. In your story map, make sure to address the 4 guiding questions:

- **What is Where?** - *LOCATE* what area the natural disaster affected (*Use specific cities, provinces, countries, etc.*) and *facts about the event (i.e., Name of Disaster, Date, Deaths/Injuries, Cost, etc.)*
- **Why There?** - Briefly *DESCRIBE* why the natural disaster occurred there and why the location is susceptible to that type of disaster.
- **Why Care?** - Explain *WHY* the natural disaster is important. Outline the potential social, environmental, and economic implications from your natural disaster.
- **What Next?** What *ACTION* needs to be taken next? *IDENTIFY* the strategies that you feel individuals, communities, businesses, and/or governments should take to prepare for and to help reduce the negative impacts of that natural disaster.

To begin, go to the following web address: <https://storymaps.arcgis.com/stories>

#### Use the following steps as a checklist for assessing your completion:

- An appropriate TITLE and SUBTITLE

#### Knowledge

- At least 6 LOCATIONS that have been affected by different natural disasters identified on a map.
- Facts included about the natural disaster event such as name, date, death/injury toll and economic cost.

#### Thinking

- DESCRIPTIONS of why the natural disaster occurred there and why the location is susceptible to that type of disaster.
- Explanations of WHY the natural disaster is important. Explain the significance of the natural disaster outlining the potential social, political, environmental, and economic impacts.

#### Application

- What ACTION needs to be taken next? IDENTIFY the strategies that you feel individuals, communities, businesses, and/or governments should take to prepare for and to help reduce the negative impacts of that natural disaster.

#### Communication

- IMAGES that effectively capture the context of the natural disaster
- A wide array of visual content (websites, videos, voice audio, gifs, charts, and graphs)
- A MAP that shows each specific location you are identifying.
- Personalized SETTINGS (e.g., attractive, organized, changed colour/theme, and icon)
- Correct grammar, spelling and structure.

## Assessment as Learning

As you complete each part of the summative project, refer to the charts below to check for completion and self-evaluate your work.

### Part 1: Plan your Story Map

Self-Assessment	Excellent ----- Not Yet			
	4	3	2	1
6 relevant natural disaster locations mapped and identified with facts about the event				
6 descriptions of why the natural disaster occurred there				
Social, environmental, and economic implications are explained.				
6 plausible solutions/strategies to help minimize the impacts from the disaster are clearly outlined				

### Part 2: Peer Evaluate a StoryMap

Peer Evaluator: _____	4 Excellent	3 Good	2 It's a Start	1 Not Yet
<b>Story Map Includes:</b>				
An appropriate specific TITLE and SUBTITLE				
Clear separators that make reader aware of new natural disaster				
LOCATION (maps) and FACTS of all 6 natural disasters included				
DESCRIPTIONS of why the natural disaster occurred and why location is susceptible to that type of natural disaster				
Clear explanations WHY the natural disaster was important <input type="checkbox"/> social, economic, environmental, and political implications				
CREATIVE solutions and strategies for responding to and preparing for natural disasters in the world				
A variety of IMAGES/MEDIA that effectively capture the context of the natural disaster				
StoryMap is in full sentences with proper grammar and spelling.				
12 references in proper APA format (at least 2 per natural disaster) are included at the end in alphabetical order				

**FORCES OF NATURE**  
**Natural Disaster Preparedness**

Category	Level 4	Level 3	Level 2	Level 1 R
<b>Knowledge/Understanding</b>				
<b>Concepts</b> Identified correct locations of 6 recent natural disasters. <b>WHAT is WHERE?</b>	Demonstrated exemplary understanding of recent natural disasters and the location of their occurrence.	Demonstrated clear understanding of recent natural disasters and the location of their occurrence.	Demonstrated some understanding of recent natural disasters and the location of their occurrence.	Demonstrated little understanding of recent natural disasters and the location of their occurrence.
<b>Citations</b> Records relevant information with an APA formatted reference list with more than 12 sources	Relevant information is recorded with a high degree of effectiveness.	Relevant information is recorded with considerable effectiveness.	Relevant information is recorded with some effectiveness.	Relevant information is recorded with limited effectiveness.
	Includes an APA formatted reference list with 12+ sources	Includes an APA formatted reference list with less than 12 sources.	Includes a reference list lacking APA formatting and less than 12 sources	Includes a reference list with no APA formatting and less than 12 sources
<b>Thinking</b>				
<b>Research</b> Completes effective research demonstrating understanding why the natural disaster occurred and why that location is prone to that disaster. <b>WHY THERE?</b>	Able to explain why the natural disaster occurred with a high degree of effectiveness (citing research done)	Able to explain why the natural disaster occurred with considerable effectiveness (citing research mostly done)	Able to explain why the natural disaster occurred with some effectiveness (citing research somewhat done)	Able to explain why the natural disaster occurred with limited effectiveness (citing research poorly done)
<b>Geographic Perspective</b> Explain the significance of the natural disasters by discussing the social, environmental, political, and economic implications. <b>WHY CARE?</b>	Explains the significance of the natural disasters by examining the social, environmental, political, and economic implications with a high degree of effectiveness.	Explains the significance of the natural disasters by examining the social, environmental, political, and economic implications with considerable effectiveness.	Explains the significance of the natural disasters by examining the social, environmental, political, and economic implications with some effectiveness.	Explains the significance of the natural disasters by examining the social, environmental, political, and economic implications with limited effectiveness.
<b>Communication</b>				



<b>StoryMap</b> StoryMap communicates results of research to intended audience (attractive, organized, media, personalized and maps included)	StoryMap communicates results of research to intended audience with a high degree of effectiveness (with no technical errors).	StoryMap mostly communicates results of research to intended audience with considerable effectiveness (with few technical errors).	StoryMap somewhat communicates results of research to intended audience with some effectiveness (with some technical errors).	StoryMap communicates results of research to intended audience with limited effectiveness (with many technical errors).
<b>Written Text</b> Written text communicates with clarity and has correct grammar and spelling.	Written text communicates ideas with a high degree of effectiveness.	Written text communicates ideas with considerable effectiveness.	Written text communicates ideas with some effectiveness.	Written text communicates ideas with limited effectiveness.
<b>Application</b>				
<b>Next Steps</b> Examines specific and detailed strategies that can be used to help prepare for and reduce the negative impacts of natural disasters.  <b>WHAT NEXT?</b>	Thoroughly explains the specific actions and strategies that should be implemented to help prepare for different natural disasters.	Considerably explains the specific actions and strategies that should be implemented to help prepare for different natural disasters.	Somewhat explains the specific actions and strategies that should be implemented to help prepare for different natural disasters.	Limited explanation of the specific actions and strategies that should be implemented to help prepare for different natural disasters.

**Descriptive feedback:**

TOTAL: \_\_\_\_\_ / 100 marks