





# International Consortium for Multilingual Excellence in Education



Our hope is that these materials can provide some meaningful learning supports to students and families who may not have access to online learning opportunities. However, we can also imagine a variety of ways that these packets can provide learning opportunities outside of our original intent and purpose. Please use these activity packets in any way you see fit for your students and families. We will be so pleased to learn of how they might be useful, particularly for your multilingual students and their families. We think it might be particularly helpful for you to print packets and mail them to families, but we also see opportunities to work with local agencies, leave printed-out packets for pick-ups at schools, etc.

We designed these activities based around several big ideas:

- Productive play and inquiry
- Grade level and English Language Development standards/curriculum
- Fostering multilingual language development
- Providing opportunity for all four language domains (reading, writing, speaking and listening)

These packets are self-contained. Everything a child will need to be successful with the activities is provided in the packet. Students will only need a writing utensil. Additional tools like crayons or scissors are optional.

We have also included a letter to parents. We hope this will help parents understand what students will be doing with the packet and that we encourage the use of all language resources available to the student. The packets are in English for the students, but the students can write, talk and engage with family members regarding the packet activities in any language they would like. We have translated the parent letter into Spanish, and we encourage districts to translate the letter into any other language that would be helpful for your local families.

Designing Activity Packets is a new initiative for us, though we have been designing professional learning opportunities (eWorkshops) for teachers of multilingual learners since 2011. Like our Activity Packets, those learning opportunities for teachers are free. To learn more about them and us, please visit our website at: <https://cehs.unl.edu/icmee/>

We are eager to be a helpful, collaborative partner in all learning needs related to multilingual students and their teachers, so please, do not hesitate to reach out to us with questions, ideas, concerns, feedback, etc. We are available at [icmee@unl.edu](mailto:icmee@unl.edu).

Sincerely,

Kara Mitchell Viesca, PhD

Associate Professor of Language Education

University of Nebraska Lincoln

Teaching, Learning and Teacher Education

PI: International Consortium for Multilingual Excellence in Education

This packet was designed and created by **Caryn G. Jones** in collaboration with Lauren Gatti and Alexa Yunes.



The Standards that Informed the Development of this Packet are:

**Standards:**

- **ELA Literacy RH.6-8.7:** Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
- **ELA-Literacy WHST.6-8.2:** Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
  - **Especially C:** Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.
  - **Especially D:** Use precise language and domain-specific vocabulary to inform about or explain the topic.

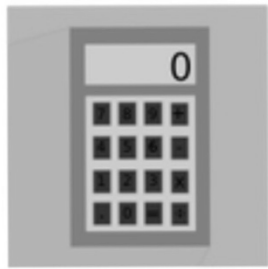
**Language Functions:**

- Explain a series of actions within an event; explain sequence and duration using adverbs of time and manner
- Explain cause and effect relationships for natural processes using auxiliary verbs with conjunctions
- Classification of objects or ideas using verbs and conjunctions
- Compare and contrast ideas using adverbs and conjunctions



7<sup>th</sup> – 8<sup>th</sup> grade • English Level 3

# Learning PACKET #1



# International Consortium for Multilingual Excellence in Education



August 15<sup>th</sup>, 2020

Dear Families:

During the COVID-19 pandemic, it became necessary for students to learn at home. Many students have limited access to technology, others struggle with online learning, and some simply want more to do while they are at home. With these things in mind, we have created an extensive resource of learning materials that we hope will be helpful for your children to engage with. These Activity Packets were designed with your students in mind and are aligned with each of their grade level content. Each activity in the packets will help students continue with their schooling as well as continue to grow their multilingualism. We encourage you to talk to your student about what they are doing and let your child ask you about the topics they are learning about. The packet is in English, but we encourage you and your children to speak and think together in any language you would like to. We strongly encourage you to use the language you feel most comfortable using with your student. Supporting their learning in all the languages they know is helpful—even for developing their English! So, please encourage your student to do the work in the packet in any language they would like.

We know that families are dealing with a lot of stress and uncertainty right now, so we encourage you to play the role you would like to play with your student and their Activity Packet based on what works best for you. We recommend reading the information about the packet and activities and then discussing with your student how the packet works and how they can work through it. We believe that with that introduction, your student can do a lot, if not all, of the work themselves. However, if you are available to work more closely with your student (or for a sibling or other family member to do so), we encourage that as well. Please know, this is not intended to be something that adds stress and work to your family during this demanding time. We hope that this is a helpful resource so your student can continue growing academically while in unusual situations.

We also hope you will find these packets interesting and fun. We have integrated activities from all of the grade level content standards: English Language Arts, Mathematics, Social Studies, Science, Physical Education and Art. We have also developed different packets for the different levels of English proficiency, so your child should feel challenged but also capable of largely understanding the content in front of them.

6<sup>th</sup>-12<sup>th</sup> grade students are encouraged to talk about their learning as much as possible, even if it is not to one person in particular. Some packets will include activities where students can “use a cell phone” to record voice messages and post on social media, which we hope might be ways in which they can be encouraged to speak in English or in any language they prefer.

In these packets, we have also included the following activities:

- Dictionary. Each day we hope that your student will engage with words they find interesting and want to keep track of. We encourage students to use the dictionary activities to keep track of words they learn and find interesting. We also encourage students to use any language they would like as well as pictures to help them remember what the words mean.

# International Consortium for Multilingual Excellence in Education



- Journal. Students should be encouraged to write in any language (or combination of languages) that they feel most inclined to. They can also use pictures as appropriate. We hope these journal spaces will also be points of conversation for your child with someone in their home.

This packet is the first in a unit about Disasters. Your student will practice using high-level English language while learning about a high-interest topic. The lessons will include working with language used in science, math, and social studies, as well as reading and writing.

Day 1 - Your student will choose someone to “communicate” with throughout this unit. It can be someone they know outside your household or someone that they imagine and create. They will also define the word **disaster** and compare and contrast the term with the word **emergency**. They will sort and classify disasters as either natural or human-caused.

Day 2 - Your student will review some geography terms and skills before mapping the locations where certain types of disasters are most likely to occur.

Day 3 - Your student will consider the signs and warnings of specific types of disaster, learn the story of a girl whose knowledge of tsunami warning signs saved hundreds of people and then match a location to the warning signs to be looked for in that area.

Day 4 - Your student will work to pull data out of text they read in order to analyze data. They will pull information from text to complete a table, then use the data to answer some questions about the effects of various natural disasters. One question will require some mathematical calculation. They will then explore the sensory details of three types of disasters.

Day 5 - Your student will review all of the work they’ve done so far. They will use the information from throughout the week to write a short letter to their “colleague” warning them of the hazards possible in the area where they will be living.

We have included answers for activities in the packet so your or your student can check their work, as well as some graphic organizers that can help students as they work through specific activities.

We hope that these activities will enhance your child’s learning while we work through these very unusual circumstances. We also hope that they will give your child opportunities for productive play. If you have any questions or concerns about these packets, feel free to reach out to our project at [icmee@unl.edu](mailto:icmee@unl.edu) or by calling the Teaching, Learning and Teacher Education department at 402-472-2231.

Sincerely,

Kara Mitchell Viesca, PhD

Associate Professor of Language Education

University of Nebraska Lincoln

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# Answer Keys

## Compare and Contrast ANSWERS

**Disaster - a terrible event, especially one that happens suddenly and causes great loss of life, damage, or hardship**

- Causes a lot of damage
- Kills/harms a lot of people

**Ways to say it's the same:**

Similarly, likewise, in the same way

**Ways to say it's different:**

However, on the other hand, on the contrary

**Both emergencies and disasters**

- Happen suddenly
- Cause damage
- People need help

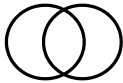
**Emergency – a sudden, urgent event, especially one where people need help**

- Usually a smaller number of people or area

Psst...

You've seen this method of comparing and contrasting before. It usually looks like this:

We call it a Venn diagram. I've started making them square because when students are drawing it in their notebooks, squares are easier to make and have them look nice. ☺



**Write it out: what makes disasters and emergencies alike and different?**

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## Sort and Classify Answers

We classify disasters as natural or human-caused. Sort these disasters into the table below. Sometimes it's not clear whether a disaster is natural or human-caused. Put those in the box at the bottom and try to explain your thinking. See the examples. Circle any disasters you don't know.

Disasters	Natural	Human-Caused
Avalanche Blizzard Chemical Spill/Release Cold Snap/Polar Front Drought Dust Storm Earthquake Epidemic/Pandemic Fire Flood Heat Wave Hurricane/Typhoon Ice Storm Landslide/Mudslide Nuclear Explosion Oil Spill Plague of Insects Power Outage Sinkhole Solar Storm/Flare Structural Failure Terrorism Thunderstorm Tornado/Cyclone Transportation Accident Tsunami Volcanic Eruption War/Civil Unrest Wildfire Windstorm	Blizzard Cold Snap/Polar Front Earthquake Flood Hurricane/Typhoon Ice Storm Plague of Insects Solar Storm/Flare Thunderstorm Tornado/Cyclone Tsunami Volcanic Eruption Windstorm	Chemical Spill/Release Nuclear Explosion Oil Spill Structural Failure Terrorism Transportation Accident War/Civil Unrest

**Hard to Classify**

Avalanches, Fires, Power Outages, Sinkholes, and Wildfires – can be triggered by nature or humans  
 Drought, Dust Storms, Heat Waves – can all be related to climate-change (which is human-caused)  
 Epidemics/Pandemics – usually happen naturally, but human decisions and actions can make them more or less deadly  
 Landslides/Mudslides – can happen naturally, but are disastrous when humans build without considering erosion

## Lesson 2 – Location, location, location

### Refreshing Your Geography Mind

You already know a lot about maps and geography, but just in case it hasn't been at the top of your mind lately, let's refresh your memory.



**Name SEVEN Continents:**

1. Africa
2. Asia
3. Australia/Oceania
4. Antarctica
5. South America
6. Europe
7. North America

**Name the FIVE Oceans\*:**

1. Southern
2. Indian
3. Atlantic
4. Pacific
5. Arctic

**Name SIX Countries (it doesn't matter which ones):**

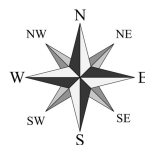
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

**Name THREE States (it doesn't matter which ones):**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

# Answer Keys (Continued)

## More Maps and Stuff



We use the compass rose to understand the point-of-view from which we're seeing a map.

Name the FOUR Cardinal (Main) Directions:

1. North
2. South
3. East
4. West

The word intermediate means between. With that in mind, name the FOUR Intermediate Directions:

1. Northeast
2. Northwest
3. Southeast
4. Southwest



## Where is everything?

Remember, **longitudinal** lines stretch North/South (long) and **latitudinal** lines stretch East/West (lat rhymes with fat!).

When we are explaining where something is, we can use **absolute location**, the exact position on Earth, or **relative location**, describing where it is compared to other places.

1. With that in mind, which city is located at approximately 10°S, 40°W?

Vitoria

2. Which city is located near the equator?

Belem

3. Which city is on the west coast of South America?

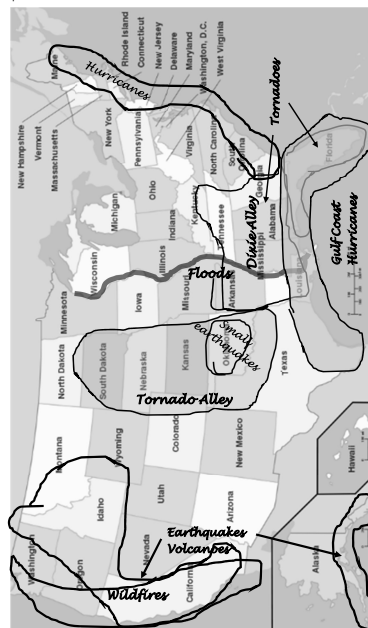
Lima

#1 used (circle one): **absolute** or relative

#2 used: absolute or **relative**

## Where are the dangers?

Disasters happen everywhere, but there are some areas of the world where specific natural disasters are more common.



Hurricanes are most likely on the Gulf Coast (Texas, Louisiana, Mississippi, Alabama, and Florida). The East Coast from Florida up through around New York.

Earthquakes and volcanoes are most common on the West Coast (including Alaska). Lately, Oklahoma has had many small earthquakes due to oil drilling/fracking.

Most tornadoes are in: + Tornado Alley: the Dakotas, Nebraska, Kansas, Oklahoma, and North Dakota. + Florida + Dixie Alley, Arkansas, Louisiana, Georgia, Tennessee, Mississippi and most of Georgia.

Let's map on the national level (in the U.S.). Flooding is common along the Mississippi River in Minnesota, Wisconsin, Iowa, Illinois, Arkansas, Mississippi, and Louisiana.

## What Would You Pay Attention To?

Use the map you marked and labeled to show where in the United States you might need to worry about specific natural disasters. Now think through what you might need to be aware of in these locations. What kinds of signs might you hear, see, smell, and feel that would help you recognize a coming disaster?

	In Florida	In Iowa	In Alaska
<b>What might you hear?</b>	Rushing wind, items crashing around	A very loud roaring like a freight train.	A grinding or rumbling noise
<b>What might you see?</b>	Rain being blown almost sideways, items being blown through the air, flooding	A dark wall of clouds, debris (broken pieces of houses, cars, etc.) flying around	Items falling from walls, cracks in walls, buildings, and the ground.
<b>What you might feel (physically)?</b>	High winds, driving rain,	Wind, but then a stillness before the tornado gets near enough, then strong winds.	Shaking and rolling of the floor/ground
<b>What might you smell?</b>		Fresh cut wood and grass	

## A Success Story

There are many heroes out there who have saved other people during disasters. Here is the story of one girl.



### Surviving Into the New Year

The day after Christmas in 2004, Tilly Smith, age 10, was on vacation in Thailand with her parents and her sister. She and her family went for an early morning walk on the beach when she noticed something strange.

Tilly later told news reporters that at first she was not sure why what she was seeing was familiar. **She noticed that the ocean waves were coming in, but not going back out. She heard a fizzing sound like a carbonated drink being poured.**

She started to tell her parents that something was wrong. They could not understand why she was so upset. She kept saying "it's the water...it bubbles...the water bubbles." She knew something was familiar, but she couldn't quite place it.

Then she saw something else and she realized why the ocean's behavior was bothering her. **The sight of a log spinning around in the ocean reminded her of a video that she had seen during a geography lesson at school.** Now that she knew why she was feeling anxious, she could communicate more effectively. **She finally convinced her father, telling him that these were signs of a tsunami.**

Her father yelled for her mother and siblings to come back. He stopped to tell a security guard what Tilly had said. People around them had started paying attention to Tilly's anxiety. The security guard began warning visitors. Together, hundreds of people from that stretch of beach started hurrying to higher ground.

Tilly's ability to recognize the signs of a tsunami and to communicate it to her father gave those people the few minutes head start they needed to survive. Up and down the coast of Thailand, 10,000 people died that morning. Altogether nearly 250,000 people were killed by the tsunami. Everyone staying in the hotel where Tilly and her family stayed survived.

### Think It Through

In order for the people on Maikhao Beach to survive, Tilly had to go through a series of actions. What did she need to do? (Hint: Notice the bolded sentences in the article.)

First, she needed to **notice small things like the fizzing sound, the waves not going out.**

Next, **she had to remember the lesson she had learned at school**

Finally, **had to communicate what she knew to her father in a way that convinced him**

# Answer Keys (Continued)

## Most Deadly Disasters - Answers

Let's look at some statistics about natural disasters. We can learn a lot by looking at the data in different ways. You can take data from texts you read and manipulate it (move it around) to find out how events relate to each other.

The text we are looking at gives us information on disasters from 1900-2010. We want to know which events were most deadly and what type of disaster was most deadly overall.

The first thing to do is to put the data into a table so it's easier to see all of the information.

First, make a list of the information you have access to from the text that is common to all of the entries. For instance, there is information about data like the magnitude of earthquakes or the height of waves, etc. but if we are comparing all types of natural disasters, we don't want that in the way.

Let's look at an entry about the earthquake/tsunami that Tilly Smith and her family survived. Let's underline data we need and cross out data we don't. The information you need might be scattered in the text. This entry is talking about an earthquake AND a tsunami? We need to use both. It also shows two locations affected: Sumatra and the countries bordering the Indian Ocean.

Dec. 26, 2004. A magnitude 9.0 quake struck off the coast of Sumatra, triggering tsunamis that swept through the coastal regions of a dozen countries bordering the Indian Ocean. The death toll has been estimated at between 225,000 and 275,000.

The data we have for each event that will help answer our questions (the columns for our table) are:

- the date of the event
- the type of event
- the number of people killed
- the location of the disaster

Table title: Most Deadly Natural Disasters from 1900-2010

Date	Type of Disaster	Death Toll	Location
1 5/8/1902	Volcanic Eruptions	40,000	Martinique, Caribbean
2 12/28/1908	Earthquake/Tsunami	123,000	Southern Italy
3 12/16/1920	Earthquake/Landslides	200,000	Gansu, China
4 9/1/1923	Earthquake/Fires	143,000	Tokyo/Yokohama, Japan
5 5/22/1927	Earthquake	200,000	Xining, China
6 5-8/1931	Flood/Disease/Starvation	4,000,000	China
7 10/5/1948	Earthquake	110,000	Ashgabat, Turkmenistan
8 11/13/1970	Cyclone	500,000	Bangladesh
9 7/28/1976	Earthquake	242,000	Tangshan, China
10 11/13/1985	Volcanic Eruption/Mudslides	25,000	Armero, Columbia
11 7/15/1991	Volcanic Eruption	800	Luzon, Philippines
12 10-11/1998	Hurricane	11,000	Honduras, Nicaragua
13 12/26/2003	Earthquake	43,000	Bam, Iran
14 12/26/2004	Earthquake/Tsunami	225,000	Sumatra/12 countries bordering the Indian Ocean
15 10/8/2005	Earthquake	80,000	Kashmir, Pakistan
16 5/3/2008	Cyclone	100,000	Myanmar
17 5/12/2008	Earthquake	70,000	Sichuan, China
18 1/12/2010	Earthquake	230,000	Haiti

Next, use the text below to fill in the blanks in our table.

### Earthquakes and tsunamis

- Jan. 12, 2010. More than 230,000 people were killed when a 7.0-magnitude earthquake struck Haiti.
- May 12, 2008. About 70,000 people were killed and 18,000 people were reported missing after a 7.9-magnitude earthquake struck Sichuan, China.
- Oct. 8, 2005. At least 80,000 people were killed and three million left homeless after a quake struck the mountainous Kashmir district in Pakistan.
- Dec. 26, 2004. A magnitude 9.0 quake struck off the coast of Sumatra, triggering tsunamis that swept through the coastal regions of a dozen countries bordering the Indian Ocean. The death toll has been estimated at between 225,000 and 275,000.
- Dec. 26, 2003. An earthquake devastated the ancient city of Bam, in central Iran, leaving between 31,000 and 43,000 people dead.
- July 28, 1976. The 20th century's most devastating quake (magnitude 7.8) hit the sleeping city of Tangshan in northeast China. The official death toll was 242,000.
- Oct. 5, 1948 - More than 110,000 were killed when a 7.3 quake hit Ashgabat in Turkmenistan.
- May 22, 1927. A magnitude 7.9 quake near Xining, China, killed 200,000
- Sept. 1, 1923. A third of Tokyo and most of Yokohama were levelled when a magnitude 8.3 earthquake shook Japan. About 143,000 were killed as fires ravaged much of Tokyo.
- Dec. 16, 1920. China was also the site for the world's third-deadliest quake of the 20th century. An estimated 200,000 died when a magnitude 8.6 temblor hit Gansu, triggering massive landslides.
- Dec. 28, 1908. Southern Italy was ravaged by a 7.2 magnitude quake that triggered a tsunami that hit the Messina-Reggio-Calabria area, killing 123,000.

### Volcanic eruptions

- July 15, 1991. Mt. Pinatubo on Luzon Island in the Philippines erupted, blanketing 750 square kilometers with volcanic ash. More than 800 died.
- Nov. 13-14, 1985. At least 25,000 are killed near Armero, Colombia, when the Nevado del Ruiz volcano erupted, triggering mudslides.
- May 8, 1902. Mt. Pelee erupted on the Caribbean island of Martinique, destroying the capital city of St. Pierre. Up to 40,000 were killed.

### Hurricanes, cyclones and floods

- May 3, 2008. Cyclone Nargis, swept along by winds that exceeded 190 kmh and waves six meters high struck the Burmese peninsula and may have left as many as 100,000 dead.
- Oct. 26-Nov. 4, 1998. Hurricane Mitch was the deadliest hurricane to hit the Americas. It killed 11,000 in Honduras and Nicaragua and left 2.5 million homeless.
- Nov. 13, 1970. The Bhola cyclone in the Ganges delta killed an estimated 500,000 in Bangladesh. Some put the complete death toll as high as one million.
- May-August 1931. Massive flooding of China's Yellow and Yangtze rivers led to almost four million deaths from drowning, disease and starvation.

Some questions about our table:

1. We listed the disasters in which order?
  - a. Alphabetical
  - b. When the events happened
  - c. Type of disaster
2. What type of disaster is listed most often in our table?
  - a. Floods
  - b. Hurricanes
  - c. Earthquakes
  - d. Volcanoes

## Analyze the Data Answers

Now that our data is organized, we can start to look for patterns and make some calculations.

We had two goals. To find:

1. Which events were most deadly (we'll look for the top 3)
2. What type of disaster was most deadly overall

All we need to do is look at our table to answer the first question. The top three most deadly events from our list are:

1. 1931 Floods in China killed 4,000,000
2. 1970 Cyclone in Bangladesh killed 500,000
3. 1976 Earthquake in Tangshan, China killed 242,000

Finding which type of disaster was most deadly is a little more complicated. We need to know the total number of people killed in each type of disaster:

- Earthquakes/Tsunamis
- Volcanic Eruptions
- Hurricanes/Cyclones/Floods

One thing I do to help double check myself is to count how many events of each type we have. There are a total of 18 events.

- Earthquakes/Tsunamis = 11 events
- Volcanic Eruptions = 3 events
- Hurricanes/Cyclones/Floods = 4 events

Yikes! I'm glad I double checked myself. I had only counted 10 Earthquakes, but that wouldn't add up to 18 so I counted again. Whew!

**Make your prediction.** Which of the three types of disasters do you think will end up having been the most deadly?

I think that \_\_\_\_\_ was the most deadly kind of disaster in this list because \_\_\_\_\_.

**Make your calculations to answer #2:**

Type of disaster: \_\_\_\_\_

# People killed by that type of disaster: \_\_\_\_\_

Was your prediction correct? (circle one) Yes No

Show your work! Use this space to do your calculations.

### Earthquakes

200,000  
110,000  
242,000  
43,000  
80,000  
70,000  
230,000  
143,000  
200,000  
123,000  
225,000  
1,666,000

### Hurricanes, etc.

500,000  
100,000  
4,000,000  
11,000  
4,611,000

### Volcanoes

800  
25,000  
40,000  
65800

### Here are three short descriptions of disasters:

Underline what they SAW. Circle what they HEARD. Make a box around what they FELT. Star anything they SMELLED.

### Earthquake

We heard a rumbling noise and the floor started to shake. We could hear dishes breaking in the kitchen and pictures falling from the walls with a crash. Then there was a loud bang before the rumbling started again. Everything looked like it was bouncing up and down. Dresser drawers were rolling open and then closed again. Doors were swinging wildly. Dust came raining down from cracks forming in the walls and ceiling, making us cough. The shaking stopped for a few minutes and then started again.

### Wildfire

As we woke up, at first, we just smelled smoke. That wasn't unusual in this area because people often lit campfires to cook, but the smell grew stronger. We left our tent, and suddenly a hot, dry wind hit us and we saw a plume of smoke rising above the trees. Then we could hear crackling and whooshing sounds and we knew it was time to leave. The wind grew hotter and stronger as we ran to our car.

### Tornado

The thunderstorm seemed to have passed. We felt the wind die down but when we looked up to the sky, we realized the storm was not over. We saw a huge wall of dark clouds racing toward us. As the funnel cloud spun down from the mass of clouds the noise got louder and louder until it sounded like a freight train or a huge airplane was coming toward us. As it got closer we could see a cloud of debris, broken boards, tree limbs, all kinds of things, flying around. Strangely, as we took cover we could smell the tornado too! It smelled like freshly cut wood and a lawn that has just been mowed.

# International Consortium for Multilingual Excellence in Education



15 de agosto del 2020

Queridas familias:

Durante la pandemia del COVID-19, ha sido necesario que los estudiantes aprendan en casa. Muchos de los estudiantes tienen acceso limitado a la tecnología, otros tienen dificultad para aprender en línea y algunos simplemente quieren tener algo más que hacer mientras están en casa. Pensando en estas razones, hemos creado un recurso con una gran extensión de materiales de aprendizaje que esperamos serán útiles para que sus hijos participen activamente. Estos paquetes de aprendizaje fueron diseñados teniendo en mente a sus niños y están alineados a los contenidos de cada nivel de grado. Cada actividad en estos paquetes los ayudará a continuar con su escolarización, así como a seguir aumentando su multilingüismo. Lo alentamos a que hable con su estudiante sobre lo que está haciendo y deje que le pregunte sobre los temas que le interesan. El paquete está en inglés, pero le recomendamos a usted y a su estudiante que hablen y piensen juntos en el idioma que deseen. Le recomendamos encarecidamente que use el idioma con el que se sienta más cómodo al comunicarse con su estudiante, ya que respaldar su aprendizaje en todos los idiomas que sabe es útil, ¡incluso para su inglés! Por lo tanto, anime a su estudiante a hacer el trabajo en el paquete en cualquier idioma que desee.

Sabemos que las familias están lidiando con mucho estrés e incertidumbre en este momento, por lo que lo alentamos a que desempeñe el papel que le gustaría desempeñar con su estudiante y su paquete de actividades según lo que funcione mejor para usted. Le recomendamos leer la información sobre el paquete y las actividades que contiene y luego discutir con su estudiante cómo funciona el paquete y cómo pueden trabajar en él. Creemos que, con esa introducción, su estudiante puede hacer mucho, si no todo, el trabajo por sí mismo. Sin embargo, si usted está disponible para trabajar más estrechamente con su estudiante (o un hermano u otro miembro de la familia), también lo recomendamos. Por favor, tenga en cuenta que esto no pretende ser algo que agregue estrés y trabajo a su familia durante este momento tan desgastante. Por el contrario, esperamos que este sea un recurso útil para que su estudiante pueda continuar desarrollándose académicamente durante esta situación tan inusual.

También esperamos que ustedes encontrarán estos paquetes interesantes y divertidos. Hemos integrado actividades de todos los estándares de contenido de nivel de grado: Artes del Lenguaje en inglés, Matemáticas, Estudios Sociales, Ciencias, Educación Física y Arte. También hemos desarrollado diferentes paquetes para los diferentes niveles de dominio del inglés, de esta manera su hijo podrá sentir el desafío y también será capaz de comprender en gran medida el contenido que se les presenta.

Los estudiantes de 6to a 12avo grado son motivados a hablar sobre su aprendizaje tanto como sea posible, aun cuando no sea a una persona en particular. Algunos paquetes incluirán actividades en donde los estudiantes pueden “usar un teléfono celular” para grabar mensajes de voz y subirlos a las redes sociales; esperamos que estas sean formas que los animarán a hablar en inglés o en el idioma de su preferencia.



# International Consortium for Multilingual Excellence in Education



En este paquete hemos incluido las siguientes actividades:

- Diccionario: Esperamos que cada día su estudiante aprenda palabras que encontrará interesantes y querrá tener un seguimiento y registro de estas. Al final de los paquetes encontrarán páginas en las que su estudiante podrá mantener su propio diccionario. Recomendamos ampliamente que los estudiantes usen estas páginas para registrar palabras que les gusten o les parezcan interesantes. También alentamos a los estudiantes a usar cualquier lenguaje que deseen, así como imágenes para recordar el significado de las palabras.
- Diario: Cada día, los estudiantes tienen un tema corto de escritura al que pueden responder. Los estudiantes deben ser alentados a escribir en cualquier idioma (o combinación de idiomas) que les parezca más conveniente. También pueden utilizar imágenes si lo consideran necesario. Esperamos que estos temas de escritura puedan utilizarse de puntos de conversación entre su estudiante y su amigo.
- Día 1  
Su estudiante escogerá alguien con quien “comunicarse” a lo largo de esta unidad. Puede ser alguien que conozca fuera de la familia o alguien que ellos se imaginen o creen. También definirán la palabra **desastre** y compararán y contrastarán este término con la palabra **emergencia**. Ellos ordenarán y clasificarán desastres como naturales o causados por el hombre.
- Día 2  
Su estudiante repasará algunos términos geográficos y algunas destrezas antes de localizar en un mapa lugares donde es más probable que ocurran ciertos tipos de desastres.
- Día 3  
Su estudiante reconocerá los signos y advertencias de algunos tipos específicos de desastres. También aprenderán la historia de una niña que con sus conocimientos sobre los signos y avisos de tsunamis salvó varios cientos de personas y harán coincidir una ubicación con las señales de advertencia que se presentan en esa área.
- Día 4  
Su estudiante extraerá datos de un texto que lea para analizarlos. Extraerán información del texto para completar una tabla, luego usarán los datos para responder algunas preguntas sobre los efectos de varios desastres naturales. Una pregunta requerirá algunos cálculos matemáticos. Luego explorarán los detalles sensoriales de tres tipos de desastres.
- Día 5  
- Su alumno revisará todo el trabajo que ha realizado en los cuatro días. Utilizará la información de toda la semana para escribir una breve carta a su "colega" advirtiéndoles de los posibles peligros en el área donde vivirán.
- Hemos incluido respuestas para las actividades del paquete para que usted o su estudiante puedan verificar su trabajo, así como algunos organizadores gráficos que pueden ayudar a los estudiantes a medida que realizan ciertas actividades.



# International Consortium for Multilingual Excellence in Education



Esperamos que estas actividades mejoren el aprendizaje de su hijo mientras trabajamos juntos para atravesar estas circunstancias tan inusuales. También esperamos que le darán a su hijo oportunidades de juego productivo. Si tiene alguna pregunta o inquietud acerca de estos paquetes, siéntase en libertad de comunicarse con nuestro proyecto a [icmee@unl.edu](mailto:icmee@unl.edu) o llamando al departamento de Enseñanza, Aprendizaje y Educación para maestras (Teaching, Learning, and Teacher Education) al 402-472-2231.

Sinceramente,

Kara Mitchell Viesca, PhD

Associate Professor of Language Education

University of Nebraska Lincoln

Teaching, Learning and Teacher Education

PI: International Consortium for Multilingual Excellence in Education



## Share your learning!

Share a picture of any of your work by using **#MultilingualProud** on social media.

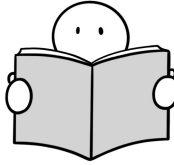
We'd love to see what you've done with this packet!



## Instructions Key



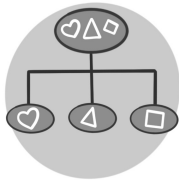
- Share with someone else
- Comparte con alguien más
- مشاركتها مع شخص آخر
- La wadaag qof
- Chia sẻ với ai đó



- Read
- Lee
- اقرأ
- Akhriso
- Đọc



- Write
- Escribe
- اكتب
- Qor
- Viết



- Sort
- Ordena
- رتب
- Kala sooc
- lựa chọn



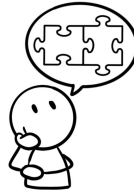
- Move your body
- Mueve tu cuerpo
- حرك جسمك
- Dhaqdhaqaaqa jirkaaga
- Di chuyển cơ thể của bạn



- Cut
- Corta
- قص الورقة
- Waraaqda jar
- Cắt giấy



- Read out loud
- Lee en voz alta
- قراءة بصوت عال
- Kor u aqri
- Đọc to



- Make a connection
- Hacer una conexión
- إجراء اتصال
- Xiriir samee
- Tạo kết nối

123

- Count
- Cuenta
- العدد
- Tiri
- đếm



- Draw
- Dibuja
- رسم
- Sawir
- Vẽ tranh



- Find
- Encuentra
- وجد
- Soo hel
- Tìm thấy


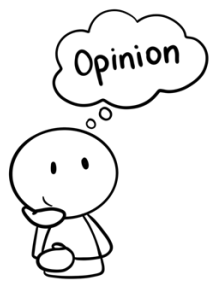

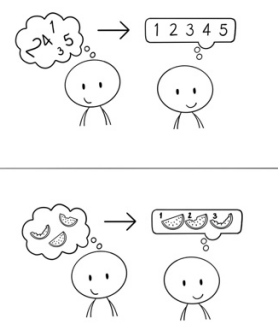
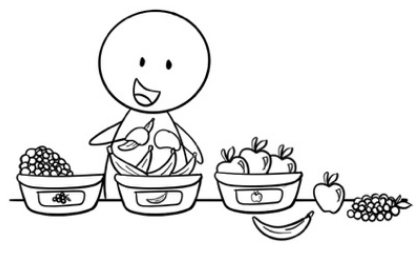


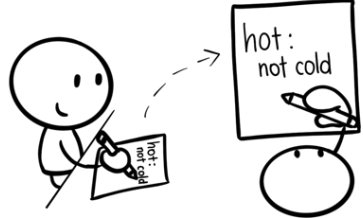
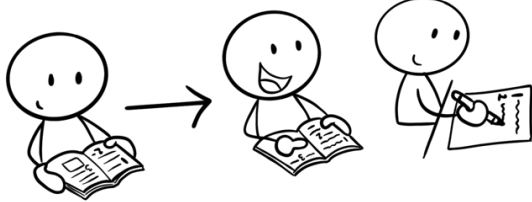


- Color
- Colorea
- لون
- Midab gudaha
- làm cho hoa mỹ






- Share with your Buddy
- Comparte con tu Buddy
- شارك مع صديقك
- La wadaag asxaabtaada
- Chia sẻ với bạn bè của bạn

## Thinking Skills Glossary – Level 3 English

Word	Definition	Picture
Fact 事实 Hecho	something we know, without question 我们知道的毫无疑问 Algo que podemos comprobar	
Opinion 意见 Opinión	something we think or believe 我们认为或相信的事情 Algo que pensamos	
Compare 相比 Comparar	think about how two or more things are the same or different 考虑一下两个或多个事物是相同还是不同 Pensar en qué se parecen y en qué son diferentes dos o más cosas	
Sequence 序列 Secuencia	to put things in the right order from first to last 从头到尾正确地安排事情 Poner las cosas en orden , del primero al último	
Classify Sort Categorize 分类 Clasificar Organizar	to put things into groups by how they are the same 通过相同的方式将事物分组 Agrupar cosas por cómo se parecen	

Word	Definition	Picture
Define 限定 Definir	Write the meaning 写出意思 Escribir el significado	Define "hot" 
Retell 复述 Recontar	To tell again, in your own words 再说一遍，用你自己的话 Volver a contar en tus propias palabras	
Think Imagine Reflect 认为 想像 反映 Piensa Imagina reflexiona	Talk to yourself in your mind 畅所欲言 Hablar contigo mismo	
Brainstorm 头脑风暴 Lluvia de ideas	think of many ideas about one question 想出关于一个问题的许多想法 Pensar en varias ideas sobre la misma pregunta	

Word	Definition	Picture
Predict 预测 Predecir	Think about what will happen next 想想接下来会发生什么 Pensar y adivinar lo que va a pasar	
Main idea 大意 Idea principal	One big idea about the story 关于这个故事的一个大想法 Una idea mas importante de la historia	
Find Locate 找 Encontrar	Look for something 寻找东西 Buscar algo	

# iPhone Instruction Icons



Write a text message  
写短信  
Escribe un mensaje



Tweet: write one sentence  
推特：写一句话  
Tweet: escribe una oración



Post on Facebook: write a few sentences  
在Facebook上发布：写几句话  
Publica en Facebook: escribe algunas oraciones



Post on Instagram: write a sentence and draw a picture  
在Instagram上发布：写一个句子并画一幅画  
Publica en Instagram: escribe una oración y dibuja



Write an email: write a paragraph  
写一封电子邮件：写一个段落  
Escribe un correo electrónico: escribe un párrafo

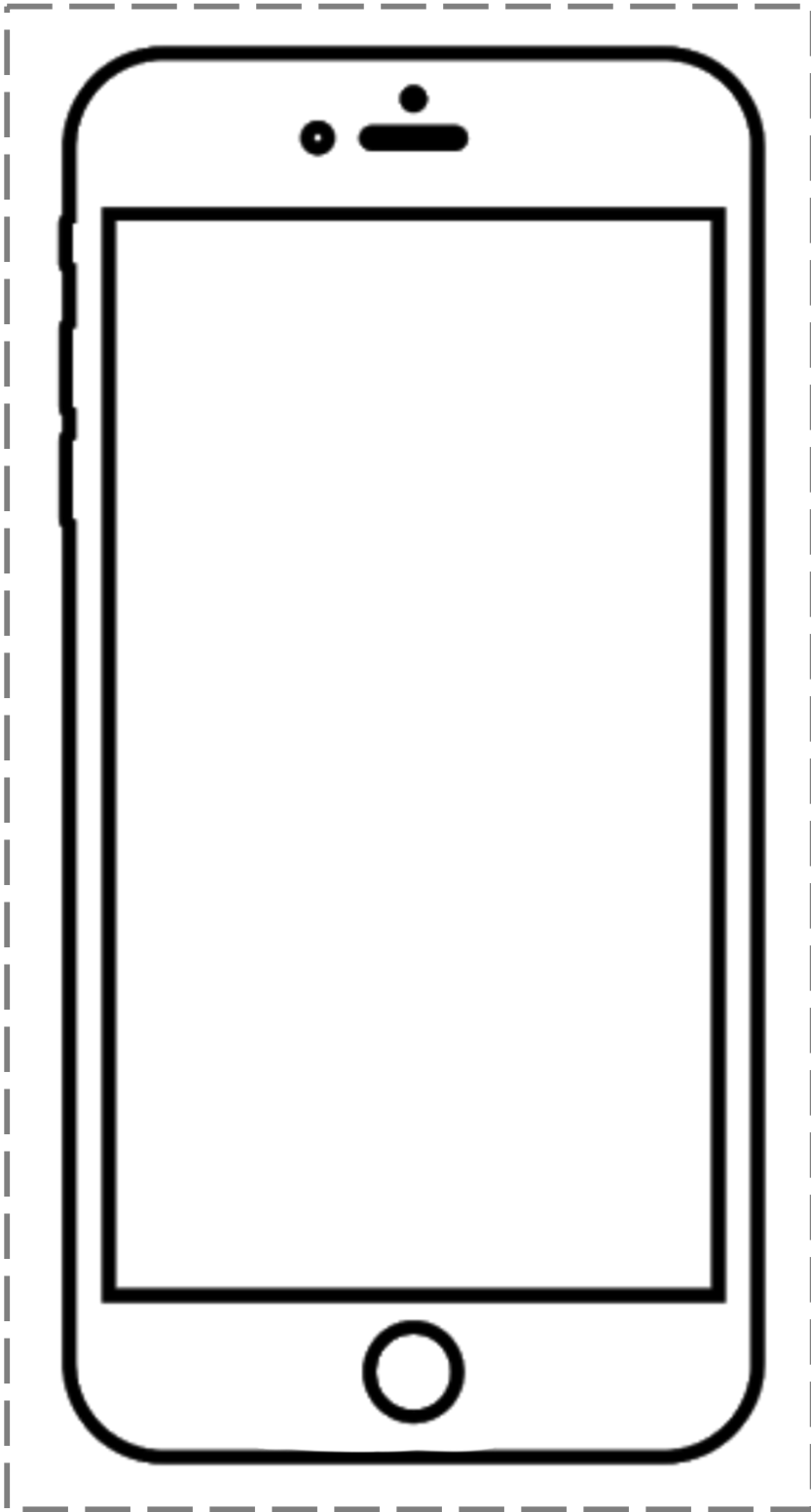


Record a voice message  
录制语音留言  
Graba un mensaje de voz



Make a phone call  
打个电话  
Haz una llamada





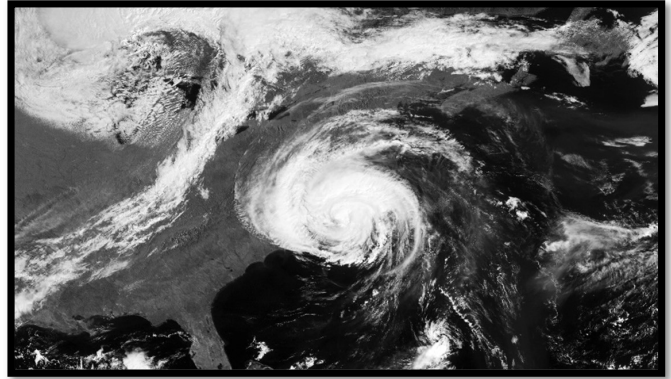


# Disasters Happen

Grades 7-8

## ***Why study disasters?***

Humans and nature cause any number of disasters. We need to understand how environmental conditions connect to our well-being so we can determine the logical steps to survive those conditions.



## ***Language matters***

In addition to learning about this topic, we are practicing how we work with language. We have many different ways to use the English language. This week we will use high-level academic language to describe events scientifically, to describe experiences, and to write a letter to someone who will be going to a geographic location where they might expect a specific disaster.

# Building academic language

Our goal, every day, in every lesson, is to use the English language to communicate in any situation, particularly in school or work. To do that, we are building:

**Cohesion** (adjective) *unified, well-structured*

- Does the way I organized my ideas help my readers understand?
- Have I used transitions to help my sentences fit together?
- Did I write enough to fully explain my thinking without repeating?

**Flexibility** (adjective) *able to be changed/adapted to make it better*

- How can I say or write this in a higher-level way?
- Have I used the right structures to help my readers understand?
- Did I use different types of sentences for different purposes?

**Precision** (adjective) *exact, exactly right*

- Did I use the right words/vocabulary to explain my thinking?
- How can I say this accurately or correctly?
- Has my language painted the picture I want readers to see?

**Transfer** (verb) *to move from one place to another*

- How can I use this language in my social studies/science class?
- Can I use this language in my math class?
- Is there a way to use this language outside school?

## I already speak English

I know you do! You have so much experience with the English language, but we have to keep building. Even native English speakers need to work at it. The more proficient you are in using high-level academic language, the more opportunities you will have. We use language differently with our friends and families than we do to explain our thinking in school or at jobs.

# Welcome to Disaster Preparedness

Over the next few weeks we will explore the disasters that impact our world, how they happen, what damage they can cause, and how we can be prepared to survive and overcome them.

## Topic 1: Disasters Happen

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Define Disaster	Maps and things	Can you see it coming?	Getting a sense of a disaster	Review your work this week.
Who's your colleague?	What happens where?	Knowing is half the battle	Write as if you are in a disaster	Write a letter warning your colleague before they travel
Natural vs. Human-caused?	Most deadly disasters	Add warning signs to maps	Disaster by the numbers	

### What will you do in this packet?

- Learn or refine (make better) your understanding of vocabulary
- Examine facts about different types of disasters to sort, classify, compare and contrast
- Map which disasters happen where
- Analyze and calculate statistics and data about disasters
- Reflect on your learning and how you can use it in the real world

At the end of each lesson, you will enter the vocabulary you learned in your personal dictionary and write to tell your colleague what you've learned.



# Who is your colleague?

A colleague is a teammate in a work situation. Even though we cannot work together in our classrooms, we should still consider who we would share this work with. Authors talk about their “first readers” or “beta readers,” this means the first person they share their work with.

Who would be the first person you would tell when you learn something interesting or cool? Think of someone outside your household (you can tell those people too, but for this, pick someone else ☺). Who will be the colleague you “tell” about what you are learning. It can be a friend, a relative, or you can make someone up!

## Meet My Colleague

Name \_\_\_\_\_

Age \_\_\_\_\_ Where do they live? \_\_\_\_\_

Draw or describe them.

Write 2-3 sentences explaining why they're the person you want to “work with” for this.

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# Lesson 1 – Defining disaster

First, write what you think the word **disaster** means:

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According to Dictionary.com (6/12/20) **disaster** means:

(Noun) a calamitous event, especially one occurring suddenly and causing great loss of life, damage, or hardship, as a flood, airplane crash, or business failure.

**Noun** – a word for a person, place or thing  
**Verb** – a word that names an action/state of being  
**Adjective** – a word that describes a noun or pronoun (he/she/it/they, etc.)  
**Adverb** – a word that describes a verb, an adjective, or another adverb

## This is how we do it (vocabulary):

Word/Term:   **disaster**  

Definition:

  (copy the definition here)  

Draw a picture or write a personal connection:

Noun form:   **disaster**  

Verb form:   **NONE**  

Adject. Form:   **disasterous**  

Adv. Form:   **disasterously**  

Describe a natural disaster you know about already:

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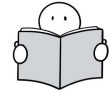
## Pushing for More Precise Vocabulary

Sometimes you will see a box that looks like this. Emerging language is language you probably have; you should be able to use some of the Developing language as well; Expanding language will be challenging, try it!

Word/Phrase	Emerging	Developing	Expanding 
Words to describe something positive	Good	Important	Essential, crucial, significant

# What makes an emergency a disaster?

Disasters and emergencies are very similar situations. Read about these two events and use them to try to identify what makes emergencies and disasters similar and different.



## Scenario 1

The Lozano Family piled into the car, ready for a drive in the mountains, excited to have a picnic along the way. Everyone was talking excitedly as they left the city and headed into the foothills. They turned off the main highway and the trees grew thicker around the road. Finally, they came across a huge meadow crisscrossed by a sparkling creek. After eating their picnic, Dad, Marco, and Abby played in the creek. Mom, Tia, and Sarai picked wildflowers. Abuelita and the baby napped.

Soon, they all climbed back in the car. They were tired and happy. They also knew there was an ice cream shop at the bottom of this road. It was quieter in the car now, Mom and several of the kids were falling asleep. Dad hummed to himself and Marco listened to music. Suddenly, as Dad turned one of the steep curves, a mountain goat leaped across the road. Dad yanked on the steering wheel to miss it, but then he couldn't keep the car on the road.

The car crashed down the side of the mountain before coming to a stop, the front of the car dipping into the rushing creek. A group of people had just floated past in a river raft. They heard the crash and immediately headed toward the shore, pulling out cell phones to call 9-1-1. The rafting guide and another man ran to help the Lozano Family.

In the end, Dad had a deep cut on his forehead from where he hit his head on the visor. Tia and Sarai were both unconscious, but breathing. Abuelita and the baby were banged up, but okay. Mom, Abby, and Marco had started to climb out of the car. The car was totally destroyed.

## Scenario 2

The Lozano Family piled into the car, ready for a drive in the mountains, excited to have a picnic along the way. Everyone was talking excitedly as they left the city and headed into the foothills.

They turned off the main highway and the trees grew thicker around the road. Finally, they came across a huge meadow crisscrossed by a sparkling creek. They found a picnic table under a shady tree near a bend in the creek and ate their picnic. Dad, Marco, and Abby played in the creek, using stones to create a bridge from one side to the other. Mom, Tia, and Sarai picked wildflower while Abuelita and the baby napped on a blanket under the trees.

They were tired and happy, looking forward to getting ice cream. They were just driving down into the little town at the bottom of the mountain pass and were waving to a group of rafters in the creek when they heard a deafening cracking sound. "Look," shouted Marco, pointing back up the mountain. They barely had time to see an enormous slab of rock hurtling down. In the blink of an eye, the rock had broken into boulders and rocks and was slamming the car off the side of the road, landing on the river raft, and crashing into homes and businesses in the town.

It only took a minute for the rocks to come to a rest. The sudden silence was deafening. Sirens wailed as emergency vehicles came rushing into town from out by the highway and from nearby towns. In the end, seven people were killed and 25 injured. More than 20 homes and businesses and a dozen vehicles were damaged in the rock slide.

# Compare and Contrast

**Disaster - a terrible event, especially one that happens suddenly and causes great loss of life, damage, or hardship**

- \_\_\_\_\_
- \_\_\_\_\_

**Ways to say it's the same:**

Similarly, likewise, in the same way

**Ways to say it's different:**

However, on the other hand, on the contrary

**Both emergencies and disasters**

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

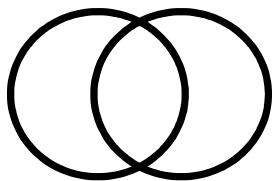
**Emergency – a sudden, urgent event, especially one where people need help**

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_



You've seen this method of comparing and contrasting before. It usually looks like this:

We call it a Venn diagram. I've started making them square because when students are drawing it in their notebooks, squares are easier to make and have them look nice. 😊



**Write it out: what makes disasters and emergencies alike and different?**

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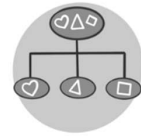
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# Sort and Classify

We classify disasters as natural or human-caused. Sort these disasters into the table below. Sometimes it's not clear whether a disaster is natural or human-caused. Put those in the box at the bottom and try to explain your thinking. See the examples. Circle any disasters you don't know.



Disasters	Natural	Human-Caused
Avalanche <del>Blizzard</del> <del>Chemical Spill/Release</del> Cold Snap/Polar Front Drought Dust Storms Earthquake Epidemic/Pandemic Fires Flood Heat Wave Hurricane/Typhoon Ice Storm Landslide/Mudslide Nuclear Explosion Oil Spills Plague of Insects Power Outages Sinkhole Solar Storms/Flares Structural Failures Terrorism Thunderstorm Tornado/Cyclone Transportation Accidents Tsunami Volcanic Eruption War/Civil Unrest Wildfire Windstorms	<i>Blizzard</i>	<i>Chemical Spill/Release</i>

**Hard to Classify**

*Wildfires – can be caused by lightning or humans*



# Lesson 1 Reflections

## Word-Wise

Now you are going to turn to your Personal Dictionary at the back of the packet\*. You should enter the word: **disaster**    **emergency**    **natural**    **human-caused**

You may add other words you want to remember, of course! Look back at the sample for the word **disaster** if you need to remember how to complete the dictionary entry.

## Talk it through



At the back of the packet\* you will also find a place for your lesson reflections.

This is the point where you think through what you learned and did today. What do you need to tell your colleague so that they can understand? This can be about disasters, or it could be about the skills and language you practiced. Here's a list of ideas of what you might talk about. You do NOT have to write about all of them or any of them if you have something else to say. You should write 3-5 sentences.

- Which disasters are you most interested in learning more about?
- Have you ever experienced a disaster?
- Was it easy/hard to figure out the differences between an emergency and a disaster? Why?
- What was challenging about sorting and classifying the list of disasters?

You should start your writing off with a greeting or introduction to your colleague. Here are some ways you can do that:

- Dear \_\_\_\_\_
- \_\_\_\_\_, I have some important information for you.
- I worked on something challenging today. Let me tell you about it.
- You'll never guess what I learned today.

## Looking Ahead



Considering what you learned today, make some notes on other ideas that you want/need to know about disasters.

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# Lesson 2 – Location, location, location

## Refreshing Your Geography Mind

You already know a lot about maps and geography, but just in case it hasn't been at the top of your mind lately, let's refresh your memory.



**Name SEVEN Continents:**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_

**Name the FIVE Oceans\*:**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

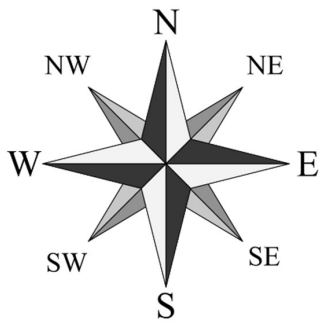
**Name SIX Countries (it doesn't matter which ones):**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

**Name THREE States (it doesn't matter which ones):**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

# More Maps and Stuff



We use the compass rose to understand the point-of-view from which we're seeing a map.

Name the FOUR Cardinal (Main) Directions:

1. \_\_\_\_\_ 2. \_\_\_\_\_  
 3. \_\_\_\_\_ 4. \_\_\_\_\_

The word intermediate means between. With that in mind, name the FOUR Intermediate Directions:

1. \_\_\_\_\_ 2. \_\_\_\_\_  
 3. \_\_\_\_\_ 4. \_\_\_\_\_



## Where is everything?

Remember, **longitudinal** lines stretch North/South (long) and **latitudinal** lines stretch East/West (lat rhymes with fat!).

When we are explaining where something is, we can use **absolute location**, the exact position on Earth, or **relative location**, describing where it is compared to other places.

1. With that in mind, which city is located at approximately 10°S, 40°W?

\_\_\_\_\_

2. Which city is located near the equator?

\_\_\_\_\_

3. Which city is on the west coast of South America?

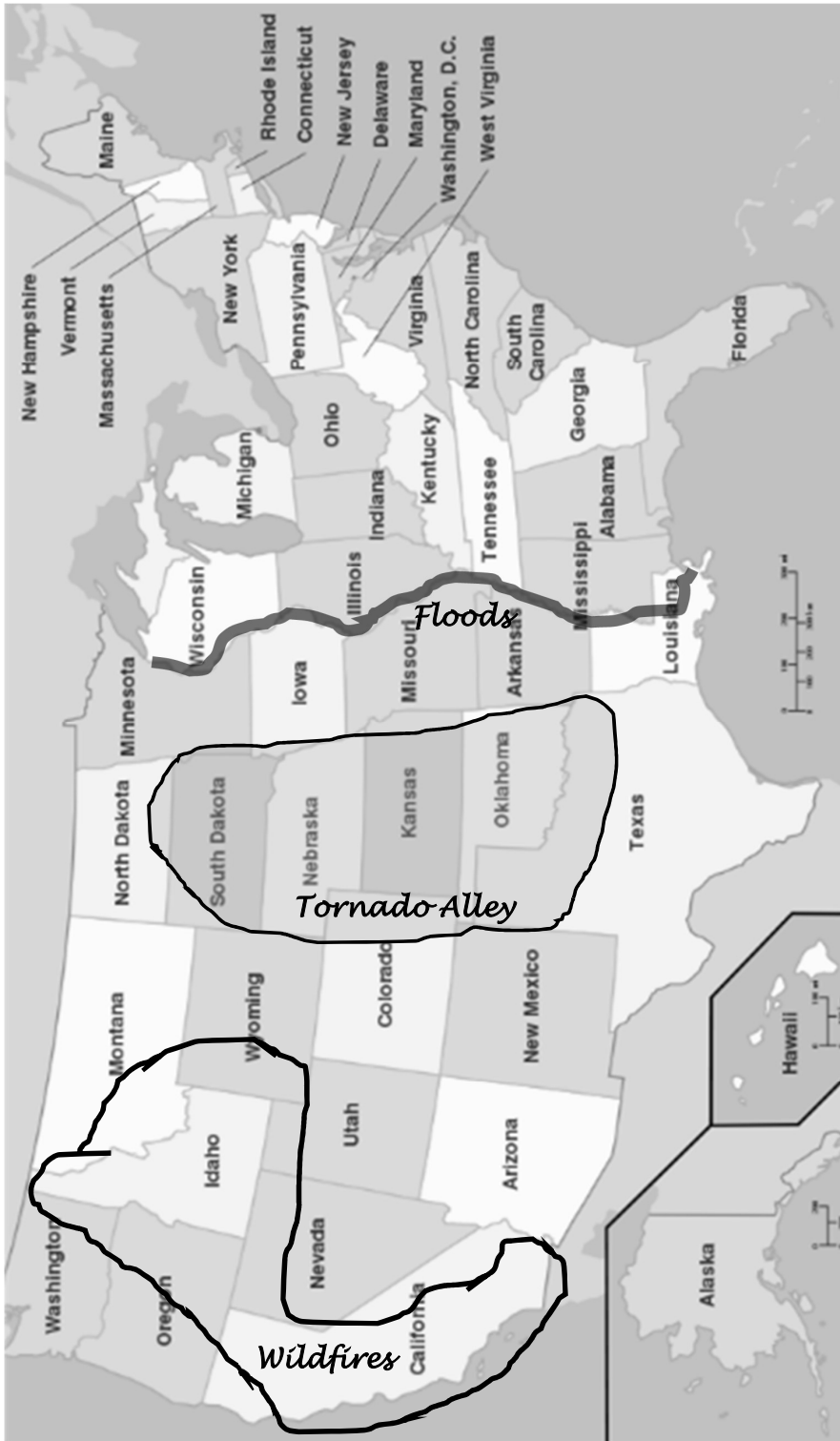
\_\_\_\_\_

#1 used (circle one): absolute or relative

#3 used: absolute or relative

# Where are the dangers?

Disasters happen everywhere, but there are some areas of the world where specific natural disasters are more common.



Let's map on the **national** level (in the U.S.).

Flooding is common along the Mississippi River in Minnesota, Wisconsin, Iowa, Illinois, Arkansas, Mississippi, and Louisiana.

Most tornadoes are in:

- + Tornado Alley: the Dakotas, Nebraska, Kansas, Oklahoma, and North Texas.
- + Florida
- + Dixie Alley: Arkansas, Louisiana, Georgia, Tennessee, Mississippi and most of Georgia.

Earthquakes and volcanoes are most

common on the West Coast (including Alaska). Lately, Oklahoma has had many small earthquakes due to oil drilling/fracking.

Hurricanes are most

likely on the Gulf Coast (Texas, Louisiana, Mississippi, Alabama, and Florida's west coast or on the East Coast from Florida up through around New York).

# Lesson 2 Reflections

## Word-Wise

Now you are going to turn to your Personal Dictionary at the back of the packet\*. You should enter the word: **longitudinal latitudinal relative location absolute location national**

You may add other words you want to remember, of course! Look back at the sample for the word **disaster** if you need to remember how to complete the dictionary entry.

## Talk it through

It's time to report to your colleague. What do you want to share about today's learning? You do NOT have to write about all of them or any of them if you have something else to say. You should write 3-5 sentences.



- What part of the country do you think would be safest/most dangerous disaster-wise?
- Which natural disaster would you rather have to face?
- Why is it helpful to classify information by putting it on a map?
- What was challenging calculating the risks of various disasters?

You should start your writing off with a greeting or introduction to your colleague. Here are some ways you can do that:

- Dear \_\_\_\_\_
- \_\_\_\_\_, I have some important information for you.
- I worked on something challenging today. Let me tell you about it.
- You'll never guess what I learned today.

## Looking Ahead

Considering what you learned today, make some notes on other ideas that you want/need to know about disasters.



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# Lesson 3 – Looking for signs and warnings

## You could save a life!

If you could warn the people around you that a disaster is coming, you could help save lives. Think about the kinds of things that you might see, hear, smell, or feel if a natural disaster was about to happen.

	Tornado	Wildfire	Floods
What might you hear?			
What might you see?			
What you might feel (physically)?			
What might you smell?			

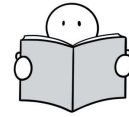
## Sensory\* Language to Describe Disasters \*sensory = to do with the five senses

Sense	Emerging	Developing	Expanding
Hearing/ Auditory	Quiet/hushed/loud,	Silent/roaring Use onomatopoeia like: whooshing,	Soundless/stillness/rumbling, Use a metaphor or simile "like a freight train" or a waterfall
Seeing/ Visual	Bright/light/dim/dark, Name colors: red, blue, green, etc. to describe	Blinding/gloomy/blackness, COLOR-ish (greenish, brownish, etc.)	Blazing/shadowy/pitch darkness, Metaphor or simile: a wall of clouds, dark as night, etc.
Smell/ Olfactory	Smelly, smells like smoke	Foul, smoky	Fetid, reeking of smoke
Touch/ Tactile	Hot/warm/cool/cold,	Burning/mild/chilly/freezing	Scorching/temperate/bitter cold

Taste/ Gustatory – we use our sense of taste least of all when describing the signs of disasters

# A Success Story

There are many heroes out there who have saved other people during disasters. Here is the story of one girl.



## Surviving Into the New Year

The day after Christmas in 2004, Tilly Smith, age 10, was on vacation in Thailand with her parents and her sister. She and her family went for an early morning walk on the beach when she noticed something strange.

Tilly later told news reporters that at first she was not sure why what she was seeing was familiar. **She noticed that the ocean waves were coming in, but not going back out. She heard a fizzing sound like a carbonated drink being poured.**

She started to tell her parents that something was wrong. They could not understand why she was so upset. She kept saying "it's the water...it bubbles...the water bubbles." She knew something was familiar, but she couldn't quite place it.

Then she saw something else and she realized why the ocean's behavior was bothering her. **The sight of a log spinning around in the ocean reminded her of a video that she had seen during a geography lesson at school.** Now that she knew why she was feeling anxious, she could communicate more effectively. **She finally convinced her father, telling him that these were signs of a tsunami.**

Her father yelled for her mother and siblings to come back. He stopped to tell a security guard what Tilly had said. People around them had started paying attention to Tilly's anxiety. The security guard began warning visitors. Together, hundreds of people from that stretch of beach started hurrying to higher ground.

Tilly's ability to recognize the signs of a tsunami and to communicate it to her father gave those people the few minutes head start they needed to survive. Up and down the coast of Thailand, 10,000 people died that morning. Altogether nearly 250,000 people were killed by the tsunami. Everyone staying in the hotel where Tilly and her family stayed survived.

## Think It Through

In order for the people on Maikhao Beach to survive, Tilly had to go through a series of actions. What did she need to do? (Hint: Notice the bolded sentences in the article.)

First, she needed to \_\_\_\_\_

Next, \_\_\_\_\_

Finally, \_\_\_\_\_

# What Would You Pay Attention To?

Use the map you marked and labeled to show where in the United States you might need to worry about specific natural disasters. Now think through what you might need to be aware of in these locations. What kinds of signs might you hear, see, smell, and feel that would help you recognize a coming disaster?

	<b>In Florida</b>	<b>In Iowa</b>	<b>In Alaska</b>
<b><i>What might you hear?</i></b>			
<b><i>What might you see?</i></b>			
<b><i>What you might feel (physically)?</i></b>			
<b><i>What might you smell?</i></b>			



# Lesson 3 Reflections

## Word-Wise

Now you are going to turn to your Personal Dictionary at the back of the packet\*. You should enter the word: **sensory auditory visual olfactory gustatory tactile**

You may add other words you want to remember, of course! Look back at the sample for the word **disaster** if you need to remember how to complete the dictionary entry.

## Talk it through

It's time to report to your colleague. What do you want to share about today's learning? You do NOT have to write about all of them or any of them if you have something else to say. You should write 3-5 sentences.



- What did you learn from Tilly Smith's story about convincing someone to listen to you when it is important?
- Do you think that you pay enough attention to the world around you to notice these signs?
- How could visitors to a potential disaster area be educated about the dangers to look for?

You should start your writing off with a greeting or introduction to your colleague. Here are some ways you can do that:

- Dear \_\_\_\_\_
- \_\_\_\_\_, I have some important information for you.
- I worked on something challenging today. Let me tell you about it.
- You'll never guess what I learned today.

## Looking Ahead

Considering what you learned today, make some notes on other ideas that you want/need to know about disasters.



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# Lesson 4 - Most Deadly Disasters

Let's look at some statistics about natural disasters. We can learn a lot by looking at the data in different ways. You can take data from texts you read and manipulate it (move it around) to find out how events relate to each other.

The text we are looking at gives us information on disasters from 1900-2010. We want to know which events were most deadly and what type of disaster was most deadly overall.

The first thing to do is to put the data into a table so it's easier to see all of the information.

First, make a list of the information you have access to from the text that is common to all of the entries. For instance, there is information about data like the magnitude of earthquakes or the height of waves, etc. but if we are comparing all types of natural disasters, we don't want that in the way.

Let's look at an entry about the earthquake/tsunami that Tilly Smith and her family survived. Let's underline data we need and cross out data we don't. The information you need might be scattered in the text. This entry is talking about an earthquake AND a tsunami? We need to use both. It also shows two locations affected: Sumatra and the countries bordering the Indian Ocean.

Dec. 26, 2004. A ~~magnitude 9.0~~ **quake** struck off the coast of Sumatra, triggering **tsunamis** that swept through the coastal regions of a dozen countries bordering the Indian Ocean. The death toll has been estimated at between 225,000 and 275,000.

The data we have for each event that will help answer our questions (the columns for our table) are:

- the date of the event
- the type of event
- the number of people killed
- the location of the disaster

Table title: Most Deadly Natural Disasters from 1900-2010

	Date	Type of Disaster	Death Toll	Location
1	5/8/1902	Volcanic Eruptions	40,000	Martinique, Caribbean
2	12/28/1908	Earthquake/Tsunami		Southern Italy
3	12/16/1920	Earthquake/Landslides	200,000	Gansu, China
4	9/1/1923	Earthquake/Fires	143,000	Tokyo/Yokohama, Japan
5	5/22/1927		200,000	Xining, China
6	5-8/1931	Flood/Disease/Starvation	4,000,000	China
7	10/5/1948	Earthquake	110,000	
8	11/13/1970		500,000	Bangladesh
9	7/28/1976	Earthquake	242,000	Tangshan, China
10	11/13/1985	Volcanic Eruption/Mudslides	25,000	Armero, Columbia
11	7/15/1991			
12	10-11/1998	Hurricane		Honduras, Nicaragua
13		Earthquake	43,000	Bam, Iran
14	12/26/2004	Earthquake/Tsunami	225,000-275,000	Sumatra/12 countries bordering the Indian Ocean
15	10/8/2005	Earthquake	80,000	Kashmir, Pakistan
16	5/3/2008	Cyclone	100,000	Myanmar
17		Earthquake	70,000	Sichuan, China
18	1/12/2010	Earthquake	230,000	

# Most Deadly Disasters - Answers

Let's look at some statistics about natural disasters. We can learn a lot by looking at the data in different ways. You can take data from texts you read and manipulate it (move it around) to find out how events relate to each other.

The text we are looking at gives us information on disasters from 1900-2010. We want to know which events were most deadly and what type of disaster was most deadly overall.

The first thing to do is to put the data into a table so it's easier to see all of the information.

First, make a list of the information you have access to from the text that is common to all of the entries. For instance, there is information about data like the magnitude of earthquakes or the height of waves, etc. but if we are comparing all types of natural disasters, we don't want that in the way.

Let's look at an entry about the earthquake/tsunami that Tilly Smith and her family survived. Let's underline data we need and cross out data we don't. The information you need might be scattered in the text. This entry is talking about an earthquake AND a tsunami? We need to use both. It also shows two locations affected: Sumatra and the countries bordering the Indian Ocean.

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- the type of event
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4	9/1/1923	Earthquake/Fires	143,000	Tokyo/Yokohama, Japan
5	5/22/1927	Earthquake	200,000	Xining, China
6	5-8/1931	Flood/Disease/Starvation	4,000,000	China
7	10/5/1948	Earthquake	110,000	Ashgabat, Turkmenistan
8	11/13/1970	Cyclone	500,000	Bangladesh
9	7/28/1976	Earthquake	242,000	Tangshan, China
10	11/13/1985	Volcanic Eruption/Mudslides	25,000	Armero, Columbia
11	7/15/1991	Volcanic Eruption	800	Luzon, Philippines
12	10-11/1998	Hurricane	11,000	Honduras, Nicaragua
13	12/26/2003	Earthquake	43,000	Bam, Iran
14	12/26/2004	Earthquake/Tsunami	225,000	Sumatra/12 countries bordering the Indian Ocean
15	10/8/2005	Earthquake	80,000	Kashmir, Pakistan
16	5/3/2008	Cyclone	100,000	Myanmar
17	5/12/2008	Earthquake	70,000	Sichuan, China
18	1/12/2010	Earthquake	230,000	Haiti

Next, use the text below to fill in the blanks in our table.



### Earthquakes and tsunamis

- Jan. 12, 2010. More than 230,000 people were killed when a 7.0-magnitude earthquake struck Haiti.
- May 12, 2008. About 70,000 people were killed and 18,000 people were reported missing after a 7.9-magnitude earthquake struck Sichuan, China.
- Oct. 8, 2005. At least 80,000 people were killed and three million left homeless after a quake struck the mountainous Kashmir district in Pakistan.
- Dec. 26, 2004. A magnitude 9.0 quake struck off the coast of Sumatra, triggering tsunamis that swept through the coastal regions of a dozen countries bordering the Indian Ocean. The death toll has been estimated at between 225,000 and 275,000.
- Dec. 26, 2003. An earthquake devastated the ancient city of Bam, in central Iran, leaving between 31,000 and 43,000 people dead.
- July 28, 1976. The 20th century's most devastating quake (magnitude 7.8) hit the sleeping city of Tangshan in northeast China. The official death toll was 242,000.
- Oct. 5, 1948 - More than 110,000 were killed when a 7.3 quake hit Ashgabat in Turkmenistan.
- May 22, 1927. A magnitude 7.9 quake near Xining, China, killed 200,000
- Sept. 1, 1923. A third of Tokyo and most of Yokohama were levelled when a magnitude 8.3 earthquake shook Japan. About 143,000 were killed as fires ravaged much of Tokyo.
- Dec. 16, 1920. China was also the site for the world's third-deadliest quake of the 20th century. An estimated 200,000 died when a magnitude 8.6 temblor hit Gansu, triggering massive landslides.
- Dec. 28, 1908. Southern Italy was ravaged by a 7.2 magnitude quake that triggered a tsunami that hit the Messina-Reggio-Calabria area, killing 123,000.

### Volcanic eruptions

- July 15, 1991. Mt. Pinatubo on Luzon Island in the Philippines erupted, blanketing 750 square kilometers with volcanic ash. More than 800 died.
- Nov. 13-14, 1985. At least 25,000 are killed near Armero, Colombia, when the Nevado del Ruiz volcano erupted, triggering mudslides.
- May 8, 1902. Mt. Pelee erupted on the Caribbean island of Martinique, destroying the capital city of St. Pierre. Up to 40,000 were killed.

### Hurricanes, cyclones and floods

- May 3, 2008. Cyclone Nargis, swept along by winds that exceeded 190 kmh and waves six meters high struck the Burmese peninsula and may have left as many as 100,000 dead.
- Oct. 26-Nov. 4, 1998. Hurricane Mitch was the deadliest hurricane to hit the Americas. It killed 11,000 in Honduras and Nicaragua and left 2.5 million homeless.
- Nov. 13, 1970. The Bhola cyclone in the Ganges delta killed an estimated 500,000 in Bangladesh. Some put the complete death toll as high as one million.
- May-August 1931. Massive flooding of China's Yellow and Yangtze rivers led to almost four million deaths from drowning, disease and starvation.

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Some questions about our **table**:

1. We listed the disasters in which order?  
a. Alphabetical      b. When the events happened      c. Type of disaster
2. What type of disaster is listed most often in our table?  
a. Floods      b. Hurricanes      c. Earthquakes      d. Volcanoes

# Analyze the Data

Now that our data is organized, we can start to look for patterns and make some calculations.

We had two goals. To find:

1. Which events were most deadly (we'll look for the top 3)
2. What type of disaster was most deadly overall

All we need to do is look at our table to answer the first question. The top three most deadly events from our list are:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Finding which type of disaster was most deadly is a little more complicated. We need to know the total number of people killed in each type of disaster:

- Earthquakes/Tsunamis
- Volcanic Eruptions
- Hurricanes/Cyclones/Floods

One thing I do to help double check myself is to count how many events of each type we have. There are 18 total events.

- Earthquakes/Tsunamis = 11 events
- Volcanic Eruptions = 3 events
- Hurricanes/Cyclones/Floods = 4 events

***Yikes! I'm glad I double checked myself. I had only counted 10 Earthquakes, but that wouldn't add up to 18 so I counted again. Whew!***

**Make your prediction.** Which of the three types of disasters do you think will end up having been the most deadly?

I think that \_\_\_\_\_ was the most deadly kind of disaster in this list because \_\_\_\_\_.

## **Make your calculations to answer #2:**

Type of disaster: \_\_\_\_\_

# People killed by that type of disaster: \_\_\_\_\_

Was your prediction correct? (circle one) Yes No

\* Look at the bottom of your Lesson 4 Reflections to see what my prediction was! I was SO wrong!

Show your work! Use this space to do your calculations.

# Analyze the Data Answers

Now that our data is organized, we can start to look for patterns and make some calculations.

We had two goals. To find:

1. Which events were most deadly (we'll look for the top 3)
2. What type of disaster was most deadly overall

All we need to do is look at our table to answer the first question. The top three most deadly events from our list are:

1. 1931 Floods in China killed 4,000,000
2. 1970 Cyclone in Bangladesh killed 500,000
3. 1976 Earthquake in Tangshan, China killed 242,000

Finding which type of disaster was most deadly is a little more complicated. We need to know the total number of people killed in each type of disaster:

- Earthquakes/Tsunamis
- Volcanic Eruptions
- Hurricanes/Cyclones/Floods

One thing I do to help double check myself is to count how many events of each type we have. There are a total of 18 events.

- Earthquakes/Tsunamis = 11 events
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**Make your prediction.** Which of the three types of disasters do you think will end up having been the most deadly?

I think that \_\_\_\_\_ was the most deadly kind of disaster in this list because \_\_\_\_\_.

## **Make your calculations to answer #2:**

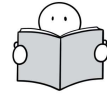
Type of disaster: \_\_\_\_\_

# People killed by that type of disaster: \_\_\_\_\_

Was your prediction correct? (circle one) Yes No

Show your work! Use this space to do your calculations.

# What is it like? How does it feel?



Every type of disaster is different. There are different signs and different effects. Some disasters are more predictable than others. Predictability can make a difference in how many people are injured or killed. With today's technology we often get several days' notice before a hurricane hits land. It might not go exactly where we think it will go, but people can certainly have a warning so they can prepare. Meteorologists can tell us when coming storms might produce tornadoes, and can send out warnings that can give people a few minutes to get to safety. New wildfires are hard to predict, but we can know when weather has been hot and dry so that even the smallest spark might set off a fire. However, there aren't currently any ways to predict when and where an earthquake might strike.

## **Here are three short descriptions of disasters:**

### **Earthquake**

We heard a rumbling noise and the floor started to shake. We could hear dishes breaking in the kitchen and pictures falling from the walls with a crash. Then there was a loud bang before the rumbling started again. Everything looked like it was bouncing up and down. Dresser drawers were rolling open and then closed again. Doors were swinging wildly. Dust came raining down from cracks forming in the walls and ceiling, making us cough. The shaking stopped for a few minutes and then started again.

### **Wildfire**

As we woke up, at first, we just smelled smoke. That wasn't unusual in this area because people often lit campfires to cook, but the smell grew stronger. We left our tent, and suddenly a hot, dry wind hit us and we saw a plume of smoke rising above the trees. Then we could hear crackling and a whooshing sound and we knew it was time to leave. The air grew hotter and stronger as we ran to our car.

### **Tornado**

The thunderstorm seemed to have passed. We felt the wind die down, but when we looked up to the sky, we realized the storm was not over. We saw a huge wall of dark clouds racing toward us. As the funnel cloud spun down from the mass of clouds the noise got louder and louder until it sounded like a freight train or a huge airplane was coming toward us. As it got closer we could see a cloud of debris, broken boards, tree limbs, all kinds of things, flying around. Strangely, as we took cover we could smell the tornado too. It smelled like freshly cut wood and a lawn that has just been mowed.

## **Draw it!**

Draw a picture of one of the three disasters you just studied.



# Lesson 4 Vocabulary

## Word-Wise

Now you are going to turn to your Personal Dictionary at the back of the packet\*. You should enter the word: **data**      **table**      **death toll**      **sensory**

You may add other words you want to remember, of course! Look back at the sample for the word **disaster** if you need to remember how to complete the dictionary entry

## Warn Your Colleague

Use everything you have learned so far to choose a topic, then plan and write a letter to your colleague, warning them of natural disasters they might encounter.

**Circle a destination (a place your colleague will be moving to):**

New Orleans, Louisiana      Miami, Florida      Anchorage, Alaska      San Diego, California

**What types of disasters might they face? Circle all that apply.**

Earthquake      Tsunami      Volcanic Eruption  
Flooding      Hurricane      Tornado



**What signs should they look for that would warn of those disasters? Consider the 5 senses!**

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**Write your letter:**

Dear \_\_\_\_\_:



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# Warn Your Colleague Example



I am going to write to my colleague about their move to Jackson, Wyoming where there are frequent wildfires during dry summers.

## **What signs should they look for that would warn of those disasters? Consider the 5 senses!**

They should pay attention to whether there has been enough rain lately. If the grasses and trees are starting to look brown and dusty, drying out, then should be on the lookout. If they smell smoke it should alert them to danger immediately and they should look for a column of smoke larger than you would see from a chimney or campfire. If there is a wildfire, they will also feel the heat of it and hear its roaring and crackling.



### **Notice that my letter:**

- **Talks about the senses visual, olfactory, tactile, auditory**
- **Has a greeting/introduction, three paragraphs of facts, and some last pieces of advice (FIVE paragraphs).**

Dear Alfredo:

Wow! I can't believe that you are moving to Jackson, Wyoming. I've never lived somewhere like that. Listen, I was doing some research and I saw that your new area is prone to wildfires, especially if the weather has been really dry.

If you notice that it hasn't rained much, take a look around. Are the grasses turning brown? Do the trees look dusty and like they need water? That's the first sign that you might be in danger of a wildfire sometime soon. The local news will also probably warn you about "high fire danger."

If it's been dry for a while and you smell smoke, you should check outside. Look around to see if there is any smoke. If someone has a fire in their fireplace or a campfire, you'll see only a little trail of smoke. If it's more than that, a column of smoke, then you should start to worry.

If you see a bigger column of smoke, start getting ready to leave while you check to see if your town has announced a fire warning. It's better to be safe than sorry, leaving even if you don't need to. If you can feel the heat of the fire or hear it crackling and roaring, it might already be too late to get away safely!

When you get to your new house you should find out how to sign up for local emergency notifications so that you can get texts or calls if there's a wildfire near you.

Be safe!  
Sincerely, Caryn Jones

## Looking Back



What information/skill/practice was most interesting to you?

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## Looking Ahead

Considering what you've learned about disasters. What do you want to know about how to survive disasters?

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## Visualize It

Draw something that comes to mind from the information you have learned so far. It can be a picture, a graph, whatever comes to mind.

# My Personal Dictionary

Word/Term: \_\_\_\_\_

Definition:

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Draw a picture or write a personal connection:

Noun form: \_\_\_\_\_

Verb form: \_\_\_\_\_

Adject. Form: \_\_\_\_\_

Adv. Form: \_\_\_\_\_

\* \* \*

Word/Term: \_\_\_\_\_

Definition:

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Draw a picture or write a personal connection:

Noun form: \_\_\_\_\_

Verb form: \_\_\_\_\_

Adject. Form: \_\_\_\_\_

Adv. Form: \_\_\_\_\_

Word/Term: \_\_\_\_\_

Definition:

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Draw a picture or write a personal connection:

Noun form: \_\_\_\_\_

Verb form: \_\_\_\_\_

Adject. Form: \_\_\_\_\_

Adv. Form: \_\_\_\_\_

\* \* \*

Word/Term: \_\_\_\_\_

Definition:

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Draw a picture or write a personal connection:

Noun form: \_\_\_\_\_

Verb form: \_\_\_\_\_

Adject. Form: \_\_\_\_\_

Adv. Form: \_\_\_\_\_

Page \_\_\_\_\_





## Reference Sheet

### LENGTH

Metric	Customary
1 kilometer = 1000 meters	1 mile = 1760 yards
1 meter = 100 centimeters	1 mile = 5280 feet
1 centimeter = 10 millimeters	1 yard = 3 feet
	1 foot = 12 inches

### CAPACITY AND VOLUME

Metric	Customary
1 liter = 1000 milliliters	1 gallon = 4 quarts
	1 gallon = 128 ounces
	1 quart = 2 pints
	1 pint = 2 cups
	1 cup = 8 ounces

### MASS AND WEIGHT

Metric	Customary
1 kilogram = 1000 grams	1 ton = 2000 pounds
1 gram = 1000 milligrams	1 pound = 16 ounces

### TIME

1 year = 365 days
1 year = 12 months
1 year = 52 weeks
1 week = 7 days
1 day = 24 hours
1 hour = 60 minutes
1 minute = 60 seconds



ICMEE is housed within:



# About the team