

### Inquiry Project Design Plan

<b>Teacher/Designer Names: Rhode Ponte</b>	
<b>School: Cesar Chavez</b>	
<b>Name of Project: Understanding Ecology through Natural Disasters</b>	<b>Grade Level: 4</b>
<b>Est Launch Date: 10/2/23</b>	<b>Est Duration (in weeks): 3-4 Weeks</b>
<b>Disciplines Involved: Science/ELA</b>	
<b>Problem Statement:</b> The Canadian wildfires have impacted Yonkers recently in an extreme way.	

#### STAGE 1: DESIRED RESULTS

**Big Idea: Cause and Effect**

<p><b>Enduring Understandings:</b></p> <ul style="list-style-type: none"> <li>● Climate change causes changes in our lives.</li> <li>● Natural disasters impact communities.</li> <li>● Through research, I can inform myself and my community on how to prepare for natural disasters.</li> <li>● I can research ways to assist in natural disasters.</li> </ul>	<p><b>Essential Question(s):</b> (MEANT TO BE SHARED WITH STUDENTS)</p> <ul style="list-style-type: none"> <li>● How do Earth’s natural processes impact our lives?</li> </ul>
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**Established Goals (Standards, Performance Indicators, Learning Goals):**  
 \*choose relevant standards to unit/project plan timing and learning goals; do not need to use all disciplines below.  
 \*\* unpack into SWK and SWBAT under identified standards as this will lead to aligned assessment design

**Science Standards** (list if using, unpack under each standard into SWK and SWBAT):

- 4-ESS 3-2. Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.

**SWK:**

- The different types of natural disasters that impact the Earth.
- How human beings are affected by natural disasters.
- How to prepare for natural disasters
- How to assist their communities during or after a natural disaster.

**SWBAT:**

- Research the different types of natural disasters while taking notes
- Read informational texts on natural disasters
- Annotate as they read
- Use their notes to create a Canva on one type of natural disaster
- Conduct a gallery walk to learn about the different types of natural disasters their classmates researched

**Social Studies Standards** (list if using, unpack under each standard into SWK and SWBAT):

Backward Stages: 1. Identify desired results. 2. Determine acceptable evidence. 3. Plan learning experiences and instruction.  
 Adapted from Wiggins & McTighe (2005) *Understanding by Design (UbD)*

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<p>SWK:</p> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li></ul> <p>SWBAT:</p> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li></ul>
<p><b>Mathematics Standards</b> (list if using, unpack under each standard into SWK and SWBAT):</p> <p>SWK:</p> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li></ul> <p>SWBAT:</p> <ul style="list-style-type: none"><li>•</li><li>•</li><li>•</li></ul>
<p><b>ELA Standards</b> (list if using, unpack under each standard into SWK and SWBAT):</p> <ul style="list-style-type: none"><li>• 4R1: Locate and refer to relevant details and evidence when explaining what a text says explicitly/implicitly and make logical inferences.</li><li>• 4W5: Draw evidence from literary or informational texts to respond and support analysis, reflection, and research by applying the grade 4 Reading Standards.</li><li>• 4W6: Conduct research to answer questions, including self-generated questions, and to build knowledge through investigating multiple aspects of a topic.</li><li>• 4W7: Recall relevant information from experiences or gather relevant information from multiple sources; take notes and categorize information, and provide a list of sources.</li></ul> <p>SWK:</p> <ul style="list-style-type: none"><li>• Read and annotate informational texts about their chosen topic</li><li>• Choose the appropriate websites where they can conduct their research on their chosen topic</li><li>• Take notes and save them for their Canva project</li></ul> <p>SWBAT:</p> <ul style="list-style-type: none"><li>• Conduct research on natural disasters</li><li>• Conduct research on their chosen topic</li><li>• Read, pair and share with their classmates to edit their final draft of the essay that will go along with their Canva project.</li></ul>
<p><b>Technology Standards:</b></p> <ul style="list-style-type: none"><li>• <b>NYS Computer Science and Digital Fluency</b> (select at least 1 for Smart Start):</li></ul> <p>4.6.IC.3 Explain current events that involve computing technologies.</p> <ul style="list-style-type: none"><li>• <b>ISTE:</b></li></ul>
<p><b>Social Justice Standards:</b></p>

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**Other (Art, SEL, etc):**

**Links to Standards/Reference Frameworks:**

NYS NextGen [ELA](#) and [Math](#), [NGSS](#), [NGSS by DCI](#) [Nat'l C3 SS Framework](#), [NYS K-8 SS Standards](#), [ISTE](#), [Social Justice Standards](#), [CASEL SEL Framework](#), [NYS CS and Digital Fluency](#)

**Teaching/Learning Goal Notes for Stage 1:**

### STAGE 2: EVIDENCE & ASSESSMENTS:

#### Performance Task Narrative

**Goal:** *Provide a statement of the task. Establish the goal, problem, challenge, or obstacle in the task.*

*Students will create a design to explain the different types of natural disasters that affects Earth. They will explain their topic through essay writing.*

**Role:** *Define the role of the students in the task. State the job of the students for the task.*

Students will be researchers, planners, informers, and designers to create a Canva website to inform their families and community on how to prepare for a natural disaster.

**Audience:** *Identify the target audience within the context of the scenario.*

The target audience will be their peers, families, and their community. They will create awareness on how to prepare for a natural disaster.

**Situation:** *Set the context of the scenario. Define the narrative.*

The initial context of the scenario will be on learning about the different types of natural disasters through informational texts. (Unit 8 in Benchmark/Earth Changes). Then, the students will brainstorm how to prevent natural disasters by decreasing the role humans play negatively which increase the possibility of natural disasters. For example, what they can do in their daily lives to prevent a natural disaster from happening. In addition, students will brainstorm on how to prepare for a natural disaster. Also, students will research about the wildfires that occurred recently and will learn about how this natural disaster can be prevented.

**Product(s):** *Clarify what the students will create and why they will create it.*

- Students will create a Canva to inform the audience on natural disasters and how to prevent them.
- They will learn and inform how to prepare for a natural disaster. For example, what did they do when the schools were closed due to the Canadian wildfires. Did they stay home? Did they wear a mask if they had to go out?

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**Criteria for Success):** *Provide students with a clear picture of success. Identify specific standards for success such as rubrics, checklists, quizzes, etc.*

- Weekly Benchmark Quizzes.
- Student interaction among their peers
- Sharing their research and notes
- Creating a checklist to make sure their focus is on track and they are coming along positively with their projects.

### **Other Evidence/Assessments:**

Students will create an essay for the following teacher prompt:

What are the different types of natural disasters? What can we do or should not do to prevent a natural disaster from happening? How can we prepare for a natural disaster. In your essay be sure to:

- Use your notes from your research
- Use your annotations from your Benchmark booklet
- Make sure that your essay is based on text and research evidence.

The teacher will use Readworks and other sources to provide the students with reading assignments that come with multiple-choice and constructed response questions.

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### STAGE 3: THE LEARNING PLAN:

#### Learning Activities

(potential layout below. Can be daily, divided by periods, or even using the Engineering Design Process to divide into stages such as Ask, Imagine, Plan, Create, Improve)

#### Week 1

##### Learning Goals: Students will learn:

- About the different types of natural disasters that impact the Earth.
- How human beings are affected by natural disasters.
- How to prepare for natural disasters.
- How to assist their communities during or after a natural disaster.

##### Learning Events:

- Introduce natural disasters as a whole group and discussing the recent Canadian Wildfires that affected us.
- Research different websites on Canadian Wildfires to learn of real life experiences and how people handled it.
- Take specific notes on the wildfires
- Look into different newspapers such as the New York Times to read different accounts of the Canadian wildfires and what people experienced.

##### Formative Assessments:

Benchmark Assessments  
Readworks Assessments

##### Notes/Resources:

Benchmark Unit 8 booklet and video:

<https://itrs-production.benchmarkuniverse.com/#/init/bb938d4122b7f80681090a159d650b6a22a8d681/X37674>

#### Week 2

##### Learning Goals:

##### Learning Events:

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<b>Formative Assessments:</b>
<b>Notes/Resources:</b>
<b>Week 3</b>
<b>Learning Goals:</b> <ul style="list-style-type: none"><li>€ <b>Students will be introduced to Canva:</b></li><li>€</li><li>€ Students will use their research notes to create a Canva on one type of natural disasters.</li><li>€ Conduct a gallery walk to learn about the different types of natural disasters their classmates researched</li></ul>
<b>Learning Events:</b>
<b>Formative Assessments:</b>
<b>Notes/Resources:</b>
<b>Week 4</b>
<b>Learning Goals:</b>
<b>Learning Events:</b>

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### Formative Assessments: