

# SEVERE WEATHER HAZARD INFOGRAPHIC ASSIGNMENT

**Name:** \_\_\_\_\_ **Period:** \_\_\_\_\_

**Severe Weather Phenomena:** \_\_\_\_\_

## INTRODUCTION

As we begin our unit on weather and climate, you are being tasked with investigating a specific hazardous weather phenomena. To do this, you will research, design and present an infographic that explores a specific weather hazard. Throughout our unit, we will explore how water, air, and sunlight contribute to the weather and climate events on Earth. Some of these events can be unpredictable and hazardous to humans; you will investigate these events and the technologies used to mitigate their effects.

**Inquiry Question:** How do severe weather hazards form and impact humans?

**Objective:** Obtain and communicate information on severe weather hazards, the effects of these hazards and how they might be mitigated.

**Standard:** MS-ESS3-2 - Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.

## INFOGRAPHIC

**Assignment:** You will be exploring severe weather hazards that occur across the globe. You will choose your hazard from the list below. After completing research on your weather event, you will create an infographic. An infographic is a hybrid information, image, and graphic presentation that can be printed out and displayed. Your infographic should be created using a digital design software. Use the checklist below to guide your process. Each infographic should contain all checklist elements.

**Phenomenon:** Tornado, Thunderstorm, Hurricane, Blizzard, Monsoon, Flood, Drought, Fog/Smog, Nor'easter, Lake-Effect Snowstorm, Hail Storm, Heat Wave, Waterspout, Sand Storm, Typhoon

**Check List:** Make sure that your final product has the following items.

- Title with severe weather hazard
- Your name and class period on the back of your infographic
- Images of severe weather hazard
- Answers to the following questions – These do not need to be in paragraph form. Think of a creative way to display this information. An infographic shares information with the public; think outside the box.
  - i. How does your type of severe weather form?
  - ii. What conditions are needed for it to form?
  - iii. When and where does this weather event most frequently occur?
  - iv. Is there a scale used to measure the intensity of your weather event?
  - v. How is your weather event named or classified?
  - vi. What technology is used to monitor your weather event?

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- vii. What effects should someone expect from this type of storm?
- Clear Infographic organization
- Minimum of 2 sources cited at bottom of infographic in APA format
  - \*APA format for a website is as follows: Author Last Name, First Initial, Middle Initial. (Year, Month Date Published). *Website Page Title*. Retrieved from: website URL
  - Ex: Stroller-Conrad, J. (2017, November 13). *10 Interesting Things About Earth*. Retrieved from: <https://climatekids.nasa.gov/10-things-earth/>

**Design Software:** Canva, Piktochart, Adobe Illustrator, Venngage; any other cool software you are familiar with.

### CLASS PRESENTATION

**Assignment:** After creating your infographic, you will be presenting it to the class in the form of a gallery walk. We will print out and hang infographics around the room and you will get the opportunity to walk the room and observe the weather hazards and hard work your classmates put into creating their infographic. Of course, though, there will be some work involved.

Thinking like a scientist necessitates that you bring a critical lens to every experience. As part of your journal walk, you will be given a stack of 4 Post-it notes. On each warm colored post-it note (red, yellow, orange, pink) you will write one positive comment for an infographic you connect to. On each cool colored post-it note (blue, green, purple) you will write one question you have for the creator of the infographic. To help you with this process of constructive feedback, refer to the list of critical feedback sentence starters.

### TIMELINE

February 12, 2018: Introduce assignment, pick weather events, discuss research techniques.

February 16, 2018: In-class work day, Individual conferences with either Slavens or Zaker.

February 9 - March 1, 2018: Homework is to research, takes notes, cite sources, answer checklist, design your infographic.

**\*You are free to come in during your lunch periods Mon/Wed/Fri to work on your projects.**

March 2, 2018: Finished infographic due, gallery walk, present infographics, post-it notes.

### WEATHER RELATED WEBSITES

Here are some websites that you might find useful in your search for information:

<https://www.fema.gov> (Federal Emergency Management Agency)

<http://www.weather.gov/owlie/> (National Oceanic and Atmospheric Administration)

<http://www.ucar.edu/40th/webweather/index.html> (Web Weather)

<http://www.weatherwizkids.com/> (Weather Whiz)

<https://www.nasa.gov/audience/forstudents/5-8/index.html> (NASA)

<http://www.theweatherchannelkids.com/weather-ed/weather-encyclopedia/> (The Weather Channel)

<https://climatekids.nasa.gov/ocean/> (Nasa Climate page)

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### RUBRIC

You will be evaluated using the rubrics below. This project fulfills IB Sciences Criterion A: *Knowing and Understanding* and IB Design Criterion A: Inquiring and Analyzing The first rubric will assess your weather phenomena science content. The second rubric will assess your infographic as an artifact and project.

|   | <b>8-7pts</b>  | <b>6-5pts</b>  | <b>4-3pts</b>   | <b>2-1pts</b>   |
|---|--|--|---|---|
| <b>Sciences<br/>Criterion A - i.<br/>outline scientific<br/>knowledge</b>                       | Student is able to:<br>outline scientific<br>knowledge of their<br>weather<br>phenomena. | Student is able to:<br>state scientific<br>knowledge of their<br>weather<br>phenomena. | Student is able to:<br>recall scientific<br>knowledge of their<br>weather<br>phenomena. | Student is able to:<br>select scientific<br>knowledge of their<br>weather<br>phenomena. |
| <b>Design<br/>Criterion A - iv.<br/>present the main<br/>findings of relevant<br/>research.</b> | The student:<br>presents the main<br>findings of<br>relevant research.                   | The student:<br>outlines the main<br>findings of<br>relevant research.                 | The student:<br>outlines some of<br>the main findings<br>of research                    | X   |

|                            | <b>Meeting</b>  | <b>Developing</b>  | <b>Beginning</b>  |
|----------------------------|---|--|---|
| <b>Presentation</b>        | (5-4pts) Infographic is well organized and well written so that observers can efficiently read and process information.                     | (3-2pts) Infographic is organized, but may contain too much text, or lack enough information to engage the observer.                       | (1-0pts) Infographic is confusing or not organized stopping the observer from reading and processing the information.                 |
| <b>Artistic Appearance</b> | (5-4pts) Infographic is artistically designed and shows the scientists care and investment.   | (3-2pts) Infographic is artistic, but may be sloppy or boring.   | (1-0pts) Infographic is plain and inartistic.   |
| <b>Source Citation</b>     | (2pts) Two (2) or more sources are cited on the infographic in APA format.  | (1pt) At least one (1) sources is cited on the infographic in APA format.  | (0pt) No sources are cited. Sources are not in APA format.  |
| <b>Gallery Walk</b>        | (5-4 pts) Student engages in gallery walk by writing four (4) thoughtful and critical questions and comments that provide quality feedback. | (3-2 pts) Student participates in gallery walk and writes questions and comments that provided feedback. Quality of feedback is decreased. | (1-0 pts) Student partakes in gallery walk. Quality of questions and comments do not provide helpful feedback or where not completed. |