Learning Segment Title: Natural Disasters

Grade: 9-12 Context:

Students in the class: _25__ Males: _12_ Females: _13_
Students with IEPs: _1__ Students with 504 Plans: _1__
English Language Learners: _3__
Language Proficiency Level (# of students at each level):
Beginning: _1__ Intermediate: _2_ Advanced: _0_ Advanced High: _0_

Central Focus: The central focus for this learning segment is to analyze (function) the cause and effects of natural disasters, specifically in situations pertaining to earthquakes, fires, tornadoes, hurricanes, flooding, tsunamis (vocabulary), within a variety of different locations and situations. In order to identify how and why natural disasters occur (syntax), students will explain instances of natural disaster as well as what takes place after them and how to protect themselves in the event that they come into contact with one. The purpose for teaching this content is that being able to analyze natural disasters will help students understand and describe (discourse) natural hazardous events that take place in today's world.

Lesson Plan Number:

Lesson Title: [Natural Disastes]

Content Standards

TEKS: [Environmental Systems

(8) Science concepts. The student knows that environments change naturally. The student is expected to:

(A) analyze and describe the effects on areas impacted by natural events such as tectonic movement, volcanic events, fires, tornadoes, hurricanes, flooding, tsunamis, and population growth]

ELPS: (if applicable) [(b) School district responsibilities. In fulfilling the requirements of this section, school districts shall:

- (1) identify the student's English language proficiency levels in the domains of listening, speaking, reading, and writing in accordance with the proficiency level descriptors for the beginning, intermediate, advanced, and advanced high levels delineated in subsection (d) of this section;
- (2) provide instruction in the knowledge and skills of the foundation and enrichment curriculum in a manner that is linguistically accommodated (communicated, sequenced, and scaffolded) commensurate with the student's levels of English language proficiency to ensure that the student learns the knowledge and skills in the required curriculum;
- (3) provide content-based instruction including the cross-curricular second language acquisition essential knowledge and skills in subsection (c) of this section in a manner that is linguistically accommodated to help the student acquire English language proficiency;]

Learning Objectives:

SWBAT #1: (function) [Analyze natural disasters and determine their causes and effects] **SWBAT # 2: (vocabulary)** [Identify the terms Natural disasters, permafrost, albedo, Richter scale, magma, lava, lahars, tectonic plates, cinder cone volcanoes, composite volcanoes, and levee.]

SWBAT #3: (discourse) [Describe the different types of natural disasters]

SWBAT #4: (syntax) [Identify instances of natural disaster and what happens before and after each one]

Language Demands	Language Supports
Function [Analyze natural disasters and determine their causes and effects]	 A video will be introduced to students for the concept of natural disasters. Questioning strategies will be used to clarify the overall content.
Vocabulary [Identify the terms Natural disasters, permafrost, albedo, Richter scale, magma, lava, lahars, tectonic plates, cinder cone volcanoes, composite volcanoes, and levee]	 Vocabulary words for each natural event will be defined at the beginning of the natural disasters' sections Vocabulary words will be put onto the word wall for the Natural Disaster section
Discourse [Describe the different types of natural disasters]	A graphic organizer will be used to assist students in preparations for a short presentation describing a natural disaster.
Syntax [Identify instances of natural disaster and what happens when each one occurs before and after]	A review of the wall board and graphic organizer presentation will prepare students to understand natural disaster events, before and after.

Focus/Attention-Getter (5 min.): [I will show students a 3 to 5-minute introduction video that show the different types of natural disasters (specifically volcanoes, earthquakes, and tsunamis) in the section of the lecture. While the video is playing students will be asked to jot down a few things that they found interesting or want to learn more about. I will ask students what they found interesting about the video or what they would like to learn more about to get them interested.]

SWBAT #1

Background Information/ Lesson Rationale (2 min.): [Based off what the video was about I will tell students the different types of people that study these natural disasters. Since the video will be real-world experiences I will explain as to why it is important for students to learn about this content. Since this is a lesson that is later into the semester, I will be able to tie in things that students have learned previously to show to make connections.]

SWBAT #1

Input/Presentation/ Modeling (5 min.): [I will show a presentation of the topic that contains the vocabulary for students to copy down in their notebooks. These vocabulary words will be put onto the word wall under the "Natural Disasters" section so that students will be able to quickly reference over to the wall. Only the words will be on the walls, so it is the student's responsibility to have the definition written down. While I am presenting, I will move around the room making sure that everyone is staying on task and so that way I don't just stand by the projector the whole time.]

SWBAT #1&2

Guided Practice (10 min.): [I will give students 1 graphic organizer for each of the 3 different disasters (volcanoes, earthquakes, and tsunamis), and they will be asked to fill out the characteristics of each of the topics. Student will work in groups so they can have social learning time and they will not be closed off from each other. Students will be able to collaborate on their answers. This will be a time for the vocabulary words that were put into practice for students to get experience with these words so when they come up again on quizzes/discussion they will be able to recall.

I will be walking around to make sure that students are filling in the worksheets and not just socializing with each other. Though talking is ok if students are on task and their assignment is being completed. If students need help or have questions about the assignment, I will use this time to have some one-on-one discussion.

At the end of this time students will be randomly called upon using popsicle sticks with their names on them to help fill in the blanks on a worksheet projected onto the board. This will let those students who may be missing a few pieces can get those answers so that way they don't fall behind.]

SWBAT #2&3

Independent Practice (20 min.): [I will ask for students to use this time to discuss the topics that were covered in lectures. Each table group will be given one of the three natural disaster that they are to focus on and answer questions that may concern them. However, they are not limited to answering just question pertaining to their topic if the other groups don't understand they are able to answer if they feel like they know the answer. Desks will not need to be rearranged as students will be allowed to discuss with other groups on what they have learned in the lecture. As students are discussing the characteristics of actions leading up to natural disasters as well as those that are following, I will be taking notes to see what I may need reteach because someone didn't understand.]

SWBAT #3&4

Modifications for Learners with Exceptionalities: []

Students with IEPs/504 Plans

Mobility Issues: Since the room is set up like a lab with tables ideally the tables are adjustable however if they are not then a desk will be added onto the table, so the student still feels included. Students will be working in their table groups to create the posters for the assessment portion of the lesson. The poster that the students are working on will be passed around so that everyone is able to contribute to it and the student will not have to worry about accessibility. Supplies will be moved to where the student is so that way, they are able to contribute to the poster.

Students with ADHD/ADD: Displaying the assignment and its instructions for all the students to see and having copies for the table that are segmented based off guided practice, independent practice, and assessment. Displaying and providing each table a rubric for the assignments for students to be aware of what is expected of them. Making real life connections between what is being learned and why it is important to know such information. Including connections from past lectures so students can see that the lessons build on each other.

Students with Specific Language Needs

English Language Learners: Providing visuals when discussing the vocabulary words so students can make connections between words and what they mean. Giving students time to process the questions and the answer to the questions rather than skipping over them. Providing them with a bilingual dictionary where the words that we will be using for lecture are highlighted so that way they don't have to keep flipping through it to find the words. Making connections to information that has already been taught for students to be able to grasp the concepts better.

Students with Other Learning Needs

Assessment (10 min.): [I will split the students into three groups where they are going to create a poster with information they learned about the natural disaster. The poster should include the causes and effects of their natural disaster. There should be an inclusion of vocabulary words that used in the poster, where they are used to describe specific parts of their natural disaster. Students will be asked to present their posters at the end of the lecture since students shouldn't have to do research and will be filling out the posters based off their notes.]

Closure (3 min.): [In the last three minutes of my class I will address how this is the first part of this 2- or 3-part lecture. The next natural disaster we will be covering would be the wildfires, tornadoes, and hurricanes because the are the ones that are heavily affected by win and/or storms. Then we will finish out the chapter with population growth since there are a plenty of information to discuss about the topic to take up a lecture.]

Materials: [Laptop, Projector, Smartboard, Poster paper, markers, pens, pencils, colored pencils, journals]

Evaluation Criterion Template

Student Name	Sample	Date	Sample	
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Lesson Title [Natural Disasters: Presentations]

Level					
Criteria	Excellent	Proficient	Adequate	Limited*	Insufficient
Evaluated					/ Blank*
Participation	Students are actively speaking about the topic during the presentation	Students have made 3 comments on topic comments throughout the presentation	Students made 2 on topic comments during the presentation	Student made 1 on topic comment during the presentation	No score is awarded because there is insufficient evidence of student performance based on the requirements of the assessment task.
Able to correctly apply the information	Students can accurately discuss the information in their own words	Students can accurately discuss the topic with the assistance of their notes	Students can discuss the topics however information may not be entirely accurate	Student can discuss the topics, but they lack information	
Posters are appropriate and information on them accurate	Posters have accurate drawings, information, and uses vocabulary	Posters have mostly accurate drawings, information, uses of vocabulary (with 1-2 mistakes)	Posters have a mix between inaccurate and accurate drawings, information, and uses of vocabulary	Posters lack in accurate information or in any information at all	
Actively Listening/Being Respectful	Students are actively listening to group presenting with no side conversations	Students are listening to group presenting with a minimal side conversation	Students are talking or not actively paying attention to group presenting	Students are talking and disrupting the group presenting	

When work is judged to be limited or insufficient, the teacher makes decisions about appropriate intervention to help the student improve.

https://aac.ab.ca/materials/rubric-materials/