“NATURAL HAZARDS” GROUP PROJECT

Introduction

“I’m bored!” Well, perhaps things would be more exciting if you faced one or more of the many natural hazards that affect North America each year. Maybe you’d enjoy stumbling out of the remains of your school or home after an earthquake or tornado has reduced it to rubble. Perhaps you would find it less boring if a hurricane uprooted trees and smashed them through your window or crushed the family car. Or you might like the challenge of outrunning lava pouring down from a volcano or cleaning up tremendous amounts of ash scattered over everything. Things would be much livelier when you had to duck hailstones that can break windows and dent car-tops, or sit in your home without electricity and heat for weeks after ice storms have knocked down power lines. If you need more excitement, how about floods, landslides, avalanches, wildfires, or tsunamis (earthquake-produced giant waves)?

All of these natural hazards occur across our continent each year, although not all in the same location, and rarely with great force in White Plains, if at all. But you won’t always live here, so you need to know more about these threats—what they are, where they occur, how often they happen, and what you can do about them.

During the next few months, you and your group will develop a presentation about one of these natural hazards for presentation to the class and posting on my pages of the school web site. In doing this, you will learn much more about significant geo-hazards, using educational technology, working as a group member, and producing a finished project.

Procedure

- Start by reading the National Geographic Society’s “Natural Hazards of North America” poster. This will give you an overview of the many types of dangerous conditions that affect our continent.
- Your group will “pick a number out of a hat” that will determine the order of selecting which natural hazard you will focus on for your project. When it is the turn for your group to choose, select one of the following from those remaining:
  - earthquakes
  - flood
  - hailstorm
  - hurricane
  - landslide and avalanches
  - tornado
  - tsunami
  - volcano
  - space weather
  - wildfire
  - winter storm
- Use the books available in class and Internet sites to begin developing a presentation that answers the following questions, and any other points you want to make:
  - What are the major features of your natural hazard?
  - Where is it most likely to occur in North America? Elsewhere in the world?
  - Some major historical examples.
  - How likely is it that we will experience this type of event in White Plains?
  - What types of emergency preparedness procedures can be taken?
  - What do schoolchildren need to know about this danger in their home and school environment? When they are traveling?

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Resources

To help you get started, I want you to use DLESE --the Digital Library for Earth System Education at www.dlese.org.

When you first open this site, find the search box in the central left section of the home page and type in your natural hazard. You can refine your search by selecting materials that are identified as being for certain Grade Levels (such as Elementary/Intermediate/Middle/High School.) You can also select from among the various types of Resources.

You may also find useful materials from the following web sites, among many others:

National Geographic Society: Eye in the Sky  http://www.nationalgeographic.com/eye/


National Weather Service  http://www.nws.noaa.gov/

Of special interest are the National Specialized Centers, a list of which can be found at http://www.nws.noaa.gov/organization.php#hq

NASA (National Aeronautics and Space Agency)  www.nasa.gov

(You may to skip the introductory clip and click Enter Main NASA Site in the lower left.)

One program of special interest is “Space Weather”  http://www.spaceweather.com

National Science Foundation “Geosciences for Kids”

Atmospheric Science  http://www.geo.nsf.gov/atm/atmkids.htm


Schedule of Presentations

These presentations will take place during much of the school year as we study about the related topic. So you may have selected a natural hazard that we will examine soon, and have only a few weeks to get ready, or you may have picked one that we won’t get to until the spring.

Regardless of when you will present, you need to create a program that will occupy one class period. You’ll need to create:

- a PowerPoint presentation with at least 15 slides,
- a “paper” and/or “hands-on” activity that the class will go through,
- a hand-out sheet describing what a family can do for emergency preparedness
- a list of useful references and resources to learn more