

INSPIRE GK12 Lesson Plan



Lesson Title	Natural Hazards ¹⁰
Length of Lesson	One (50 minute) class periods
Created By	Will McBryde, Rob Thornton
Subject	Earth Science
Grade Level	8 th grade
State Standards	8 th : 1d (Inquiry); 4 (Earth Science)
DOK Level	DOK 3
DOK Application	Draw Conclusions, Differentiate, Apprise
National Standards	5-8: A (Inquiry); D (Earth/Space)
Graduate Research Element	Topics presented in the classroom are studied at the graduate level but in greater detail. (i.e. surface water levels – flooding)

Student Learning Goal:

MS 8th Grade:

1(d) Analyze evidence that is used to form explanations and draw conclusions.

4 Describe the Earth's System in terms of its structure, composition, and climate.

National Science Education Standards of Content 5-8:

A: Inquiry; Abilities necessary to do scientific inquiry; Understandings about scientific inquiry; Natural Hazards activity will cause the students to think and relate specific words to a specific natural hazard.

D: Earth/Space; Structure of the earth system; Earth's history; Earth in the solar system; Natural Hazards Lecture; Definitions for the various natural hazards will be presented to the students with bonus information provided by the instructor.

Materials Needed (supplies, hand-outs, resources):

PowerPoint file (INSPIRE_McBryde_07.28.10_PP); Word file (INSPIRE_McBryde_07.28.10_Handout); Word file (INSPIRE_McBryde_07.28.10_Game); laptop; projector; packet of note cards

Lesson Performance Task/Assessment:

Students will play a natural hazards guessing game to introduce themselves to hazards and words that relate to the hazard. Students will then listen and take notes during a PowerPoint Lecture on natural hazards. The instructor will lecture briefly on each natural hazard (10 hazards). The first slide of each natural hazard the student should copy down the definition of the natural hazard onto the note taking sheet. The second slide of each natural hazard will be information that the instructor wants to share with the students but does not find it necessary for the students to write down. The instructor will observe the students note taking sheet and ask students questions. After completion the students will be given a note card in which they will list what they want to learn or what questions they have about geosciences. The instructor will observe, ask, and answer questions in regards to the students input. General classroom discussion.



Lesson Relevance to Performance Task and Students:

The lessons and performance tasks will hopefully capture the students' interests and establish a baseline for additional lessons to be taught on natural hazards/disasters.

Anticipatory Set/Capture Interest:

Students will play the hazards guessing game. The instructor will ask for volunteer students to participate in a hazards guessing game. The ten volunteers will have a sign taped to their back (see handout). The volunteer student will then turn and let the class see what is written on their back. This is done so that the students (audience) can give clues to volunteer as to what is written on their back. Eventually the volunteer will correctly guess what word is written on their back.

Guided Practice:

Lecture presentation based on the PowerPoint.

Independent Practice:

Natural Hazards Game

Students will fill out the handout sheet during PowerPoint lecture.

Students will write on a note card and express their (3-5) interests/questions in regards to geosciences.

Remediation and/or Enrichment:

Remediation: Individual IEP; Make PowerPoint presentation and handout sheet available to resource teacher

Enrichment: Students that finish note card early can list historical dates or events that are relative to natural hazards.

Check(s) for Understanding:

Observation of student activity; check for completion of note taking sheet and note cards

Closure:

Ask students the following questions.

Question 1: Recall the natural hazards; select which ones interest you the most?

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Question 2: Point out which natural hazards could potentially affect you?

Question 3: What are the forces involved in the cause of the natural disasters?

Question 4: How does preparation for a natural disaster depend on the type of disaster?

Possible Alternate Subject Integrations:

History, Journalism, Media

Teacher Notes:

This class lesson will serve as an introductory lesson to interest/excite students about natural hazards and geosciences in general that will be explored in further detail in the upcoming class lessons.

Give an opportunity for students to ask questions

<http://perilousplanet.com/>

<http://earthobservatory.nasa.gov/NaturalHazards/>