6.5 Natural Hazards

Content Area: **Science**
Course(s): **Science 6**
Time Period: **Marking Period 4**
Length: **25 days**
Status: **Published**

Established Goals/Standards

Please choose the appropriate Goals/Standards from the Standards tab above.

SCI.MS-ESS2-2	Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.
SCI.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.
SCI.MS.ESS3.B	Natural Hazards

Technology Standards

TECH.8.1.8.B.1	Synthesize and publish information about a local or global issue or event (ex. telecollaborative project, blog, school web).
TECH.8.1.8.C.CS2	Communicate information and ideas to multiple audiences using a variety of media and formats.

NJ 21st Century Life and Careers/NJ Career Ready Practices

CAEP.9.2.8.B.3	Evaluate communication, collaboration, and leadership skills that can be developed through school, home, work, and extracurricular activities for use in a career.

Interdisciplinary Connections

ELA/Literacy -

RST.6-8.1	Cite specific textual evidence to support analysis of science and technical texts. (MS-ETS1-1),*(MS-ETS1-2),(MS-ETS1-3)*
RST.6-8.9	Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic. (MS-ETS1-2),(MS-ETS1-3)
WHST.6-8.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration. (MS-ETS1-2)
WHST.6-8.8	Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. (MS-ETS1-1)
WHST.6-	Draw evidence from informational texts to support analysis, reflection, and research. *(MS-ETS1-*

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Mathematics -

MP.2 Reason abstractly and quantitatively. *(MS-ETS1-1),(MS-ETS1-2),(MS-ETS1-3),(MS-ETS1-4)*

7.EE.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. *(MS-ETS1-1),(MS-ETS1-2),(MS-ETS1-3)*

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Essential Questions

Please add your Essential Questions by clicking on the Lists tab above.

- How do we prepare for natural hazards?
- Where do natural hazards happen?

Enduring Understanding

Please add your Enduring Understandings by clicking on the Lists tab above.

- Natural hazards cannot be stopped, but their effects can be mitigated.
- We can use data about how natural hazards occur to predict where they will happen in the future.

Content

- Natural hazards can be the result of interior processes, surface processes, or severe weather events.
- Some natural hazards, such as volcanic eruptions and severe weather, are preceded by phenomena that allow for reliable predictions, but others, such as earthquakes, occur suddenly and with no notice, and thus are not yet predictable.
- Mapping the history of natural hazards in a region, combined with an understanding of related geologic forces, can help forecast the locations and likelihoods of future events.
- Data on natural hazards can be used to forecast future catastrophic events and inform the development of technologies to mitigate their effects.
- Data on natural hazards can include the locations, magnitudes, and frequencies of the natural hazards.
- Graphs, charts, and images can be used to identify patterns of natural hazards in a region.
- Graphs, charts, and images can be used to understand patterns of geologic forces that can help forecast

the locations and likelihoods of future events.

- Technologies that can be used to mitigate the effects of natural hazards can be global or local.
- Technologies used to mitigate the effects of natural hazards vary from region to region and over time.

Accommodations and Modifications

Accommodations and Modifications according to student IEP, 504, I&RS goals, and/or gifted status.

Assessment

Summative assessment: student-created project answering the question "Where do natural hazards occur and how do we prevent damage from them?"

Formative Assessments

- Participation/Observations
- Questioning
- Discussion Circles
- Science Notebook
- Exit Slips
- Peer/Self Assessment
- Rubrics
- Teacher-created project-based assessment
- Turn & Talk

Alternate Assessments

- Teacher-created project-based assessment
- Alternate running records
- Discussion Circles
- Turn and Talks

Benchmark Assessments

- Teacher-created assessment

Resources

- Amplify
- BrainPOP
- Discovery Education
- TuvaLabs