



Unit 1 Weathering and Erosion

Grade 4 Science

Unit Description:

Students will conduct investigations on the effects of water, ice, wind, and vegetation on the relative rate of weathering and erosion. By analyzing data from maps, students will describe the patterns of Earth's features. Students will make predictions as to why and how living things affect the physical characteristics of their environment. Evidence will be collected to generate multiple solutions to reduce the impacts of natural Earth processes on humans. Students will also develop wave models to describe patterns in terms of amplitude, wavelength, and how waves can cause objects to move.

Science Standards:

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| 4-ESS2-1 | Plan and conduct investigations on the effects of water, ice, wind, and vegetation on the relative rate of weathering and erosion. |
| 4-ESS2-2 | Analyze and interpret data from maps to describe the patterns of Earth's features. |
| 4-ESS2-3 | Ask questions that can be investigated and predict reasonable outcomes about how living things affect the physical characteristics of their environment. |
| 4-ESS3-2 | Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans. |
| 4-PS4-1 | Develop a model of waves to describe patterns in terms of amplitude and wavelength and to show that waves can cause objects to move. |

Enduring Understandings- Unit Anchor Phenomenon:

Louisiana loses about 75 square kilometers of land annually.

Essential Questions- Reflective Summaries:

- Describe the impact of living and nonliving things on Louisiana's coastline.
- Generate two different solutions to Louisiana's disappearing coastline and determine the strengths and weaknesses of both proposals.