

Water Weathering and Erosion

Lesson #	Focus Questions	Vocabulary	Activities	NYS Standards	Assessment
1	What are weathering and erosion?	Mechanical Weathering Erosion Structure	<p>Video: https://www.youtube.com/watch?v=R-lak3Wvh9c</p> <p>Discussion of students' experiences of building sandcastles on the beach, mud structures in the backyard, stone/rock structures.</p> <p>Students observe the different materials and predict what they think will hold up best.</p>	2-ESS2-1	<p>Observation chart on each of the materials.</p> <p>Prediction of what material they think will hold up best to water weathering and erosion with explanation.</p>
2	What is sand? How does water effect sand?	Sand Mechanical Weathering Erosion	<p>Video: https://www.youtube.com/watch?v=VkrQ9QuKprE</p> <p>Create 3 identical sand structures. Use dripping water, spraying water, and a cupful of water to test the integrity of the sand structure. Draw and record observations.</p>	2-ESS2-1	<p>Visual observation of built sand structure.</p> <p>Observation chart of how sand reacts to the different amounts of water.</p> <p>Drawings to support observations.</p>
3	What is clay? How does water effect clay?	Clay Mechanical Weathering Erosion	<p>Video: https://www.youtube.com/watch?v=bggea0E2eAY</p> <p>Create 3 identical clay structures. Use dripping water, spraying water, and a cupful of water to test the integrity of the clay structure. Draw and record observations.</p>	2-ESS2-1	<p>Visual observation of built clay structure.</p> <p>Observation chart of how clay reacts to the different amounts of water.</p> <p>Drawings to support observations.</p>
4	What is rock? How does water effect rock?	Rock Mechanical Weathering Erosion	<p>Video: https://www.youtube.com/watch?v=CeuYx-AbZdo</p> <p>Create 3 identical rock structures.</p>	2-ESS2-1	<p>Visual observation of built rock structure.</p> <p>Observation chart of how rock reacts to</p>

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			Use dripping water, spraying water, and a cupful of water to test the integrity of the rock structure. Draw and record observations.		the different amounts of water. Drawings to support observations.
5	What type of landform would hold up best to water?	Landform	Students build a structure that they think will hold up best to a cupful of water. They will be able to use a mixture of materials if preferred. Students verbalize why they think their structure will hold up to the water. Students demonstrate the integrity of their structure by dumping a cupful of water on it. Students write personal reflection.	2-ESS2-1	Students write a reflection of how well their landform held up to the water. They write about what they could have done differently to create a more resistant structure.

*These lessons are focused on a week's worth of science exploration. Since it is a week's worth of information, only one standard from the 'Earth's Systems: Processes that Shape the Earth' will be focused on so students gain a deeper understanding of the standard. Additionally, there will be 50 minutes allotted each day of the week for science.