

LCM Informal Loop

<p>LCM Lesson Plan: Who's Stealing Our Land</p> <p>Standards: LA: A1-A7, SC: A7-B1, TE: D2 CA: E4</p> <p>Science concept: Water erosion is constantly changing the area in which we live</p> <p>Time: Five 50 minute class periods</p>	<p>Name Grade level</p>	<p>Brian Bailey Brevig Mission 5th-6th</p>
	Process Skills	Materials
<p>Gear- Up-Day 1</p> <ul style="list-style-type: none"> ➤ Do a concept map to gather information of what the students know about erosion. ➤ Show a two to three minute segment of the movie Pale Rider which shows gold mining procedures using hydro-mining. After watching the segment of the Movie, conduct a discussion to point out that the force of the water is being used to erode the hillside for mining. 	<p>Communication Observation Inference</p>	<p>White Board Dry Erase Marker Movie-Pale Rider TV./VCR</p>
<p>Explore 1-Day 2</p> <ul style="list-style-type: none"> ➤ Help the students set up an erosion simulation to show the force of water and what methods may be used to help prevent erosion. Ask what materials worked best to help prevent erosion. 	<p>Observation Inference Communication</p>	<p>Plastic tub Beach sand Rocks Sticks Grass Water Plant watering can</p>
<p>Explore 2-Day 3 Take the students on a short fieldtrip to explore some examples of beach erosion caused by Bering Sea storms or run off from snow melt and rain in the local creeks. Have the students take digital pictures and take notes of three water erosion examples to be used in a powerpoint presentation created by the students to show a relationship between the force of water and erosion</p>	<p>Observation Collection of data</p>	<p>Digital Camera Note Pads Pencils/pens</p>

<p>Generalize: -Day 4</p> <ul style="list-style-type: none"> ➤ How do you know that water caused the erosion and not some other force? ➤ Why is the erosion more severe in some areas than in others ? ➤ What could you do to help prevent some of this erosion ? <p>-Discuss the requirements of the upcoming powerpoint presentation</p>	<p>Inference</p>	<p>Vocabulary</p> <p>Erosion prevent Severe cause/effect Hydro-mining Storms Run off local</p>
<p>Apply/Assess -Day 5</p> <ul style="list-style-type: none"> ➤ Have the students use their notes and pictures to create a powerpoint presentation and write a compare/contrast analysis of the erosion damage of different materials that they have observed. 	<p>Communication</p>	<p>Fieldtrip notes Digital pictures Computer w/powerpoint</p>
<p>Extensions:</p> <p>Invite a native elder to visit your classroom to speak about changes he has seen throughout the seasons and in his lifetime that occurred due to erosion.</p> <p>Show the students movies and photos of storm caused erosion from areas in the Bering Strait region such as Shishmaref or Shaktoolik which show extreme beach erosion to the extent that houses were being lost then have them reconstruct the beaches using various materials that might prevent the erosion.</p>	<p>Collection of data Observation Inference communication</p>	<p>Photos of beaches Web sites for research Elder invitations</p>

Performance Rubric for Erosion activity			
ELEMENT	PROFICIENT	DEVELOPING	EMERGING
Creates a PP presentation To show three examples of erosion.	PP presentation includes three pictures with explanations to show the effects of erosion.	PP presentation includes two pictures with explanations to show the effects of erosion.	PP presentation includes one picture but fails to explanation the effects of erosion.
Writes a compare/contrast analysis to explain how different materials may be used to help prevent the affects of erosion.	Describes two different types of materials and is able to explain how the materials may help prevent erosion.	Describes two different types of materials but can't explain how the materials may help prevent erosion.	Describes only one type of material and is not explain how the materials may help prevent erosion.
Informal- Is able to demonstrate through discussion, how the area in which they live is changing due to erosion.	Demonstrates how the land around them is changing due to erosion using two examples as support .	Demonstrates how the land around them is changing due to erosion but can't cite examples as support.	Can't explain how the land around them is changing due to erosion .