Grade: 2nd grade (learning center multiple grades)	Subject: Earth Science
Materials: water/sand board checked out from the resource library (or boxes with sand rocks and sticks plus water, brown clay could also be used)	Technology Needed: none
Instructional Strategies: Peer teaching/collaboration/ cooperative learning Visuals/Graphic organizers PBL Learning Centers Lecture Technology integration Other (list) Peer teaching/collaboration/ cooperative learning Visuals/Graphic organizers PBL Discussion/Debate Modeling	Guided Practices and Concrete Application: Large group activity Independent activity Pairing/collaboration Simulations/Scenarios Other (list) Explain: Hands-on Technology integration Imitation/Repeat/Mimic Simulations/Scenarios
Standard(s) 2 ESS1-1: Use information from several sources to provide evidence that Earth events occur quickly or slowly. Objective(s)	Differentiation Below Proficiency: - Students will participate and observe erosion. Above Proficiency: - Students will create and help others create earths changes. Approaching/Emerging Proficiency: - Students will observe and create erosion.
At the end of the lesson students will identify erosion. At the end of the lesson students will use what they have discovered to create or envision earth's changes. Bloom's Taxonomy Cognitive Level:	
Classroom Management- (grouping(s), movement/transitions, etc.) Whole group: - students will be sitting on the floor or around a table to gather together Voices will be off and will not need any materials with them - Partner talk: voices should be inside voices and they should talk respectfully. Talking with a partner: - When students talk with a partner it should be at a whisper - The students should stay on topic and be focused	Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.) Whole group: - eyes should be on the teacher, voices should be off, they should be sitting and ready to listen Partner talk: respectful and kind language should be used toward partners. Group behavior: - Students are expected to whisper when they talk with a partner not talk loudly.
Students are to be responsible for their own notebook and pencil They should be using their materials at appropriate times not when they should be looking at the board They should handle their materials with care.	- They should have their hands to themselves They should be doing their job and paying attention. Direct instruction: - Students should have their eyes on the board and be attentive - They should have their voices off They should try to answer questions to the best of their abilities and be prepared to participate They should not be talking unless they are answering a question

question.

Minutes	Procedures
10 min	Set un/Duen.
10 min	Set-up/Prep:
	- Prep the water/ sand table.
	- Make sure that there is a tarp under the table to make sure that a big mess is not created.
	- Test the table so that it works for the purpose it is needed for (to show an example of erosion.
2 min	Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)
	- "Alright everyone please gather over at the center circle with me."
	- Allow the students time to get to where they need to be. Count down if the students are taking a long time.
	- "1, 2, 3 eyes on me"
	 "Alright everyone I want you to close your eyes and we are going to imagine a scene. A scene is an image we create in our minds of a place"
	- Describe for the students a beautiful scene that is likely on a hill or and describe small details
	- After a minute all of a sudden to shock the students clap loudly and yell "boom" or something that might startle them
	- then explain, "everything that you just imagined is demolished ® because a volcano erupted and ruined everything
	Explain: (concepts, procedures, vocabulary, etc.)
	- what we just imagined is a good example of the earth changing. (using an anchor chart will help define your terms)
	- Ask the students, "do you think a volcano would change the earth quickly or slowly? Please think quietly to yourself"
	- If you think quickly raise your left hand if you think slowly raise your right hand
	- "If you said that it is a quick change that is correct! A volcano is a quick change of the earth that causes the earth to move
5 – 10	and be thrown around."
min to	- "yet sometimes the earth changes slowly. Think to yourself how can the earth change slowly?"
explain	- Giving them some time to think then say "turn to a neighbor and see what they think.
	- Give the students some time to discuss what they think would be good examples.
	- "alright now can anyone give me an example of what they think might be a slow change?"
	- Using the anchor chart reveal some examples
	- "great examples. Up on our chart we have that the earth changes slowly and the earth can change fast, we even put some
	examples with them."
	- "we also defined what a volcano is and now I am going to use another word, erosion."
	- Describe erosion
	- Can anyone think of a time they maybe saw erosion?
	 "yeah maybe on the shoreline, or on a hill" a big example is the grand canyon "has anyone seen the grand canyon?" it is a big valley that was slowly made over long periods of time.
	- Thas anyone seem the grand carryon: It is a big valley that was slowly made over long periods of time.
	- Today we are going to look at and make our own erosion.
15 – 20	- Before we start, I need to make sure we are on the same page. So first I need you to close your eyes and hold up a 1 if you
min for	think erosion is fast or a 2 if you think erosion is slow.
students	- "somebody that held up a 2 can you tell me why erosion is slow."
to use	 Good, ok we know that erosion is a slow process that happens over time Now can someone give me of an example that either a student mentioned or that I mentioned
the materials	- Call on one student
11101011015	- Today we are going to be using a fancy table that will help us see erosion more closely
	- But we need to lay some rules.
	- So repeat after me "I will not touch the table until I have washed my hands, I will not touch the table until a teacher tells
	me it is my turn, I will not touch the table without someone watching, I will stop what I am doing when I am told to stop, I
	will be careful not to make a mess. "
	- Take a trip for them to wash their hands
	- Bring them to the table and give an example of erosion
	- Split the group in half or small groups
	- Have each group take a turn creating their own

	- The other groups can either design their own or can draw what they did and together can write what they noticed	
	happened	
	- "ask them questions "what do you notice?" "are their changes" "what types of changes" "are they fast"	
	Explore: (independent, concreate practice/application with relevant learning task -connections from content to real-life	
	experiences, reflective questions- probing or clarifying questions)	
	If there is time gather up the students:	
	- "alright everyone, now we are all going to wash our hands again and line up."	
3 min to	- After lining up have the students turn and face you.	
gather	- "alright now that I had you all imagine a place I want you to imagine the people." "these people are amzaing and	
up the students	wonderful and always on their best behavior, they are quiet when they walk, the whisper only if necessary, and they stay in line. You all are going to be these people."	
	 We are going to walk around the campus so that we can see a really big example of real life erosion. In order to do this though you need to prove that we can walk well, safely, and responsibly. 	
	- "as we walk think about erosion, think about how the earth changes because when we get to our next spot I will ask some questions	
	Having gotten to the bluff/ hill	
15-25	- Ask the students "did anybody notice anything on the walk here?"	
min to	- Allow time for students to think and then also allow a couple students to answer	
get to	- Then ask the students "what do you notice about the hill"	
the hill	- Maybe prompt them	
and	- Giving them time to think allow a couple students to answer	
explore	- Then talk about how the hill is an example of erosion and how the river is example of erosion and how it cuts away at the	
	land.	
	- After giving some time for good discussion line the students back up and walk back.	
5 min to	Review (wrap up and transition to next activity):	
wrap up	#	
and	- "so today we talked about earth's changes, we created earths changes and we looked at an example of earths changes" "turn to a friend pout to you and tall them what your favorite part of precion was taday."	
move on	 "turn to a friend next to you and tell them what your favorite part of erosion was today" "give me a one if you like talking about erosion, give me a 2 if you liked creating erosion, and give me a three if you liked 	
	seeing erosion on the hill."	
	- If you put up a one can you tell why this was your favorite part.	
	ii you put up a one can you ten why this was your lavorite part.	
Formative	Assessment: (linked to objectives, during learning) Summative Assessment (linked back to objectives, END of learning)	

- Progress monitoring throughout lesson (how can you document your student's learning?)
- I will be looking for how the students respond to questions
- I will also be looking at what the students are able to observe when we go to the hill.

At the end of the lesson I will be reflecting on how the students worked together and how the used the information they learned to look at new types of erosion and how they created their own erosion.

Reflection (What went well? What did the students learn? How do you know? What changes would you make?):

This lesson was a very interesting lesson to teach because of the circumstance of teaching it in the learning center. Nevertheless, I thought this lesson gave me great opportunity to be flexible a learning from my own teaching style. The way that I made the lesson plan was for specific materials. The materials I had wanted to use were not exactly what I had envisioned but learning to be flexible I made do with what I had. In the future I would maybe try to test how the student would interact with the materials before introducing them to everyone. I would also try to have this topic not be just one day that way the students can learn more about the materials and how to properly use them and also explore

with them. The students were able to visually learn about what erosion looks like because I was able to show them on a small-scale example and then they were able to identify when we walked around campus and looked out over the hill. In the future I would make sure that the students understand more of the vocabulary. I would also try to maybe put the students in small groups so that they are able to have a discussion about the topic we are focusing on. I would also consider doing an exit slip with the students just to hear directly from each individual about what they learned.