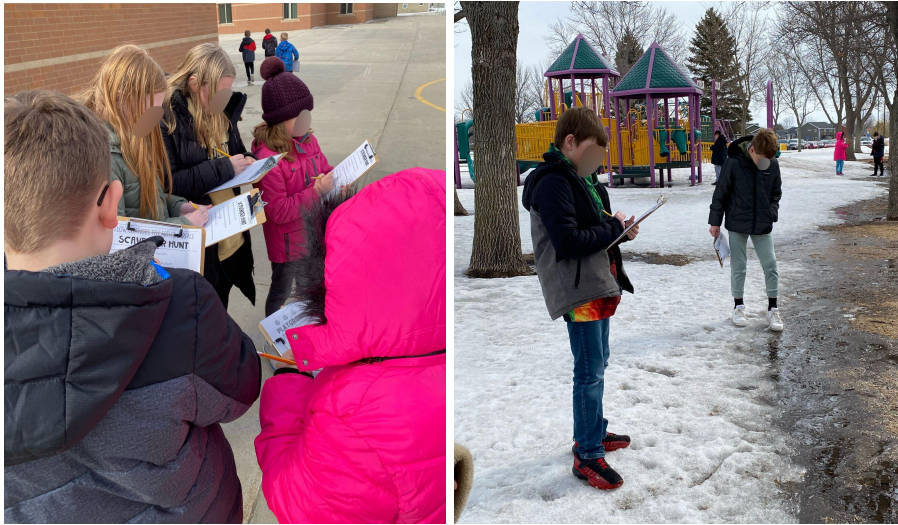


PLAYGROUND EXPLORATION LESSON PLAN



Name: Alisen Young

Grade Level: 4th Grade Science

School: Camelot Intermediate School

Date/Time: 1 hour

- Thursday, March 30th
 - Block 1: (9:45 am - 10:45 am)
 - Block 2: (10:45 am - 11:45 am)
- Monday, April 3rd
 - Block 1: (9:45 am - 10:45 am)
 - Block 2: (10:45 am - 11:45 am)

Reflection from the Prior Lesson

- Many students have been completing or nearing the end of their workbook Canvas explorations. Because they now have a solid background understanding of the changes to Earth's surface, they would benefit from locating examples of these terms in real life. They will be taking their Learning Target Checks (LTC) soon, so I want them to be able to imagine some of the concepts from their own experiences.
- Some students have been finishing quickly with the assignments. I will make sure to mention that this is not a competition, so they should take their time with the assignment. If learners finish with extra time, I will ask them to help others locate the examples of erosion that they have located. I want every student to have the opportunity to find as many examples as possible.
- Some groups of students seem to become distracted when working together or sitting near each other. I will pay attention to who students choose to work with during the exploration. If they seem to be getting distracted during the lesson, I will split them up into different groups where they will be able to be more productive.

Contextual Factors/ Learner Characteristics

We have a variety of students in each block/class that we see. The total numbers that we have include:

- 118 Total Students
- 20 Students on Individualized Education Plans (IEP)
 - 11 Reading/Language
 - 3 Cognitive

- 4 Math
- 3 Speech
- 6 Social Skills
- 10 Students Who Receive Text-To-Speech Services
- 2 Students on 504 Plans
- 6 English Language Learners (ELL)
- Our students are fairly talkative and tend to get distracted easily. To help with this we give many reminders and attention-getters throughout the lesson. Because we have flexible seating options, we may move students around if they seem to be struggling to focus in the area they are sitting.
- We have a few students who struggle with behavior often. When this happens, my cooperating teacher, Megan Madsen, typically pulls these students to the side and has one-on-one conversations with them as I continue the lesson.

Lesson Goal(s) / Standards

- ESS.ES.6 I can describe how Earth's surface is constantly changing through weathering, erosion, and deposition.
- 4-ESS2-1 Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation. (SEP: 3; DCI: ESS2.A, ESS2.E; CCC: Cause/Effect)

Lesson Objective

- The students will understand and describe how Earth's surface is always changing through weathering, erosion, and deposition.
 - I can locate specific examples of weathering, erosion, and deposition in our environment.

Assessment

- The students will hand in their handouts after they complete them. I will their charts to determine if they were able to fully understand the assignment. I will pull the students aside who need additional instruction for intervention during our next worktime blocks to walk them through these processes and major terms.
- I will be walking around the playground to make observations on how students are understanding the activity/content. I will provide feedback and assistance when necessary.
- I will be assessing student involvement during the discussion at the end of the lesson.

Materials Needed

- [Playground Exploration Student Notes](#)
- [Weathering and Erosion Playground Pictures](#)
- Clipboards and Pencils

Connection(s) to Research & Theory

- **Providing Meaningful Contexts:** Students are able to connect their learning to their other experiences and real life when provided meaningful contexts to problems. I will show students pictures of some examples of weathering and erosion that they may find in their own lives. They will also have the opportunity to find their own real-life examples.
- **Hands-On Learning:** Students benefit from being actively involved in their learning. The students will have the opportunity to explore their environment and touch their findings.
- **Formative Assessment:** Formatively assessing students allows the teacher to know where students are at and how he/she can alter instruction throughout the lesson for the benefit of the students. I will be doing this throughout the lesson when I observe and listen to students' actions, conversations, and questions during the activity. I will use the information that I gather to adjust the rest of the lesson and answer any questions that students may have. Students will also be completing handouts that I will assess. I will be using this information to determine how much additional instruction students may need before they have a strong understanding of the standards.

A. The Lesson (45 minutes)

● Introduction (10 mins)

- “Please put the attendance code in for this workshop, then close your computers. We won’t need them at all this block.”
- “We have been learning about weathering, erosion, and deposition. As we have been talking about some of the types of erosion, some of you have been sharing times when and where you have seen this happen in your own lives. I am so glad you have been making connections from our learning to real life!”
- “Today we will have a chance to explore this even more and find examples of weathering and erosion on our own playground. First, I will show you some pictures of some of the types of erosion you may see.” I will show them the [Weathering and Erosion Presentation](#).
- As we go through the presentation, I will ask students what types of weathering and erosion they are noticing. I will also ask them what they think caused the specific changes to the Earth’s surface in the pictures.

● Content Delivery (30 mins)


- “You have background knowledge of what weathering, erosion, and deposition are and now you have some ideas for what you will be looking for on the playground!”
- **Handout:** “I will be giving you each a handout. The first thing you will do is write your name up top. When you look at the handout, one side has a scavenger hunt checklist. Your goal is to try to find each of these items on your list. We have been learning about each of the items on the list, so you will likely know what they are talking about. If you have a question about one of them, ask a friend. If you still need extra clarification, I will be outside to help you too! On the other side of the handout, you will see some columns and a box that says ‘location.’ You will choose one of the examples of weathering or erosion that you find and draw a picture of what you have found. In the ‘Location’ box, you will write where you found your example. Then, you will draw what see. Your drawing does not need to be perfect. Just try your best! In the next column, write a description of what you are drawing and any other details you think are important. In the last column, you will write *why* you think your example occurred.”

SLOW CHANGES TO EARTH'S SURFACE



SCAVENGER HUNT

Find as many items on the list as you can.

- 1. deposition of sediments in a new place
- 2. a cracked rock that has been weathered
- 3. a pile of sediments
- 4. a small channel from runoff
- 5. a sedimentary rock that allows sediments to be easily scraped off of it
- 6. evidence of weathering
- 7. exposed tree roots above the ground
- 8. a sidewalk crack
- 9. mud
- 10. a drainage pipe
- 11. a sloped hill
- 12. evidence of ice wedging

 Name _____

PLAYGROUND WEATHERING & EROSION

 Location: 

Drawing	Description	Why do you think this occurred?

- “You may work in groups of 2 or 3 if you would like or you may work individually. Each of you will need a student handout, a clipboard, and a pencil. You may gather your supplies.”
- “When we are outside, make sure you stay out of the mud and anything that may get your clothes dirty. When I do the same whistle that we use to come inside from recess, please line up by the door like usual. This is not a competition or race, so really try to think about what you are noticing.” If I need to get a student’s attention, I will blow my whistle once and talk to them. They are used to this strategy because we do the same thing during recess.
- We will spend about 20 mins outside for students to explore the playground. I have found some great examples of erosion on the playground already, so I can lead them in the right direction if needed.
- Possible questions that students may ask themselves:
 - What is causing the patterns in the landscape?
 - How did the hole or cracks in the rocks appear?
 - Where did these pictures occur?
 - Does this happen in our own community?
 - What types of weather may cause this?
- **Closure (10 Mins)**
 - “I noticed that you found some very interesting examples of weathering and erosion out on the playground! I hope you will continue to find examples in your day-to-day lives!”
 - Discussion Questions:
 - “What observations did you make outside?”
 - “Did you find it challenging to find any of the items of the checklist? If so, which ones?”
 - “What types of erosion were easier to locate?”
 - “Do you think you will be able to notice more types of erosion in your lives?”
 - “Double-check that your name is on your handout and place it in the pile up front. Have a great rest of your day!”

B. Differentiated Instruction

- Adaptations for students with special needs or not meeting expectations
 - I will provide the option for students to work in pairs or groups of 3 if needed. This collaboration will help them find the items on the scavenger hunt list.
 - If students are unable to complete the scavenger hunt, I will allow them to find pictures of the items on the list instead. This will be only if students are completely unable to do the exploration. I will apply the other adaptations first if possible.
 - I will be walking around the classroom/playground to help students or answer questions when needed.
 - Some students have individual accommodations on their IEPs and/or 504 Plans. I will apply these accommodations for these students if they choose to sign up for these blocks.
- Adaptations for those exceeding expectations
 - If students are completing the activity quickly, I will challenge them to think of additional types of erosion and weathering that may see on the playground during the other times of the year.
 - If they finish drawing their model and locating the items on the list, I will ask them to help others locate these spots.
- Language Support
 - The students who are ELL have iPads available for Google Translate. They are able to take a picture of the text and the application translates it into their first language.
 - I will provide pictures and videos that go along with the instructions, so they have visuals to help them understand.

C. Resources

- https://docs.google.com/document/d/16hNqWGDdL_NU6gajSvQq4tJu-XkJLsgZiOWiLFQpFKI/edit?usp=sharing