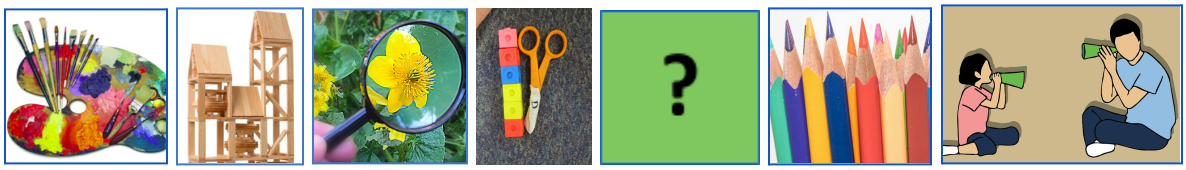
WEEK 6 Studios



Beginning the Popham Beach Erosion Project

Children use the materials available in all studios to begin to explore their ideas about slowing erosion on Popham Beach. Specific work in studios will depend on projects taken on by individual children and small groups.

Big Ideas	Wind and water can change the shape of the land. People can change the shape of the land. The changing shape of the land impacts people. Changes happen over time.
Weekly Question	How do people interact with the land?
Materials and Preparation	• crayons for Matching Crayons routine • Popham Beach Erosion Project Planning Prompts, copy for each pair of children • new studios prompts Cut apart and replace studios prompts. Note: Sets of prompts are identical for each studio. • Observation Sheets, on clipboards <u>New For the Math Studio:</u> • number cards, 1-9 Each pair playing will need a set of number cards. • Target Numbers Stage 4 recording sheet Make sure that as many unit resources as possible are available at the <u>Research Studio</u> or obviously posted and accessible around the classroom: texts, photographs, maps, charts, videos. Reread the Popham Beach Erosion Project Overview in the Unit 2 introductory documents. Imagine a variety of activities to propose to the children, in consideration of the particular interests of the

	classroom community and of individual children. Prepare materials that will support suggested ideas, to begin. Some individual or small group project ideas include: ● writing, creating a set and costumes for, and acting out a **play** about erosion (on Popham Beach), including what people might do about it and with roles such as ocean waves, storms, trees, and the land. ● building a **model** in the Landforms and Water Table that can be manipulated, accompanied by **procedures** for using it, for loan to classes with younger children. ● writing an informational **pamphlet** or other easily-reproduced resource to share with a broader audience, such as upper grade classes that travel to Popham Beach. Such a pamphlet could be shared with Outward Bound for distribution. ● creating a **public bulletin board** with visual and written information about erosion and how to approach it. ● writing and illustrating a small group or class **book** to add to the classroom library and to share with other classrooms. A book and bulletin board could be produced in tandem. ● building a **model** in the Landforms and Water Table, including both natural and human-made elements, to be displayed in the school lobby or library. ● creating a series of related **artworks** about the forces of wind and water, or inspired by different approaches to erosion.
Opening	*This week we're beginning our Popham Beach Erosion Project: researching and testing different approaches to slowing or preventing erosion, and then recommending something that can be done at Popham Beach to slow erosion there. During Studios, you will think about an important idea that you would like to communicate about erosion on Popham Beach.* Refer to the classroom schedule. *You will have Studios time just twice this week. Next week, we'll spend extra time with science and engineering investigations, instead of Studios. And then we'll come back to Studios for the final week of our study, in order to prepare for our end of unit celebration.* *This is a bit unusual, so let's take a few minutes to plan how we will use Studios time. There are lots of possibilities to think about.* Supply some ideas about how children might pursue Studios work (above). Demonstrate, to the extent that is useful, materials and tools that will be made available in each studio.

	Distribute crayons for the Matching Crayons routine. *Find your crayon partner, and talk together about your ideas for using your time well during Studios to communicate your ideas about erosion on Popham Beach. Here are some questions to help you think about this.* Distribute and read the Popham Beach Erosion Project Planning Prompts. Allow a few minutes for children to talk together. Encourage children to identify a partner or small group to work with. Have a few children share their plans aloud to the group. Support any children who are still unsure of how to proceed, perhaps suggesting classmates to work with, an area to work in, materials to start with, or specific ideas to pursue. *In the Discovery Studio, you can continue the investigations you have been doing with water and wind. These investigations will help you work out what ideas you would like to communicate about erosion.* *In addition, in the Research Studio, you have started writing introductions for books in our classroom. These are really helpful to other members of our classroom community! This week you can continue this work. Remember to choose your books carefully and to choose the proper sheet, depending on whether the book is an informational or a fictional text.* *Of course, you will want to use the Research Studio for research, as well! As you develop your projects, make sure to use the resources we have: images, books, maps, video, and charts.* *Your work may use materials from more than one studio, but it will be based in one studio so that things don't get confusing. Think about where you think you'll spend the most time, and start there today.*
Process	Children pursue self-defined projects that communicate ideas about slowing or preventing erosion.
Facilitation	Children might pursue any of the suggested projects; they might also propose and design other projects. Use the boxes below to record the kinds of work children are pursuing in order to plan for subsequent sessions in studios. To support organization within and among projects, encourage children

	to situate themselves in one studio, even as they may use materials and resources from—and collaborate with children in—other studios. Facilitate careful, intentional work by asking children questions about their plans, processes, discoveries, changes in course, collaborations, and successes. Insist that children articulate their work orally, artistically, or in written form in order to hold them accountable to the purpose of the work.

Art 	**Communicating about Erosion** Content Objective: Process: Facilitation/Prompts: Thinking and Feedback Possibilities: Ongoing Assessment and Next Steps:
Building 	**Communicating about Erosion** Content Objective: Process: Facilitation/Prompts:

	<u>Thinking and Feedback Possibilities:</u> <u>Ongoing Assessment and Next Steps:</u>
Discovery 	**Simulating and Evaluating Approaches to Erosion** <u>Content Objective:</u> I can plan and set up experiments for testing and observing outcomes of different approaches to erosion. <u>Process:</u> Children refer to the Approaches to Slowing and Preventing Erosion charts to decide how to structure new and continuing experiments. They may also refer to unit images for inspiration. Children use structures created in the Building Studio in Week 5 to simulate and evaluate approaches to erosion. <u>Facilitation:</u> Provide useful resources. Make structures easily available and ask children to consider new possibilities for approaches to erosion. <u>Thinking and Feedback Possibilities:</u> Children might revisit this work through photographs, or the class might gather around the Landforms and Water Table itself to consider peers' approaches to erosion. Discussion may include new ideas that can be part of the class recommendation to Popham Beach. <u>Ongoing Assessment:</u> Consider how children use materials. Consider how they approach different erosion scenarios with familiar and novel materials.

Math

Target Numbers

Objective:

I can add or subtract to get as close as possible to a target number.

Process/Directions:

- On your turn:
  - Start at 100
  - Draw a number card.
  - Choose whether to subtract that number as tens or ones.

For example:

I chose 7, so I could subtract 7 tens (70) or 7 ones (7). My equation could say 100 - 7 = 93 On the next round the equation would start with 93.

- Each round, the difference from the previous equation is the starting number in the new equation.
- Take turns until you've played 6 rounds.
- The partner who gets a difference closest to 0 without going below 0 wins.

Facilitation:

Be sure to visit the Center and model how to play the game. Support children with their equations.

Ongoing Assessment:

Note children's strategies for playing the game. How are they approaching the goal and using equations to support their thinking? How are they working together to play the game?

Research

Communicating about Erosion / Book Introductions

Content Objective:

Process:

Facilitation/Prompts:

Thinking and Feedback Possibilities:

	Ongoing Assessment and Next Steps:
Writing and Storytelling  	**Communicating about Erosion** Content Objective: Process: Facilitation: Thinking and Feedback Possibilities: Ongoing Assessment and Next Steps:

Standards	Standards addressed will depend on the studios in which children work. Some possibilities include developing work towards those listed in the Studios Introduction (Part 1). Math: **2.NBT.B.5** Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. **2.NBT.B.8** Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900