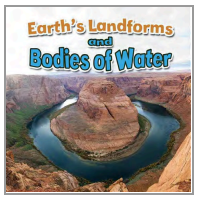
Unit 2: The Forces of Wind and Water

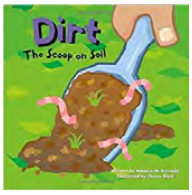
WEEK 1 At a Glance

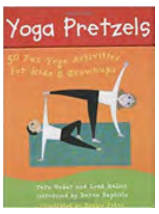
Weekly Question:
What are landforms?

Texts



Mentor texts





Vocabulary and Language
Days 1 & 2: Introduce Weekly Words: *area, cause, feature, raised, steep, surface, surround, wear*
Day 3: Compound Words
Day 4: Compound Words
Day 5: Making and Using New Words

Text Talk
Day 1: Horseshoe Bend (photograph)
Day 2: *Earth's Landforms and Bodies of Water*, Read 1
Day 3: *Earth's Landforms and Bodies of Water*, Read 2
Day 4: *Earth's Landforms and Bodies of Water*, Read 3
Day 5: Yangtze River (photograph)

Stations
Guided Independent Reading

Listening & Speaking: Listen & Respond (*Seeds of Change: Planting a Path to Peace*)
Science Literacy: What landforms or bodies of water do you notice outside of our classroom?
Vocabulary: Choose 3!, Think About It
Word Work: choose from activities
Writing: follows from Text Talk Week 1, Days 1 and 4

Science and Engineering
Lessons 1 & 2: Physical Geography: Landforms and Bodies of Water

Studios
Children explore and represent places and landforms, using familiar materials.

Writing: Procedure
Day 1: Deconstruction: Procedure Purpose
Day 2: Deconstruction: Procedure Stages
Day 3: Deconstruction: Images; Joint Construction: Soil Experiment
Day 4: Deconstruction: Verbs; Joint Construction: Steps
Day 5: Deconstruction: Adverbs; Joint Construction: Steps

WEEK 1 Days 1 & 2

Vocabulary & Language

Weekly Words

Weekly Question	What can we learn about land?
Language Objectives	I can talk with my classmates about words. (SL.1.2) I can define and use new words. (L.5) I can connect words to my own real-life experiences. (L.5.2.a)
Vocabulary	**area**: place or region **cause**: to make happen **feature**: a part or quality of something **raised**: elevated **steep**: at a sharp angle **surface**: the top layer **surround**: to circle around on all sides **wear**: to cause to become damaged through long use, friction, or exposure
Materials and Preparation	Choose four words to teach each day, following the steps of the Weekly Words routine. ● Week 1 Weekly Words cards ● chart paper Create the week's Weekly Words chart by writing out the Weekly Words and their definitions. Add icons, sketches, or images as needed.
Opening Day 1	*Today we are beginning a new study: The Forces of Wind and Water. Our Weekly Words come from the texts that we read and the unit's big ideas. Today's words are: _____, _____, _____, and _____.* **New:** As children rate their knowledge of each word, ask a few children to share their ideas about the word. Use this opportunity to highlight connections, similarities, and differences to other words used in the

	classroom, remarking on parts of speech and morphology and affirming children's word knowledge. As children respond to the Think, Pair, Share prompts, encourage them to use the word as they speak. Offer sentence stems where it might be helpful.
Day 2	*Let's continue learning our words for this week. Today's words are: _____, _____, _____, and _____.*
Teaching the words	**area** (noun) Elaboration: *This field and park area is a large and stretches across this city.* Think, Pair, Share prompt: *What is an area of our schoolyard where you like to be? What is special about that area?*
	cause (verb) Elaboration: *You might know this game—Jenga. Pulling a block out might cause the whole tower to fall down. Players try not to let that happen!* Think, Pair, Share prompt: *What is something that causes you to feel happy?*
	feature (noun) Elaboration: *One feature of this classroom is its large windows that let in lots of natural light.* Think, Pair, Share prompt: *What is a feature of our school that you think is positive?*
	raised (adjective) Elaboration: *We learned the verb **raise**, meaning to go up or to make more. When we add the suffix -ed, we make it an adjective, **raised**. This picture shows a raised desk; it's higher, or taller, than a regular desk.* Think, Pair, Share prompt: *Why might someone want to work at a raised table or desk?*
	steep (adjective) Elaboration:

	What a steep slide! It doesn't have a low or gentle angle or slope. Think, Pair, Share prompt: *What does it feel like to walk up a steep hill?*
	surface (noun) Elaboration: *This insect, called a water strider, can stay and move on the surface of the water. It doesn't sink; it stays right on the top of the water.* Think, Pair, Share prompt: *Put your hand on the surface of something near you* [rug, floor, table] *and describe it. You can say, "The surface of the _____ feels _____."*
	surround (verb) Elaboration: *A fence surrounds a garden. It's made of wood and wire, it has a gate for people to come in, and it goes all the way around the garden to protect it from animals that might come by to nibble the plants.* Think, Pair, Share prompt: *Think of places where you might find a fence. Why does a fence surround one of those places?*
	wear (verb) Elaboration: *People have been walking up and down these stairs, causing them to wear. We can see that the paint and wood don't look fresh anymore.* Think, Pair, Share prompt: *What might cause our clothes or shoes to wear?*
Closing	*This week, we're beginning a new study about the effects of wind and water on land. The words we're studying will help us to talk about this, our texts, and other experiences we're having together.*
Standards	**SL.1.2** Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. **L.5.** Demonstrate understanding of word relationships and nuances in word meanings.

	L.5.2.a Identify real-life connections between words and their use (e.g., describe foods that are spicy or juicy).
Ongoing assessment	Use information gathered from each lesson to plan for embedded opportunities for teaching and reinforcing words. How do children interact with new and familiar words? Are they playful, curious, perplexed, disengaged? Do children connect words to personal experiences? What connections do children make between words they are learning and familiar words? How do children integrate learning from *Fundations* lessons and other developing morphological knowledge? How do children respond when they discover an error in their understanding or use of a word? How flexible are they when confronted with new definitions? How do children talk with peers about new words—do they use gestures, substitute familiar words, dig for descriptions, tell stories? Keep a list to follow each child's vocabulary growth over time.

Notes

WEEK 1 Day 3

Vocabulary & Language

Compound Words

Weekly Question	What are landforms?
Language Objective	I can use the meaning of individual words to predict the meaning of a compound word. (L.4.2.d)
Vocabulary	**compound**: made up of two or more parts
Materials and Preparation	● Compound Words slides Note: This lesson uses slides 1-7.
Opening	*Today we will learn about compound words. We'll use our knowledge of words to predict their meanings.*
Discussion slide 2	***Compound words** are made when two or more words are put together to form a word with a new meaning.*
slide 3	*This week we have begun learning about landforms. "Landform" is a compound word.* Click the animation to show the separate words. *It is made up of two words: "land" and "form."* *I know what the land is, and I know that form means "shape." I can use what I know about each word to predict what the compound word means.* *I predict that "landform" has to do with the shape of the land.*
slide 4	*Here is the definition of the word "landform."*
slide 5	*Let's read this page from* Earth's Landforms and Bodies of Water*.* *There are two compound words on this page; can you find them?*
slide 6	*"Coastline" is a compound word.* *Let's think about the two words that make up this compound word.* *What does "coast" mean?* *What does "line" mean?*

	What do you think "coastline" means?
slide 7	*"Sometimes" is a compound word.* *Let's think about the two words that make up this compound word.* *What does "some" mean?* *What does "times" mean?* *What does "sometimes" mean?*
Closing	*Today you used your knowledge of the meanings of individual words to predict the meanings of compound words.* *Tomorrow you will build your own compound words.*
Standards	**L.4.2.d** Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark).
Ongoing assessment	During the discussion, listen for evidence that children are understanding compound words. Do children accurately define the individual words? Are they able to apply their knowledge of individual word meanings to predict the meaning of the compound word?

Notes

WEEK 1 Day 4

Vocabulary & Language

Compound Words

Weekly Question	What are landforms?
Language Objective	I can create and define compound words. (L.4.2.d)
Vocabulary	**compound**: made up of two or more parts
Materials and Preparation	• Compound Words slides, from Day 3 Note: This lesson uses slides 8-10. • paper and pencil, one for each child
Opening	*Yesterday you learned about compound words. Today you will write your own compound words.*
Discussion slide 8	*Remember, **compound words** are made when two or more words are put together to form a word with a new meaning.*
slide 9	*You will write three compound words. You can combine words from this list, or any other words you can think of.*
slide 10	*After you finish writing your words, you will share them with a partner.* Review the process for sharing words from the slide.
	Bring the class back together. Invite a child to share their partner's compound words. Ask the pair to define each individual word, as well as the compound word. Repeat the process with another child/pair, as time allows.
Closing	*Today you wrote and defined three compound words!*

Standards	**L.4.2.d** Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark).
Ongoing assessment	During the discussion, listen for evidence that children are understanding compound words. Do children accurately define the individual words? Are they able to apply their knowledge of individual word meanings to predict the meaning of the compound word?

Notes

WEEK 1 Day 5

Vocabulary & Language

Making and Using New Words

Weekly Question	What are landforms?
Language Objective	I can work with my classmates to make new words by identifying root words and changing or adding parts. I can use the words we make in a sentence. (SL.1.2, L.4.2.c)
Vocabulary	**cause**: to make happen **raised**: elevated **steep**: at a sharp angle **surround**: to circle around on all sides **wear**: to cause to become damaged through long use, friction, or exposure
Materials and Preparation	• Week 1 Making and Using New Words sheets, one for each small group • pencils, one or two for each small group • Week 1 Weekly Words cards, those listed above • chart paper and markers (2 different colors)
Opening	*This week we are using the Making and Using New Words routine.*
Key Activity	Distribute sheets and send children to work. Circulate to help children strategize through the routine, encourage equitable participation, observe interpersonal dynamics, and glean understanding about children's knowledge about how words are formed. While children work, select one group to present their response to the class. Have the group identify one or two members who will present the words they made and read their sentence aloud.
	After about 7 minutes, signal for children to finish their answers and return to the whole group.

	Invite the presenter(s) from the selected group to share the word they started with, new words they made, and then the sentence they wrote. *Please read your sentence slowly so I can write it down.* Write the sentence on the chart paper. *Let's see which Weekly Word they used and changed! I'll read the sentence again, and you can let me know when you hear the word that came from one of our Weekly Words.* Read the sentence aloud, slowly, and pause as children identify the Weekly Words. Circle that word with the contrasting marker. *Let's think together about how this word changed and how that changed its meaning.* Invite children from other groups to share any ways that this group's work resembles their own.
Closing	*We can see that changing a word's ending changes its meaning and how it's used.*
Standards	**SL.1.2** Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. **L.4.2.c** Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional).
Ongoing assessment	Listen to children's conversations as they work. What knowledge do children demonstrate about parts of words? What contributions do they make to the construction of a response to a specific question? Observe children's interactions. How effectively do children work in their groups? What roles do they take on? Reflect on the whole group sharing of one group's response. What more was revealed about children's understanding of how words' meanings change according to their parts? Review each sheet. Use children's answers to inform planning for successive lessons, revisiting words, prefixes, and suffixes, and informal conversations with individual children.

Date: _____

Names: _____

Choose one Weekly Word. Underline the base word. Make new words by adding or changing suffixes. Write the words. Check to make sure they make sense. What do the new words mean?

Weekly Words	Suffixes	New Words
cause raise steep surround wear	- s - ed - ing - es - er - est	_____ _____ _____ _____

Write a sentence with one of the new words.

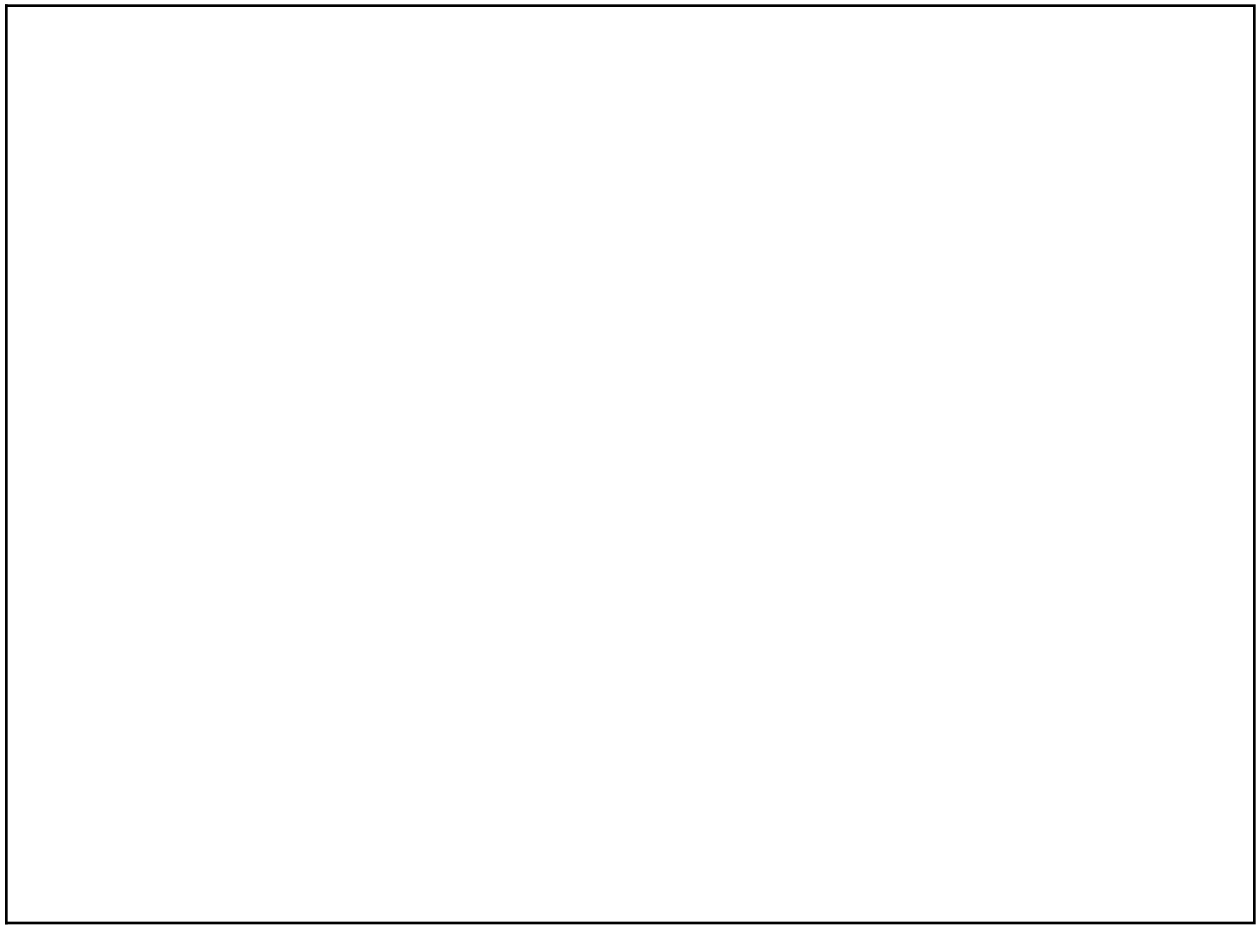
_____

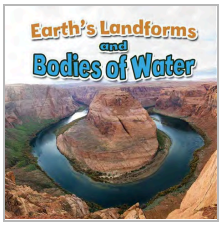
_____

Writing Station Response: ***Horseshoe Bend slides***

Name: _____ Date: _____

Describe this landform. What information from this photo and other slides did you use to come up with your description?





WEEK 1 Day 2

Text Talk
Earth's Landforms and Bodies of Water
Read 1 of 3 (pages 4-11)

Big Idea	Wind and water can change the shape of the land.
Weekly Question	What are landforms?
Content Objectives	I can use a variety of text features to clarify details in a text. (R.4.2, R.8.2.b) I can identify the main topic of sections of text in order to describe examples of landforms. (R.5.2.b, R.11.2.c, R.11.2.d, 2-ESS2-4 (MA)) I can observe different maps and models of earth's landforms and begin to explain how they represent the world differently. (2.T1.2, 2-ESS2-2)
Language Objective	Through text features and embedded definitions, I can learn, understand, and use words about landforms and bodies of water. (L.4)
Vocabulary	**canyon**: a low landform with steep sides **coast**: land next to the sea **delta**: a triangle-shaped landform where the river meets a lake or ocean **landform**: a feature of the Earth's surface, how the land is shaped **mineral**: a substance formed in the earth, not of an animal or plant **model**: a small representation of something **mouth** (of a river): the end of a river where it meets a lake or an ocean **narrow**: not wide **plateau**: a high, level area of land **representation**: showing what something looks like **shore**: land along the edge of the water **soil**: dirt made of rocks and humus *** steep**: at a sharp angle

<table>
<tr><td></td><td>stream: a natural flow of water that is smaller than a river
surrounded: circled around on all sides (* surround, v.)
valley: a long, low area between mountains or hills</td></tr>
<tr><td>Materials and Preparation</td><td>

Earth’s Landforms and Bodies of Water, Natalie Hyde
Informational Text Features Chart, in a sheet protector, or affixed to or copied onto a chart
crayons for Matching Crayons routine
chart paper

Prepare the chart, Learning about Landforms and Bodies of Water.
<table>
<tr><td colspan="2">Learning about Landforms and Bodies of Water</td></tr>
<tr><td>What we know from experience</td><td>What’s new from the text</td></tr>
</table>
</td></tr>
<tr><td>Opening
4 minutes</td><td>Introduce the book and elicit background knowledge about landforms and bodies of water.
In this unit, we are learning about landforms and the power of water and wind. We may not yet share the same understanding of what a landform is.

Today, we will begin reading this book, Earth’s Landforms and Bodies of Water by Natalie Hyde, to strengthen our vocabulary, like “landforms,” and ideas that have to do with land and water. We will use the vocabulary and concepts throughout our study.

What do you already know about landforms and bodies of water? Turn to a partner and share one thing you know about either landforms or water.
Let’s write what we already think we know on this chart.
Write children’s ideas on the left side of the chart.

Earth’s Landforms and Bodies of Water is an informational text. It will help us build knowledge for our work in this unit, so we will read it over a few days.
Set a purpose for today’s reading.
The text features and layout in Earth’s Landforms and Bodies of</td></tr>
</table>

	Water *signal to us that this is an informational text. Text features are things like headings and captions.* [Open a page and point to examples of each.] *Layout is how the words and images are organized on the pages. These text features and layout choices give us important information that we might not learn by reading the text only.* *Today we will use the text features to help understand what is being read. We will also learn definitions for new words.* Refer to the chart. *When we come to new information, we can add it to this chart. Finally, we will determine what feature of the text was most helpful in learning about landforms.* Refer to the Informational Text Features Chart. *Some of these text features will appear in this book, and we'll find some of them in other texts we read in this unit.*
Text and Discussion 22 minutes Table of contents, Exploring text features	Turn to the Contents page. *This book is organized by sections that are listed here, in the Contents. The purpose of a Contents page is to organize the book and show us topics we can find on certain pages. It's often called a "table of contents, and it's one feature of an informational text.* Indicate table of contents on the Informational Text Features chart. *We can flip to a topic listed in the table of contents if we are interested in something specific, like this one, "Models of Earth." I'm interested in finding out what they mean by "models." Let's turn to that page.* Demonstrate turning to page 18, "Models of Earth," and finding the section heading. *It looks from the pictures and captions that this page is about maps. Maybe "models" means maps. We can come back to this later to find out.* Turn back to the Contents page. *The section headings listed here and at the top of the pages help us organize our reading. They might also spark our thinking and make us curious.* Flip through the first few pages of the text, narrating but not reading. *This book has photo images with captions that give us more information. There are also sections that alert our attention, called "What do you think?" We can call these sections fact boxes or sidebars.* [Refer to Informational Text Features.] *In this book, these*

	sidebars ask us questions about what we just read. As we read, let's try to answer some of these questions.
page 4	Model thinking aloud about landforms. *The text says that mountains, hills, valleys, plains, and plateaus are on Earth, and that they are shapes on the Earth called landforms. As a reader, I am starting to understand that **landforms** are shapes on Earth, but I think I'll need to read more and see more pictures to be completely sure. Put your thumb up if you already know what a plateau is. Like many of you, I am not sure yet what plateaus are. I hope the book will give us definitions of this and other landforms.*
page 5	*The text is already telling us what a model is. It says here that a model is a representation of a real object. What does that mean?* Harvest a few ideas and affirm connections children make. Offer a definition. Then, finish the paragraph. Refer to the question at the end of the page (What do you think the colors show?), and invite a few children to respond. Then, point to the text features chart, and model referencing the caption on the map that tells what the color white represents. *We have read two paragraphs about Earth's landforms. What do we know now from the text? What were these paragraphs mostly about? What are some details we know? Let's jot these down on our chart.* Write children's ideas from the text on the right side of the chart. If children volunteer information that is not pulled directly from the text, emphasize this by writing on the left side of the chart.
page 6	Read page 6. Pause to define any tricky vocabulary, such as gravel, boulders, concrete, and minerals. Then skip "Where things grow" on page 7 and read the "What do you think?" section. (Mention that the class will learn more about soil next week.) *What do <u>you</u> think? Turn to your partner and try to convince them why you do or do not think that a mountain can become sand over time. Remember to use evidence from the text to support your thinking.*
pages 8-9	Show pages 8 and 9 without reading the paragraphs. Read the caption on page 9. Model thinking aloud. *Look at this picture. Let's read the caption.* [Reference the text features chart.] *When we look at the picture together with the caption, we get a lot of information about what a plateau is. This photo and caption*

	have important information for us even before we have read the paragraph. When you are reading informational text, it's important to pay attention to captions and photos, too. Read the main text on pages 8 and 9. Stop to address questions. *Now we understand from the text what a plateau is. When we put the information from the paragraph together with the photo and the caption, we get a really good sense that a **plateau** is a high flat landform! Let's try to answer the question in the "What do you think?" section: How is a plateau different from a mountain?* Stop to add new ideas to the chart. Use the Matching Crayons routine to have children talk as partners. *Before we read the next two pages, let's discuss what we have learned so far from the text. Turn to your partner. Each person will tell two new things you now know about landforms. Later, we'll share and add ideas to our chart.*
page 11	Finish reading through page 11. Optional stopping places, depending on time or interest, include: ● After page 10: *What are important low landforms? What makes them special?* ● After page 11: *What is a plain?* Show the image of the Grand Canyon on the book's cover. This will be familiar from the previous day's lesson. Compare this image with the image on page 10. *What is the same in these two images? What is different? How do these two perspectives help us understand landforms in the Grand Canyon?*
Key Discussion 12 minutes	*Let's review our chart.* Read both sides of the chart. Quickly address any questions. Use the Numbered Heads Together routine. *Two partners will meet with another two partners to make groups of four. Turn to face each other, and share one thing you learned about landforms that you didn't know before we started reading this book. Share what feature of the text was most helpful in learning that concept. (Was it the paragraphs we read? the "What do you think?" sections? the photos with captions?)* After groups talk, invite one child from each group share the new understandings they identified and where that information came from. As children share, highlight and define new vocabulary. As appropriate, add

	ideas to the Weekly Question Chart.
Closing 1 minute	*Today we noticed some important features of this informational text—photos, captions, the main text, and extra text—and we noticed how putting these together gave us more information. We began to explain what we are learning about representations of landforms. When we return to this book, we will continue talking about how to determine the main topics of a text.*
Standards	**R.4.2** Ask and answer questions about who, what, when, where, how, and why. **R.5.2.b** Identify the main topic of a multi-paragraph text and the central ideas of specific paragraphs. **R.8.2.b** Explain how various text features (e.g., headings, bold print, index, graphics, tables of contents, glossaries, links, icons) are used to locate key facts or information in a text efficiently. **R.11.2.c** Explain how specific visuals contribute to and clarify the meaning of a text. **R.11.2.d** Compare and contrast the information presented by two texts on the same topic. **L.4.** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from a range of strategies. **2.T1.2** Compare different kinds of map projections (e.g., Mercator, Peters) and explain how they represent the world differently. **2-ESS2-2.** Map the shapes and types of landforms and bodies of water in an area. **2-ESS2-4(MA).** Observe how blowing wind and flowing water can move Earth materials from one place to another and change the shape of a landform.
Ongoing assessment	Listen in and take notes during children's conversations. Do children use the text features and images to clarify the text? Do they identify the main topics of sections of text? Do they use text features and embedded definitions to define key vocabulary related to the topic? Do they identify which text features helped them understand the text the most? Do children begin to describe maps and changing landforms? These observations, combined with the upcoming reading response, will provide information about children's understandings of landforms and bodies of water.

Informational Text Features

title

the name of the book, which tells what the book will be about

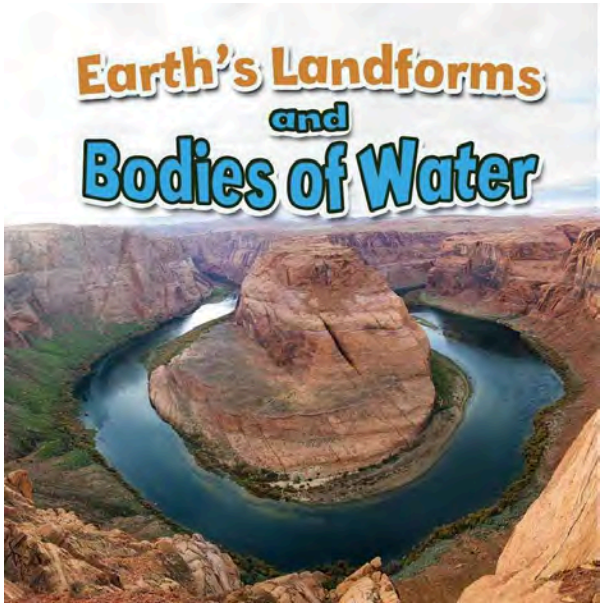
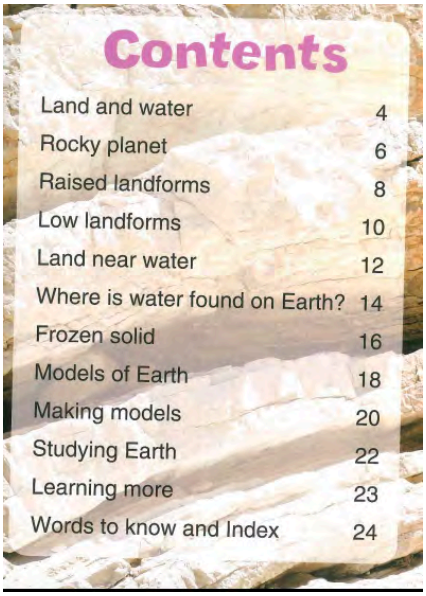


table of contents

a list with each chapter name and the page number where it can be found



heading

the title of a section of the book that tells the big idea of the section

illustration

an image that adds information about the topic, could be a photograph

close-up photograph

a photograph taken very close up so that the reader can see an object in detail

caption

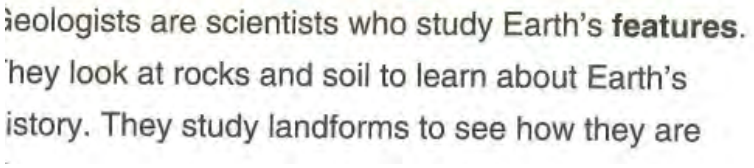
a sentence that describes an illustration and gives more information on the topic

labels

words that name objects in an illustration

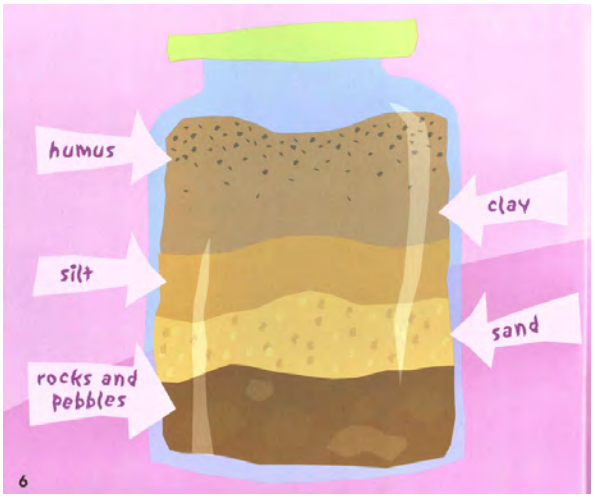
bold words

key words in the text that are thicker and darker and can be found in the glossary



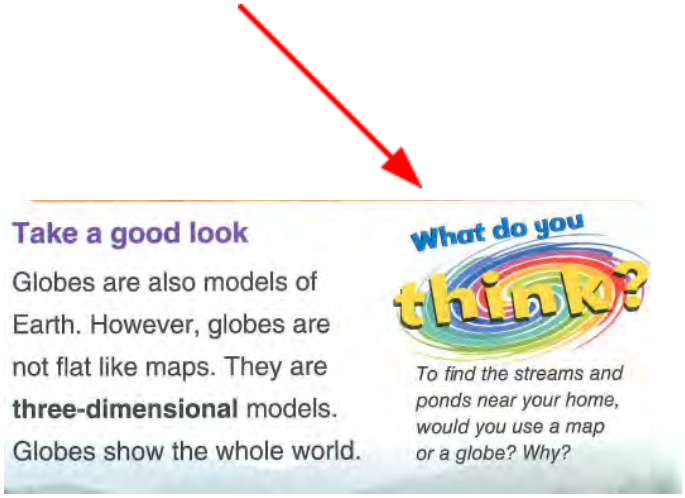
diagram

a labeled drawing that gives information



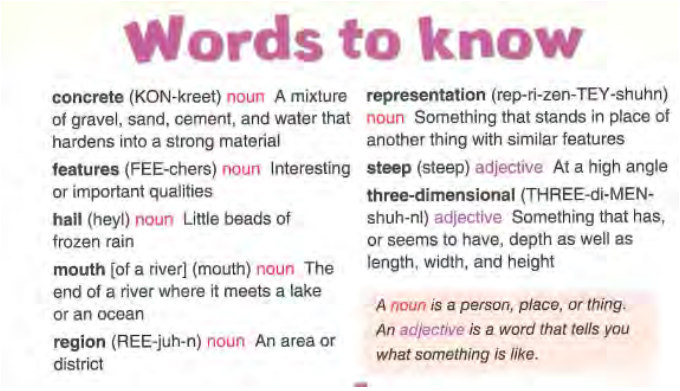
fact box
or
side bar

small section on the side of the text that gives additional information or extends the learning



glossary

an alphabetical list of key words and their meanings



Words to know

concrete (KON-kreet) noun A mixture of gravel, sand, cement, and water that hardens into a strong material

features (FEE-chers) noun Interesting or important qualities

hail (heyl) noun Little beads of frozen rain

mouth [of a river] (mouth) noun The end of a river where it meets a lake or an ocean

region (REE-juh-n) noun An area or district

representation (rep-ri-zen-TEY-shuhn) noun Something that stands in place of another thing with similar features

steep (steep) adjective At a high angle

three-dimensional (THREE-di-MEN-shuh-nl) adjective Something that has, or seems to have, depth as well as length, width, and height

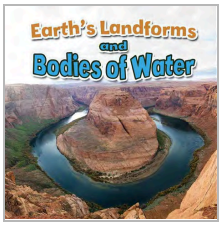
A noun is a person, place, or thing. An adjective is a word that tells you what something is like.

index

an alphabetical list of key words and the page numbers where they can be found in the text

Index

24



WEEK 1 Day 3

Text Talk
Earth's Landforms and Bodies of Water
Read 2 of 3 (pages 12-19)

Big Idea	Wind and water can change the shape of the land.
Weekly Question	What are landforms?
Content Objectives	I can identify the main topic of a multiparagraph text, as well as the focus of specific paragraphs within the text. (R.5.2.b) I can use my background knowledge and informational text features to describe landforms and bodies of water and explain how they affect one another. (R.8.2.b, 2-ESS2-2) I can describe how maps and globes represent landforms and bodies of water. (2-ESS2-2) I can use examples from the text to describe various bodies of water. (2-ESS2-3)
Language Objective	Through text features and definitions in the text, I can learn, understand, and use words about landforms and bodies of water. (L.4)
Vocabulary	**canyon**: a low landform with steep sides **coast**: land next to the sea **delta**: a triangle-shaped landform where the river meets a lake or ocean **landform**: a feature of the Earth's surface, how the land is shaped **mineral**: a substance formed in the earth, not of an animal or plant **model**: a small representation of something **mouth** (of a river): the end of a river where it meets a lake or an ocean **narrow**: not wide **plateau**: a high, level area of land

	representation: showing what something looks like **shore**: land along the edge of the water **soil**: dirt made of rocks and humus *** steep**: at a sharp angle **stream**: a natural flow of water that is smaller than a river **surrounded**: circled around on all sides (*** surround**, v.) **valley**: a long, low area between mountains or hills
Materials and Preparation	● *Earth's Landforms and Bodies of Water,* Natalie Hyde ● Learning about Landforms and Bodies of Water chart, from Day 2 ● *Earth's Landforms and Bodies of Water* excerpts, one for each pair of children ● globe, if available ● Discussion Prompts chart, from Unit 1 On the board, write: How does the photograph and caption help us understand what a <u>delta</u> is? What in the picture helps us know what a <u>channel</u> is? What do we know from the text about <u>glaciers</u>?
Opening 5 minutes	Reintroduce the book. *Yesterday, we started to read part of the book,* Earth's Landforms and Bodies of Water *by Natalie Hyde. This book tells us important information about the shape of our Earth. Today we will finish reading the book.* *Before we start, let's use our bodies to show what we remember about landforms. Everyone stand up. I'll name a landform, like delta, plateau, or hill, and you can represent that landform with your body.* Turn to illustrations in the text to show images of landforms as they are named. Participate alongside the children. Draw children's attention to each other's different ways of representing these landforms. Suggest that they can use these body shapes as they act in the Writing and Storytelling Studio. Set a purpose for today's read. *Today we will learn more about landforms and start reading about bodies of water. We will also think about how these are represented in maps and other models.*

	Listen closely to the content of the paragraphs. Today, we will read to find out the main topic of a section and then, within that, what each paragraph is mostly about. We will also continue to add information to our charts.
Text and Discussion 24 minutes pages 12-13, Contents	Read the heading on page 12 and the subheading on page 13. *Notice how these two pages have headings, but one is in larger type and one is in smaller type? This means that "Land near water" is the main heading of this section and "Where rivers meet the sea" is a subheading; it is part of the bigger section. Headings and subheadings are features of informational text.* Refer to the Information Text Features chart. Turn back to the Contents page. *When we look at the table of contents, we find this larger heading, "Land near water" listed, and we see that it is found on page 13. The subheading "Where rivers meet the sea" isn't listed here, because it's part of the larger section.* *Let's read to find out about land near water.*
page 12	Pause on any tricky vocabulary, like coastline and surround. *What is this paragraph mostly about? What does the author want us to know here?* Harvest ideas from the group. Use these ideas to formulate a sentence. *Let's write a sentence together that tells what the paragraph is mostly about.* Write this sentence on the right hand side of the Learning about Landforms and Bodies of Water chart. *What are some details about the places where land meets water?* *What is some important vocabulary in this part of the text?* List details as bullet points underneath the sentence. Highlight and include key vocabulary. *When we read, we can pause after each paragraph to do this kind of thinking. We can ask ourselves: What is this paragraph mostly about? And what are some details that go with that?*
page 13	Read page 13. Harvest a few responses to the following questions. *What is this paragraph mostly about?* *What makes this section special?* *Why do you think this paragraph is under the larger heading "Land*

	near water"?
Earth's Landforms and Bodies of Water excerpt, page 13	*Let's look closely at an excerpt from the text that shows a photograph and its caption.* Distribute the Earth's Landforms and Bodies of Water excerpts, one to each pair of children. Refer to the questions on the board. *Read the first section with a partner and discuss these questions.* *How does the photograph and caption help us understand what a delta is?* *What in the picture helps us know what a channel is?* Bring the children's attention back to the whole group. *What did you find out as you read this excerpt together?* Address any misconceptions that arose.
page 14	*Let's continue reading. The next section is called "Where is water found on Earth?" When we look at the pictures on these two pages, we notice right away that the pages look different from others. Let's see what we'll find out.*
page 15	Continue reading. Stop at the end of page 15. *What do we find out on this page? Why do you think it was organized this way?* Harvest a few ideas. Articulate the reading process. *This page is not written in paragraphs, so we cannot read it straight through to find out what's most important. Instead, each image has a caption. Readers have to jump to each image and caption. The images plus the captions tell us about different bodies of freshwater. Look: from the pictures we can see the difference between a lake and a stream.* *When we read informational text, we think carefully about images and captions in addition to reading paragraphs closely.* Refer to the Information Text Features chart.
pages 16-17, *Earth's Landforms and Bodies of Water* excerpt	Slowly read pages 16 and 17. Have children read along with their excerpts. *Turn to a partner to talk about details. What are all of the things we know from these two paragraphs about glaciers?* *Now ask your partner: What is the most important thing about glaciers? Why do you say that?* Bring the group back together and compose a sentence to add to the Learning about Landforms and Bodies of Water chart.

	Let's write another sentence telling what the section called "Frozen solid" is mostly about. We can add some details underneath: what new information did we learn about ice? What words are important?
pages 18-19	Read pages 18-19. Point out the section "What do you think?" *Yesterday, we wondered what models might be. Now we know that maps are models, and that a globe is also a model* [refer to the globe, if available]. *These two models give us information about the Earth—some of it the same, and some of it different.*
Key Discussion 10 minutes	*Now that we have finished reading the book, let's add some more to our chart about landforms and bodies of water. What's new that you have learned?* Facilitate a discussion referring to the Discussion Prompts chart and encouraging children to use any other prompts for accountable talk that the classroom community has adopted.
Closing 1 minute	*Today we read to describe more about how bodies of water impact landforms. We also read to determine the main topic of a section and what each paragraph is mostly about. When you read informational texts on your own, this is a strategy you can use to organize your thinking. You can also pay attention to text features such as images and captions. Throughout this unit, we will be learning a lot of new information about the forces of wind and water on land. It will be helpful to think about what the texts we read are mostly about and to identify details that support that.*
Standards	**R.5.2.b** Identify the main topic of a multi-paragraph text and the central ideas of specific paragraphs. **R.8.2.b** Explain how various text features (e.g., headings, bold print, indexes, graphics, tables of contents, glossaries, links, icons) are used to locate key facts or information in a text efficiently. **L.4** Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. **2-ESS2-2.** Map the shapes and types of landforms and bodies of water in an area. **2-ESS2-3.** Use examples obtained from informational sources to explain that water is found in the ocean, rivers and streams, lakes and ponds, and may be solid or liquid.
Ongoing assessment	Listen in and take notes during children's conversations. Do they identify the main topics of text and the focus of specific

	paragraphs? Do they use text features to locate information? Note how children read the text and discuss in partners. What do children grasp from the text? What misconceptions arise? Observe how children grapple with new conceptual understandings of landforms, bodies of water, and representations of these. How do children describe landforms and bodies of water? Do children clarify the meanings of new words and phrases using many strategies?

Notes

Earth's Landforms and Bodies of Water excerpt, page 13

A delta is a place where a river splits into many channels. Those channels flow into a lake or an ocean.

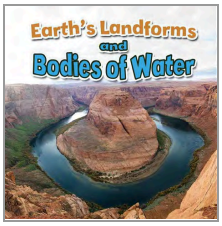
Earth's Landforms and Bodies of Water excerpt, pages 16-17

Frozen solid

Not all of Earth's water is liquid. Some of it is in solid form. Much of Earth's fresh water is frozen as ice in glaciers. Glaciers are thick layers of moving ice. Glaciers form when snow and **hail** begin to pile up high in the mountains. The weight causes the snow to change to ice. The ice then starts to slowly slide down the mountain.

Frozen rivers

Glaciers push and drag rocks and soil down the mountain with them. Piles of soil and rock are left along the edges of the glacier. Glaciers carve out valleys as they move. The melted water from the glacier fills these landforms, creating rivers and lakes.



WEEK 1 Day 4

Text Talk
Earth's Landforms and Bodies of Water
Read 3 of 3

Big Idea	Wind and water can change the shape of the land.
Weekly Question	What are landforms?
Content Objectives	I can identify important ideas about landforms in a text and answer questions about them in an organized way, both orally and in writing. (R.4.2, SL.2.2.a, W.3.2, W.1.2.b) I can map the shapes and types of landforms and bodies of water in an area. (2-ESS2-2) I can explain the bodies of water in my map using examples from an informational text. (2-ESS2-3)
Language Objective	I can identify, represent, and report my ideas about landforms and bodies of water in an organized way, both orally and in writing. (SL.2.2.a, SL.3.2.b, W.3.2)
SEL Standards	I can effectively communicate about my classmates' maps and writing. (SEL. Relationship Skills)
Vocabulary	**canyon**: a low landform with steep sides **coast**: land next to the sea **delta**: a triangle-shaped landform where the river meets a lake or ocean **landform**: a feature of the Earth's surface, how the land is shaped **mineral**: a substance formed in the earth, not of an animal or plant **model**: a small representation of something **mouth** (of a river): the end of a river where it meets a lake or an ocean **narrow**: not wide

	plateau: a high, level area of land **representation**: showing what something looks like **shore**: land along the edge of the water **soil**: dirt made of rocks and humus *** steep**: at a sharp angle **stream**: a natural flow of water that is smaller than a river **surrounded**: circled around on all sides (*** surround**, v.) **valley**: a long, low area between mountains or hills
Materials and Preparation	● *Earth's Landforms and Bodies of Water,* Natalie Hyde, 4 copies ● chart paper and markers ● Learning about Landforms and Bodies of Water chart, from previous days ● blank paper, 11" x 14" or larger, one for each child ● writing paper, one for each child ● writing tools In this lesson, children will be drawing, labeling, and writing one or two sentences about maps they are making. At the Writing Station, they will continue writing about their maps in order to generate a paragraph as modeled below.
Opening 1 minute	Reintroduce the book. *Yesterday, we finished reading* Earth's Landforms and Bodies of Water *by Natalie Hyde. We have been learning about the different landforms and bodies of water that shape Earth. Today we will draw and label maps of imaginary places. Then we will explain our map in writing.*
Text and Discussion 18 minutes	As a whole group, create and label a map of an imagined place on the chart paper. Invite children to name landforms and bodies of water to include and to explain how to represent them on the map. Re-read and cite passages from the text according to the landforms and bodies of water that children name. Reference the chart as is useful. Begin with a delta, to model the process of identifying and finding information about a particular landform. *Let's think about this landform together: the delta. We might not have known much about deltas before reading this book. Now we know that a delta might look like this* [draw a small triangle]. *In our map, we want to be specific and accurate; let's look in the Index to see where in the book we can find out more about deltas.*

The index, at the back of the book, is where readers can look up a word to find out on which pages it is mentioned. This is a bit different from the contents, which tells readers where to find information about a topic. Refer to the Informational Text Features chart.

Model looking at the index and finding deltas on page 13.

Here it says a delta is a triangle-shaped area. The caption tells us that a delta is the place where a river splits into many channels. So we need to draw the big river and also to draw the smaller channels, or streams.

Invite children to suggest a few more landforms and bodies of water.

We have started our class map with one landform and some bodies of water. What else could we include in our map of the place we imagine? What would make sense to have near a delta?

Let's think for one full minute about the landforms and bodies of water you know now from reading this book.

Flip slowly through the pages of the book and refer children to the Learning about Landforms and Bodies of Water chart to help them recall various landforms.

Turn and talk to a partner: what landforms or bodies of water are you thinking of? Can you remember where in the book you learned about them—through text we read, or through illustrations and captions?

Add a few more landforms or bodies of water to the group map, according to children's ideas. Label each one with the children's input.

Let's describe our map. We'll name each landform or body of water and say why we included it and how we learned about it. We can use the book to help us.

Alongside the map or on another sheet of chart paper, jointly construct a short paragraph. Model referring to the text for clarifying information. For example:

> We made a map of a place we imagined with landforms and bodies of water we are learning about. We started with a delta. We made a river touching the delta. We did this to show what we learned on page 13, that soil gets dragged by the water and then can make land called a delta. Around the river, we drew a valley. We did this because we know from our discussion and the book that a lot of times rivers cut into land to make valleys.

Key Activity 20 minutes	*Now you will draw and label your own map of a place you imagine. We have four copies of this book, so you can use a book and our chart to make sure your map makes sense. When you've drawn and labeled your map, write one or two sentences to tell about it. Make sure to write where you found this information.* Distribute paper and writing tools and send children to work at tables. Note: The quality of children's map-making skills matters less than their labeling and their reasoning for why they have included each landform and body of water. After about twelve minutes, have children lay their maps on the tables. Invite children to walk around and look silently at each other's maps and writing. Return to the whole group. Invite a few children to share something they noticed in a classmate's map. Children will continue working on their maps and write about them in more detail at the Writing Station.
Closing 1 minute	*Today we showed what we know about landforms and bodies of water by making maps and writing about them. Sometimes we can talk about books we read, and sometimes we can write about them. Writing can help us report on what we know in an organized way. You will write more about your map at the Writing Station.*
Standards	**R.4.2** Ask and answer questions about who, what, when, where, how and why. **W.3.2** Use a combination of drawing and writing to communicate a topic with a beginning, middle (including details), and an end. **W.1.2.b** Gather information from provided sources and/or recall information from experiences in order to answer questions. **SL.2.2.a** Recount or describe key ideas or details from a text read aloud or information presented orally or through other media. **SL.3.2.b** Create audio/video recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings. **2-ESS2-2.** Map the shapes and types of landforms and bodies of water in an area. **2-ESS2-3.** Use examples obtained from informational sources to explain that water is found in the ocean, rivers and streams, lakes and ponds, and may be solid or liquid. **SEL.** Relationship Skills

Ongoing assessment	As formative assessment of children's learning with *Earth's Landforms and Bodies of Water*, collect the children's maps and writing. Notice trends and assess children's understanding of the content and vocabulary. Do the maps and writing demonstrate accurate understanding of how different landforms and bodies of water relate to each other? Do they note what information in the text forms the basis of their thinking? During discussions, note how children communicate effectively and respectfully about the maps and writing.

Notes

WEEK 1 Day 5

Text Talk
Yangtze River (photograph)

Big Ideas	Wind and water can change the shape of the land. The changing shape of the land impacts people.
Weekly Question	What are landforms?
Content Objectives	I can identify the continent Asia on a world map and situate the Yangtze River on that map. (2.T2.1) I can explain how the location of landforms and bodies of water helps determine how people live there. (2.T2.3) I can describe how humans interact with the Yangtze river. (2.T2.4)
Language Objective	I can discuss how a physical feature (the Yangtze River) can be represented in multiple ways. (2.T1.2, SL.1.2.a, SL.1.2.b)
SEL Objective	I can build relationships and think together with my peers using the Visual Thinking Strategies routine. (Social Awareness, Relationship Skills)
Vocabulary	**landform**: a feature of the Earth's surface, how the land is shaped **landscape**: all the features of a piece of land that are visible **mountain**: an area of land that rises high above the land around it **river**: water that flows across land and into a lake or the ocean
Materials and Preparation	• Yangtze River slides • projector and screen • world map and pushpins • *Earth's Landforms and Bodies of Water*, Natalie Hyde • Week 1 Weekly Question Chart On the whiteboard write: How is the Yangtze river depicted in multiple ways and why does

	this matter? How might people's communities be affected by the land and water where they live?
Opening 1 minute	*The photograph we are about to look at includes some interesting landforms. You'll be able to make connections to the text we've been reading this week,* Earth's Landforms and Bodies of Water*. Let's take a look.*
Text and Discussion 19 minutes slide 2	Show slide 2. This photograph includes a caption with photographer, title, and date. Use the VTS routine to uncover children's initial responses to and ideas about the photograph. First allow children a moment to look, and then read the caption. The questions for the VTS routine are asked one at a time, paraphrasing children's contributions to ensure understanding, probing children's thinking, and synthesizing the thinking of the group: *What's going on in this picture?* *What do you see that makes you say that?* *What more can we find?* *As we see in the caption, this is a photograph of part of the Yangtze River in China. It's a long river, important to many communities in China. Wushan is the name of this city.* With children's input, locate China and the Yangtze River on the world map and mark them with pushpins. *Edward Burtynsky, the photographer who took this picture, has traveled all over the world photographing bodies of water. He is interested in how bodies of water impact people who live near them, and how people impact bodies of water.*
slide 3	Show slide 3, with a physical map of China. *This map gives us information about how the land in China is different from one area to another. The Yangtze River stretches way across the country. What do you notice about where it begins and ends?* Give children a few minutes to look at this map and offer impressions about it. They will likely notice the variations and changes in color and recall how colors on physical maps indicate landforms. The map's labels offer further information: desert, plateau, mountains (Himalayas). Record questions in order to revisit them, and connect children's ideas to other discussions from Science and Text Talk this week. Do not attempt to answer

	all questions at this point, as children will have many more experiences from which to build knowledge.
slide 4	Compare images on slide 4. *Let's look at these two images together. What do you notice?* Facilitate a discussion, supporting the use of descriptive and precise language. Refer to vocabulary surfaced in the previous days' readings of *Earth's Landforms and Bodies of Water*, showing the book as is helpful.
slide 5	Invite children to compare this depiction of the Yangtze River to the one in the photograph.
Key Discussion 10 minutes	Think, Pair, Share. Prompt 1: *How is the Yangtze river depicted in multiple ways, and why does this matter?* Prompt 2: *How might people's communities be affected by the land and water where they live?* Harvest children's ideas in the whole group.
Closing 1 minute	*Today we noticed and discussed some photographs of the Yangtze River in China. We considered the different ways the Yangtze river is depicted. We also described how the Yangtze river changes the shape of land and how people impact and are impacted by the river.*
Weekly Question Chart 5 minutes	Refer to the Weekly Question Chart. Read the chart together. Add any essential ideas that may be missing. Identify and color-code two or three themes that emerge. Some themes might be: landforms can be high like mountains or low like valleys. There can be different perspectives and representations of the same landform or body of water. Save this chart for use in Week 5.
Standards	**SL.1.2.a** Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). **SL.1.2.b** Build on others' talk in conversations by linking their comments to the remarks of others. **2.T1.2** Compare different kinds of map projections (e.g., Mercator, Peters) and explain how they represent the world differently. **2.T2.1** On a map of the world and on a globe, locate all the continents and

	some major physical characteristics on each continent (e.g., lakes, seas, bays, rivers and tributaries, mountains and mountain ranges, and peninsulas, deserts, plains). **2.T2.3** Explain how the location of landforms and bodies of water helps determine conditions (i.e., climate, weather, vegetation) for habitable living. **2.T2.4** Explain and describe human interaction with the physical world (the environment). **SEL.** Social Awareness **SEL.** Relationship Skills
Ongoing assessment	Take note of what children notice and how they describe what they see. Do children infer accurate and interesting information when just looking? Keep a list of content-specific and descriptive vocabulary children apply to this image, and build on it over the course of the study. How do children compare the images? What vocabulary do they use to compare the images? Consider how children are building content knowledge and vocabulary. How do children understand landforms after this first week of study? How do children describe the impact of changing landforms on people, if at all? What important ideas are starting to form? What questions seem to intrigue them? What misconceptions will need to be addressed? Note the children's engagement with the VTS routine and how they listen to and build on each other's ideas.

WEEK 1 Stations

Station	Activities	Materials Writing tools at each station
Guided Independent Reading		• individual book bags
Teacher groups: strategic small group instruction		
Listening & Speaking	Listen and Respond	• audio recording and technology • *Seeds of Change: Planting a Path to Peace* book • conversation prompts
Science Literacy	What landforms or bodies of water do you notice outside of our classroom?	• Unit 2 Science and Engineering packets • colored pencils
Vocabulary	Choose 3!	• **Week 8** Weekly Words cards (selected from across Unit 1) • Recording sheets • Choose 3! menu
	Talk About It: This river runs through this city. How might people and animals in this city use this river?	• Week 1 image, 2 copies cut apart • Week 1 sheets *Note: Children use vocabulary they know, rather than Weekly Words, to discuss and write about this image.*
Word Work Provide activity directions cards (align skills with literacy program)	Marking suffixes	• Week 1 Read It, Write It, Mark It sheets
	Making new words with prefixes	• Week 1 Make New Words sheets
	Writing words, using them in sentences	• Week 1 Look Cover Write Check sheets
Writing	Prompt from Text Talk Day 1: Describe this landform. What information from this photo and other slides did you use to come up with your description?	• Horseshoe Bend image • Writing Station Response sheet

Seeds of Change: Planting a Path to Peace conversation prompts: Cut apart and provide with the physical text and audio recording.

Page 14:

What are some ways that it is difficult for Wangari to continue her education?

Seeds of Change: Planting a Path to Peace

Page 22:

What is happening to the trees in Kenya? Why is this a problem?

Seeds of Change: Planting a Path to Peace

After reading:

Describe some ways that Wangari cared for the environment.

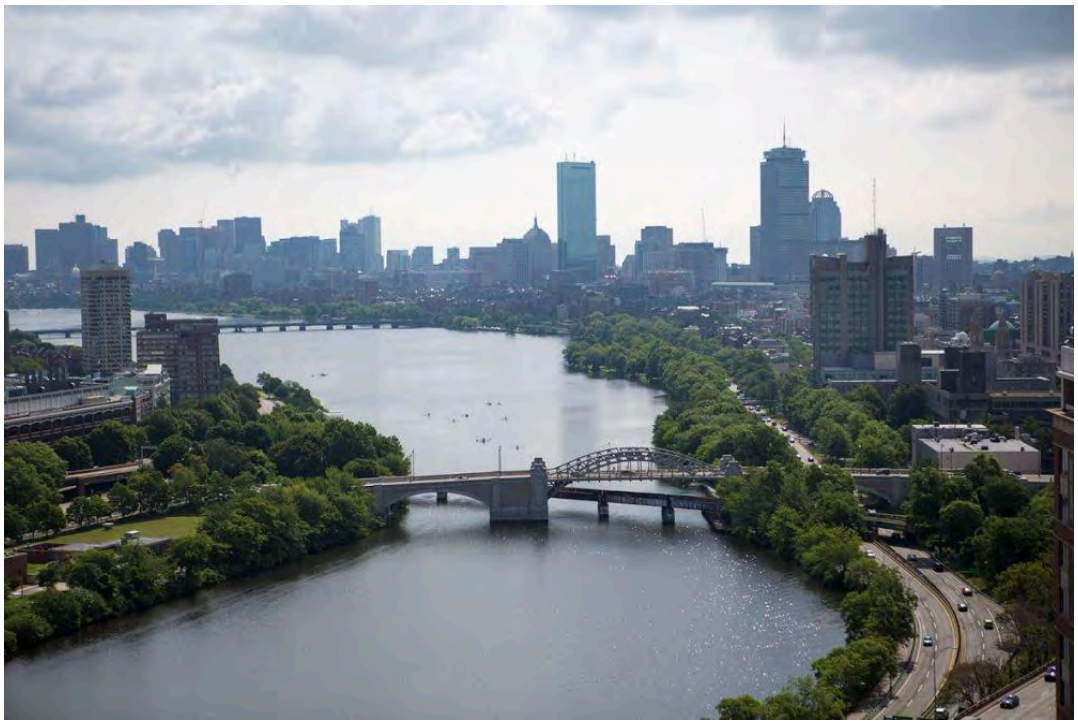
Seeds of Change: Planting a Path to Peace

I agree with you. I also think ___.

Why do you think that?

I wonder why you said ___.

Talk About It



Charles River, Boston

https://www.wbur.org/news/2021/07/14/epa-water-quality-report-card-2021-charles-mystic-neponset-rivers

---

Charles River, Boston

https://www.wbur.org/news/2021/07/14/epa-water-quality-report-card-2021-charles-mystic-neponset-rivers

Talk About It

Name: _____ Date: _____

A river runs through this city. How might people and animals in this city use this river?

Look carefully at the image. **Talk** with your partner, **draw and write** about your ideas, and then **share** your writing. Use important vocabulary words as you talk and write. **Circle** the important words you use.

_____

_____

_____

_____

_____

Name:_____

Read It	Write It	Mark It

Underline the base word. Circle the suffix.

finish<u>es</u>	
kindness	
fixable	
cupful	
softness	
invented	

Read It	Write It	Mark It

Underline the base word. Circle the suffix.

selfish	
handful	

Skills: know and apply grade-level phonics and word analysis skills in decoding words.

Name: _____

Make New Words

Cut apart the cards. Arrange the cards in two columns: **prefixes** (with stars) and **words** (without stars). Read each card.
Put cards together to make new words. Write the new words.

☆non + payment	nonpayment

Skills: decode words with common prefixes and suffixes.

Make New Words Cards

non	respect
dis	plant
un	credit
trans	spell
dis	kind
mis	stop
dis	selfish
un	infect
trans	behave
mis	port

Name: _____

Look	Cover	Write	Check √
against			
knew			
know			
always			
often			
once			

Use it in a Sentence

against

knew

know

always

often

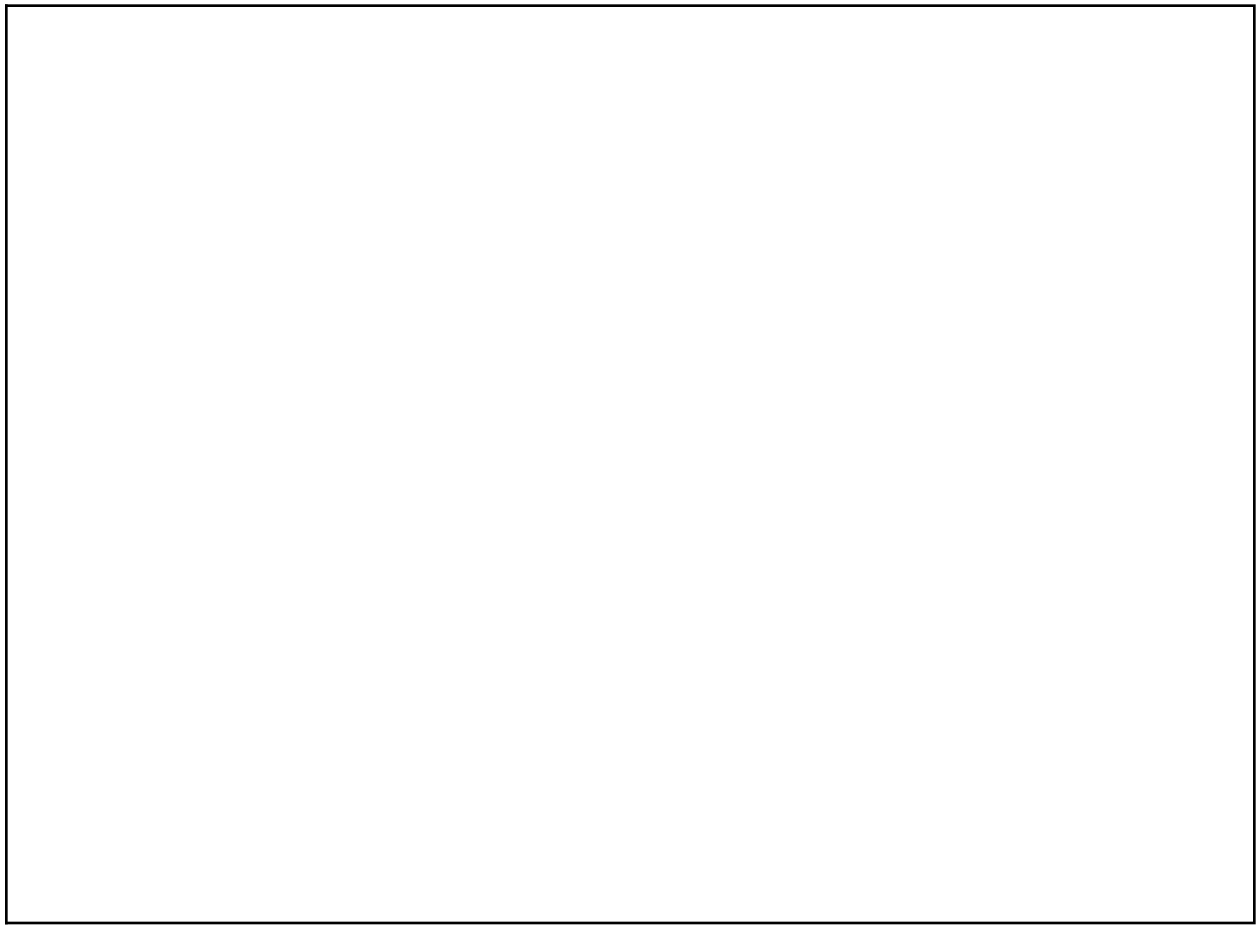
once

Skills: recognize and read grade-appropriate irregularly spelled words.

Writing Station Response: ***Horseshoe Bend slides***

Name: _____ Date: _____

Describe this landform. What information from this photo and other slides did you use to come up with your description?



WEEK 1 Lesson 1

Science and Engineering: Earth's Systems

Physical Geography of Maine: Landforms and Bodies of Water

S & E **Big Ideas**	Wind and water can change the shape of the land. Changes happen over time.
S & E **Guiding Question**	What does our Earth look like? What makes it look that way?
Content Objective	I can ask questions to get more information about the landforms and bodies of water on different maps. (Practice 1, 2-ESS2-2)
Language Objective	I can discuss and ask questions about a map. (SL.1.2.c)
Vocabulary	**bay:** water that has land almost all around it **body of water**: an accumulation of freshwater or salt water on Earth's surface, such as an ocean, river, stream, pond, or lake **elevation**: height above sea level **hill**: a naturally raised area of land, shorter than a mountain **island**: a piece of land surrounded by water **key**: on a map, information to make sense of the map **lake**: a body of standing water that is surrounded by land; most lakes are full of freshwater, but some are filled with salt water **landform**: a feature of the Earth's surface, how the land is shaped **model**: a small copy or example of something **peninsula**: an area of land that goes out into the water and is connected to the mainland by a narrow stretch of land **pond**: a body of water usually smaller than a lake **river**: water that flows across land and into a lake or the ocean **sea**: salty waters that cover the greater part of the earth's surface **sea level**: the surface of the ocean water, halfway between high and low tides

Materials and Preparation	• Maps for Kids video (https://www.youtube.com/watch?v=UZaTK7B0doE) • chart paper On the whiteboard write: *Maps are important because _____.*
Opening	*Today we will learn more about maps. Where are some places that you have seen maps being used?* Harvest children's responses. *We will watch a video today. As we watch, pay close attention to the different maps that people use, and how map makers provide information for the readers.* *After we finish, I will ask you to share your observations about maps, and strategies that map makers use.* Watch the video.
Investigation	*Let's come back together and discuss our observations. Let's revisit the statement, maps are important because…* Invite children's reflections. Record the responses on the chart paper. Revisit the topic of strategies map makers use to help their readers understand more about a location. Children should reference a compass, symbols, and labels to demonstrate understanding of parts of a map.
Closing	*You have made many interesting observations. Tomorrow we will look at some maps of Maine. You will be map observers and readers as we investigate more about our state.*
Standards and Practices	**SL.1.2.c** Ask for clarification and further explanation as needed about the topics and texts under discussion. **2-ESS1-1** Use information from several sources to provide evidence that Earth events can occur quickly or slowly. **2-ESS2-3** Obtain information to identify where water is found on Earth and that it can be solid or liquid.
Ongoing assessment	Take note of the children's understanding of maps, their purposes, and how maps can be similar or different. Listen and observe the application of the week's vocabulary during conversations and writing opportunities.

WEEK 1 Lesson 2

Science and Engineering: Earth's Systems

Physical Geography of Maine: Landforms and Bodies of Water

S & E **Big Ideas**	Wind and water can change the shape of the land. Changes happen over time.
S & E **Guiding Question**	What does our Earth look like? What makes it look that way?
Content Objectives	I can ask questions to get more information about the landforms and bodies of water on different maps of Maine. (Practice 1, 2-ESS2-2) I can cite specific features of the land to explain why a map is important. (2.T2.3)
Language Objective	I can ask questions and build upon others' ideas. (SL.1.2.b)
Vocabulary	**bay:** water that has land almost all around it **body of water**: an accumulation of freshwater or salt water on Earth's surface, such as an ocean, river, stream, pond, or lake **elevation**: height above sea level **hill**: a naturally raised area of land, shorter than a mountain **island**: a piece of land surrounded by water **key**: on a map, information to make sense of the map **lake**: a body of standing water that is surrounded by land; most lakes are full of freshwater, but some are filled with salt water **landform**: a feature of the Earth's surface, how the land is shaped **model**: a small copy or example of something **peninsula**: an area of land that goes out into the water and is connected to the mainland by a narrow stretch of land **pond**: a body of water usually smaller than a lake **river**: water that flows across land and into a lake or the ocean **sea**: salty waters that cover the greater part of the earth's surface

	sea level: the surface of the ocean water, halfway between high and low tides
Materials and Preparation	• Unit 2 Science and Engineering packets • writing tools • Maps of Maine slides • projector and screen • chart paper from Lesson 1 On the whiteboard write: This map is important because _____.
Opening 1 minute	*Yesterday we started exploring how mapmakers make maps to model different characteristics of an area of land, to tell different stories. Today you will use the notes in your Science and Engineering packets to share what you noticed and wondered about the map.*
Discussion 28 minutes	Show chart from previous lesson. *Let's review our thinking.* Show Maps of Maine slides.
slide 2	Model sharing an observation, such as: *I noticed that there are sections of land that stretch into the water. That stretch of land is called a **peninsula**.* *A **bay** is a body of water that is almost surrounded by water.* Invite children to share relevant experiences.
slides 3-6	Invite children to approach and interact with the maps one at a time or with their partners as they share their observations and questions. As children talk, highlight and reinforce relevant vocabulary, referring to slide 3 and/or referring children to the vocabulary page in their packets. Invite children to show the "Me, too" or other signal to affirm similar observations. Allow children to ask questions of each other. After children have shared observations, invite other children to share their questions in a similar manner. *What are you wondering?* Again, invite children to approach and interact with the map as they share their questions. Invite other children to respond with answers, but leave some questions unanswered, to be addressed later in the unit.
	Refer to the prompt on the whiteboard. *We'll take a few quiet minutes so you can take another look at your*

	notes. Underline anything you noticed that helps you think about why this map could be important. What does it tell us? How might someone use it? *Along with reviewing your notes, you might also take another look at the map and make more notes to support your thinking about why the map is important.* Allow children a few minutes to review their notes and prepare for the conversation. Facilitate equitable participation in the discussion using established discussion prompts and with questions such as: ● Why do you think that? ● Are you saying the same thing as _____, or something different? How is it different? ● What do other people think about that? ● Does anyone have something more to add? As the discussion begins, encourage children to begin, *This map is important because* _____. Remind them to cite evidence directly from the map and to use precise vocabulary.
Closing 1 minute	*This week we practiced working with physical maps and learned about the landforms and bodies of water. In the Discovery Studio this week, you will look more at this map, and you can use Beautiful Stuff to construct landforms and bodies of water.* *Next week we will explore landforms and bodies of water using other maps.*
Standards and Practices	**SL.1.2.b** Build on others' talk in conversations by linking their comments to the remarks of others. **2-ESS1-1** Use information from several sources to provide evidence that Earth events can occur quickly or slowly. **2-ESS2-3** Obtain information to identify where water is found on Earth and that it can be solid or liquid.
Ongoing assessment	Reflect on the class discussions. What language are children using? What do they understand about the purpose of maps? What do they find confusing? What language do children use to communicate their observations about landforms and bodies of water? To what extent do children use the discussion prompts, and how are the prompts helpful in promoting equitable and respectful

	discussion?

Notes

Landforms and Bodies of Water Vocabulary Week 1

 bay	 hill
 island	 lake
 peninsula	 pond
 river	 sea

WEEK 1 Studios

Representing Landforms and Bodies of Water

Children use familiar materials in new ways to explore and represent places and landforms.

Big Ideas	Wind and water can change the shape of the land. People can change the shape of the land. Changes happen over time.
Weekly Question	What are landforms?
Materials and Preparation	• new studios prompts Cut apart and replace studios prompts. • Observation Sheet <u>New for the Art Studio:</u> • Landscape Artworks images Place artwork images in sheet protectors. Place them so that children can easily view them at close range and then choose one to take to a workspace for ongoing consultation as they work. • drawing tools: pencils, pens, colored pencils, crayons • collage tools: paper, glue, glue spreaders • Beautiful Stuff • trays to collect tools and materials and organize workspace <u>New for the Building Studio:</u> • Kapla blocks • Landscapes images, in sheet protectors • blank paper • writing tools

	<u>New for the Discovery Studio:</u> ● maps from Science and Engineering lessons, in sheet protectors ● Beautiful Stuff Select items from Beautiful Stuff that are particularly conducive to building and representing landforms and bodies of water. Note that no adhesives (other than clay) are used in this activity, to encourage flexibility, revision, and reuse. ● clay, cut into small pieces, in a container ● unit texts and images, for reference <u>New for the Math Studio</u>: <u>New for the Research Studio:</u> ● Places around town images, in sheet protectors <u>New for the Writing and Storytelling Studio:</u> ● Photo Stories images, in sheet protectors Decide which studios need particular attention, and bring those bins to the whole group. In the Opening Basket, place the Studios Planner and a few sample materials from each studio. Include prompts, and review them, as needed, as those studios are introduced. Have sufficient copies of the Observation Sheet on clipboards. Decide which day(s) to host a Thinking and Feedback meeting, and plan Studios time accordingly.
Opening	*We are thinking about this question: "What are landforms?" When you work in Studios this week, you'll be exploring different shapes and kinds of land. You'll also be thinking about different landforms that are part of a landscape.* *A **landscape** refers to all of the features that are visible, or that you can see, on a piece of land. When I look out our classroom window, I can see* _____ [name important features in the foreground and background of the school landscape, both natural and human-made, such as trees, tall buildings, garden, playground, parking lot]. *All of those things together make the landscape outside our classroom.*

	Briefly introduce each Studio. Images of landforms will appear in multiple studios; children will access these as inspiration and information as they make art work, build, and tell stories. Refer to the Studios Planner. *What will you work on today in Studios?* Give children time to share their plans with a partner and to arrange to collaborate. Dismiss children to work.
Facilitation	Support the use of new scientific vocabulary as children recreate landforms and landscapes. Listen carefully to the vocabulary children use to describe features of the land and bodies of water. Offer unit texts as references. Supply map-related vocabulary. Take note of children's connections to specific places in the town/area. Circulate through studios and check in with children about what they are pursuing. Refer to the Weekly Question and to studio-specific prompts and resources. Direct children's attention to each other's work. Encourage them to ask each other for help and collaboration. Identify a piece of work for use during Thinking and Feedback and/or for planning purposes.

Art 	**Reconstructing Landscape Artworks** <u>Content Objective:</u> I can view, interpret, and reconstruct artworks. <u>Process:</u> After taking time to view the various artworks, children choose one to reconstruct using the materials and processes available. They may attempt a direct reconstruction or copy of the artwork (which requires looking very closely) or use it as a jumping off point (which encourages analysis and interpretation). <u>Facilitation:</u> *What interests you about this artwork?* *What details do you want to be sure to capture?* *What questions would you like to ask the artist who made it?* *Are you reconstructing it or using it as inspiration?* *Why did you decide to use these materials?*

	Thinking and Feedback Possibilities: Presenting children might talk about how and why they chose particular artworks, materials, and processes. Ongoing Assessment: Consider children's choices of artwork (what appeals to them) and how they approach their response—by copying or being inspired to do something new. What features of landscapes are most interesting to children? What scientific vocabulary do children use? How do children use and talk about the use of materials? How do children respond to frustration? What kinds of feedback do children offer each other?
Building 	**Building and Mapping** Content Objective: I can move between two and three dimensions by looking at images of landscapes, building them, and mapping them. *This activity complements moving from 2D to 3D in the Discovery Studio.* Process: Children first look at images of landscapes. They build in order to grapple with the shapes and contours of various landforms, simultaneously pushing their facility and flexibility with the blocks. Finally, they draw maps of their built landscapes into their Planning and Reflection Notebooks or on blank paper. Facilitation: *Tell me about the landscape you are building. Can you describe it? What is tricky about building it?* *You are building with blocks; can you imagine how this landform would be created in the natural world?* *What will be important to show on your map of this place?* Thinking and Feedback Possibilities: Take photographs of the built structures and project them for group discussion. Show photos and children's maps side by side to promote a conversation about how maps are two-dimensional representations of three-dimensional places, and about the challenges in moving from one kind of representation to another. Ongoing Assessment: Notice how children attempt to move from three dimensional building

	to two dimensional drawing. What challenges do they encounter in this translation, and how do they respond to these challenges?
Discovery 	**Building Landforms** Content Objective: I can identify landforms and bodies of water and then construct them with Beautiful Stuff. *This activity complements moving from 2D to 3D.* Process: Beautiful Stuff is arranged in a way that makes it easy for children to make intentional choices about what to use in building. Children choose one area on the map, identify the landforms and/or bodies of water, and create models with Beautiful Stuff. They may use clay as a kind of temporary adhesive to hold pieces together. As they work, they use materials flexibly, moving and trading materials to create a satisfying and thoughtful representation. Once finished, children clean up by deconstructing their representations so that materials can be reused. Facilitation: *What landforms and bodies of water do you notice on this map?* *What do you think you will try to represent with these materials?* *What materials might help you build this area?* Help children to generalize from specific locations to places generally, such as from a specific park to parks in general. Ongoing Assessment: How do children talk about landforms and bodies of water? How do they make decisions about materials?
Math 	**Measuring** Objective: I can estimate the length of an object and measure to discover its actual length. Process: Directions: ● Children choose an object. ● Children choose a unit to measure the length: centimeters, inches, or feet

	• Children estimate how many units long the object is. Record this number. • Measure and record the actual measurement. <u>Facilitation</u>: • How accurate is your estimate? • What are you finding? • Which is the longest/shortest object you've measured? • How would your numbers change if you chose a different standard of measurement? <u>Ongoing Assessment</u>: Note how children are approaching measuring objects. How are children approaching estimating? What strategies do they use when measuring? What mathematical vocabulary do they use?
Research ?	**Matching Images and Maps** <u>Content Objective:</u> I can identify landforms and name similarities and differences. <u>Process:</u> Images and maps are mixed up and spread on a table, or placed on a tray or in a basket. Children look through the images and maps and select one image and one map that appear to represent the same place. Children talk about why they made their choices, referring to specific landforms and other features and using emerging scientific vocabulary. <u>Facilitation:</u> *Why do you think this image and this map depict the same place? What are your clues?* *What can you tell your partner/group about what you see here?* *What words best describe these landforms?* <u>Ongoing Assessment:</u> Note any personal connections children make to places represented in maps and images. How do children talk about landforms and landscapes? What strategies do they employ to make decisions about matches? What vocabulary do they use?

Writing and Storytelling  	**Photo Stories** Content Objective: I can tell, act out, and write and draw stories inspired by images of places. Process: Provide images in a format that is easy for children to browse through, perhaps in sheet protectors in a basket, spread on a table, hung within reach, or in a binder. Children peruse the images and choose one to tell and write a story, imagining themselves in that place. Children may act out stories collaboratively, write and draw them independently in their Storytelling Books, or a combination of these. Facilitation: *Can you imagine what the air feels like in this place? What's the temperature?* *What sounds do you hear?* *What do you imagine you will see here, and what will you do when you see this?* *What is going to happen in this place, in your story?* *How can you communicate to your audience what this place feels and looks like?* Thinking and Feedback Possibilities: Ask children to act out their stories or to read them aloud to the group. Children can offer feedback about how effective the storytellers are in transporting the audience to this place. Ongoing Assessment: Consider recording children's stories to review at another time and/or to use during a Story Acting session with the whole group. What kinds of stories do children tell? What do children understand about how places impact people's experiences? What narrative structures do children use?

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) and the following studio-specific standards. Building and Discovery:

	2.T1.3. Construct a map of a familiar location (e.g., the school, the neighborhood, a park). **2.T2.4.** Explain and describe human interaction with the physical world (the environment). **2-ESS2-2.** Map the shapes and types of landforms and bodies of water in an area. <u>Math:</u> SR.C.1 Describe and compare measurable attributes <u>Research:</u> **2.T1.1.** Explain the kinds of information provided by components of a map (e.g., compass rose/cardinal directions, scale, key/legend, title) and give examples of how maps can show relationships between humans and the environment (e.g., travel, roads, natural resources, agriculture, mining). <u>Writing and Storytelling:</u> **W.3.2** Use a combination of drawing, and writing to communicate a topic with a beginning, middle (including details) and an end. **W.2.2.a** With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing. **SL.2.2.a** Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

Notes

Art Studio

While you are working, think about:

What is interesting to me about the landforms in this artwork?

What questions would I like to ask this artist?

What details do I want to capture?

Why did I decide to use these materials?

Building Studio

While you are working, think about:

What is tricky about building this landscape?

How might this landform have been created in the natural world?

What will be important to show on my map?

Discovery Studio

While you are working, think about:

What landforms and bodies of water do I notice on this map?

How can I represent them with materials?

Math Studio

While you are working, think about:

How accurate is your estimate?

What are you finding?

Which is the longest/shortest object you've measured?

How would your numbers change if you chose a different standard of measurement?

Research Studio

While you are working, think about:

Are this image and this map showing the same place? What are my clues?

What do I see?

How can I best describe the landforms I see?

Writing and Storytelling Studio

While you are working, think about:

What does the air feel like in this place?

What sounds do we hear?

What might we see here? What will we do when we see it?

What is going to happen in this place, in this story?

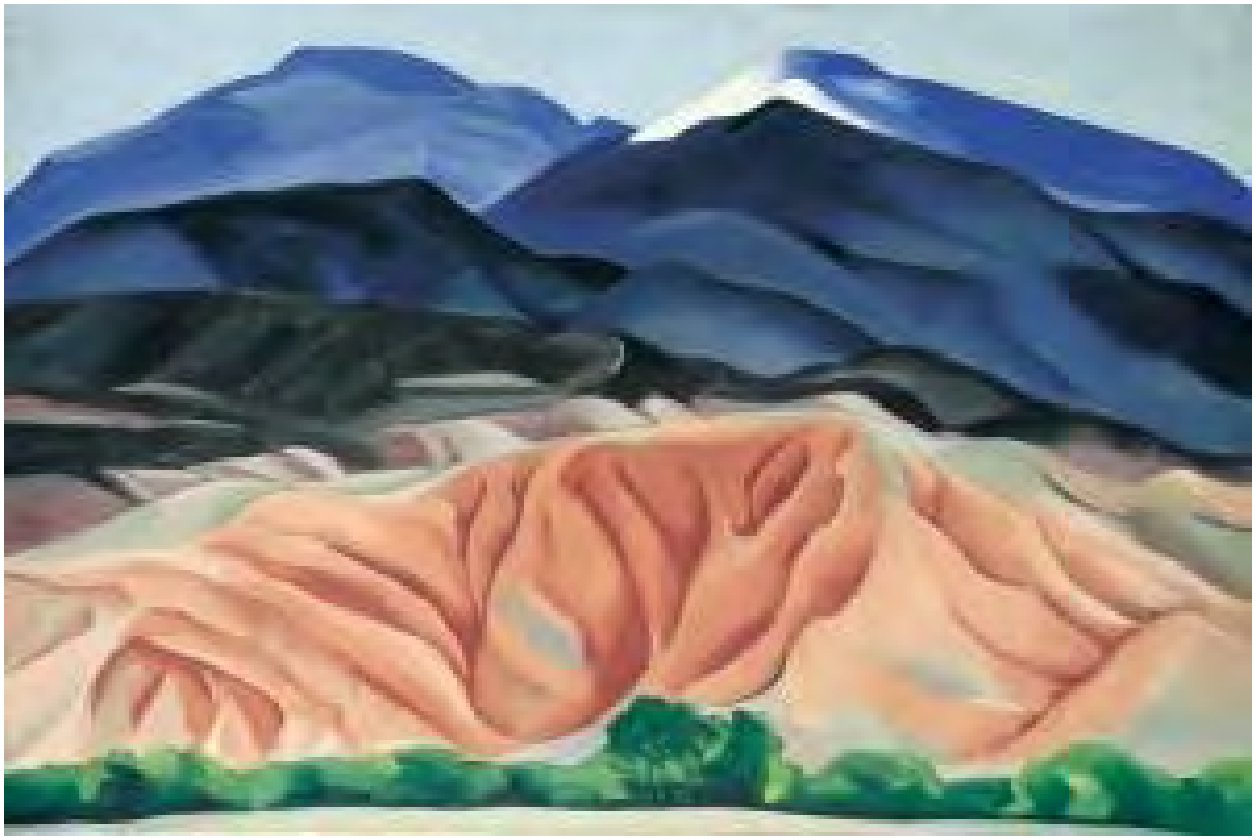
How can we communicate to our audience what this place feels and looks like?

Landscape Artworks

Diego Rivera, *Landscape* (1911)

Artist not known, Haiti

Artist not known, Laos (embroidery)



Georgia O'Keefe, *Black Mesa Landscape, New Mexico* (1965)

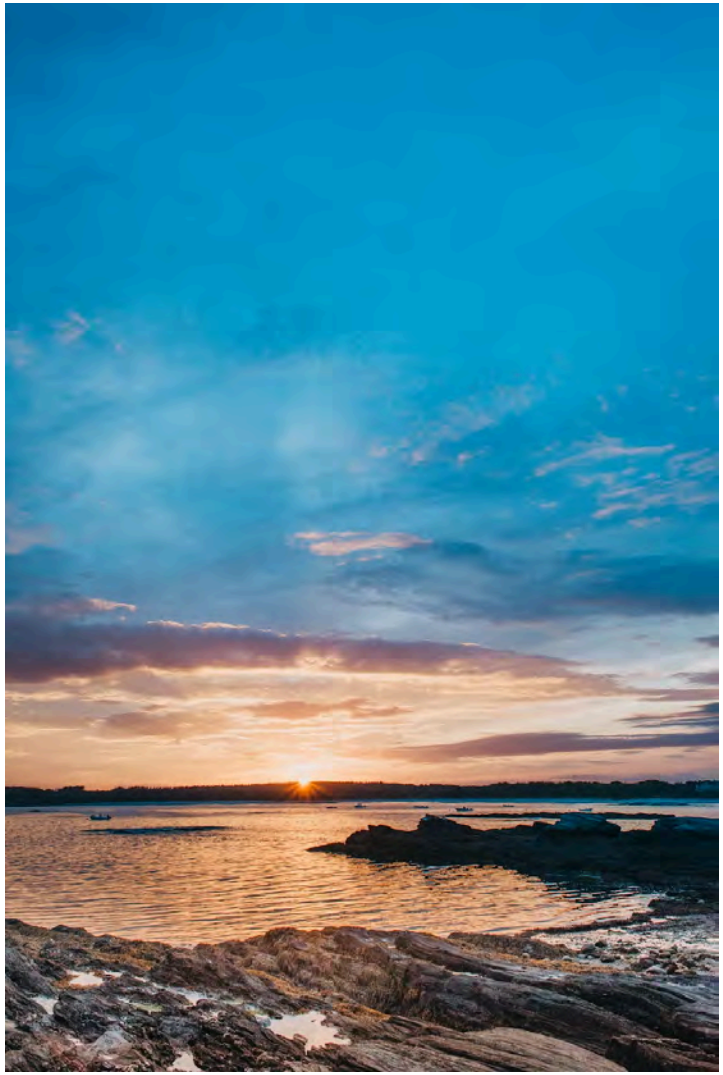
Jules Ernest Paul, *Les Voyageurs*, Haiti

Paul Gaugin, *Tahitian Landscape* (1891)

Henry Ossawa Tanner, *Coastal Landscape, France* (1912)

Ansel Adams, *The Tetons and the Snake River* (1942) Grand Teton National Park, Wyoming.

L. A. Roberts, *Yosemite Valley*



Kettle Cove, Casco, Maine
Julie Haider on Unsplash

Portland Head Lighthouse, Cape Elizabeth, Maine

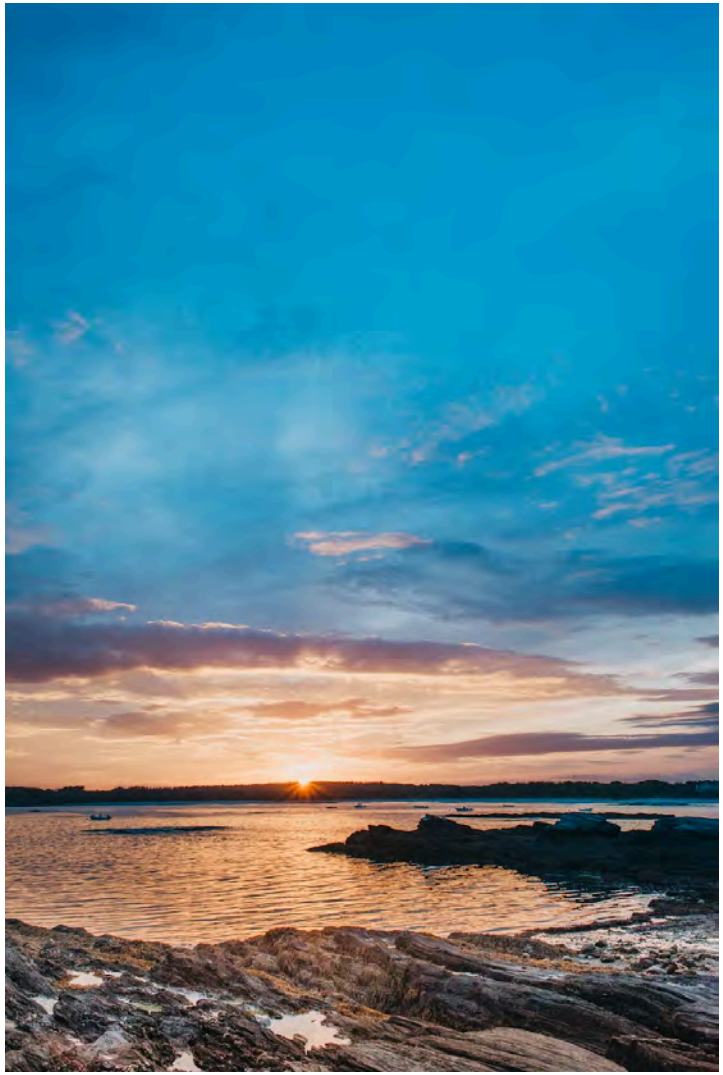
Mitch McKee on Unsplash

Boothbay Harbor, Maine
Jonah Hochstadt on Unsplash

on Pixabay

Acadia, Maine
Iperron on Pixabay

from worldatlas.com



Kettle Cove, Casco, Maine
Julie Haider on Unsplash


KIMBALLS CORNER
SONGO LOCK
SOUTH NAPLES
Kettle Cove
Kettle Cove Marina
EAST RAYMOND
302
Raymond
NORTH SEBAGO
Sebago Lake
EAST SEBAGO
Frye Island
302
LONG BEACH
NORTH WINDHAM
WARDS COVE
Steep Falls Wildlife Management Area
HARMON BEACH
STEEP FALLS
Google Maps

Portland Head Lighthouse, Cape Elizabeth, Maine
Mitch McKee on Unsplash

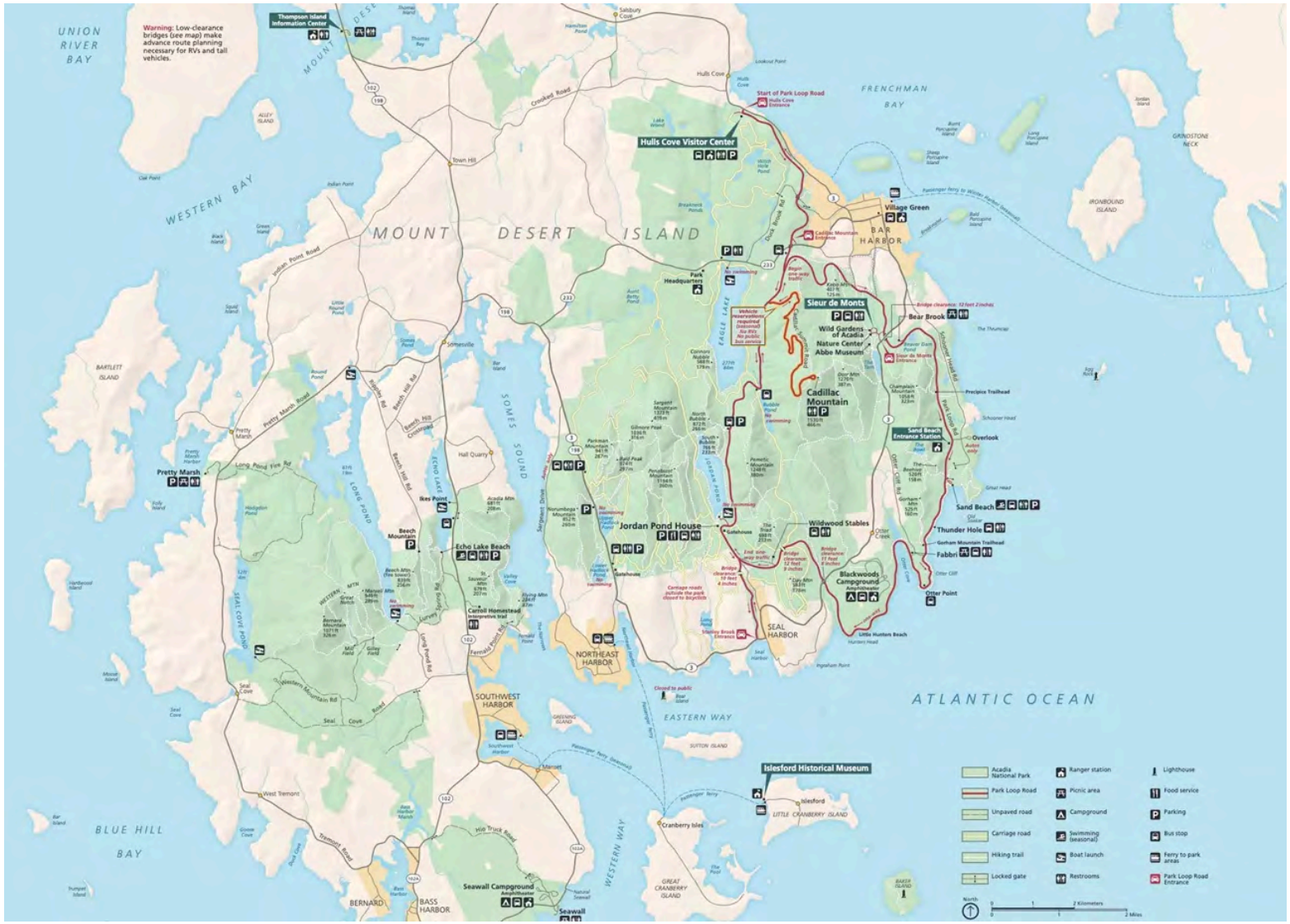

VISIT
PORTLAND
MAINE
Authentic By Nature
South Portland
Westbrook
PARKSIDE
BAYSIDE
EAST BAYSIDE
WEST END
ARTS DISTRICT
OLD PORT
EAST END
WATERFRONT
South Portland
Cape Elizabeth
KEY
RESTROOM
INFO CENTER
PARKING
HOSPITAL
PLAYGROUNDS
POPULAR PHOTO SPOTS
— Area Code of all of Maine is (207) —
CRUISES + TOURS
HISTORIC SITES + MUSEUMS
RECREATION + SPORTS

Boothbay Harbor, Maine
Jonah Hochstadt on Unsplash

https://www.boothbayharbor.com/live/discovery-maps-of-the-boothbay-region/

on Pixabay

Jordan Pond, Acadia, Maine
https://www.nps.gov/acad/planyourvisit/maps



https://www.nps.gov/acad/planyourvisit/maps.htm

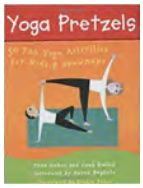
from worldatlas.com

Estimate and Measure Stage 2 Recording Sheet

Directions:

- Choose an object.
- Choose a unit to measure the length. (inches, feet, centimeters)
- Estimate how many units long your object is.
- Measure and record the actual measurement.

object	unit	estimate	actual measurement
example: crayon	*inches*	*5 inches*	*3 inches*

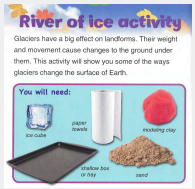
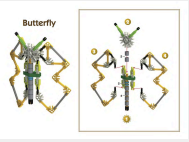


WEEK 1 Day 1

Writing Procedure

Deconstruction: Procedure Purpose

Content Objective	I can discuss the main purpose of a text. (R.9.2.b)
Language Objective	I can recount key details from a text to support my thinking. (SL.2.2.a, W.3.2,)
Vocabulary	**accomplish**: to complete successfully **directions**: instructions **genre**: a type of writing **goal**: aim; objective; what someone wants to accomplish **procedure**: a genre of writing whose purpose is to give directions to accomplish a goal **purpose**: the reason for doing or creating something
Materials and Preparation	To become familiar with the genre and how it is taught, read Writing: Introduction to Procedure (in the Introduction documents). ● procedure mentor texts, one text (one page) for each pair of children ● markers ● Procedure anchor chart images: mentor texts, cut apart ● chart paper Prepare the following Procedure anchor chart.

	Procedure **Purpose:** to give directions to accomplish a goal **Examples:**  Science  Art  Yoga  Building • Why We Write chart, from Unit 1, Week 1, Day 1 • *Yoga Pretzels*, Tara Guber and Leah Kalish, Rock card On the whiteboard, write the following questions, leaving space under each one to record children's ideas. Why did the author write this? What do you notice?
Opening 1 minute	*Today we are going to begin looking at a new genre of writing. When we learned about personal recount and argument we started by discussing each genre's **purpose**, or reason authors write them. In pairs you will look at a text and try to determine the author's purpose.*
Deconstruction 28 minutes	Refer to the questions on the board. *With a partner, read the text. Discuss these two questions: Why did the author write this? and What do you notice? Be prepared to share your ideas and observations with the group.* Provide each pair with a procedure mentor text to analyze. As children work, circulate to support them and refer them to the questions. Give children about 10 minutes to work together, then bring them back to the whole group. One at a time, have each pair hold up their procedure text to show their classmates. Ask, "Why did the author write this?" and "What did you notice?" Write the pairs' responses on the whiteboard. As pairs share, think aloud to highlight the trends in their responses.
	Each pair looked at a different text. Some of these texts look similar,

	and some look very different. All of these texts are procedures. Introduce the Procedure anchor chart. *As you discovered, authors write **procedures** to give directions to accomplish a goal.* Refer to the River of Ice Activity on the Why We Write chart. *In the first week of school we looked at this procedure. Is there any other information we would like to add about the purpose of procedure?*
	Hold up the Rock yoga card. *What is the goal of this procedure; what does the author want us to do?* *Let's follow the directions on this card to reach the goal.* Read each step to guide children through moving into the yoga pose.
Closing 1 minute	*Today we began learning about a new genre called procedure, which is written to give directions to accomplish a goal. Tomorrow we will look closely at a procedure to learn about its structure.* Note: Leave the Procedure anchor chart posted. It will be referenced and added to it throughout the unit.
Standards	**R.9.2.b** Identify the main purpose of a text, including what the author wants to answer, explain, or describe. **W.3.2** Use a combination of drawing and writing to communicate a topic with a beginning, middle (including details), and an end. **SL.2.2.a** Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.
Ongoing assessment	Capture children's responses by taking a picture of the whiteboard or by taking notes. What do children already know and notice about the structure of procedures? What do they know and notice about the language? How do children interpret the purpose of procedures?

River of ice activity

Glaciers have a big effect on landforms. Their weight and movement cause changes to the ground under them. This activity will show you some of the ways glaciers change the surface of Earth.

You will need:

20

Steps

1. Flatten a small ball of clay onto the tray.
2. Move the ice cube back and forth over the clay several times. Look for changes in the surface of the clay.
3. Now place some sand on top of the clay. Put the ice cube on top of the sand and leave it for one minute.
4. Pick up the ice cube and look at the side that was touching the sand. What do you see?
5. Place the sandy ice cube back on the clay. Press it down, and move it back and forth several times.
6. Remove the ice cube. Use a paper towel to gently brush the sand off the clay.

Asking questions

- What changes did you notice on the surface of the clay after you rubbed the sandy ice cube on it?
- What do you think would happen if the sand was replaced with bigger rocks?
- How does this activity teach us how glaciers change the surface of Earth?

21

procedure mentor texts: Science

Make a River

What you need:

- a strong piece of cardboard
- a bucket of sand
- a block of wood or a box
- a full pitcher of water

What you do:

1. Work outside! Wet the sand in the bucket.
2. Put the sand on the cardboard. Make hills and valleys so it looks like a real landscape.
3. Put the block or box under one end of the cardboard so it tilts slightly.
4. Slowly pour the pitcher of water on the high end of the sandy landscape.
5. Watch how the water travels and cuts the quickest path to the bottom. Notice how water carries sand with it.
6. Make a new landscape and try tilting the landscape to the right or left. See if anything different happens.

What do you think will happen to your sandy landscape if you pour more slowly or more quickly?

What do you think will happen if you pour water on dirt, rock, or concrete?

procedure mentor texts: Science

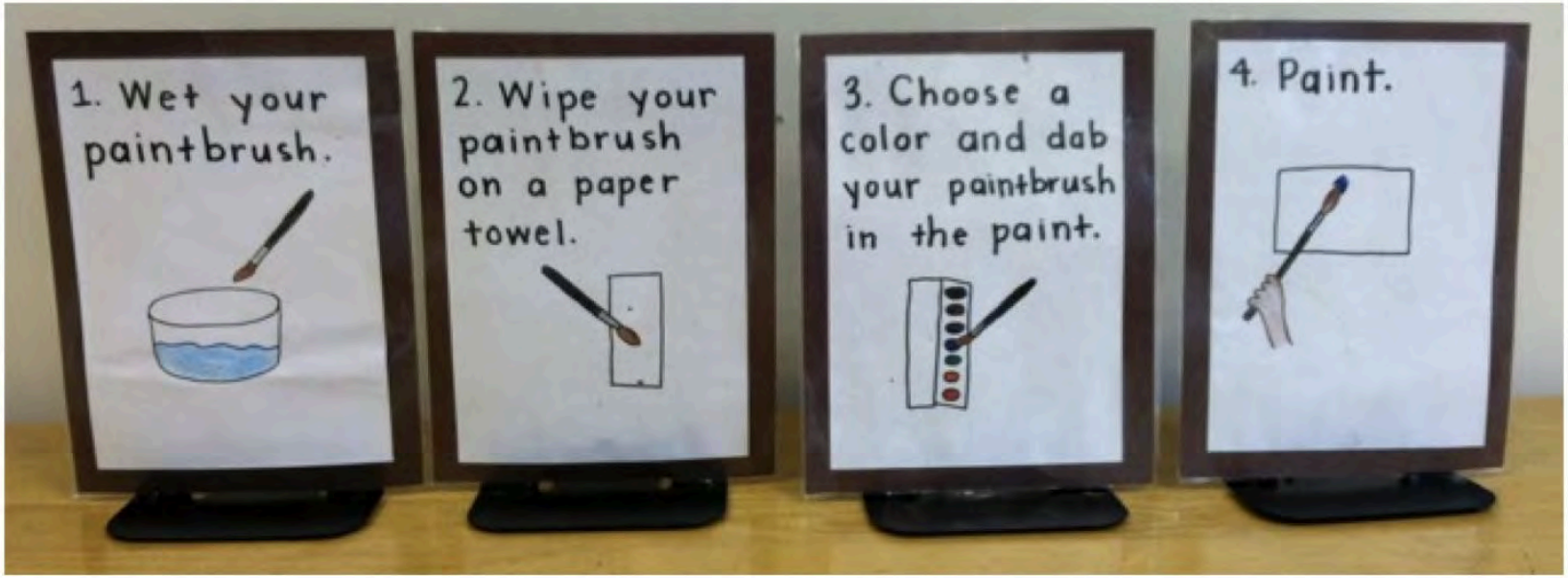
Making models

Earth is made up of many landforms. You can make your own model out of salt dough to see and better understand some of Earth's landforms.

Steps

1. Search on the Internet for photos of "Physical Maps."
2. Choose a **region** or country to model. Try to find an area with at least four landforms.
3. Draw or trace the shape of your area on the cardboard.
4. Press some of the salt dough onto the cardboard. Flatten it to the outline of your region.
5. Using the map to guide you, add dough to build up raised landforms, such as hills, mountains, and plateaus.
6. Shape low landforms such as rivers and valleys.
7. Let your model dry for about 1 or 2 days.
8. Paint your landforms. Use different colors. Water can be blue. Then use different colors for higher sections. Green can be the lowest land, then yellow, then orange, and red for the highest land.
9. Add a color key to tell others what the colors mean.

Steps for Watercolor Painting



Score and Slip

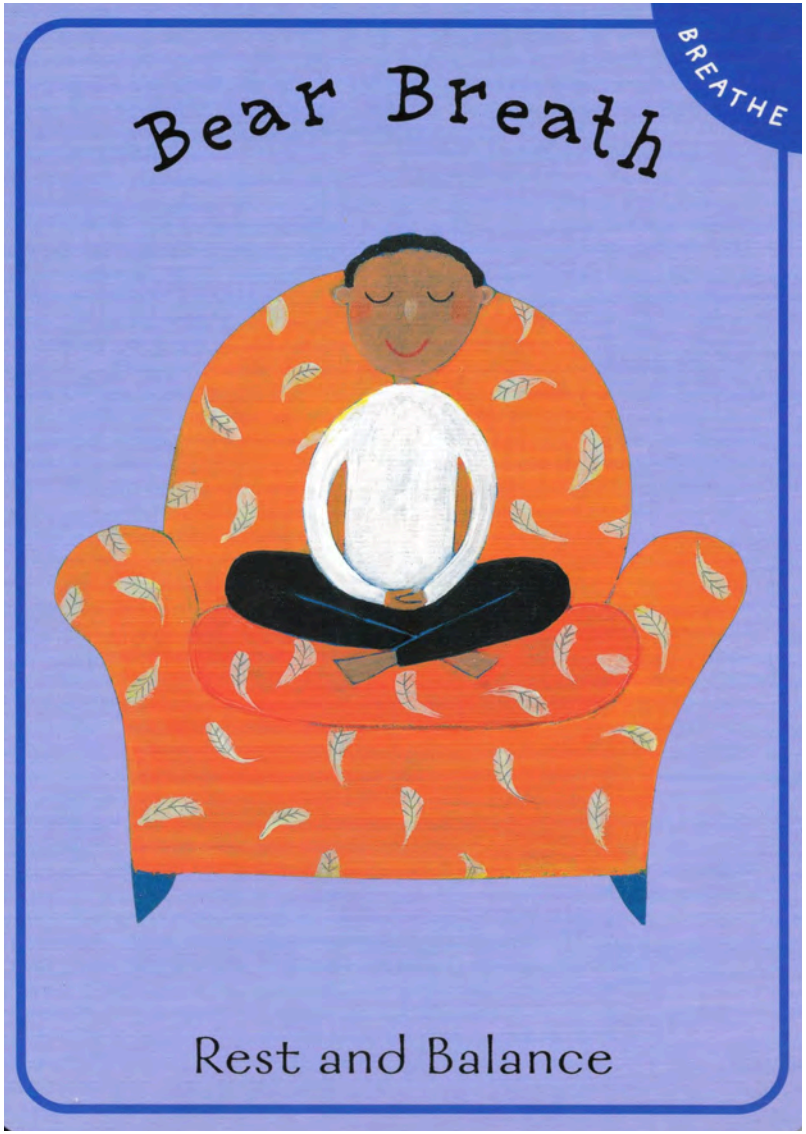
1. Score (scratch) both pieces of clay with a fork or another tool.

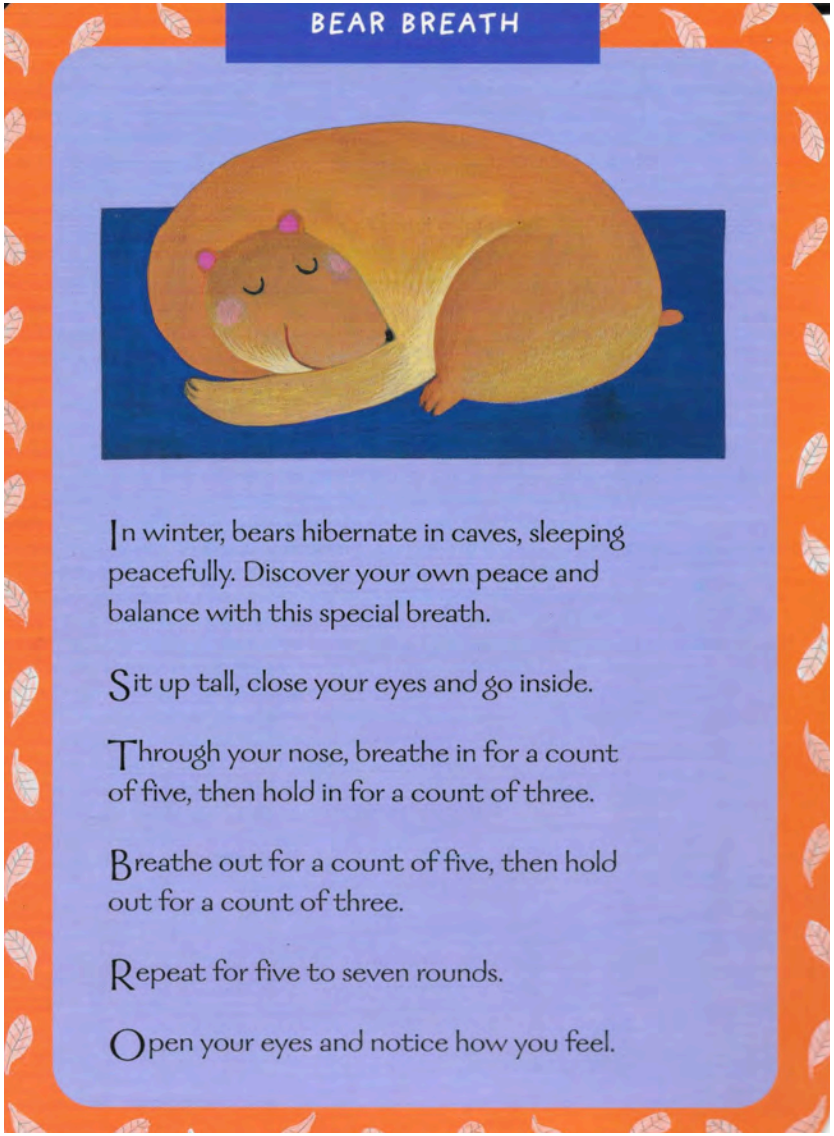
2. Apply slip to both pieces of clay.

3. Press the two pieces together.

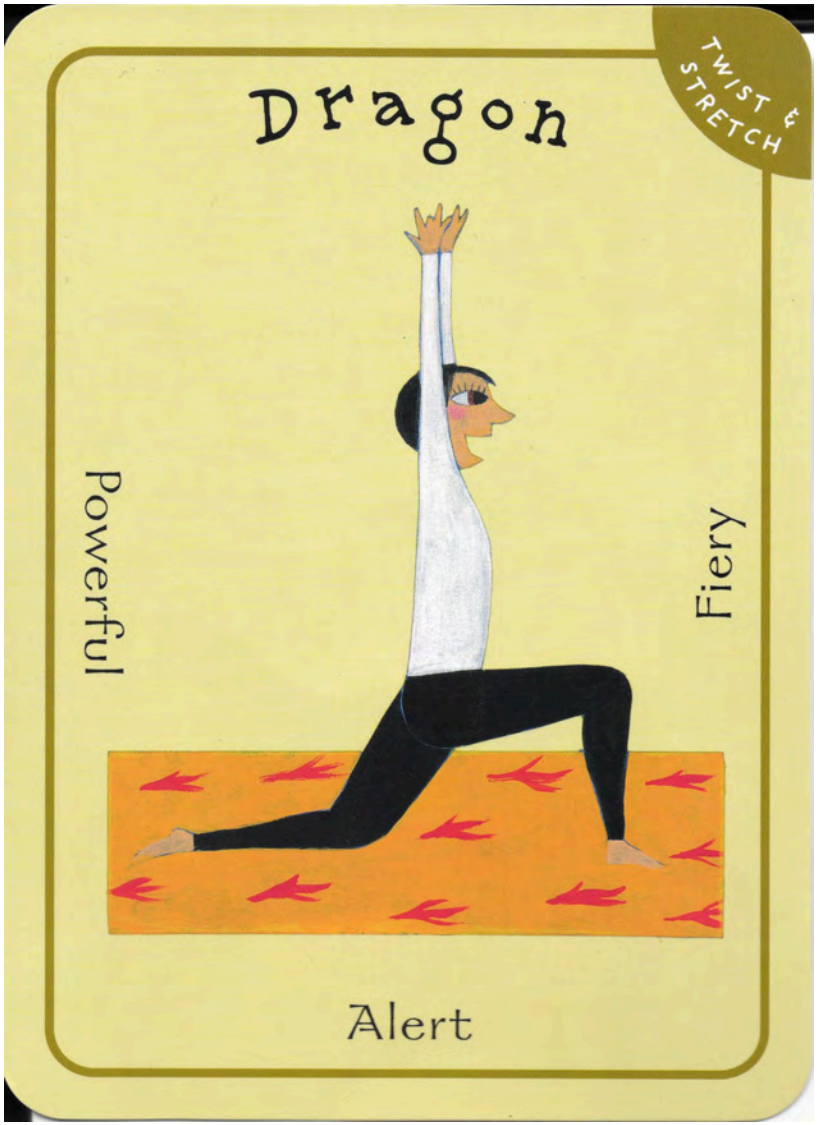
4. Now the two pieces are attached!

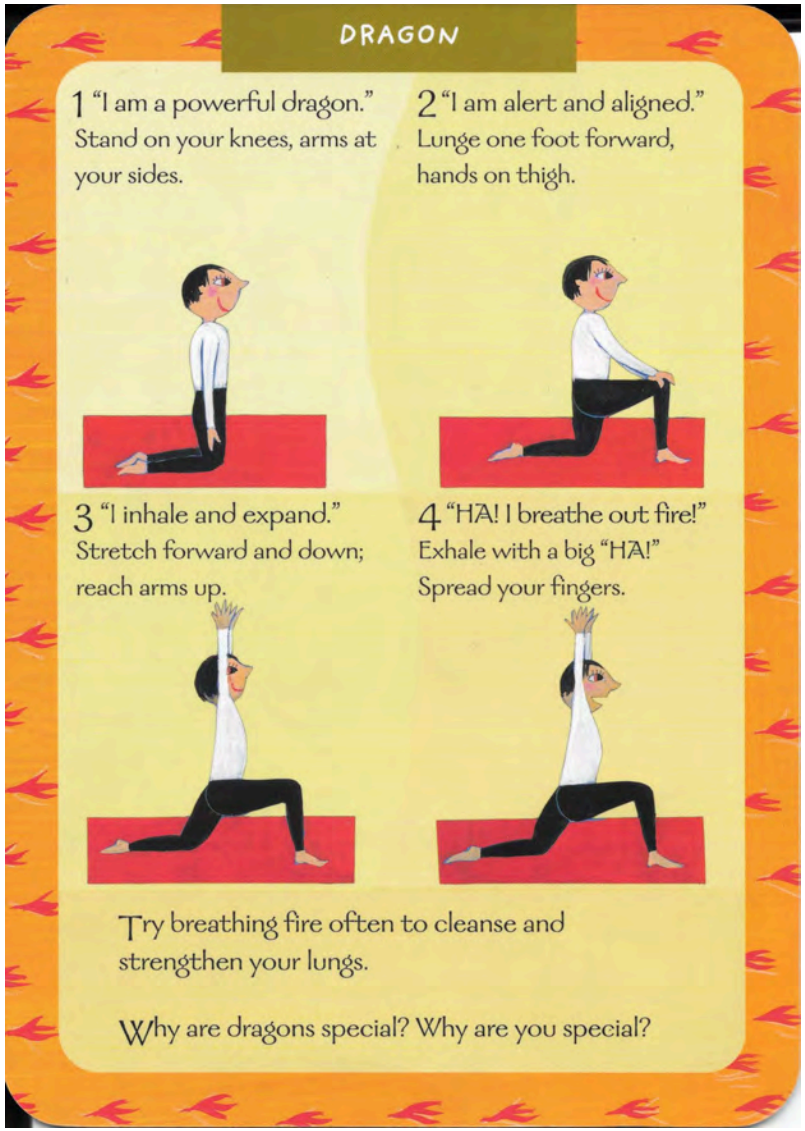
procedure mentor texts: Yoga



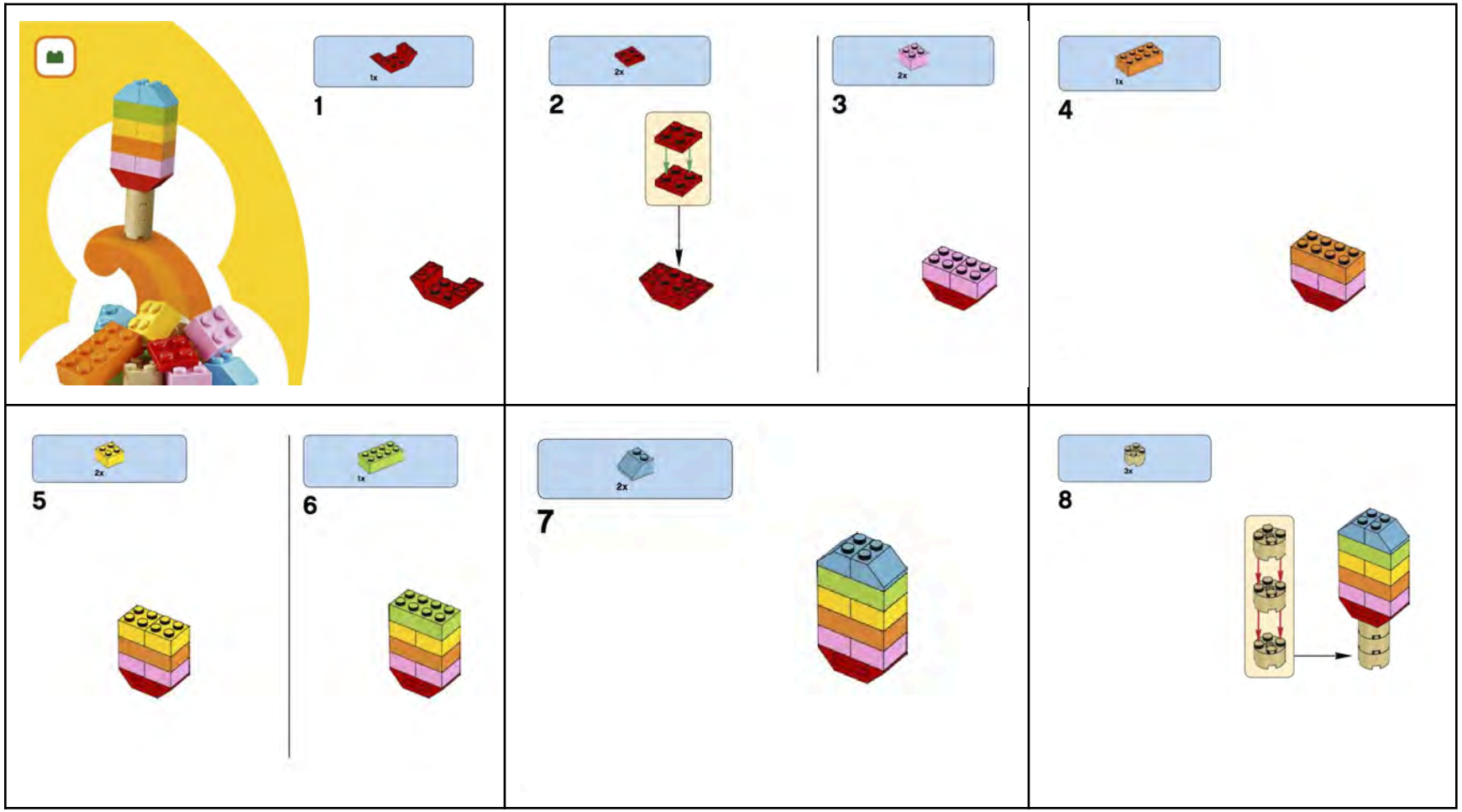


procedure mentor texts: Yoga

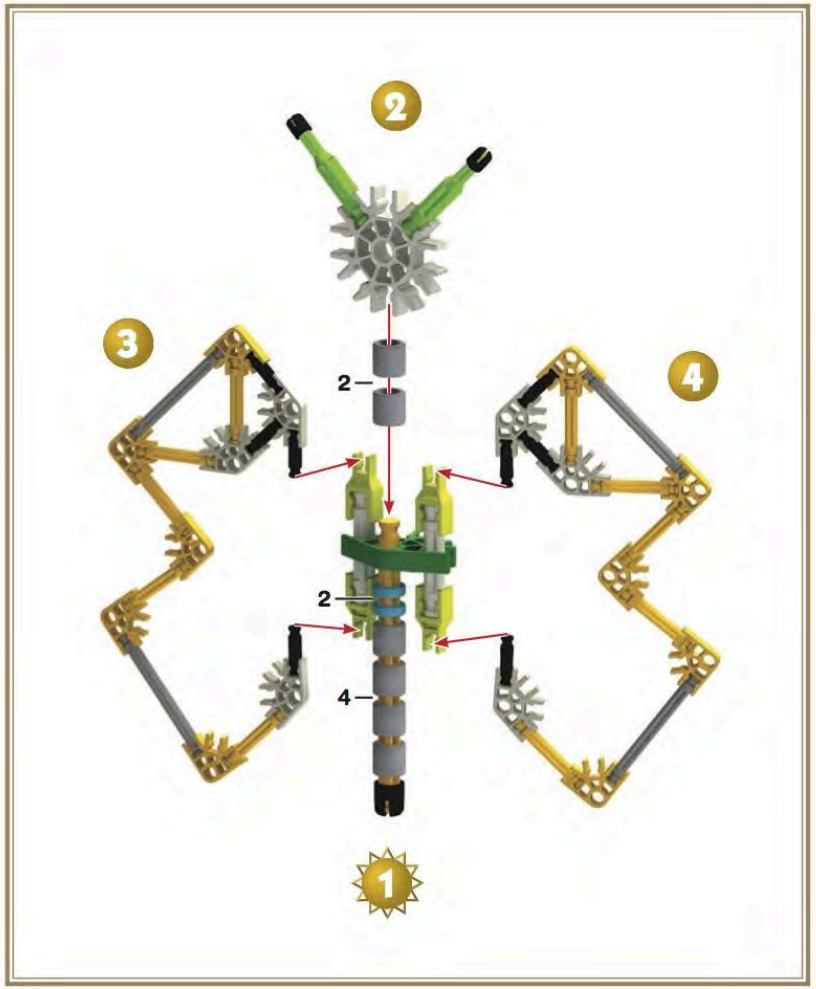




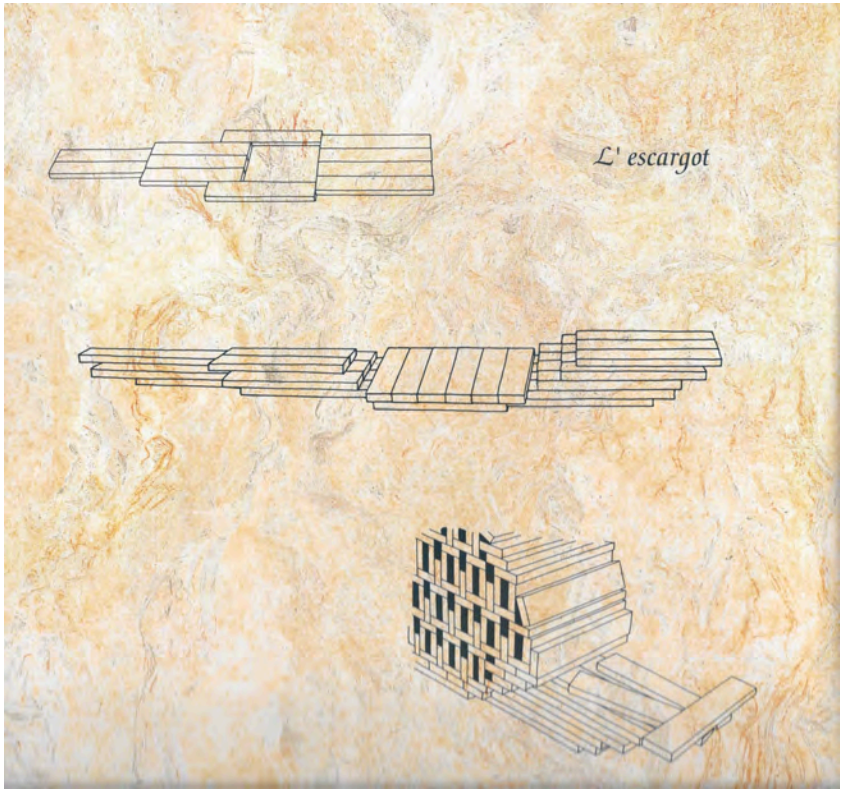
procedure mentor texts: Building

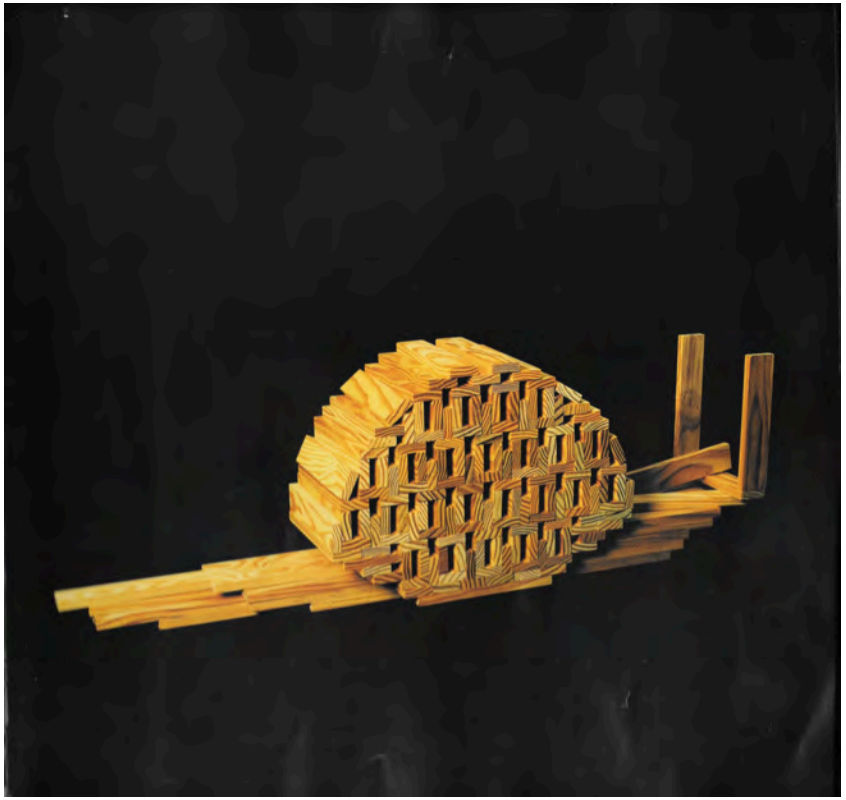


procedure mentor texts: Building



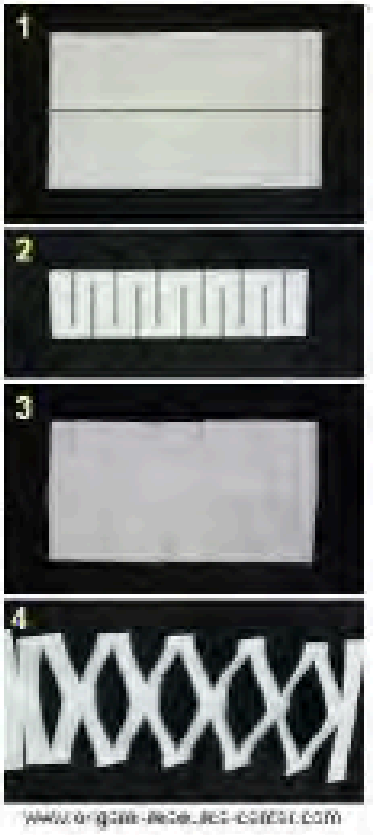
procedure mentor texts: Building





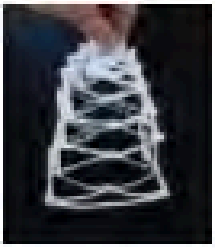
Easy Kirigami Decoration

This easy kirigami decoration is a classic. It's easy to make and fun to play with. Kids will love it. If you are ready for something a little more challenging, you can also try the hanging kirigami decoration.



Easy Kirigami Decoration Instructions

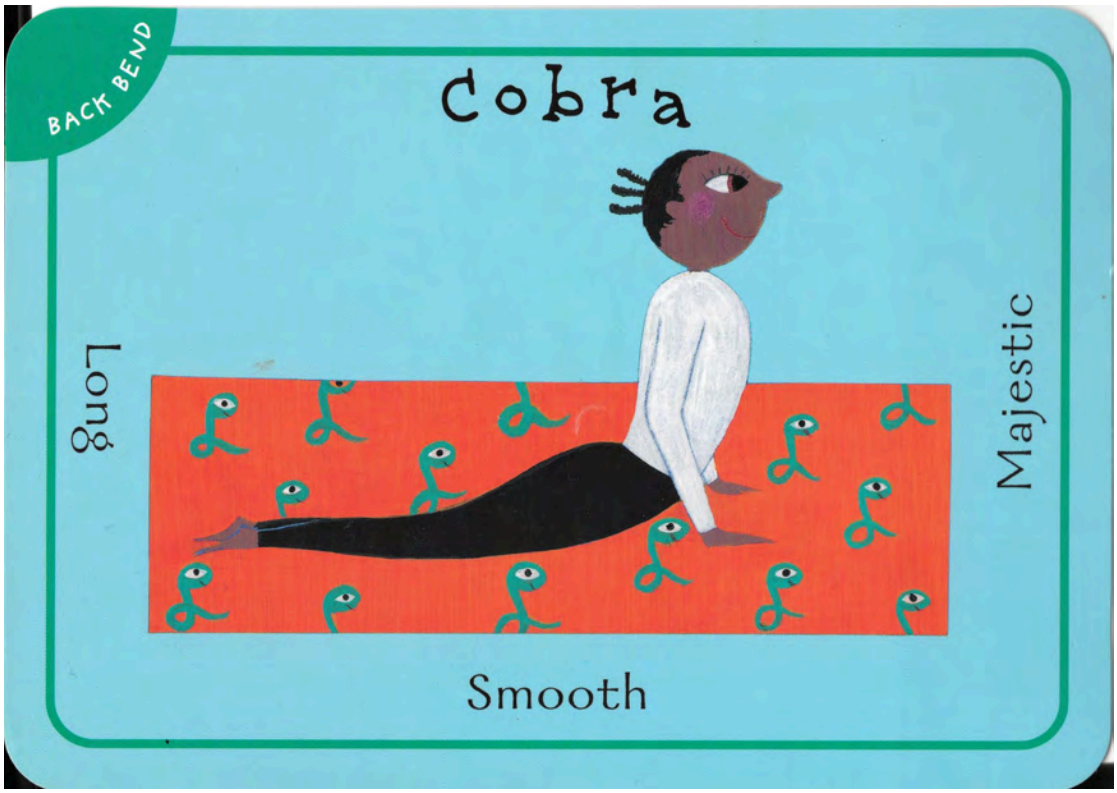
1. Start with a rectangular sheet of paper. In this example, we used 3" x 5". Fold the paper in half lengthwise.
2. Cut the paper along the lines as shown. First cut from top to bottom; then cut from bottom to top. Continue in this alternating manner to the end of the sheet. Be sure to cut up to the edge but do not cut the paper completely so that it falls apart into segments.
3. Carefully unfold the cut paper.
4. Grasp the paper at the two short ends and pull apart. This will give a cool springy cut-out. It can be a toy or you can connect lots of them end to end to make a streamer-like decoration.

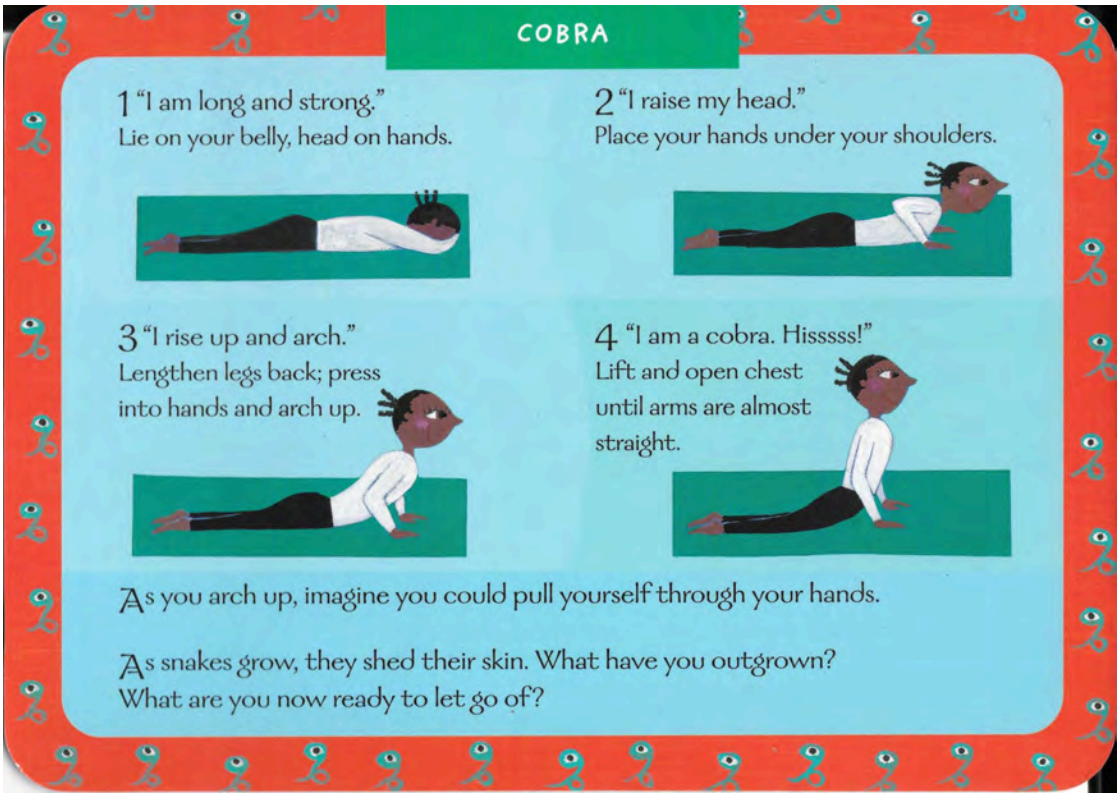


Variations:

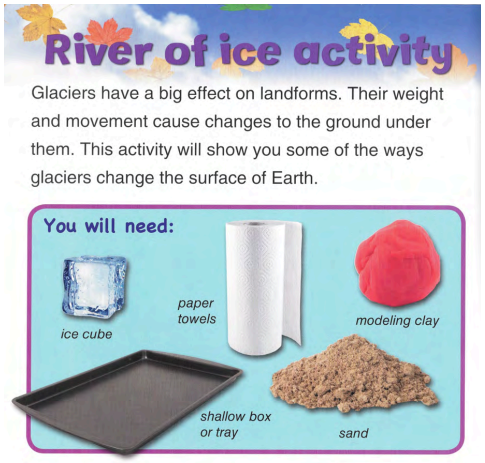
- Use a a wider sheet of paper and fold it into 4ths (up-and-down like an accordion or fan). Cut the paper as described above to get three rows of springs.
- Start with a square sheet of paper and make a 3-dimentional hanging decoration. See instructions here.

procedure mentor texts: Yoga

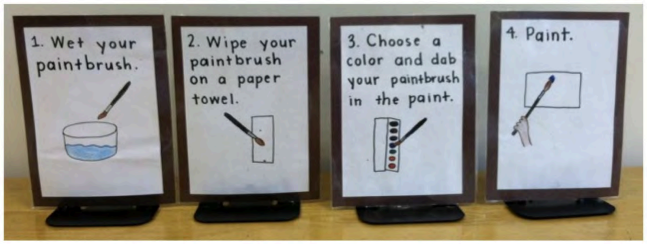




Procedure anchor chart images: mentor texts

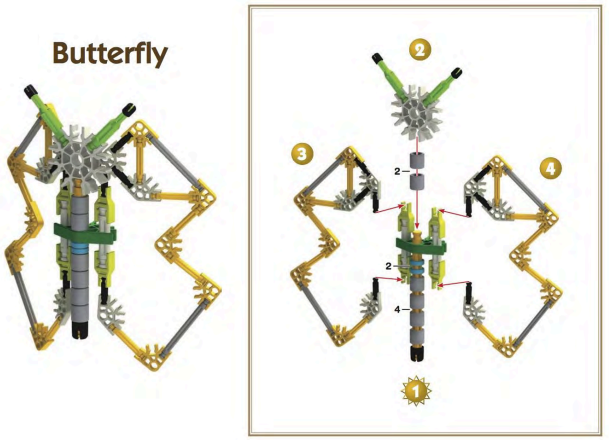


Science

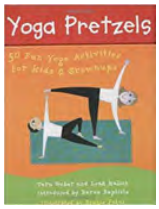


Art

Yoga



Building



WEEK 1 Day 2

Writing Procedure

Deconstruction: Procedure Stages

Content Objective	I can name and order procedure stages. (W.3.2, W.2.2.a)
Language Objective	I can ask and answer questions to understand procedure stages. (SL.2.2.b)
Vocabulary	**accomplish**: to complete successfully **directions**: instructions **goal**: aim; objective; what someone wants to accomplish **materials**: the items needed to complete a procedure **procedure**: a genre of writing whose purpose is to give directions to accomplish a goal **purpose**: the reason for doing or creating something **stages**: the parts of a piece of writing **steps**: the actions taken to complete a procedure **title**: the name of a piece of writing
Materials and Preparation	• Procedure Stages, cut apart on the dotted lines The procedure has 11 parts. Pairs of children will discuss each part of the procedure. Before the lesson, plan strategic pairings. • tape • *How Do Wind and Water Change Earth?*, Natalie Hyde Flag pages 20-21. • markers • Procedure anchor chart, from Day 1 Under the mentor texts, write Stages:. • Bear Breath slide
Opening 1 minute	With the children seated on the perimeter of the rug, refer to the Procedure anchor chart. *Yesterday we began to talk about procedure. We learned that the*

	*purpose of writing **procedures** is to give directions to accomplish a goal. Today we are going to talk about the **stages**, or parts, of procedures.*
Deconstruction 28 minutes	Pair children. Distribute one piece of the Procedure Stages to each pair. *Each pair has a piece of a procedure. Together, read your part. Talk together to figure out where it might belong in the procedure.* Allow several minutes for the children to read and discuss their pieces. *Who thinks they might have the first piece of the procedure? Why do you think that?* Continue asking questions to work as a class to sequence the procedure. Under Stages:, affix the procedure to the anchor chart, in order. As each piece is placed, reread what came immediately before, to make sure it makes sense. Once all pieces have been affixed, reread the entire procedure. Then, check it against pages 20-21 in *How Do Wind and Water Change Earth?* Guide the children through a conversation about the stages of procedure, identifying and labeling each stage in the River of Ice activity. See the example below. *Procedures have different **stages**, or parts.* *The first stage of a procedure is the goal. The **goal** is what the writer wants the reader to accomplish by doing the procedure. Sometimes the goal is included in the title.* *What is the title of this procedure?* *Which part of this procedure is the goal?* *After the goal comes a list of materials needed to complete the procedure. Which part of this procedure lists the materials?* *Next are the steps. The **steps** tell the reader exactly what to do.* *Where are the steps? What do you notice about the steps?* Emphasize to the children that the steps are written in order, in a numbered list, with each step beginning on a new line. *Sometimes procedures end after the steps, and sometimes they include an evaluation or final comment. Does this procedure include an evaluation or final comment?* [Yes, the "Asking questions" section is considered a final comment.] **Procedure**

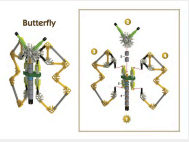
Purpose: to give directions to accomplish a goal

Examples:

Science

Art

Yoga



Building

Stages:

goal →

materials →

steps →

final comment →

slide 2

Let's take a look at another procedure. See if you can name the stages as we go through it.

Show slide 2. Use the following questions to discuss the stages of the procedure.

What is the title of this procedure? Where is it on the card?

What is the goal? Where is it; is it part of the title or listed separately?

What materials are needed for this procedure? Where are they on the card? [The materials are not listed on the yoga cards, because all that is needed is the person's body.]

	What are the steps? What is the same about these steps as the steps in the River of Ice activity? What is different? [They are in a list and in order, but they are not numbered.] Follow the steps to do Bear Breath together as a class.
Closing 1 minute	*Today we learned about the stages of procedure. Tomorrow we will begin to look at the language of procedure.*
Standards	**W.3.2** Use a combination of drawing and writing to communicate a topic with a beginning, middle (including details), and an end. **W.2.2.a** With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing. **SL.2.2.b** Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
Ongoing assessment	Reflect on the whole group work. What do children know about the order of procedure? What are their confusions? Can the children name the stages and identify them in a text?

Notes

River of ice activity

Glaciers have a big effect on landforms. Their weight and movement cause changes to the ground under them. This activity will show you some of the ways glaciers change the surface of Earth.

Steps

1. Flatten a small ball of clay onto the tray.

2. Move the ice cube back and forth over the clay several times. Look for changes in the surface of the clay.

3. Now place some sand on top of the clay. Put the ice cube on top of the sand and leave it for one minute.

4. Pick up the ice cube and look at the side that was touching the sand. What do you see?

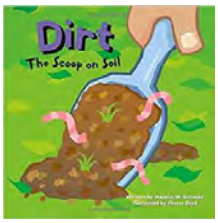
5. Place the sandy ice cube back on the clay. Press it down, and move it back and forth several times.

6. Remove the ice cube. Use a paper towel to gently brush the sand off the clay.

Asking questions

- What changes did you notice on the surface of the clay after you rubbed the sandy ice cube on it?
- What do you think would happen if the sand was replaced with bigger rocks?
- How does this activity teach us how glaciers change the surface of Earth?

21



WEEK 1 Day 3

Writing Procedure

Deconstruction: Images

Joint Construction: Soil Experiment

Content Objectives	I can discuss the role of images in a procedure. (R.11.2.c, R.11.2.d, W.3.2) With my class, I can complete a procedure. (W.3.2)
Language Objective	I can discuss each step in a procedure. (SL.1.2)
Vocabulary	**accomplish**: complete successfully **audience**: an individual or group for whom a piece of writing is composed **goal**: aim; objective; what someone wants to accomplish **image**: a representation of something in the form of a drawing, photograph, etc. **materials**: the items needed to complete a procedure **procedure**: a genre of writing whose purpose is to give directions to accomplish a goal **stages**: the parts of a piece of writing **steps**: the actions taken to complete a procedure **title**: the name of a piece of writing
Materials and Preparation	• *Dirt: The Scoop on Soil*, Natalie M. Rosinksy Read the experiment on page 6. Flag this page. • building procedures, one text (one page) for each pair of children • camera • glass jar • topsoil, packaged, or soil collected from home or the schoolyard • water • popsicle stick
Opening	Show *Dirt: The Scoop on Soil*.

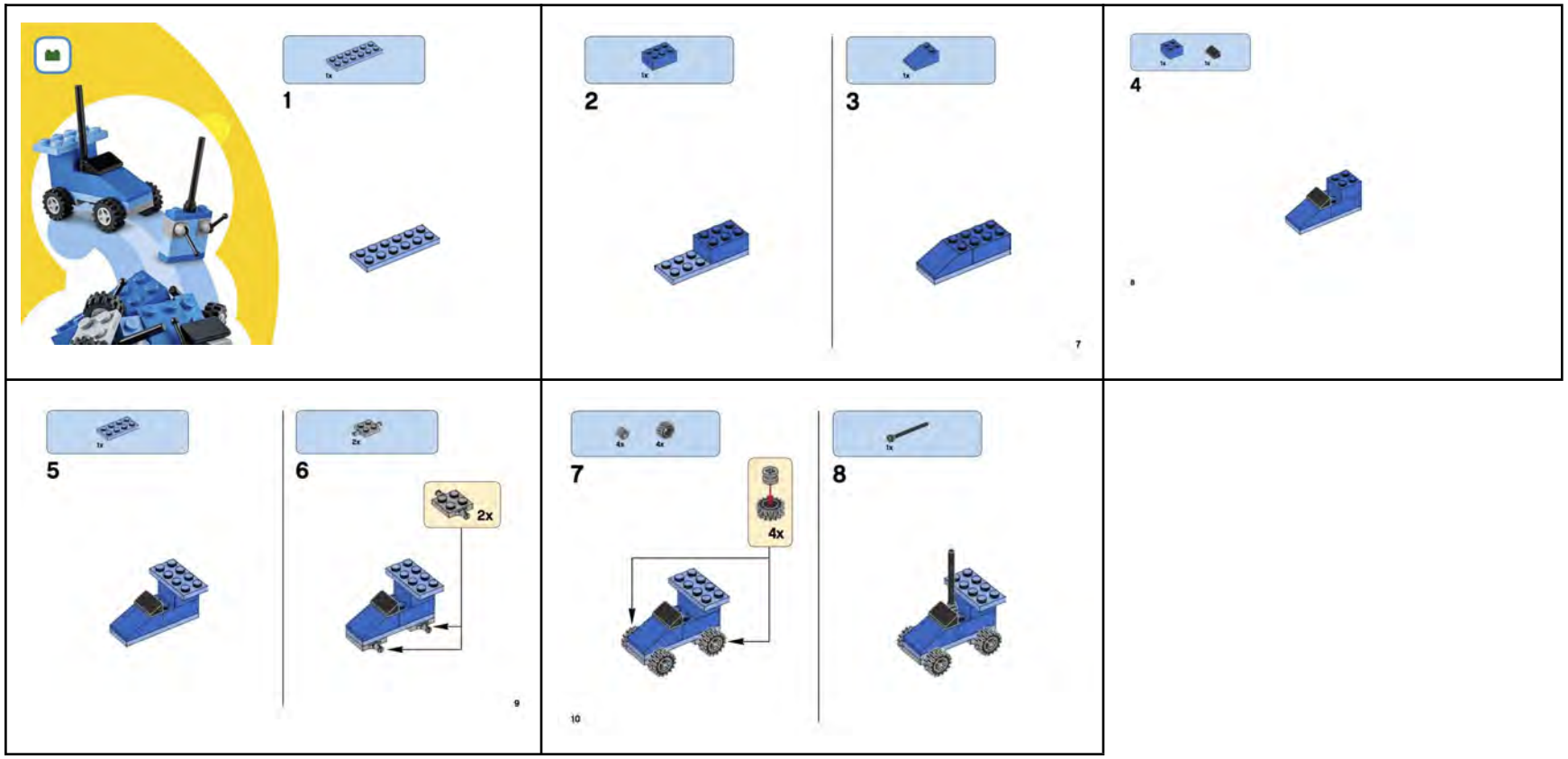
1 minute	*This book is called* Dirt: The Scoop on Soil*. Many of you read this book in Kindergarten. We will be reading it together during Text Talk, but for today we are going to do a science experiment from this book. After we do the experiment ourselves, we are going to write a procedure that is easy for Kindergarten students to follow. They will read this book in the spring and might want to try this experiment too!*
Deconstruction 8 minutes	*Before we begin our experiment, let's take a look at these procedures.* With the children still seated on the rug, distribute the building procedures, one to each pair. Allow the children one or two minutes to silently look at them. *What do you notice about these procedures? What is the same as the other procedures we have looked at?* [the purpose: to give directions to accomplish a goal; the stages: title, materials, steps] *What is different from the other procedures?* [no words except the title; materials are sometimes not listed or listed with each step, rather than at the beginning] *What would be easy about following this procedure?* [the images help readers to understand exactly what to do and where to put things] *What would be difficult about following this procedure?* [without a materials list, readers do not know what to gather ahead of time; the K'NEX procedures do not include each step] *Often procedures include both images and words to help readers understand exactly what to do.* *Let's think about the audience for our soil procedure: Kindergarten students. Some children in Kindergarten can read, but many would not be able to read the words in a procedure by themselves. As we do the science experiment today, we will take photographs to add to our procedure. These images will help Kindergarten students complete it.* Collect the building procedures.
Joint Construction 20 minutes	*Now let's do an experiment!* Without showing the illustration, read the following directions from page 6 of *Dirt: The Scoop on Soil*:

	"Put some soil into a big glass jar and fill it with water. Stir and wait." *This procedure does not include all of the procedure stages that we have discussed. Let's try it today and then rewrite it so that Kindergarten students can follow it easily.* Use the (more precise) instructions below to complete the experiment. This language will inform the procedure constructed by the class. Enlist the help of different children to complete and photograph each step of the procedure. The photographs should focus closely on the children's hands and the materials needed to complete the step; it is not necessary to photograph the children's faces or whole bodies. Reread the original procedure. *Put some soil into a big glass jar and fill it with water. Stir and wait.* *What are the materials needed for this procedure?* Name and photograph each material. *It says "Put some soil into a big glass jar…" This is the jar we will use. It is a one-quart jar. How much soil should we use?* *We're going to fill the jar two-thirds of the way, or a little more than halfway, with soil.* Fill the jar two-thirds full with soil. Take a picture as a child is finishing filling the jar. *After that it says "...and fill it with water."* Fill the jar to the top with water. Take a picture as a child is filling the jar. *Now it says, "Stir…"* Stir the soil and water mixture with a popsicle stick. Take a picture as a child is stirring. *I bet we could stir this even more if we shook it up. Let's screw the lid on tightly so it doesn't leak.* Screw the lid tightly onto the jar. Take a picture as a child screws on the lid. Shake the jar until the soil and water are fully mixed. Take a picture as a child is shaking. *The last part of the procedure says "...and wait." Let's find a safe place to keep the jar over the next few days.*

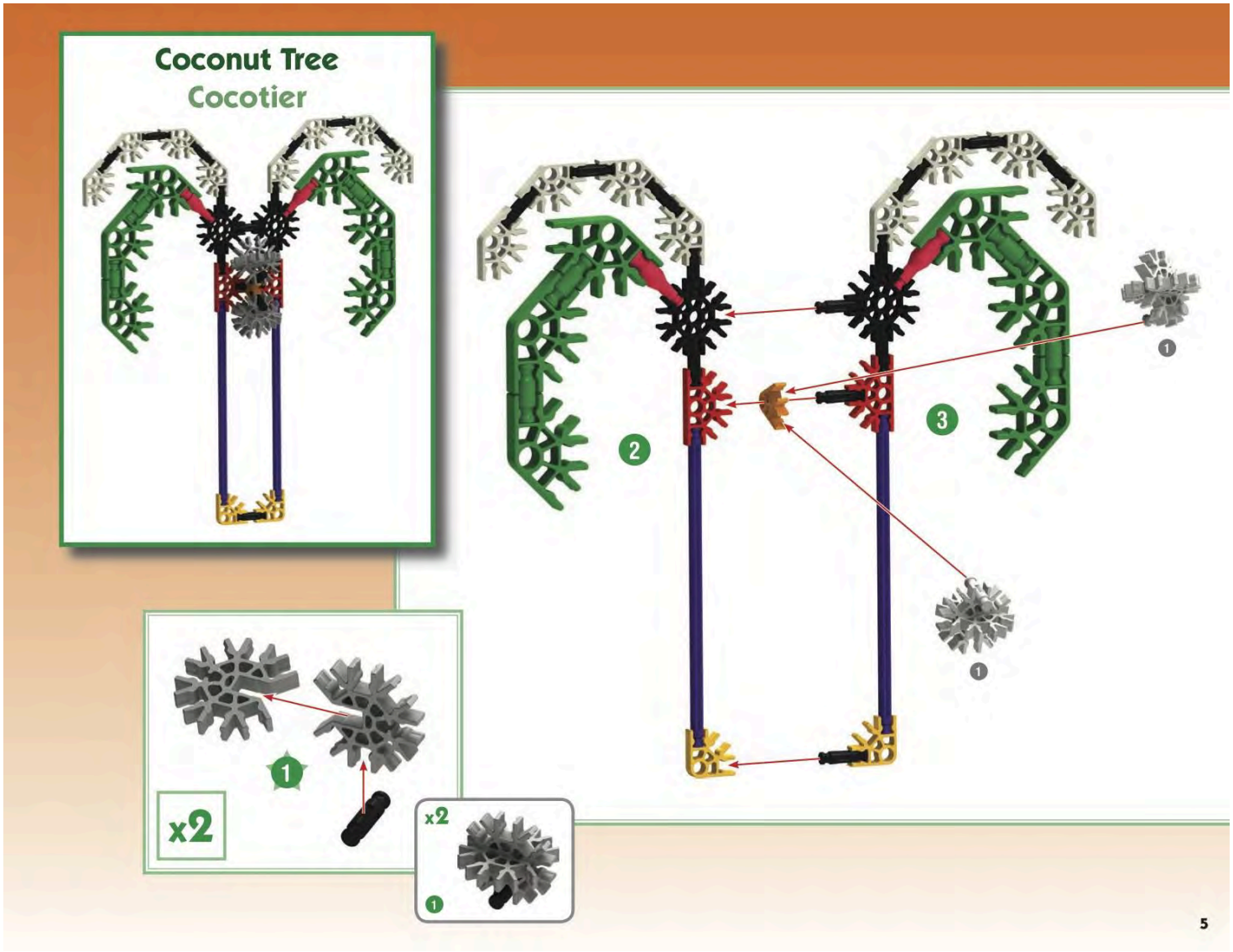
	Leave the jar in a safe place to sit and settle for the rest of the week. Take a picture of the jar in place.
Closing 1 minute	*Children in Kindergarten will be so excited to do this soil experiment! Tomorrow we will review our images and begin adding words to our procedure. Also, during Text Talk next week we will observe and discuss the results of our experiment.* Notes: ● Print the photos for use in the Day 4 lesson. ● Keep the soil experiment in the jar, visible to children, for Text Talk Week 2, Day 1 and for ongoing reference.
Standards	**R.11.2.c** Explain how specific visuals contribute to and clarify the meaning of a text. **R.11.2.d** Compare and contrast the information presented by two texts on the same topic. **W.3.2** Use a combination of drawing and writing to communicate a topic with a beginning, middle (including details), and an end. **SL.1.2** Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.
Ongoing assessment	Reflect on the whole group discussion. What observations do children make about the similarities and differences between different types of procedures? What do children understand about the role of images in procedure? What are their confusions? Reflect on the class work. How much support do children need to carry out the procedure? What language do children use as they complete the procedure? Are any materials or steps missing?

Notes

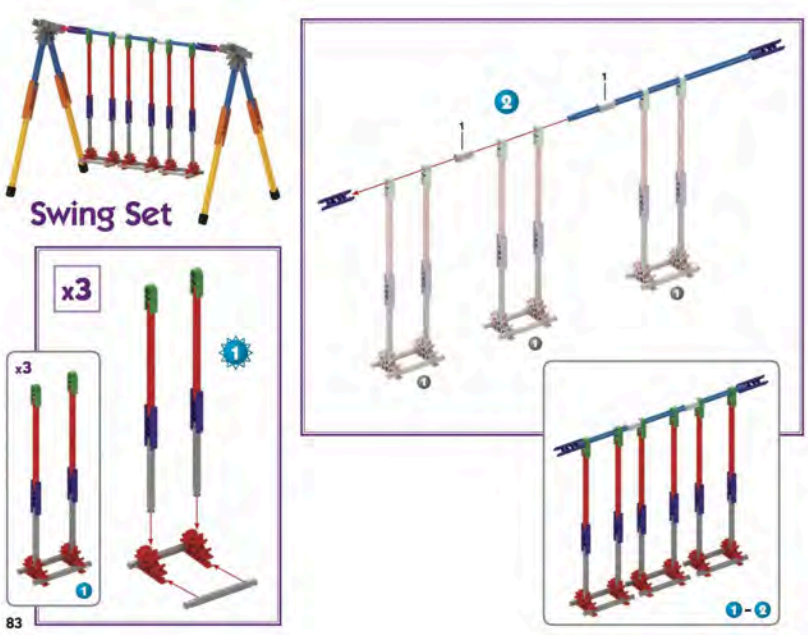
procedure mentor texts: Building

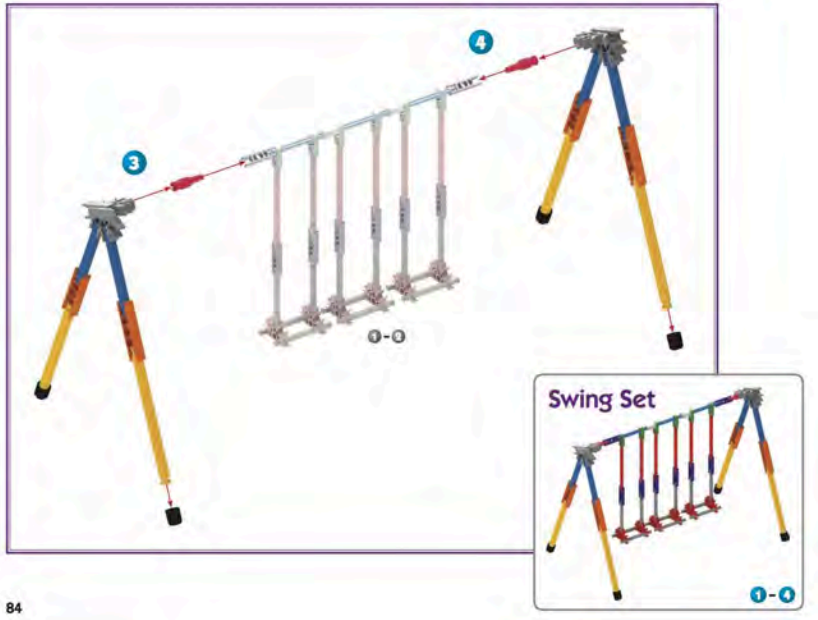


procedure mentor texts: Building

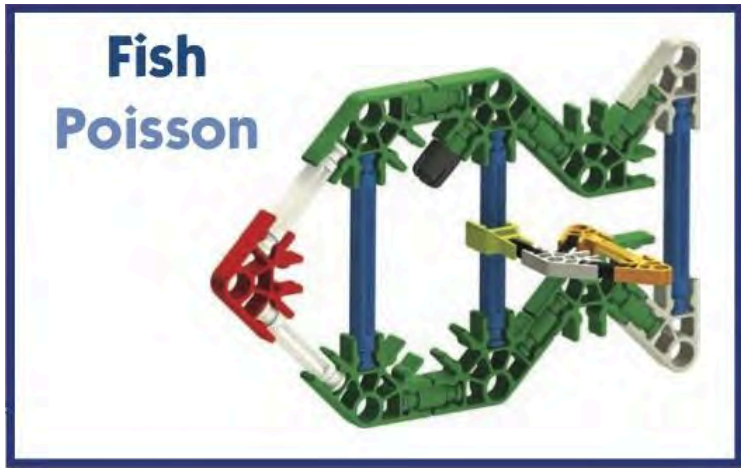


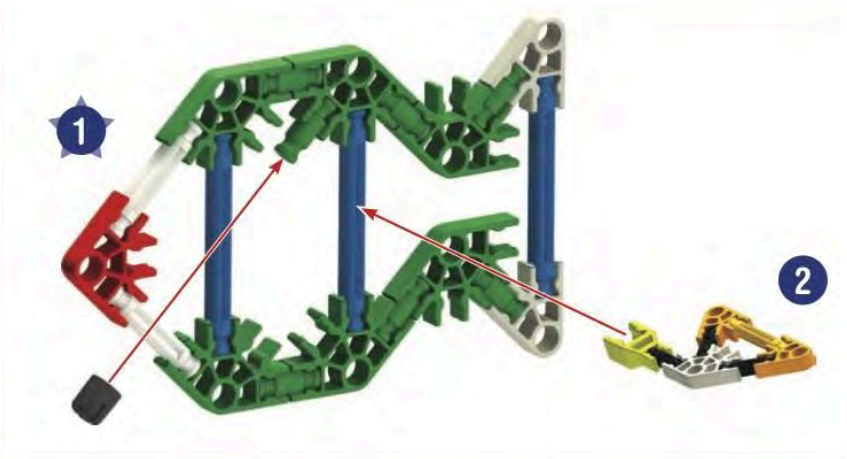
procedure mentor texts: Building





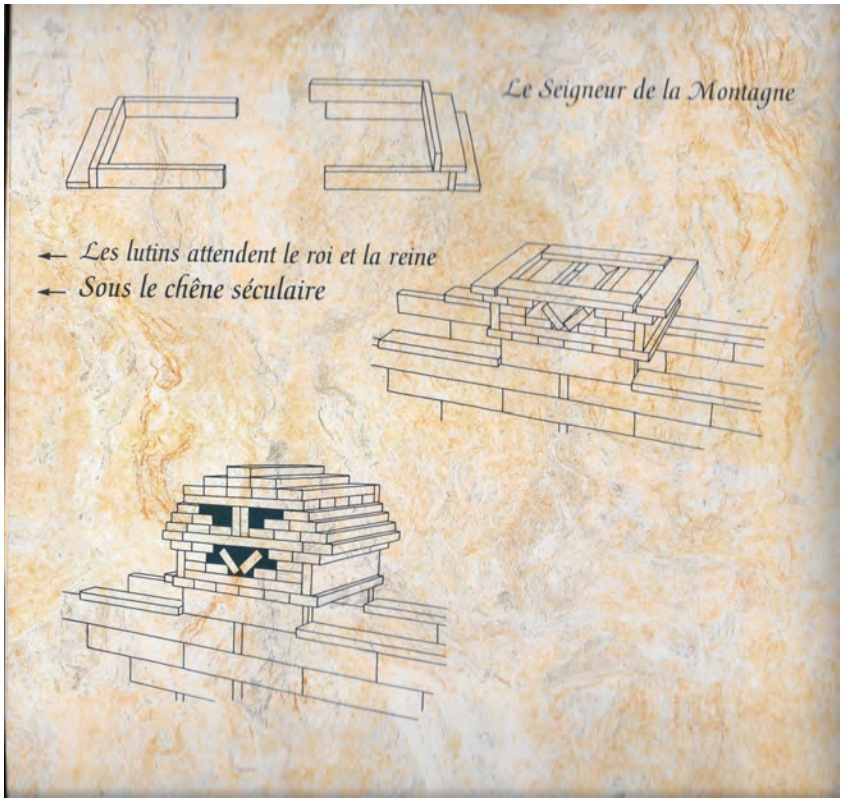
procedure mentor texts: Building



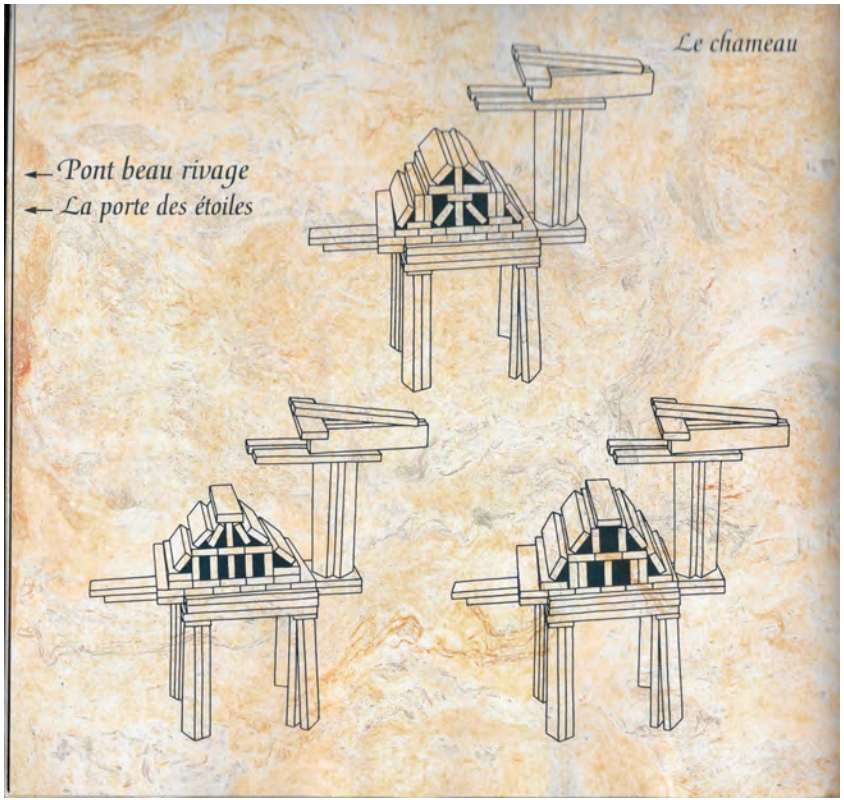


procedure mentor texts: Building

procedure mentor texts: Building

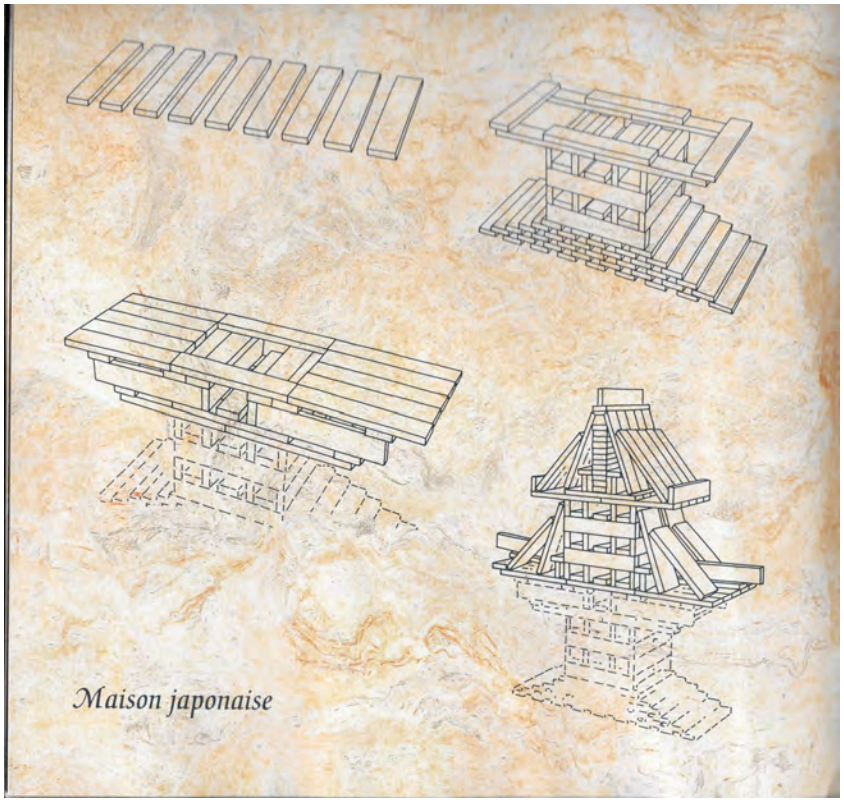


procedure mentor texts: Building

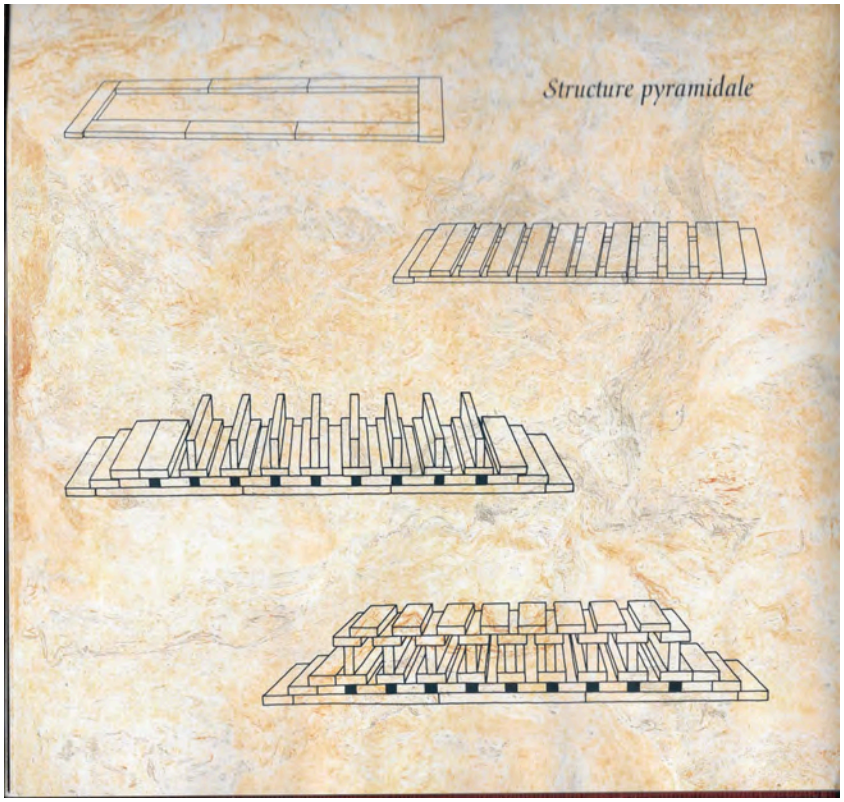


procedure mentor texts: Building

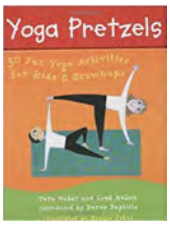
procedure mentor texts: Building



procedure mentor texts: Building



WEEK 1 Day 4



Writing Procedure

Deconstruction: Verbs

Joint Construction: Steps

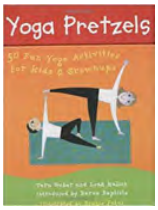
Content Objective	With my class I can write the steps in a procedure. (W.3.2, W.2)
Language Objective	I can write steps using precise imperative verbs. (L.2.3.f)
Vocabulary	**action verb**: verb that express action **imperative verb**: verb that gives directions **precise**: exact; specific **procedure**: a genre of writing whose purpose is to give directions to accomplish a goal **stages**: the parts of a piece of writing **steps**: the actions taken to complete a procedure **verb**: a word that expresses a physical action, mental action, or state of being
Materials and Preparation	• Procedure Verbs slides • markers • chart paper At the top of the chart paper, write Procedure Verbs: Science. • photos from Day 3, printed • chart paper and tape At the top of the chart paper, write Steps. • pencils • half sheets of paper, one for each step Children will work in small groups to write directions for a step in the soil experiment procedure. Consider assigning children to these groups ahead of time. There will be five groups total, one for each photograph showing a

	step in the procedure, minus the first step (not for the photos of materials).
Opening 1 minutes	*When we were writing personal recounts, we talked about verbs. Verbs are very important in writing and are used for different purposes in different genres. In personal recounts, there are a variety of verbs that relate to the topic and characters. Let's take a look at the verbs in procedures.*
Deconstruction 15 minutes slide 2	*We used this procedure as we thought about the **stages**, or parts, of procedures.*
slide 3	*Today we are going to focus on the steps, because that is where we find the verbs. The verbs in procedures are called imperative verbs. These verbs are bossy action verbs. They give directions and tell the reader what to do. Listen to this first step: "Flatten a small ball of clay onto the tray." The step starts right away with a verb, or action: "flatten." **Flatten** means to make something flat.* *I am going to read each step slowly. When you hear a verb, raise your hand. I will record the verbs here, on this chart.* Show the Procedure Verbs: Science chart. Slowly read each step of the procedure. As children identify the verbs, write them on the chart. See the following example. **Procedure Verbs: Science** flatten move look place put pick up press remove brush *Verbs in procedures are imperative. Imperative verbs sound like this: "flatten, move, sit." When you use imperative verbs, they don't always sound polite. You use them to tell someone what to do. You also don't need to say anyone's name first. For example, I don't need to say "Isabella, sit." I just say "Sit."*
slide 4	*Something else special about the verbs in procedures is that they*

	*are precise. **Precise** means exact or specific.* *Step 3 of the Rock pose says, "Stack your fists beneath your forehead." The word "stack" is precise; it tells the reader exactly how to put her or his hands. If I stack my fists, I put them one on top of the other—like this! When I put my fists side by side—like this, they are not stacked.* Demonstrate what it looks like to "stack your fists beneath your forehead" and have children do the same. *If the writer used a verb that was not precise, like "put," the reader would not know exactly what to do.* *Your hands could be like this… or like this…* [Demonstrate putting your hands beneath your forehead in different configurations.] *Precise verbs help the reader know exactly what to do.* Refer to the Procedure Verbs: Science chart. *Next week you will collect more verbs.*
Joint Construction 13 minutes	*Let's use what we know to start writing the words for our procedure. First, let's review our photos and put them in order.* Lay out the photos on the rug and work together to put them in order. Write numbers on the back of each photo to indicate the sequence. Tape the first photo to the Steps chart. *Next to our first photo, I am going to write "1," for step one. Remember, we learned that steps should begin with precise imperative verbs. What could this first step say?* Harvest several ideas. Choose a response and write the step together, using shared writing. *Now you will work together in small groups to write the rest of the steps. You will get a half sheet of paper, a pencil, and one of the photos. First you will copy the number from the back of the photo onto the paper. Then write a step that matches this photo, beginning with a precise, imperative verb.* Assign steps to be written by small groups. Distribute writing materials, printed photos, and half sheets of paper. Circulate and support children as they write the steps. Note that more time to complete steps will be provided on Day 5.
Closing	*Today we learned that procedures have precise imperative verbs,*

1 minute	*and we collected verbs from different types of procedures. Tomorrow we will learn about another important language feature of procedure.* Note: Leave the Procedure Verbs: Science chart posted.
Standards	**W.3.2** Use a combination of drawing and writing to communicate a topic with a beginning, middle (including details), and an end. **Standard W.2** Develop, strengthen, and produce polished writing by using a collaborative process that includes the age-appropriate use of technology. **L.2.3.f** Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy).
Ongoing assessment	Reflect on the whole group and small group work. What do children understand about imperative verbs? What is still confusing? Do children choose precise verbs? Do children begin steps with imperative verbs?

Notes



WEEK 1 Day 5

Writing Procedure

Deconstruction: Adverbs

Joint Construction: Steps

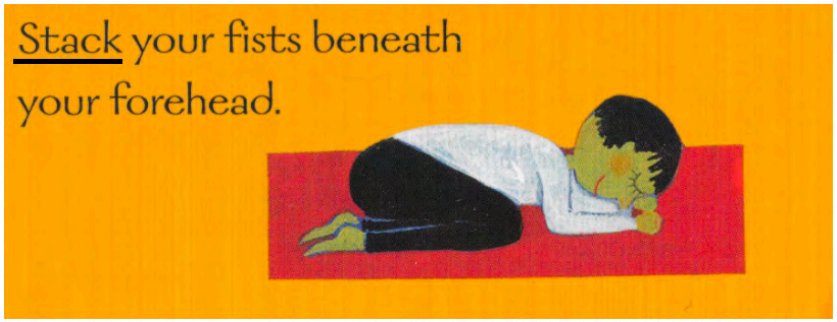
Content Objective	With my class I can write the steps in a procedure. (W.3.2)
Language Objective	With my class, I can add adverbs to make steps more precise. (L.2.3.f, L.1.2.e)
Vocabulary	**adverb**: a word or phrase used to describe a verb **imperative verb**: verb that gives directions **precise**: exact; specific **procedure**: a genre of writing whose purpose is to give directions to accomplish a goal **steps**: the actions taken to complete a procedure
Materials and Preparation	• *Yoga Pretzels*, Tara Guber and Leah Kalish, Cobra card • Procedure anchor chart, from Day 1 • Procedure anchor chart images: imperative verbs and adverbs cards • jointly constructed procedure steps, from Day 4 Before the lesson, attach the photos and children's steps to the chart, in order.
Opening 1 minute	*Yesterday we learned that it is important to use precise language when writing procedures. When a procedure has precise language, it can be followed successfully. We talked about using precise imperative verbs, and today we are going to look at another type of word that makes procedures precise: adverbs.*
Deconstruction 10 minutes	*Let's try out another yoga pose: Cobra.*

	For the children's first try at the pose, <u>do not show the illustrations</u> on the card or demonstrate how to do the pose. Read only the following words for each step. 1. Lie. 2. Place your hands. 3. Lengthen legs; press and arch. 4. Lift and open chest. Show the Cobra card while the children hold their positions. *Let's check the card to see if our bodies match what the card shows. What do you think? Why don't our bodies look like the illustration?* *OK, let's try it again.* Do the Cobra pose again, this time showing the illustrations and reading all of the steps fully. *What was different about the second time?* *The first time we tried this yoga pose, I didn't show you the illustrations, and I left out some of the words. The words that I didn't read the first time were the words that describe where and how to complete each step. These words are called* ***adverbs****.* *Let's go back to Step 1. The first time, I only said "lie," so it makes sense that you were lying down in different ways. The phrase that I left out gives more information about how and where to lie. It says "Lie on your belly, head on hands."* *The phrase "on your belly" describes where to lie, and the phrase "head on hands" describes how to lie. These are both adverbs that make the steps more precise.* *Let's add what we've learned about language to our Procedure anchor chart.* Under Stages, write Language. Add the imperative verb and adverbs cards to the chart.
Joint Construction 18 minutes	*Let's review the steps we wrote in our procedure yesterday. We'll read each one to make sure it makes sense and to see if we included any adverbs.* Read the steps one at a time. Ensure that the steps make sense. Then ask questions such as "Where?" and "How?" to elicit words and phrases that provide precise instructions. For example, a step such as "Pour soil" needs

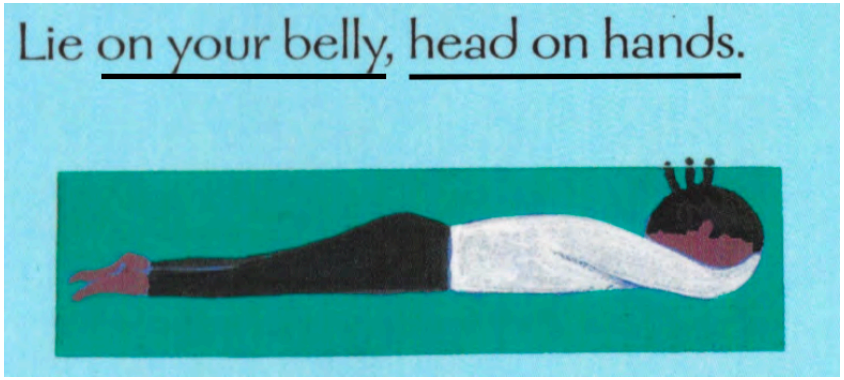
	the additional information "into the jar until it is ⅔ full" to be precise about where and how the soil is to be poured. Together with the children, revise each step as necessary. See the example steps below. Continue writing any remaining steps to accompany the photos, being sure to begin each with an imperative verb and to include adverbs that answer "Where?" and "How?" **Steps:** 1. Pour soil into the jar until it is ⅔ full. 2. Pour water into the jar until it is full. 3. Stir the soil and water with a popsicle stick. 4. Screw the lid tightly onto the jar. 5. Shake the jar until the soil and water are fully mixed. 6. Put the jar in a safe place to let it sit over the weekend. **Final Comment:**
Closing 1 minute	*Today we learned that adding adverbs makes steps more precise. Next week we will continue writing together.*
Standards	**W.3.2** Use a combination of drawing and writing to communicate a topic with a beginning, middle (including details), and an end. **L.2.3.f** Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy). **L.1.2.e** Use adjectives and adverbs and choose between them depending on what is to be modified.
Ongoing assessment	Reflect on the whole group work. What do the children understand about adverbs? What do they understand about the function of adverbs in procedures? How much support do children need to suggest adverbs that answer "Why?" and "How?"

Procedure anchor chart images

language



precise imperative **verbs**



adverbs that describe how and where