Unit 6: Things that Grow

Week 4

| | Full Day Schedule | | | | | |
|----------------------------|--|-----------------------------|--|--------------------------------------|-----------------------------|--|
| Unit 6 Week 4 | Day 1 | Day 2 | Day 3 | DAY 4 | DAY 5 | |
| | Make Way for Ducklings, 3rd Read | <i>Bigger!,</i> 2nd Read | <i>Make Way for Ducklings,</i> 4th Read | Bigger!, 3rd Read | Bigger!, 4th Read | |
| | | | Centers | | | |
| Intro to Centers | Researching Kindergarten | Bridges | Oviparous Animal Name-Letter Matching | gardens? | Cars (revisit) | |
| Art Studio | Cars (continued) | continue | continue | continue | continue | |
| Easel | | | | | | |
| Writing and Drawing | Researching Kindergarten | continue | continue | continue | continue | |
| Library & Listening | | | | | | |
| Dramatization | Kindergarten | | | | | |
| Blocks | Building <i>Make</i> <i>Way for Duckling</i> continued | Bridges | continue | continue | continue | |
| Discovery Table | Building Nests (Continued) | continue | continue | continue | continue | |
| Puzzles & Manipulatives | Continue Vegetable Memory | continue | Oviparous Animal Name-Letter Matching | Rhyming Games (from Small Groups) | continue | |

| Technology | | eations app & bridges c! & researching K | | | |
|------------------------|-------------------|---|----------------------------------|------------------------------------|---|
| Thinking & Feedback | | | | | |
| SWPL Whole Group | | | Refer to Clipboard Dired | ctions | |
| Whole Group Lessons | LFOAI: Bridges | Math: Swirl By Swirl | LFOAI: Life Cycle Drawings | LFOAI: Look at PreK Now! | Problem Story (class discusses issues impacting classroom community) |

| | Group1 Literacy | Group1 Literacy |
|--------|---|---------------------------------|
| Small | High Support: Rhyming Games | High Support: Dear PreK Letters |
| Groups | Group 2 Math | Group 2 Math |
| | Low to Medium Support: Growing Collages | Low Support: The Magic Box |
| | Group 3 Independent | Group 3 Independent |
| | Teacher's Choice | Teacher's Choice |

| Outdoor | Refer to Nature | small groups: | small groups: |
|----------|-------------------|--|---|
| Learning | Extensions for | collages: design gardens cutting pics from | create a garden in block area using natural |
| Leaning | Individual Lesson | magazines | materials |
| | plans | | |



Researching Kindergarten



Materials:

- Bigger!
- images of Kindergarten (real children, classes, teachers)
- images of children in the beginning of the school year
- paper
- clipboards
- writing utensils
- books about kindergarten

Preparation: Set up materials.



Standards: SED.ED.SC.PS.3 ATL.RPS.PS.4 , 7 ELA.W.TTP.PS.1-3 ELA.W.PD.PS.1-2 ELA.W.R.PS.1-2 ELA.RL.KID.PS.1-3

Vocabulary:

- kindergarten
- expert
- document
- research

| <i>Intro to Centers:</i> "In <i>Bigger!,</i> the boy went to 'big kid school.' What do you notice?" | Show images. Children respond. |
|--|-----------------------------------|
| "Here are images of our class when we started school. What do you notice?" | Show images. Children respond. |
| "We have learned so much about You have become <i>expert</i> PreK-ers." | |
| "After preschool is <i>kindergarten</i> . Here are images of <i>kindergarteners</i> . What do you notice?" | Show images. Children respond. |
| " <i>Kindergarten</i> is a group of children learning and playing together in school." | |
| "Today in Library and Listening, you can research Kindergarten with these materials. You can document your research in Writing and Drawing. | Show materials. |

During Centers:

Encourage children to collaborate, i.e. one child researches, another child writes or draws. Encourage children to use diagrams and maps to document their research. Invite Kindergarteners to visit the classroom as "experts" or arrange for children to visit a Kindergarten classroom to interview "experts." Compare and contrast how children felt when they were starting preschool to how they feel about starting Kindergarten.

Guiding Questions during Centers:

- How is the way you felt about starting preschool similar to or different from how you feel about Kindergarten?
- How is the Kindergarten (in our school) similar to or different from our classroom?
- How are the things you learned in preschool helpful to you as a Kindergartener?
- How did you document your research?

Thinking & Feedback: Invite children to share their processes. Encourage children to describe the challenges they might have encountered.

Documentation: Collect samples of the children's work as well as photographs and/or video of their process; use the documentation to launch a discussion during Thinking and Feedback.

Provocation:

Arrange and document a "field trip" to a Kindergarten classroom in your school.

| Unit 6 | |
|--------|--|
| Å | |
| Veek 4 | |

Bridges



Blocks

Standards: CA.DE.PS.1 -3 CA.DP.PS.1-2 ATL.RPS.PS.1-5 ATL.EP.PS.1-5

| Materials: Vocabular Make Way For Ducklings • Beautiful Stuff (including natural materials) • rope • string • craft sticks • Tape • Chenille sticks • Blue felt or tarp cut into bodies of water Cars, boats People figurines Picture resource from LFOAI or use pictures of local bridges Preparation: Set up materials | ulary: (highway-)(foot-) bridge blueprints engineer stable |
|--|--|
| Intro to Centers: "In Make Way For Ducklings, Mr. and Mrs. Mallard made nests by the water. What do you notice?" "Their first nest was near a large highway bridgea bridge that connects two cities. Their nest in the Boston Public Garden was near a smaller footbridgea bridge for people to walk on." | Show illustrations. Children respond. |
| "Here are images of other <i>bridges</i> . What do you notice?" " <i>Bridges</i> are different shapes, sizes, and colors. <i>Engineers</i> people who design and construct bridgesuse <i>blueprints</i> to plan and decide what materials are needed for a <i>stable</i> bridge." "Today in Blocks, you can be <i>engineers</i> and <i>design</i> and <i>construct</i> <i>bridges</i> using these materials. What do you notice?" | Show images. Children respond. |
| "You could construct a bridge like the bridges in <i>Make Way For Ducklings</i> or like the bridges in the images." | Show materials Children respond. |

During Centers:

Encourage children to create blueprints to plan their bridges. Compare and contrast constructing bridges to constructing block towers. Encourage children to write signs and/or descriptions of their bridges. Compare and contrast their bridges to the illustrations and images. Encourage children to make similar bridges with different materials/numbers of blocks. Encourage children to test the stability/strength of their bridges by putting people, animals, or vehicles on the bridges.

Guiding Questions during Centers:

- How will you use these materials to construct your bridge?
- Why do we need bridges??
- How will you make your bridge stable?
- How is your bridge similar to or different from the bridges in *Make Way For Ducklings/Nana in The City,* etc.?
- Can you build a bridge where cars can go over and boats can go under?
- How are these people/ cars get on top of the bridge?

Thinking & Feedback: Invite children to share their processes. Encourage children to describe the challenges they might have encountered.

Documentation: Collect samples of the children's work as well as photographs and/or video of their process; use the documentation to launch a discussion during Thinking and Feedback.

Provocation:

Encourage children to create bridges on a smaller scale, i.e., using LEGOs, cube blocks, etc. on a table. Observe and document bridges in Maine.













Types of bridges: Based on Structure



Tied arch bridge Suspension bridges cable-stayed bridge





Kindergarten



Materials:

- Bigger!
- images of Kindergarten (real children, classes, teachers)
- paper
- Clipboards
- Blank books
- writing utensils
- books about kindergarten

Preparation: Set up materials.



Standards: SED.ED.SC.PS.3 ATL.RPS.PS.4 , 7 ELA.W.TTP.PS.1-3 ELA.W.PD.PS.1-2 ELA.W.R.PS.1-2 ELA.RL.KID.PS.1-3

Vocabulary:

- kindergarten
- Student
- teacher

| Intro to Centers: "In Bigger!, the boy went to 'big kid school.' What do you notice?" | Show images. Children respond. Show images. Children respond. |
|---|--|
| "After preschool is <i>kindergarten</i>. Here are images of <i>kindergarteners</i>. What do you notice?" "<i>Kindergarten</i> is a group of children learning and playing together in school." "Today in Dramatization, you can <i>create a Kindergarten</i> with these materials. You can take turns in the role of teacher and student. | Show materials. |

During Centers:

Encourage children to use their research to create a kindergarten classroom. Support them to take on roles of student and teacher.

Guiding Questions during Centers:

- How did you decide what roles to play?
- How did you feel as the student? Teacher?
- How is the Kindergarten (in our school) similar to or different from our classroom?

Thinking & Feedback: Invite children to share their processes. Encourage children to describe the challenges they might have encountered.



Oviparous Animals Name-Letter Match



Standards: ELA.RF.PA.PS.1. d ELA.RF.PA.PS.2 S.LS.PS.2



Materials:

- Make Way for Ducklings
- Chickens Aren't The Only Ones
- Oviparous Animals resource
- thick paper or tag board
- basket or box to store game

Vocabulary:

- nest
- egg
- oviparous
- match
- animal names

• trays

Preparation: Set up materials. Copy the images onto thick paper or tagboard.

| Intro to Centers: "In Make Way for Ducklings Mrs. Mallard constructed a nest . What do you notice?" | Show illustrations. Children respond. |
|---|---------------------------------------|
| "Mrs. Mallard needed a place to hatch her <i>eggs.</i> Here are images of other <i>oviparousegg</i> laying-animals. animals. What do you notice?" | Show images. Children respond. |
| " <u>Alligators/ insects/ fish, etc.</u> also lay eggs and construct nests like ducks, but their eggs are different sizes, shapes, and colors." | |
| "Today in Puzzles & Manipulatives, you can match the beginning letters with animal names." | Show materials. Model. |
| | |

During Centers:

Encourage children to describe their strategies. Adjust number of pictures and letter cards to children's level.

Guiding Questions during Centers:

- How did you know that the letter a matched the picture of the alligator?
- What is the beginning sound of snake...s-nake. the/s/sound is represented by the letter s. Can you find that letter?
- Can you think of other oviparous animals?

Thinking & Feedback: Invite children to share their processes. Encourage children to describe the challenges they might have encountered.

Documentation: Collect samples of the children's work as well as photographs and/or video of their process; use the documentation to launch a discussion during Thinking and Feedback.

Provocation:

Encourage children to draw pictures of oviparous animals, and write the first letters of their names. Take a walk around the neighborhood and photograph oviparous animals/nests/eggs. Use photographs to create puzzles and add to Puzzles & Manipulatives.



























Small Groups: Dear PreK Letters Support: High

Standards: ATL.RPS.PS.4, 7 ELA.W.TTP.PS.1-3 ELA.W.PD.PS.1-2 ELA.W.R.PS.1-2



Materials:

- Bigger!
- documentation of children's work from the year
- paper
- writing and drawing utensils

Vocabulary:

- advice
- expert
- expectations
- mature

Preparation:

Set up materials.

Procedure:

Show images from *Bigger!* Show documentation of children's work from this school year, i.e., photographs, videos, samples, etc. Compare and contrast the things the boy and children did as they matured and grew bigger. Discuss how children felt when they started the year.

Show materials. Tell children they can be PreK experts and write advice letters to next year's class. Encourage children to collaborate to write and illustrate their letters.

Children can write individual letters, letters with partners, or a class letter.



Small Groups: Story Sequencing

Support: Medium

Standards: ELA.RL.KID.PS.1 -3 .ELA.RL.CS.PS.1-3 ELA.RL.IKI.PS.1-2

M.MD.PS.3



Materials:

- Bigger!
- pages from *Bigger!*, pages taken apart for sequencing
- Make Way for Ducklings
- Make Way for Ducklings images (from Week 3)
- trays

Vocabulary:

- first, next, last
- baby
- infant
- toddler
- grow
- mature

Preparation:

Set up materials.

Procedure:

Show images and illustrations from *Bigger!* And *Make Way For Ducklings*. Compare and contrast the boy in *Bigger!* with the ducklings in *Make Way For Ducklings*.

Show materials for sequencing.

Encourage children to collaborate and describe their sequence. Play a game by turning over one or more of the cards in the sequence and having another child guess what's underneath. Encourage children to act out the story in sequence.

| Unit 6 | Small Group: The Magic Box* Low Support | Math SG 1 | Standards: MELDS.M.OAT.PS.4 MELDS.M.OAT.PS.5 |
|--------|--|--------------|--|
| Week 4 | | | |



Image downloaded from Amazon.com

Guiding Math Ideas:

- Review and reinforcement of counting strategies- Counting on
- Manipulating shapes
- Measurement as practical and purposeful

Math Concepts from Unit Learning Progressions:

- Using and applying rational counting to questions of quantity.
- Comparing groups of numbers < > + -
- Depict understandings of sequence and time

| | Materials: Jack the Builder, Stuart Murphy 4 small boxes with openings in top (Such as empty Tissue Boxes) 3-D colored blocks Dice- Four 3-dot Small Number Paths (from Week 3, SG 2) Small bell or timer | Math Vocabulary: Number Path-numbers arranged in a long line starting with 1 Counting on- adding on to a number to get a bigger number without going back to the beginning How many?- the number of |
|--|---|--|
|--|---|--|

Preparation:

While this activity is based on the story in *Jack the Builder*, you do not have to read the book first. Use the book as a resource, or read at another time.

Assemble materials on the table, placing a magic box, a dice and a number path in front of every two children. Children work in teams. If you have room and materials, each child can play his/her own game.

Procedure:

We are going to play a Math Game! Yeah! We love Math Games! This game is called **The Magic Box**. You will play with a partner. Let's all put one block inside our team's magic box. Children place a block inside their team's box. Let's Play. One partner can roll, and you can count the blocks together and put that many in your box. You can use the **number path** to help you keep count on and keep track of how many blocks you think are in your box. When I ring this bell: (Ring bell) **Guess** how many are inside. **Stop**, **Pour** and **Count**. Remember- No Peeking!

Model playing the game as needed. Teammates take turns rolling, guessing and counting. They can vary the number of times they want to roll before they Stop, Pour and Count. Use a set number of rolls or a goal (See Strategies).

Vary times to ring bell, or if numbers of small group are uneven, choose a child to be the bell-ringer. Work together to think of ways you can keep track of how many blocks you think are in the Magic

Вох.

Model how to play. Here are some suggested counting strategies: Roll the die, choose that many blocks from the pile, and throw them in the Magic Box. Use your finger to move and count on the number path and model guessing **how many all together** are inside.

I wonder how many all together are inside my Magic Box? Reinforce math relationships, such as more, fewer, and equal.

Do you need more? Do you need fewer? Do your blocks = ?

If you have time, introduce book Jack the Builder, turning pages and showing children how Jack added one more block each time to his structure.

Here is a book about Jack the Builder, and he made a lot of things by counting on blocks. Each time he added a block he made something different. You can look at this book and see how he did it. Now that you have a lot of blocks, you can play again, or you can build something.

Place Jack the Builder in the Small Group Area for children to explore and build.

Strategies to Provoke Math Thinking:

- Specialized math books: Stuart Murphy creates leveled math books and many Level 1 books can be adapted for PreK use. Murphy's books clearly focus on a specific math concept, and have a list of activities to expand learning.
- Add challenge on the spot: If the game seems too easy or children are losing interest, it only takes a few seconds to adapt. Work on equivalencies and relationships. Give the teams a set number of dice throws OR a Goal of 10 blocks .Teams compare their numbers of blocks at the end of 3 throws. Which team has more, fewer, the same? Which team will get to 10 blocks first?
- Time: Embed understandings of time in classroom activities to help children's growing understanding of this abstract quality.
- Links to other Units and Concepts: Similar activities and books include U1, Building Houses, U2 Shake a Shape and *Changes, Changes*, U4 Roll a Shape Pictures.

Adaptations for Additional Challenge:

- Use a 6 dot dice and a longer number line, up to 20.
- Omit the number path for children who are already adding numbers "in their heads."
- Choose a number on the number path and have children build a structure using exactly that many blocks, based on the *Jack the Builder* book.

Choose a number between 2 and 10 and assess children's abilities and understandings of the numbers inside of numbers. See Tracking Tools for sample.

Provocation:

Place Jack the Builder, Magic Boxes and dice in the block area for children to use during Center Time.

*This activity is based on one suggested by Stuart Murphy in Jack the Builder, (2006).

| Unit 6 | | Math | Standards: |
|--------|-------------------------------|------|----------------------------------|
| | Small Group: Garden Designers | SG 2 | MELDS.M.G.PS.2 MELDS.M.G.PS.3 |
| Week 4 | Low Support | | MELDS.M.G.PS.4 MELDS.M.G.PS.7 |



Image downloaded from Amazon.com

Guiding Math Ideas:

- Living things are part of interdependent systems- (Enduring Understandings)
- Patterns- Extension and Creation
- Manipulating Shapes

Math Concepts from Unit Learning Progressions:

• Growing accuracy in discovering describing and comparing attributes of shapes and patterns.

Math Vocabulary:

• Spiral- a growing shape that

Garden Designer- someone

is coiled like a snake or snail.

knows a lot about plants and

uses math to plan a garden.

• Composing and decomposing shapes contributes to learning numbers and later understanding of fractions.

This is a Maine-connection Activity

Materials:

- Pattern Blocks and Templates (Math materials)
- ABABA Book of Pattern Play (for reference)
- Garden Templates resources
- 2 Magic Boxes (Re-use from SG1)
- Numbers Small plastic/wooden, or numeral cards
- Maine Coastal Botanical Garden Map resource
- Tablet, computer to display Pictures of Maine's Coastal botanical garden for inspiration – Visit the gallery for photographs and inspiration <u>http://www.mainegardens.org/</u>
- Placemats to define work space

Preparation:

Place Pattern Blocks in Math Center several days prior to SG for exploration

Copy Garden Templates, making several copies of the different shapes of gardens. Copy Maine Coastal Botanical Garden Map. If possible, use a Tablet or Laptop and display the Maine Garden website. The Gallery has beautiful pictures of the gardens.

Place small numbers in one Magic Box and several of each kind of pattern block in the other Magic Box. Set up a work area for each child in Small Group, and place pattern blocks, Magic Boxes, and Garden Templates in center of table.

We read our book Swirl by Swirl earlier this week. We sing about **Spirals** in SWPL. We made Tangram Gardens. Today we are going to use these special Pattern Blocks to make our own Gardens. We are going to be **Garden Designers**. Do you have any ideas about what a **garden designer** does?

A garden designer knows a lot about flower and plants. She or he uses math and makes a plan for where plants will grow. In Maine we have a beautiful garden that lots of people visit each year, the Maine Coastal Botanical Garden. Garden designers planned it. Here is a map of the garden and some of the flowers chosen by garden designers.

Show the map and the photos on the Tablet.

We'll be garden designers using these Pattern blocks and some garden designs.

Show Pattern blocks and garden templates.

We've played with pattern blocks in our math center. Today we are going to use our pattern blocks and our Magic Boxes to create some color and shape gardens. We are pretending that our pattern blocks are different flowers or vegetables. Garden designers choose plants and decide how many they will need. What shapes are these garden maps?

Children name spirals and rectangles.

Children create pattern gardens by drawing out a number from one Magic Box, then drawing out a shape from the other box. They find that shape in the large pile of patterns blocks in the center of the table and begin creating their gardens. They continue until their garden is complete. Comment on any patterns you see emerging. Take photos of the gardens before putting the materials away. Leave materials out on math shelves for children to play with throughout the next few weeks.

Strategies to Provoke Math Thinking:

- Set patterns or emerging ones? Many pattern-making activities present set patterns. Most pattern block sets include pre-set cards. Week 1 SG 2 had this more structured type of pattern activity. This activity is free-flowing. It encourages children to create patterns with a certain degree of randomness. Offer both types of experiences. There is a place for by-the-book pattern making and a place to be pattern-designers.
- Maine Connections: Continually look for ways to connect the surrounding environment with math. The more that children think of math as a typical part of their everyday lives, the more likely they are to develop positive math attitudes and diminish negative fears about math.

Adaptations for Additional Challenge:

- Invite children to research the Maine Coastal Botanical Garden and its Alfond Children's Garden. Add Investigating Maine Gardens as a LFOAI activity.
- Make a pattern garden using the ABABA Book of Patterns as guide. Refer to book on patterns play and make an ABBA garden, an ABA garden, etc. using pattern blocks.

Documentation:

• Make a bulletin board display using the photos of the gardens and adding some photos of Maine's Coastal Botanical Garden.

Provocation:

- Is there a local garden that is accessible to your program? Plan a visit.
- Many programs do not allow field trips with PreK children, so create a virtual garden tour of any local or Maine gardens. Create a slide show that can roll during center time, lunch or rest time.



| <u> </u> | | |
|----------|--|--|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |







Welcome and thank you for visiting today. I hope you discover something new and exciting as you explore this exquisite piece of land. Set on nearly 300 acres, this treasure began as an idea born from a small group of visionaries in 1991, and we welcomed our first visitors in 2007.

Enjoy the Gardens at your own pace. Take a stroll, go on a hike, enjoy a boat tour, learn about the natural world—Coastal Maine Botanical Gardens offers something for people of all ages and abilities. Make some great memories today!

William Cullina, President and CEO



MAKING THE MOST OF YOUR VISIT

For your enjoyment and safety, and to protect and preserve the Gardens, please abide by the following:

- Supervise children at all times. All photographs and
- Walk only on paths or lawns.
- Leave all plants, flowers and wildlife undisturbed.
- Active sports (Frisbee, ball playing, kite flying, biking, etc.) are not permitted.
 A bike rack is provided for those arriving by bicycle.
- Smoking is permitted only in designated smoking stations in the parking lots.

THE AMENITIES

To make your visit as comfortable as possible, there are a few things you may need to know:

RESTROOMS

The restroom facilities are located in the Visitor Center, Café, Bosarge Family Education Center and seasonally in the Bibby and Harold Alfond Children's Garden. CAFÉ Our locavore menu at the Kitchen Garden Café features crisp salads, hearty sandwiches, homemade soups and luscious desserts. We partner with local growers and producers and, whenever possible, use herbs and other edibles from our Burpee Kitchen Garden.

commercial use without

consent of Coastal Maine

the express written

Botanical Gardens is

strictly prohibited.

- By entering, you grant permission for us to use your image for promotional purposes.
- Dogs are permitted in the parking areas only but must be leashed. Bags for clean-up are provided. Other than service dogs, no animals are permitted elsewhere at the Gardens.
- Exit the Gardens before the posted closing time, as the gates are locked at closing.

ACCESSIBILITY

The Visitor Center, Education Center, and central gardens are accessible to people of all abilities. Due to the nature of our property, some areas may not be accessible to everyone. Ask at the information desk about options for getting around the Gardens:

- Courtesy shuttle
- Wheelchairs and scooters
- Accessible cart tours

HOW TO READ A PLANT LABEL

Botanical gardens are considered living museums, and as such our plant collections are identified and documented to serve our goals of display, education, and conservation.



ACCESSION NUMBER—As plants are added to our database they are assigned an accession number. The first four digits of the number reflect the year it was accessioned, and the balance of the coding becomes a serial number.

PLANT FAMILY

- BOTANICAL NAME—Includes the genus, species and any sub-species or variety names.
- COMMON NAME—Includes the cultivar name.
- ORIGIN—Native region of the plant. If nothing is listed, the plant originated under cultivation.

other images taken byprour guests must be forDotheir own personal usethand enjoyment. Any use,mreuse or reproductioncleby any means forth

Week 4

Day 1

Materials: Poetry posters, tag-board strips with one of the first four verses written on each one

THE WHEELS ON THE BUS

Procedure:

• Sing the familiar verses.

BOOM BANG!

Procedure:

- Read the title with the children. Point to and sound out *B* and *m* in *Boom* and *B* and *g* in *Bang*.
- Recite the poem as usual, then hand out the strips for the first four lines. Recite the poem again, having children say the line that is printed on the tag-board card they hold. Have everyone recite the last four lines.
- Tell children that they might be interested in reading the poem in the book later in the day.

LOOBY LOO

Procedure:

- Tell children that they need to stand up for this song.
- Sing the song as usual, doing the motions.
- Add a few new verses. Ask children for ideas of parts of the body to move in different way to create new verse

WHAT WORD WOULD WE HAVE IF WE TOOK OUT ____? (And Bigger!)

Procedure:

- Show the book and tell them that you are going to ask them to say some words that are in the book, and then you will ask them to leave out a part of the word to say a new word.
- Present *legs*, ask children to say it once and then to say *legs* without the /l/ (*eggs*).
- Present grow, ask children to say it once and then to say grow without eh /g/ (row).

Present meals, ask children to say it once, and then to say meals with the /m/ (eels)

Materials: poetry posters, tag-board word cards for animal sounds: *fiddle-ee-fee; bow-wow; quack, quack; baa, baa; moo, moo; neigh, neigh.*

OPEN SHUT THEM

Procedure:

- Hold both hands up, then open and close them to indicate the first song
- Sing the song and lead children in the motions.
- Sing a second time, very slowly, and then a third time, very fast.

RAINDROPS

Procedure:

- Read the title with the children.
- Hold up the two word cards with raindrops and rooftops written on them, and ask children which one says raindrops, and which says rooftops.
- Ask children to explain how they knew which was which. Help them look carefully at the letters in each word, as you sound out each one.

BARNYARD SONG

Procedure:

• Tell children that you are going to sing the "Barnyard Song" next. Sing the song as usual, holding up the appropriate animal sound word card each time it comes up.

STAND UP

- Read the title. Point to and sound out *S*, *t*, and *d* in *Stand*, and run your finger under *Up* as you read it.
- Recite and model the motions. Tell them that you are going to make the same changes you did before. Say "Shake your hands" instead of "stamp your foot" and "bend one knee" instead of "bend two knees."

Materials: poetry posters, upper and matching lower case letters

BUTTERCUPS AND DAISIES

Procedure:

- Read the title with the children, underlining the words.
- Recite the poem.

I'M A LITTLE TEAPOT

Procedure:

- Sing the song as usual with the motions.
- Make up a new verse of your own, if you'd like.

LITTLE LETTER/BIG LETTER CHANT

- Tell children they are going to play the Little Letter/Big Letter Chant game.
- Distribute the uppercase letters and retain the lowercase matches.
- Say this chant: I have the little [name a letter]. As you hold it up. Take a look to see. Someone has its partner. Who might that someone be?
- Proceed by using the lowercase matches for all letters distributed to children.
- Remind the first few children that they should say, *I have the big* [name a letter] when they hold up their card.

Materials: poetry posters, 2-row grid with 10 boxes in each row and stickers in each box,

CLAP YOUR HANDS

Procedure:

• Sing four or five verses using some familiar verses and adding some new ones (e.g. "flick flinger," "wiggle nose.").

THE LITTLE TURTLE

Procedure:

- Read the title with the children. Point to and underline *The* and read it quickly as a sight word. Point to and sound out *L* in *Little* and *T* in *Turtle*.
- Recite the poem with children, modeling the motions

TEN LITTLE FINGERS

Procedure:

- Tell children that you going to do the poem about ten fingers next.
- Recite the poem as usual, modeling the motions.
- Ask children if they know how many fingers there are altogether if two children put all their fingers together. Remind children that each pair of hands is made up of ten fingers.
- Ask two children to come up beside you so that you can help everyone figure this out.
- Gesture toward one set of hands, and say 10, then count on to add the 10 fingers of the other child: 11, 12, 13,20.
- Summarize by saying that two groups of 10 make 2-. Show a grid with two rows of 10 boxes and a sticker in each box. Hold this up and count all of the boxes with the children commenting after the first row. Say, *One row is 10.* Then continue counting on the second row, then say. *Two rows of 10 are 20.*
- Tell children you will put the counting boxes in Puzzles and Manipulatives for them to count again by themselves later if they'd like.

HEAD, SHOULDERS, KNEES AND TOES

- Tell children to stand up.
- Sing the song once, modeling the motions.
- Sing the song again, but this time, use different words and motions. Tell children to watch and listen carefully.
- Change "Head and shoulders" to "Hair and elbows"; change "Eyes and ears" to "Eyes and cheeks." Keep "knees and toes" the same. Go slowly enough for children to perform the new motions with you.

Materials: poetry posters, a small hand mirror

APPLES AND BANANAS

Procedure:

- Tell children that you are going to begin with a really silly song that they know. Ask them to guess its name.
- Sing the song as usual.

FIVE EGGS AND FIVE EGGS

Procedure:

- Read the title with the children underlining it with your finger. Say, *this is an interesting title, because it has some words that repeat.* Point out *Five and five, and Eggs and Eggs.*
- Recite the poem with children, putting up first one hand and then the other to represent five eggs and five eggs. For ten, move both hands back and forth a little bit.
- After reciting the poem, tell children that one line of the poem has a word that repeats three times. Ask them what word it is. If they do not remember, tell them to listen carefully as you begin to recite the poem once again. Read *Crackle, crackle, crackle,* and hold one finger up for each word as you say it, to help them notice the repetition of the word.
- Read the line again, this time while pointing to the words, and explain that there's a space in between them and little mark called a comma. Say, *Commas tell us to pause a little after a word*. Then recite the line without pausing after each word to demonstrate how it would sound without the comma, and then read it again with pauses in between.

HUSH LITTLE BABY

Procedure:

- Tell children that they are going to learn a new song today.
- Sing the song twice.
- Ask children if they know what a looking glass is. Provide some prompts, such as, Maybe it's a glass you look at or into. Or, ask, Is there a kind of glass you look into and see a reflection of yourself?
- Show the small mirror and tell children that another name for mirror is *looking glass.*

TWINKLE, TWINKLE LITTLE STAR

- Sing the song as usual.
- After singing, comment that the daddy in "Hush, Little Baby" mentioned giving the baby a diamond ring and that the stars in the song are compared to diamonds
- Ask children if they know what a diamond is and show them one in a ring or a picture, if possible. If not, explain that a diamond is a very sparkly kind of rock that is used in rings. Because stars sparkle too, they are sometimes described as diamonds in the sky.

| Unit 6 Week 4 | Large Group: Swirl by Swirl | Math LG | Standards: MELDS.M.MP.PS.7 MELDS.M.G.PS.2 MELDS.M.G.PS.5 MELDS.M.G.PS.8 MELDS.M.CA.VA.PS.3* MELDS.S.LS.PS.6* |
|------------------|-----------------------------|------------|--|
|------------------|-----------------------------|------------|--|

Guiding Math Ideas:

- How do living things respond and adapt to their environments (Essential Questions)
- Empowering Mathematical Thinking- Habits of Mind for School Success
- Patterns- Extension and Creation

Math Concepts From Unit Learning Progressions:

- Applying the many languages of math in multiple contexts- Nature-based math
- Identifying, describing and duplicating mathematical patterns found in the environment
- Initiating activities that involve directionality and relative position in space (U4)

Adaptations for Using Large Group In Alternate Schedule Slots:

 Introduce to small groups of children during center time. Place book in science center alongside spiral examples. The SWPL poem/activity *The Spiral Song* supports this book.
 *This is a STEAM activity AND a Maine Connection activity.

| Materials: | Math Vocabulary: | |
|---|---|--|
| Swirl by Swirl by Joyce Sidman Photos of Fiddlehead Ferns (Download from Internet | Spiral- a growing, circular | |
| for Classroom Use) Collections/examples of spirals in nature: Photos or | shape that is coiled like a | |
| real Fiddle head Ferns; Pinecones; pineapples; Photos | snake or snail. Swirl- a curling or twisting | |
| or real Flowers with Spiral Structure- Zinnia, | pattern or motion Coil- something that is | |
| Sunflower; Shells, etc.) Box or Paper Grocery Sack | wound up in a circle shape. | |

Preparation:

Place examples of spiral nature shapes in box. If possible, purchase a real sunflower or zinnia, and collect shells and other nature examples. Copy photos as needed.

Make sure that you have plenty of room for children to experiment with creating a class spiral.

| Our book is <i>Swirl by Swirl</i> written by Joyce Sidman and illustrated by Beth Krommes. It has facts and drawings about real plants and animals in our world. | Show cover and point to the spiral shapes of some of the pictures. |
|---|--|
|---|--|
| We are learning a lot about <i>Things that Grow</i> . There are so many beautiful plants and animals in our world in different shapes and sizes. Did you know that some shapes can grow? This book is about a very special and beautiful shape. It is called a spiral . A spiral is a growing, circular shape that is coiled like a snake or snail. A spiral is a growing pattern, a math pattern that we find in nature. It starts off small and grows and grows from the inside out. | Trace around the spiral shapes of some of the pictures as you leaf through the book. |
|--|--|
| When I trace around this snake, or this flower, my fingers are going round and round. They swirl around. Can you show me how your hands or fingers might swirl ? | Find a picture in the book and demonstrate a swirling motion and invite children to swirl their fingers or hands with you. |
| In the spring in Maine, we have a lot of ferns that start to grow. When the leaves start to grow, they look like a spiral - Some people like to pick them and eat them. Here are some pictures. Have any of you ever eaten some delicious fiddlehead ferns? | Turn to a few different examples in the book of fiddlehead ferns- cover, inside covers, and 2 page spread mid-book. |
| There are lots of things that grow in spirals. Let's read this book and then we can make some spiraling, swirling motions. Look for the things on the pages that are coiled around in a spiral. | Children can share any stories of seeing or eating fiddlehead ferns. Show items in box of examples. Read book. On each page, choose one or two pictures and trace the swirling, spiral shape with your fingers. |
| Could we make some spiral shapes with our bodies? Let's try. That looks great! You all look like a bunch of fiddlehead ferns, or some little grass snakes! Let's curl and uncurl a few times. Now let's all join hands and see if our whole class can coil up like a great big snake! | Children curl up as tightly as they can. Then they can uncurl. Repeat Children hold hands. Take one child's hand and |

| Follow me! | move to the center of the circle and try to curl up into a coil. It will be fun, and hard, with lots of |
|--|--|
| Wow! That was fun! | laughter and trials before you can do it! |
| If you see some more things inside or outside | |
| this week that remind you of a spiral, tell us and | Children can look for spirals during the week. |
| we will investigate. | |
| You might be surprised where you see spirals. | |
| They are everywhere. | |
| I'm going to put these things over on our science | |
| shelves. You can explore them this week. | Class activity by place spiral collection in Science |
| | <i>Close activity by place spiral collection in Science area for exploration.</i> |

Strategies to Provoke Math Thinking:

- The Fibonacci Sequence: Spirals are a growing pattern that follow a simple mathematical sequence, the Fibonacci sequence: Each number is the sum of the previous two numbers. Try out the mathematical sequence yourself. This pattern is easily seen in the growth patterns of flowers or pinecones in spiral-shaped rows. Having real objects for children to explore hands-on is the best way to make math/science/art connections.
- Re-visit *Zinnia's Flower Garden*: There are many examples of spiral growth patterns in the flower pictures of this U6 book from several weeks ago. (Sunflowers, zinnias, etc.)
- Spiral Hunt: Add interest to a common pre-K shape hunt activity. SWPL has a suggested Spiral Shape Hunt for architectural and natural examples of spirals indoors and out.

Provocation:

• Art and cooking are two additional curriculum areas where spirals are explored. Try Swirl Art, or coiling long "snakes" of modeling clay or dough. Make coiled rolls of dough (such as cinnamon rolls or other healthier alternative), bake and enjoy.



Let's Find Out About It: Bridges

Standards: ELA.LS.VAU.PS.1-3 ELA.SL.CC.PS.1-2



Materials:

- Make Way for Ducklings
- Bridge images

Vocabulary:

- (highway-)(foot-) (suspension-) bridge
- obstacle
- truss(-es)
- blueprints
- engineer
- sturdy

Preparation: Set up materials.

| Let's Find Out About It: "In Make Way For Ducklings, Mr. and Mrs. Mallard made nests by the water. What do you notice?" | Show illustrations. Children respond. |
|--|--|
| "Their first nest was near a large <i>highway bridge-</i> -a <i>bridge</i> that connects two cities. Their nest in the Boston Public Garden was near a smaller <i>footbridgea bridge</i> for people to walk on." | |
| "Water is an obstacle something that is difficult or dangerous to travel across, so a bridge helps people get from one side to the other safely." | |
| "Here are images of other <i>bridges</i> . What do you notice?" | Show images. Children respond. |
| " <i>Bridges</i> are different shapes, sizes, and colors. <i>Bridges</i> built with strong cables connected to towers are called <i>suspension</i> <i>bridges.</i> Railroad <i>bridges</i> are made of tall metal structures called <i>trusses.</i> " | Children respond. |
| "Here is an image of someone planning to build a bridge. What do you notice?" | Show images. Children respond. |
| "People who build bridges are called engineers . Engineers decide what materials are needed for a stable strong bridge . They use blueprints to plan their construction." | |



The **Deer Isle Bridge** is a brightly colored suspension bridge connecting mainland Maine with Deer Isle, an island in Penobscot Bay. It has swooping cables for support.



Babb's Bridge is a covered bridge spanning the Presumpscot River between the towns of Gorham and Windham.

Why would somebody build a covered bridge?



The Bailey Island Bridge connects Bailey Island with Orr's Island.

This cobwork bridge was build using granite slabs laid lengthwise first and then crosswise in several layers to allow the tide to ebb and flow freely





Engineers use blueprints to build bridges. It takes many people and heavy equipment such as cranes, to build a bridge.



Movable bridges open to let boats through and close to let cars go across.



Bridges can be constructed from all kinds of material. This walking bridge is made from rope and planks.



Let's Find Out About It: Life Cycle Drawings



Standards: S.LS.PS.1 -2, 4 ELA.IT.D.PS.1 -2 ELA.IT.I.PS.1 -2

Materials:

- Make Way For Ducklings
- Butterfly Life Cycle image
- Butterfly Diagram image

Vocabulary:

- life cycle
- adult
- oviparous
- mature
- arrow
- progress
- stage
- symbol

Preparation: Set up materials.

| <i>Let's Find Out About It:</i> "In <i>Make Way For Ducklings,</i> Mr. and Mrs. Mallard looked for a place to raise their family. What do you notice?" | Show illustrations. Children respond. |
|---|--|
| "First, Mrs. Mallard laid eggs. Then, ducklings hatched from the eggs. Mr. and Mrs. Mallard will care for the ducklings until they <i>mature</i> growinto <i>adult</i> ducks." | |
| "Here is an image of a butterfly, another oviparous egg- layinganimal. What do you notice?" | Show image. Children respond. |
| "Here is an egg, caterpillar, chrysalis, and adult butterfly. There are arrows between the images." | Trace along stages of life cycle. |
| "The <i>arrows</i> show how the butterfly <i>progresses</i> moves through the <i>stages</i> earlier then later timesof its life. The butterfly looks different at each <i>stage</i> . How are <i>life cycles</i> similar to or different from <i>diagrams?</i> " | Show image. Children respond. |
| " <i>Life cycles</i> and <i>diagrams</i> use drawings and symbols to depict information." | |







Let's Find Out About It: Look at PreK Now!

Standards: ATL.RPS.PS.4 ,7 SED.SD.BRC.PS.12, 16 ELA.IT.I.PS.1-2



Materials:

- Bigger!
- documentation of children's work from throughout the year

Vocabulary:

- mature
- capable
- progress
- practice

Preparation: Gather materials

| <i>Let's Find Out About It:</i> "In <i>Bigger!,</i> the boy <i>matured</i> grewfrom a baby to a preschooler. What do you notice?" | Show images. Children respond. |
|---|---|
| "The boy was more <i>capable</i> he could do more thingsas a preschooler than he was as a baby." | |
| Suggested options: | |
| "Here are illustrations <u>child</u> drew. What do you notice?" | Show documentation/samples of children's work throughout the year. |
| " <u>Child's</u> drawing of progressed got betterby " | Note the progression of work, i.e., writing has become neater/includes more details, etc. |
| "Here are images of our class lining up. What do you notice?" | |
| "You became <i>capable</i> of many things like by <i>practicing</i> ." | |



Tree Lifecycle

Standards: S.LS.PS.1-2 PHD.GM.PS.1 CA.DE.PS.3



| Materials: | Vocabulary: | |
|---|---|--|
| Forest where there are several trees in various stages of growth (saplings, mature trees, dead trees, and fallen logs). | Seed Sprout Sapling Branch Bud Leaf Roots Rootlets | |

The children have been exploring trees all year. Ideas presented in previous units include adopting a tree to observe throughout the year, in all seasons. Using journals to capture what is happening each month, collecting colored leaves in the fall, identifying trees from twigs and bark in the winter, and forcing buds to flower in the spring. They have looked at the differences between deciduous trees and conifers.

As a culmination to understanding trees, this lesson looks at the lifecycle of a tree, from seed to fallen log. Take children outside to an area where there are trees in various stages of development. Have them try and identify a sapling, young tree, mature tree, dead tree, and fallen tree or log. Ask the children if trees are alive and if so, how they know that. Have the children act out the growth of a tree from a seed to a rotting log. Begin by having the students imitate your movements as you enact the life of a tree.

Curl up in a tight ball – you're a seed Uncurl and kneel – you've sprouted Stick up one arm (fist clenched) – you've grown a branch Stick up the other arm – you've grown another branch Wiggle your fingers – you grow lots of leaves Stand up (feet together) – you grow tall Spread feet apart – you spread out lots of roots Wiggle your toes – you grow lots of little roots (rootlets) Start scratching all over – you're attacked by insects and fungi Make a loud noise (kchhhh!) – you get hit by lightning and lose a limb Smile and sigh (ahhhhhh!) – you become a home for wildlife in your old age Make a hammering noise (knock, knock, knock) and vibrate – woodpeckers peck into your dead wood Make a creaking sound and fall down – you blow down in a storm Stick up one arm – a new seed sprouts from your rotting wood Shake your hand – seeds are released from the young, growing tree

Guiding Questions:

- Are trees alive? How do you know?
- How are trees born? Do they die?
- What is the lifecycle of a tree?

*Taken from PLT Pre-8 Environmental Education Activity Guide "Tree Lifecycle" activity, p. 342-343.

| Unit 6 Week 4 | Researching Kindergarten: Library and Listening Lower Level Technology Supplement | ISTE-S 2 | Standards: SED.ED.SC.PS.3 ATL.RPS.PS.4,7 ELA.W.TTP.PS.1-3 ELA.W.PD.PS.1-2 ELA.W.R.PS.1-2 ELA.RL.KID.PS.1-3 |
|------------------|---|-------------|--|
|------------------|---|-------------|--|

[book covers that represents the book(s) the lesson touches upon]

Technology Concepts

- Increased awareness of being part of an interconnected digital world
- Teacher models safe use of digital technology

| Materials: in Epic! Books find books with Kindergarten theme and create collection for children to use for research Tablet available | Vocabulary: Use language from original lesson Use "Words to Know" when available with book Digital Citizen |
|--|---|
| | |

Preparation:

Download Epic! Books for Kids App and create your digital classroom

Create a Collection in Epic! Books that includes books with a Kindergarten theme. You can share your collection with the Epic! Book community - explain digital citizenship: respecting rights, sharing, and safety

Make sure you review all book before adding them to the collection and viewing with children

Procedure:

Place tablet in reading area and read books with children - these books have self-read capability, but an adult needs to be present at minimum the first few times

Find the collection with the books and read

Use Vocabulary in "Words to Know" when available to support the understanding and use of words

| Unit 6 | Bridges: Blocks | ISTE-S 3 | Standards: CA.DE.PS.1-3 CA.DP.PS.1-2 |
|--------|------------------------------------|-------------|--|
| Week 4 | Higher Level Technology Supplement | | ATL.RPS.PS.1-5 ATL.EP.PS.1-5 |

[book covers that represents the book(s) the lesson touches upon]

Technology Concepts

- A design process is used to create an innovative artifact and solve authentic problems
- Perseverance with use of technology present
- Students use digital tools to find information on topics of interest (if Google Expedition used)

| Vocabulary: | |
|--|--|
| e language from original son sign velop and test build | |
| De | |

Preparation:

Tablet Selected drawing App open and ready for use Google Expeditions (VR view and select one of the bridges to tour)

Procedure:

Have children use tablet to create their blueprints. Children will use materials in blocks to build the bridges and write signs. Save blueprints for sending to laptop for printing or send to others.

Use Google Expeditions for additional images as children research different bridges to build.

Unit 6: Things that Grow

Week 5

| Unit 6 | | Math | Standards: Varies according to |
|-------------------|--|------|-----------------------------------|
| Weeks 5 And | Small Groups Suggestions for End of Year | SG | Activities Chosen |
| beyond | | | |

Guiding Math Ideas:

- Associate math with enthusiasm and practical application to everyday life
- Use the MELDS continuum of learning (developmental pathways)

Math Concepts from Unit Learning Progressions:

As needed, according to Activity

Ideas for Small Groups (Or Entire Group, using Small Group Time) During Final Weeks of School

Build-a-Thon: Gather several types of blocks/builders, such as Magna Tiles, Magnet Blocks, Large Cardboard Blocks, Classroom Wooden Blocks (a portion), 3-D Geometric Shapes, etc. Create building Teams of 3-4 children per type of block. Use Large Dice or Spinner for each group. Each group rolls a number and begins building a structure using that number of blocks, adding each time. Groups compare structures at the end of the timer period.

Manipulative Scramble: Combine several sets of manipulatives in a large pile. Challenge children to sort, group, separate, combine the sets in multiple ways. Provide guidance if needed by calling out colors, textures, function, shape, etc.

Math Game Day or Parent Event: Gather the various games from each Unit and place on individual tables around the room. Invite children to play games during small group time. Or create a Math Game Night and invite Parents to play math games with children.

Barnyard or Zoo Count!- Children are grouped into different animals (barn animals, sea animals, zoo animals, etc.—however you wish. Challenge the children to "Count like a duck would count, or How would a lobster count? Turn it into a guessing game by having children draw a picture of an animal out of a bag and then act it out counting for other children to guess.

Favorites- See Large Group, Unit 1 Week 5 for process of problem-solving/voting on Favorites from each Unit. Make a list and incorporate the favorite Small Group or Large Group activities from the year.

| Unit |
|------|
|------|

Math

Math for ME Overview: Guiding Math Ideas

- Associate math with enthusiasm and practical application to everyday life
- Use the MELDS continuum of learning (developmental pathways)
- Nest curriculum into overall Curriculum, providing context through some Maine-themed materials.

| Materials: | Math Vocabulary: |
|---|------------------|
| Maine-Related Books and Activities from Math for ME Curriculum- List Attached | • |

Preparation:

Gather Maine books, SWPL and materials and make a special center or display that can remain for several days or weeks

Procedure:

Choose a Maine-themed book or activity to re-read or repeat. Lead discussions about the ways that we use math every day in Maine in our schools, our homes, with our friends and families, in our towns or cities and outdoors.

Math for ME

Maine-Related Books, Materials and Activities

| Unit | Items |
|------|---|
| 1 | Books: |
| | SWPL: While on a Walk in Maine One Day |
| | Activities: |
| 2 | Books: Down East in the Ocean by Peter and Connie Roop |
| | SWPL: While on a Walk in Maine One Day |
| | Activities: Nature Walk; Ocean Families |
| 3 | Books: Going Lobstering by Jerry Pallotta and Rob Bolster Down East in the Ocean by Peter and Connie Roop |
| | SWPL: Down East in the Ocean Chant; Going Lobstering- Acting Out Story |
| | Activities: Down East in the Ocean: Ocean Sky or Shore |
| 4 | Books: Swan Harbor: A Nature Counting Book by Laura Rankin |
| | SWPL: The Jacket I Wear in the Snow; Nice and Warm |
| | Activities: Swan Harbor Counting and Colors; Swan Harbor Math Game; Math Games |
| 5 | Books: Five Creatures by Emily Jenkins(Family groups) |
| | SWPL: Walk in the Tall, Tall Trees |
| | Activities: How Many Creatures in My Family? |
| 6 | Books: Swirl by Swirl by Joyce Sidman; Fishing for Numbers: A Maine Number book by Cynthia Reynolds |
| | SWPL: The Spiral Swirl Song |
| | Activities: Garden Designers links to Maine Botanical Gardens; Swirl by Swirl Fiddlehead Ferns; Maine Small Groups |

Week 5

Day 1:

Materials: Poetry Poster, felt board and pieces including five tadpoles, tape measure, set of lowercase letters that matches those in children's names

FIVE GREEN AND SPECKLED FROGS

Procedure:

- Put the frogs up on the log as usual, then add the tadpoles to the blue pool. Tell children that these are baby frogs and ask if anyone knows what we call them. If there is a lull, say they are tadpoles.
- Sing the song and add a verse about tadpoles. "Five little baby frogs, can't climb upon the log. Legs and feet they have not yet, Not 'til they're fully grown and have legs of their own, will they play on the speckled log."

I MEASURE MYSELF

Procedure:

- Read the title of the poem, underlining it with your finger as you read.
- Show the tape measure and ask if anyone remembers the name of this tool used for measuring. Show how it is used to measure the length of an arm.

IF YOUR NAME HAS A [] IN IT RAISE YOUR HAND

Procedure:

- Tell children that you are going to do the activity with their names that they did a few weeks ago. Explain that you are going to show lowercase letters, and they should raise their hand if the lowercase letter you show is in their name. Remind them that they should raise their hand only if the letter is lowercase in their name. For example, *Emily* should not raise her hand when you hold *e*, but *Terrence* would, because the *E* in *Emily's* name is uppercase.
- If children hold up their hand when the letter you hold up is the first letter in their name, you might say, *Cole* you have *C* in your name, but it's the uppercase letter--the big *C* –not the little one, so put your hand down.

THE GREEN GRASS GROWS ALL AROUND

Procedure:

• Sing all the verses of the song

Day 2: Materials: Poetry Posters,

MARY HAD A LITTLE LAMB

Procedure:

• Sing the song as usual.

MY SHADOW

Procedure:

- Read the title, point to and sound out *M* in *My*, and *Sh* and *d* in *Shadow*. Then recite the poem once.
- Ask if they know what part of the foot is called the heel. Ask children to point to their heel.
- Talk about how shadows grow and how real children grow more slowly.

IF YOU'RE HAPPY

Procedure:

• Sing familiar verses.

Ask children for ideas for new verses.

LOOBY LOO

- Tell children that they need to stand up for this song.
- Sing the song as usual, doing the motions.
- Add a few new verses. Ask children for ideas of parts of the body to move in different way to create new verse

Day 3:

Materials: poetry poster, pocket chart, two sets of lowercase alphabet cards

I MEASURE MYSELF

Procedure:

- Ask the children if they remember the poem from the other day. Read the title with children, pointing to and sounding out *M* in *Measure* and *Myself*, before underlining and reading the rest of each word.
- Recite the poem naturally, going fairly slowly so that children can chime in.

LITTLE LETTER/BIG LETTER CHANT

Procedure:

- Tell children they are going to play the Little Letter/Big Letter Chant game.
- Distribute the lowercase letters and retain the upper case matches.
- Say this chant: I have the uppercase[name a letter]. As you hold it up. Take a look to see. Someone has its partner. Who might that someone be?
- Proceed by using the uppercase matches for all letters distributed to children.

Remind the first few children that they should say, *I have the little* [name a letter] when they hold up their card.

HEAD, SHOUDLERS, KNEES AND TOES

- Stand up and sing song as usual
- Sing it a second time using "heels" instead of "knees." And "chin" instead of "mouth."

Day 4:

Materials: poetry poster, word cards: fiddle-ee-fee; glub, glub; squeal, squeal; hooo

IF YOU'RE HAPPY

Procedure:

- Tell the children that the first song will be "If You're Happy"
- Add additional verses with other emotions such as "surprised" (gasp), "puzzled" (furrow your brow), or "disappointed" (look sad).

BARNYARD SONG

Procedure:

- Tell the children that next they are going to sing the "Barnyard Song," but with some verses for new animals.
- Tell children you want them to imagine that there's a pool on the farm where some frogs live. A tree where some owls live, and a pigpen with some piglets enjoying the mud.
- Ask what sounds they should sing for these new animals (*glub, glub* for frog, *hooo* for owl, *squeal* for piglet)
- Sing the first verse as usual with the cat that went "fiddle-ee-fee" and then continue singing, using the new verses.
- When finished singing, show the word cards to children, and ask them which says *glub*, *glub*; which says *hooo*, which says *fiddle-ee-fee*; which says *squeal*, *squeal*.
- Segment the first phoneme of each of these words with children (e.g., /g/ for glub, /f/ for *frog*) and comment that they need to look for a word that starts with the letter that is used to represent that sound (e.g., g for /g/ f for /f/).

WHEN I WAS ONE

- Tell children that you are going to read a new poem.
- Read the title underlining the words with your finger.
- Recite the poem naturally.

Day 5:

Materials: poetry posters, book; Bigger

CLAP YOUR HANDS

Procedure:

• Sing four or five verses using some verses that children have sung before, as well as newer ones ("flick fingers," "wiggle nose").

CAN YOU THINK OF WORDS THAT BEGIN WITH THE SAME SOUND AS __? (And Bigger) Procedure:

- Show the book and tell them that you are going to say some words that are in the book and then you will ask them to think of words that begin with the same sound.
- Present mountain, /m/ and ask children if they can think of other words that begin with /m/. Provide examples if children cannot think of word (e.g., moon, morning, milk, mother)
- Present shoes, /sh/ and ask children if they can think of other words that begin with /sh/. Provide examples if children cannot think of word (e.g., ship, share, shampoo, shake)
- Present legs, /l/ and ask children if they can think of other words that begin with /l/. Provide examples if children cannot think of word (e.g., lizard, lake, lemon, light)

WHEN I WAS ONE

Procedure:

- Tell children that you are going to recite poem they learned the day before.
- Read the title underlining the words with your finger.
- Recite the poem naturally.

BARNYARD SONG

- Tell children that next they are going to sing the "Barnyard Song," using some of the verses for new animals.
- Stand up and sing the song as usual with the motions.
- Ask children for some ideas of body parts to move in some way.





Image downloaded from Amazon.com

Guiding Math Idea:

- Empowering Mathematical Thinking- Habits of Mind for School Success: Perseverance and Process
- Review and Reinforcement of Counting Strategies

Math Concepts From Unit Learning Progressions:

- Counting patterns above 10
- Applying problem solving skills to solve math and practical problems.

Adaptations for Using Large Group In Alternate Schedule Slots:

The Counting Book Read-a-Thon also is appropriate during Center Time. This is also an excellent Small Group Activity.

* This is a Maine Connection Activity: Maine Counting Books

Materials:

- *Fishing for Numbers a Maine Number Book* by C. F. Reynolds.
- Collection of Counting Books from Units 1-5. Consult your Book List, or Unit Lesson Plans.
- Graph (optional). Use Blank Graph from U6 W 4 (Measuring) and adapt to Counting Books.

Math Vocabulary:

 Counting Books: Books especially written to help us learn to name numbers and count.

٠

Preparation:

Collect counting books used in each Unit this year. Feature the Unit 6 Maine Counting Book, *Fishing for Numbers*. Each page has Maine facts that could be used for many math, science, geography and other curriculum ideas. This book has a rich vocabulary and every Maine-specific things: Bean pots!, Potatoes! Add additional counting books as needed from your school library or the general curriculum.

| Intro to Centers: | |
|--------------------|---|
| think it is about? | Show book cover and introduce the book. Flip through some pages and talk about some of the Maine-related objects and ideas. |

Yes it is a counting book AND it is a counting book about Maine- the state where we live. You might see some pictures of things in Maine that you have seen or done. We have read a lot of counting books this year. Here are some of them. Some are about Maine, and some are about animals. Some are about babies and children and families. Let's look at our books together. [Optional] I wonder, how are these books alike and how they are different? Let's do some research and find out. OR

What is your favorite counting book?

There are approximately 20 counting books in Math for ME, enough for each child to re-read and explore at least one each. Add additional counting books if you wish.

Optional: You can use the counting books as a final "research project" as children group and sort the different counting books. Make a graph to show your findings if you wish. Sample: How many books count with animals? Which books count to 10? To 20? To 100? How many books are about Maine?

Strategies to Provoke Math Thinking:

- Keep Math Connected to the Real Lives of Children: Maine Connections in the Math for ME Curriculum: Keep Our curriculum is intentionally planned to put math in context. One way is the inclusion of Maine-specific books and activities. Gather these books from the various units and place them in the reading center. There are also SWPL Maine-based activities: Units 1 and 2- While on a Walk in Maine One Day. Books: U2 Down East in the Ocean U3 Going Lobstering U4 Swan Harbor: A Nature Counting Book; U6 Fishing for Numbers; Activities: U3 Down East in the Ocean Families; Ocean Sky and Shore. You can customize math activities even more for your local celebrations, food traditions, and specific school building and schedules.
- Research and problem-solving: Children are now experienced problem-solvers. They can generate their own questions and figure out ways they would like to organize data and represent it. Instead of creating a graph for them, encourage them to make their own graphs to collect information about Counting Books.

Provocation:

This is a great time of year to compile a List of Favorites. Recall some activities from each Unit and repeat. Have children vote on their favorites. Use provocations such as How could we change this activity, now that we know more math? OR Could we change this to be a Maine- connected activity?

** Use Week 5 activities and extend them into the remaining weeks of the school year.

Week 5 has 2 Suggested Large Groups and suggestions for Small Group activities. You can also create a List of Favorite Small and Large Groups and repeat.



Week 5

Large Group: Researching the Math in Kindergarten**

Guiding Math Ideas:

- Solving a problem takes an interdependent system
- Applying research methods to questions and problems

Math Concepts From Unit Learning Progressions:

- Depict understanding of sequence and time through STEM activities.
- Applying problem-solving skills to solve math and practical problems
- Applying data skills to everyday activities and practical questions.

Adaptations for Using Large Group In Alternate Schedule Slots:

• Do anytime as a Large Group or Small Group, in coordination with Kindergarten teachers.

| Materials: | Math Vocabulary: | |
|--|---|--|
| Flip Chart and markers Individual tablets or notepads for children's data collection Simple data collection graph (Example Attached) | Research: finding out information to answer a question or solve a problem | |

Preparation:

Have Flip Chart and/or individual tablets for children to collect data. Customize the data collection graph as needed.

This activity is done in conjunction with the overall curriculum activity of Researching Kindergarten (See Week 4). Add math-related questions to the research field trip, or schedule a special time for children to visit Kindergarten and observe math.

| We started researching Kindergarten last week. Do you think that we can use all the things we know about math and problem-solving to help us research kindergarten? I wonder if (when) we visit Kindergarten , will we find anything about math there? What do you think we might find? We can do some research - find out more about math and kindergarten. We know that researchers always ask questions. | Gather children for a discussion. This can occur in Small Group time, at lunch or at your designated Large Group Math time. Children begin giving ideas about how math might be found in the kindergarten classrooms. Write down their ideas. |
|---|--|
|---|--|

| What are some questions that would help us | Write down the questions. |
|---|---|
| find out more about kindergarten and math? | Make suggestions as needed. |
| I wonder: Do they have a number chart on the | |
| wall in kindergarten? | Continue writing questions. |
| Do they practice counting every day, like we do? | |
| I wonder if they have a math shelf? | |
| Do you think they play math games like we do? | Children can recall some of their problem-solving |
| We have done a lot of problem-solving this year, | strategies from throughout the year. |
| when we collected data about a question. | |
| What would be some ways to find out and | |
| record the answers to our questions? | |
| We are going to visit Kindergarten on We | |
| will keep these questions here on our chart. | When you take the field trip to Kindergarten, |
| When we get ready to go, you can take some | take along the questions. You can assign |
| paper with you to help you remember the | children different questions, or help them with |
| questions and answers. You can draw or write, | their research and answers. |
| or ask a teacher to help you write things down to | You can also form the questions in terms of a |
| remember. | graph, as we have done several times |
| | throughout the year. (Sample attached.) Use |
| | simple graph if you have prepared one. |
| | |

Strategies to Provoke Math Thinking:

• Year in Review: The Week 5 Math Activities in each Unit focus on some aspect of problemsolving skills. During the last few weeks of school recall these problems with the children and talk about how they have grown as problem-solvers and math-thinkers this year.

Provocation:

• None- This activity crosses curriculum areas and uses analysis and other higher-level problem-solving skills.

**Use Week 5 activities and extend into the remaining weeks of the school year.

Week 5 has 2 Suggested Large Groups and suggestions for Small Group activities. You can also create a List of Favorites and repeat.

Finding Math in Kindergarten

| Question | Yes | No |
|---|-----|----|
| Is there a number chart or a number line? | | |
| Do you play math games? | | |
| Is there a Math Center? | | |
| How do you solve problems with math? | | |
| | | |
| | | |
| | | |

| | Math Games | Counting | People Math | |
|--|------------|----------|-------------|--|
| What is your Favorite Math Activity? | | | | |



Outdoor Learning Opportunities:

Standards: S.LS.PS.1 CA.MD.PS.3

Flower Parts & Parts of a Seed



| Materials: | Vocabulary: |
|--|---|
| Parts of a seed made out of felt (seed coat, cotyledon, embryo) Lima beans Container filled with water Pictures of flowers and parts of a plant Book – <i>The Carrot Seed</i> by Ruth Krauss | Seed coat Cotyledon Embryo Roots Stem Leaf Petals |

Soak lima beans in water overnight. Read *The Carrot Seed* and discuss the characteristics and part of a seed. Use the felt pieces (two brown pieces for the seed coat, one tan piece in the middle of the two brown pieces for the cotyledon, and a small green plant in the center for the embryo. Have the children take a soaking lima bean apart to find all of these pieces (the outer seed coat, the middle cotyledon or food for the seed and the small little plant hiding inside or embryo). Show pictures of the stages of development of the seed showing the seed moving up through the ground and the roots growing down, then the stem growing up, and a leaf coming out of the stem until the flower emerges with petals at the top.

Extension: Sing and act out the Billy B. Song – "Yippee, Hooray!" with modification to become a flower instead of a tree.

Wet ground! Warm sun! [*children rolled up on floor*] My life as a flower has just begun. I'm so sure, I have no doubts, Because my shell has cracked, and I have a sprout! It's growing up, and growing out, [*children start to stand up*] It's growing up, and growing out! Yippee, hooray, I have a sprout! [children jump up and extend arms in the air]
Yippee, hooray, I am a sprout!
Yippee, hooray, I have a sprout!
Yippee, hooray, I am a sprout!

Guiding Questions:

- What are the parts of a seed?
- Can you find them in the lima bean?
- What are the parts of a plant as the seed grows? What does each part do for the plant?

| Full Day Schedule | | | | | |
|----------------------------|-------|-------|------------------------|-------|-------|
| Unit 6 Week 5 | Day 1 | Day 2 | Day 3 | DAY 4 | DAY 5 |
| Story | | | | | |
| | | Cen | ters | | |
| Intro to centers | | | | | |
| Art Studio | | | | | |
| Easel | | | | | |
| Writing and Drawing | | | | | |
| Library & Listening | | | | | |
| Dramatization | | | | | |
| Blocks | | | | | |
| Discovery Table | | | | | |
| Puzzles & Manipulatives | | | | | |
| Technology | | | | | |
| Thinking & Feedback | | | 1 | | |
| SWPL Whole Group | | Refe | r to Clipboard Directi | ons | |

| Whole Group Lessons | | | |
|------------------------|--|--|--|
| Small Groups | | | |

| Outdoor Learning | Refer to Nature Extensions for Individual Lesson plans | |
|---------------------|---|--|
| | | |