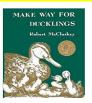


Make Way for Ducklings Story Sequencing



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



Materials:

- Make Way For Ducklings
- Make Way For Ducklings sequence cards

Vocabulary:

- sequence
- ducklings
- •first, next, last

Preparation: Set up materials.

Intro to Centers:

"In *Make Way for Ducklings*, Mr. and Mrs. Mallard *first* looked for a safe place to build a nest and hatch their *ducklings*--baby ducks. What do you notice?"

"Next, Mrs. Mallard taught the ducklings how to swim, dive, and walk in line. What do you notice?"

"What happened next?""

"What happened *last*?"

"Today in Puzzles and Manipulatives, you can use these materials to *sequence* Make Way for Ducklings--put the story in order with what happened first, next, and last."

Show illustrations. Children respond

Show illustrations. Children respond.

Show illustrations. Children respond.

Show illustrations. Children respond.

Show materials.

During Centers:

Encourage children to use sequence words (*first, next, last,* etc.) Encourage children to retell or act out *Make Way For Ducklings* after sequencing the cards. Provide numeral cards or a piece of tag/poster board divided into boxes as a "storyboard". Mount sequence cards on blocks, DUPLOs, etc. Encourage children to write and illustrate alternate endings/events of the story.

Guiding Questions during Centers:

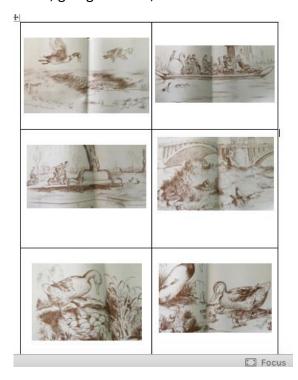
- How do you know this is what happened first, next, last in Make Way for Ducklings?
- How could you change /show the events/ending to the story?
- How is the sequence of Make Way For Ducklings similar to or different from the sequence of Community Soup, etc.?

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 sequence cards for other read alouds/routines of the day, i.e., lining up for recess, going to lunch, etc.



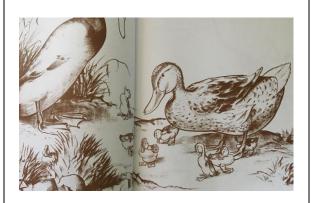






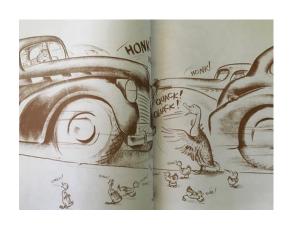


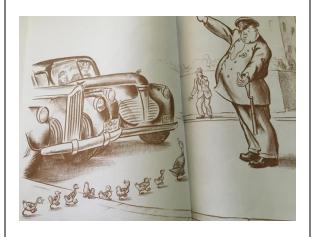




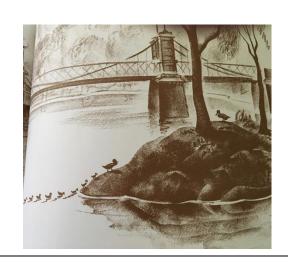










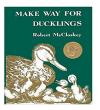




Small Groups: Bird Feeders

Support: High

Standards: ELA.SL.CC.PS.1-3 S.LS.PS.3 -4, 6-10



Materials:

- Make Way for Ducklings
- "Please Do Not Feed the Birds" sign image
- Bird Feeder images
- pine cones
- shortening, i.e., Crisco, lard, butter
- birdseed
- string

Vocabulary:

- bird feeder
- mallard
- birdseed
- observe
- document

Preparation:

Set up materials.

Procedure:

Show illustrations in *Make Way For Ducklings* of people feeding peanuts to the ducks in the Boston Public Garden, and Michael feeding them peanuts on the bank of the Charles River. Show image of *"Please Do Not Feed the Birds"* sign. Discuss why this might be an important rule.

Show images of bird feeders. Discuss how bird feeders are helpful to birds.

Show materials. Discuss how a bird feeder is similar to or different from feeding birds by hand. Model making a bird feeder using pine cone, shortening, and birdseed. Support children in making individual or partner bird feeders. Hang bird feeders outside classroom. Encourage children to observe and document birds visiting the feeders. Compare and contrast birds to illustrations/images of ducks.









Hummingbird feeder

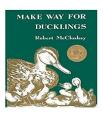


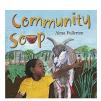


Small Groups: Rhyming Games

Support: High

Standards: ELA.LS.VAU.PS.1, 3 ELA.RF.PA.PS.1 -1a





Materials:

- Community Soup
- Make Way for Ducklings
- rhyming word picture cards
- heavy paper

Vocabulary:

- rhyme
- sound
- alike
- different

Preparation:

Set up materials. Copy rhyming word picture cards onto heavy paper. Make multiple sets if needed.

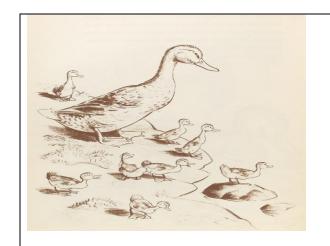
Procedure:

Show illustrations from *Community Soup* and *Make Way For Ducklings*. Model identifying rhyming words. Remind children that rhyming words have the same sounds at the end. Encourage children to produce / identify other rhyming words from the texts or make up "nonsense" words. Encourage children to identify the rhyme, i.e. 'at' in cat/hat.

Show rhyming word/picture cards and model game.

Option #1: Cards are turned face down, and each child turns over two cards. Child says the word on the cards and says if they rhyme or not. If the cards rhyme, the child makes a pair. Turn the cards back over if the words do not rhyme. Children take turns finding pairs.

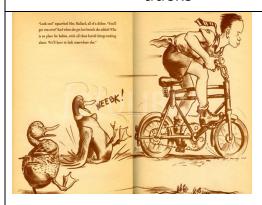
Option #2: Show children a rhyming word/picture card. Each child takes a turn to generate a rhyming word.



ducks

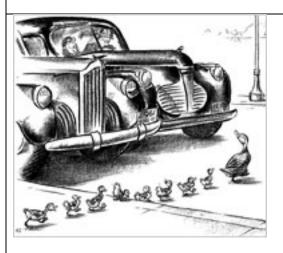


trucks



bike



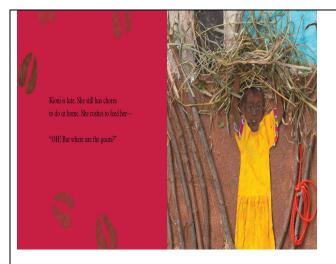


line



vine







chores







soup

hoop

Unit 6



Week 3

Small Groups: How Do I Measure? High Support

Math SG 1 Standards: MELDS.M.MD.PS.10 MELDS.M.MDPS.11

Prock by Fresh



Images downloaded from Amazon.com

Guiding Math Ideas:

- Living things grow and have life cycles (Enduring Understanding)
- Empowering Mathematical Thinking- Habits of Mind for School Success
- Measurement as Practical and Purposeful: Measurable Attributes of Things that Grow

Math Concepts from Unit Learning Progressions:

- Using standard and non-standard measurement in different ways, with different tools
- Solving problems using measurement
- Demonstrating the practical use of measurement
- Applying data skills to everyday activities and practical questions

Materials:

- Inch by Inch, Leo Lionni
- Balancing Act, Ellen Walsh
- Books about Measuring from Other Units: A Pig is Big (Unit 1), The Tall Tree (Unit 5)
- A Variety of Measuring Tools- Measuring cups and spoons, 6 and 12 inch rulers, yardstick, cloth measuring tapes, metal measuring tapes, bathroom scale, bucket balance; pan balance; thermometer
- Measuring Hands resource OR another non-standard measuring tool, such as a unit block
- Small cube/blocks for Bucket Balance
- Data collection graph or chart (Teacher Resources) Group and Blank
- Pencils or Pens

Math Vocabulary:

- Height- how tall something is from bottom to top.
- Length- how long something is from end to end.
- Width- how wide something is from side to side.
- Weight- how heavy something is.
- Capacity- how much something holds.

Preparation:

This activity takes place after Large Group, and after the Balancing Act SWPL.

Gather a lot of different measuring tools and set them up on the small group table or the floor. Before small group begins, choose 6 or 8 things you might measure from the classroom that are all measured best with different tools. Customize the *Our Measurement Graph* from Teacher Resources. Place the assortment of books about measuring in Small Group Area.

Copy and cut out some measuring hands **OR** use another non-standard measurement, such as a basket of same sized wooden blocks.

Procedure:

We read about a Measuring Worm in Large Group.

Show Inch by Inch.

The Worm used his body to measure parts of birds. Worms and living things grow. We do too! In SWPL, we read Balancing Act and pretended to balance the different sides of our teeter-totter.

Show Balancing Act.

We have a lot of other books about measuring things we have read this year.

Show books and talk about the different ways we measured.

On our table we have a lot of measuring tools. Are there any that remind you of the Inch Worm or the Teeter-Totter?

Today we are going to measure things in our classroom using a lot of different tools. We can decide what kind of tool we might need. In our class this year, we have collected data a lot of times. We have made some special graphs and lists. Here is one about measuring.

Show the Data Chart and read the tools and the items, using symbols as needed. Children explore and choose measuring tools such as rulers, yardsticks, or the pan or bucket balance. They can brainstorming about things they could measure with a tool.

Before we measure, we need to know WHAT to measure—How Heavy something is? How Tall? Go around the room measuring things and discussing what attribute they would like to measure, how to measure it, and what tool to choose. They will be going back and forth from Small Group area choosing tools. Choose the Measuring Hands as one options, and demonstrate about how they could be used for non-standard measurement. You can put the actual measurement in the chart, or a check mark to indicate what tool was used.

Examples of using accurate measurement words:

- 1. At our water table, we can measure how much water this dish could hold. That means we are measuring the **capacity**. What could we use to measure it?
- 2. This block is laying down on the floor. Let's measure its **length**. That is how long it is from end to end. What could we use to measure it?
- 3. We have some paper hands as measurement tools. How could we measure height using these? After measuring items, return to the small group area and invite children to measure more things on their own or with a partner. They can create their own chart (blank ones are included) if they wish. Clarify measurement words, and observe children's understandings of the process of measurement. Leave tools, measuring books, & blank graphs in the Small Group Area for continued exploration. Bonus: IF you measured children's heights at the beginning of school, you could adapt this activity to remeasure children and talk about life cycles and growth.

Strategies to Provoke Math Thinking:

• Choosing the correct measuring tool: Measurement can be confusing because of the many different "units" shown on measuring tools. 1 cup of water is very different from 1 inch on a

ruler. Mastering measurement is not a preschool math expectation; children need many different types of measuring experiences in different contexts to construct measuring concepts. The **process of measurement** is a complex activity that involves the idea of selecting a unit; repeating the unit; repeating without gaps or errors; adding and comparing; direct and indirect comparisons. The more familiar children are with how we go about measuring things, the better the foundation will be for more accurate ways of measuring in the primary years.

• Non-standard measurement: Reinforce a key concept about non-standard measurement: (which seems contradictory). *The non-standard unit must be "standard"*. A lump of playdough won't work. Neither will using everyone's individual hands to measure. A piece of yarn? No- it stretches in a non-uniform way. Help children choose carefully.

Adaptations for Additional Challenge:

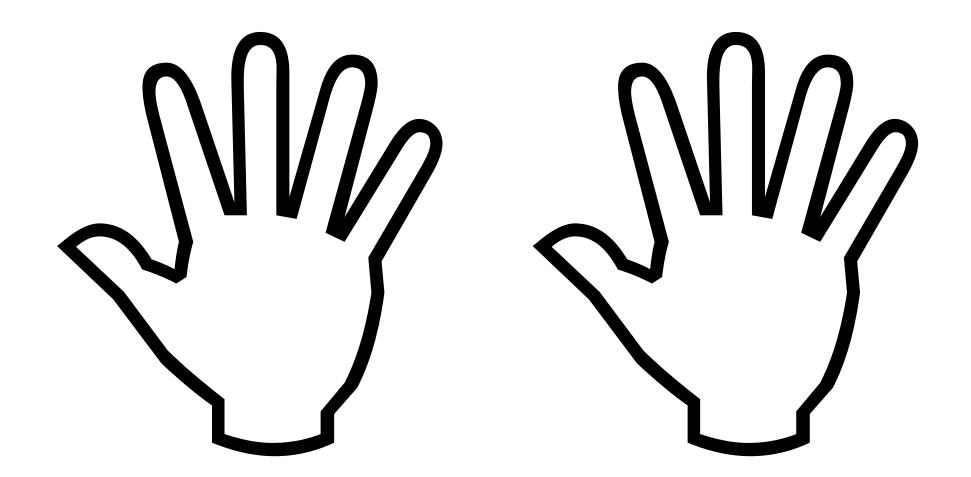
Links to other Units: Revisit A Pig is Big or The Tall Tree. Ask children to do an activity similar to measuring with the large pig/box used in U 1, which adds the important math skills of estimating and direct comparisons. Link to Other Units: One activity based on The Tall Tree (online at https://dawnpub.com/activity/tall-tall-tree-activities/ shows how to measure a very tall tree using indirect measurement. It has several steps but will be fun for e children (and adults) to try.

Documentation:

• Substitute the group Data Collection Chart for an individual one, and document children's understandings of measurement tools, attributes and the process of measuring.

Provocation:

• Use the school environment for measurement explorations. How tall is our school building? How long is the hallway? How many tables fit into the cafeteria? Is the basketball court smaller or larger than the PreK tarmac?



Unit 6



Small Groups: Growing Collages Low to Medium

Math

SG2

Standards: MELDS.M.G.PS.4 MELDS.M.MD.PS.3 MELDS.M.MD.PS.6 MELDS.M.MD.PS7 MELDS.CA.VA.PS.3* MELDS.S.LS.PS.6*



Image downloaded from Amazon.com

Guiding Math Ideas:

- Living things grow and have life cycles (Enduring understandings)
- Measurement as Practical and Purposeful: Time

Math Concepts from Unit Learning Progressions:

- Apply Part/Whole Understandings to the natural world
- Depict understanding of sequence and time through STEM activities
- *This activity also meets Visual Arts and Science Standards

Materials:

- *Inch by Inch* by Leo Lionni
- Tissue paper- many colors
- Child- sized scissors
- Watered down glue, or starch/water solution
- Small foam paint brushes
- White large construction paper or other large paper
- Markers
- Smocks
- Bowls of water for cleaning brushes and clean-up

Math Vocabulary:

- Collage
- Time and sequence words: such as first, next, last or last week, yesterday, today and tomorrow

Preparation:

Use Marker and divide each large sheet of construction paper into four sections. Example Attached. Decide whether you would like to use the sequence words, or the descriptions of the passage of time, depending on your group and their current understandings of sequence and time. Label.

Organize tissue paper by color. Prepare the glue or starch mixture. Cover Small Group Table with newspaper. Have children put on smocks.

NOTE: There are **many** ways to help children's beginning understandings of time. See *Strategies and Adaptations* for other ideas.

In Large Group, we read Inch by Inch by Leo Lionni. We noticed that Mr. Lionni used lots of different colors and kinds of paper to make his book's pictures. These pictures are called **collages**. We have made collages in art this year.

Show book and point out some of the ways that paper was used.

The grass looks like it was made with long pieces of green paper. These collage pictures show lots of plants and animals. We can make collage pictures that show growing things.

The seeds we planted are starting to grow. Did the seeds start to grow the minute we planted them?

Lead discussion about time, and how plants animals and people grow from smaller to larger.

These large pieces of paper are divided up into some parts. How many parts are there? Children count.

Yes there are 4 parts. Let's think about how to make a pictures that shows things growing from smaller to larger, like our plants are doing. I am thinking of some words that describe how long it might take for things to grow.

Show your own paper, with words written at the top indicating time/sequence.

I'm going to make a picture that shows a flower getting bigger and bigger. I'm going to use collage. This kind of collage is called tissue paper collage. Here is how it works.

Demonstrate tearing or cutting the tissue paper into pieces, and "painting" it onto the larger paper using the small brushes.

Encourage the children to start making collages that show plants or animals growing, or things growing from smaller to larger. Invite them to dictate a story about how their garden might be growing. Supply words, descriptions of time's passing, and assistance with the collage-making process. As children work, discuss the growing process that they are hearing about and experimenting with in other parts of the curriculum. If you did not pre-label their 4 part pictures, work with them in choosing time/sequence words.

Clean up and place children's artwork in safe place to dry.

Strategies to Provoke Math Thinking:

- Making time visible: Time is the most abstract concept in measurement, as it is a quality, not an observable attribute like length or height. Ideas about time develop slowly over many years.
 Humans have invented ways to keep track of time. Scientific observations can help us see that time is passing in a concrete way. This project encourages children to depict the time it takes for living things to grow. Other Units such as Wind and Water or Shadows and Reflections have time concepts embedded in them.
- Simplify: Cuts strips of construction paper in graduated lengths from short to long and use as stems. Use buttons or other materials to represent flowers. Children create small to large flowers from left to right, using sequence/time words of your choice.
- Use Music to Reinforce Time Concepts: SWPL Yesterday, Today and Tomorrow and First and Next and Then and Last.

Adaptations for Additional Challenge:

- Story Sequencing: Cut apart old books, laminate the pages, and have children sequence the stories in chronological order.
- Show children your planning book, and how use a time schedule and the days of the week to plan for all of the things we do in PreK. Invite children to make their own calendars and place activities on the different days. Try to incorporate some of their ideas into planning.

Documentation:

• This activity's concepts are best documented through collecting examples for children's portfolios. Children can also bring their art work as artifacts to Story Telling time.

Provocation:

Art/Math Connections: Monochromatic Color Collages: Continue the idea of many parts making
wholes by offering art materials in different gradations of the same color. Children can make light
to dark collages, or day to night collages, choosing colors that remind them of different parts of
the days and night.

This is an <u>example only</u> of how you could divide paper in preparation for math/art work. Fill in any headings you wish, or leave the headings blank and have children name them to demonstrate their understanding of sequence and time. OR use 3 sections instead of 4.

MY GROWING GARDEN COLLAGE

Next OR Yesterday	Next OR Today	Last Next Week

Unit 6



Week 3

Songs, Word Play, Letters

Day 1

Materials: poetry posters, 2-row grid of 10 squares with the first row and eight squares of the second row filled with dots, book: *Make Way for Ducklings;* felt letters: Q, u, a, c, k, Y, B, b; tag board, word card: Quack

FIVE EGGS AND FIVE EGGS

Procedure:

- Underline the title. Recite the poem naturally.
- Ask children if they remember how many eggs Mr. and Mrs. Mallard had. After establishing that it was eight, ask whether the mother hen had more eggs or fewer eggs than Mr. and Mrs. Mallard.
- Show the 2-row grid. Say that one row has ten boxes filled in to stand for the eggs the mother hen laid, and the other has eight boxes filled in to stand for Mr. and Mrs. Mallard's eggs. Ask children to point to which row is which. Summarize that ten is more than eight.

OPEN SHUT THEM

Procedure:

- Hold up both hands and open and close them to signal the song. Children will probably guess that the song is "Open, Shut Them."
- Sing the song and lead them in the motions.
- Sing the song two more times, once very slowly, and then very fast.

BINGO (And We Can Change it and Rearrange it)

- Tell children that you are going to sing the tune of "Bingo" but you will use "Quack" instead. Remind them that Quack was a duckling's name in *Make Way for Ducklings*.
- Show the word card. Have children name the letters one at a time, until all the felt letters are on the board. Point out that only one letter, Q, is uppercase or big, just like in the beginning of their names.
- Sing this verse: There were two ducks who had a duckling, and Quack was his name-o. Q_U_A_C_K, Q-U-A-C-K. Q-U-A-C-K, and Quack was his name-o.
- Sing the song, turning one letter over per verse, and then clapping for it the next time.
- Remove Q and u and replace them with Y, ask children what word this makes (Yack), and sound out /y/ to help them out.

- Remove Y and replace it with B, and help children read it (Back).
- Rearrange the letters to spell caB. Help children read this word. Then comment that we need a little b to write cab. Replace B with b.

Day 2

Materials: poetry posters, two sets of lowercase letters

MARY HAD A LITTLE LAMB

Procedure:

- Say, "We are going to start today by singing a new song called "Mary Had a Little Lamb." This song is about a little girl who had a pet lamb and it followed her to school."
- Sing the song once through for the children.
- Then, you might say, "We'll sing the song again in just a minute, but we should talk about some of the words in the song that might be new to you. One of the words is fleece. The song says that the lamb's" fleece was as white as snow." Does anyone know what fleece is?" Give children a chance to offer an idea and then say, "Fleece is the soft "hair" that covers a lamb. Another name for fleece that covers a sheep is wool."
- Then say, "The song also says the teacher "turned it out", but the lamb stayed near. Do you know what "turned it out" means?" Guide children to understand that it means the teacher made the lamb leave school.
- Sing the song a second time.
- Then you might say, "You would probably find a lamb in a barnyard. The poem we will recite next is about another animal you would find there, too."

GOOD MORNING MRS. HEN

Procedure:

- Read the title with children.
- Point to and sound out G and d in Good, as you read the word, and M in Mrs., and H and n in Hen as you read those words.
- Recite the poem with the children.

FIVE LITTLE DUCKS

- You might say, "Now we are going to sing about some other animals you might find in a barnyard. We are going to sing "Five Little Ducks."
- Sing the song and model the motions.
- Say, "Do you remember how many ducklings there were in the story Make Way for Ducklings?" After recalling that there were eight ducklings in the story, ask how many fingers of their second hand they would need to use if the song was about the number of ducklings in Make Way for Ducklings.
- Hold up the five fingers on your first hand, and then count fingers on your second hand until you arrive at a total of eight. You might say, 5...6, 7, 8! You would need three fingers from your second hand.

LITTLE LETTER CHANT

- Select as many lowercase letters as there are children in the class.
- Distribute the lowercase matches for each lowercase letter you selected to the children. Tell them you are going to play a matching game. Do not name the letters. Note which children name theirs spontaneously and correctly. Correct any error you hear.
- Say this chant as you hold up a letter: I have the little [letter name]. Take a look to see. If you have its match, please show it now to me.
- Proceed by using the lowercase matches for all of the letters distributed to children. Remind the first few children that they should say, "I have the little [letter name]!" when they hold up their cards.

Day 3

Materials: poetry posters, book: Make Way for Ducklings, picture cards: island, hatch, molting

IF YOU'RE HAPPY

- Tell children that you will stay seated to sing the verses that involve the head and hands
- Sing verse for "clap hands," "snap fingers," "shout hurray," nod head," and "pat cheeks," modeling the motions as you lead the children.

MY SHADOW

- Tell children that the next poem they learned a while ago, about a boy playing with his shadow.
- Read the title with the children.
- Read the poem once slowly, then a second time more quickly but slowly enough for children to join in

I'M THINKING OF ___CLUE GAME (*Make Way for Ducklings*).

- Show the book and tell the children that you are going to play the word guessing game with words from this book. Ask children to listen to all the clues you give and to hold their hand up if they have an idea. Show the Picture Card after children guess a word.
- For island, say, This is the name of a small piece of land that is surrounded by water. The last sound in the word is /d/.
- For hatch, say, Some baby animals grow inside of eggs, and then come out of the eggs when they are big enough. When eggs are ready to break and the new baby animals are ready to come out, we say that the eggs are going to ____. This word begins with /h/.
- For molting, say, This word describes what happens when ducks lose their feathers and get new ones. The word starts with /m/.

HANDS ON SHOULDERS

- Read the title, underlining the words.
- Stand up as a class and recite the poem.
- Recite it again. Tell children you are going to change some parts, so they should listen carefully. Change "and now your toes" to "and now your clothes. "Change "clap to four" to Point to the door."

Day 4

Materials: poetry posters, The Green Grass Grows All Around flannel pieces and flannel board, book;

FIVE LITTLE DUCKS

• Tell children that the first song they are going to sing today is Five Little Ducks. Sing as usual and model the motions.

I'M A LITTLE TEAPOT

Procedure:

- Ask children to stand up and sing the song as usual with the motions.
- Add an additional verse: "Add a bit of sugar to make it sweet. Stir it in. Then drink the tasty treat." Model spooning sugar into a cup, stirring, then pretending to hold a cup to your mouth to drink.

MY BIG BALLOON:

Procedure:

- Say, "We haven't read this poem for a long time. I think you will remember it though." Read the title with the children. Point to My and read it as a sight word. Point to and sound out B and g in Big, and B, II, and n in Balloon.
- Recite the poem, doing the motions with children.

THE GREEN GRASS GROWS ALL AROUND

Procedure:

- Say, "I noticed in the poem "The Big Balloon," that Big and Balloon both started with the same sound, /b/. In the song we are doing next, three of the words in the title start with the same sound. We are singing "The Green Grass Grows all Around." Green, Grass, and Grows, all start with /g/." '
 - Sing all verses of the song, placing the appropriate flannel pieces on the board as you sing.

FIVE LITTLE OWLS IN AN OLD ELM TREE

- Read the title with the children. Point to and sound *F* and *v* in *Five*, *L* in *Little*, *O* and *d* in *Old*. And *T*, *r*, and *ee* in *Tree*. Point to and sound out these words quickly, underlining all the letters as you read them. Read *in* and *an* quickly as sight words.
- Recite the poem in a manner that makes the text flow naturally. Point to the winking and blinking owls and the moon, when the text is recited.

Day 5:

Materials: poetry posters, two sets of lowercase letters

LOOBY LOO

Procedure:

• Stand up and have the children stand up too. Sing the song as usual and ask children for ideas of parts of the body to move in some way for new verses.

THE LITTLE TURTLE

Procedure:

- read the title together. 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 without referring to it in the book. Model the motions for the children.

GOOD MORNING, MRS. HEN

Procedure:

- Read the title with the children. Point to and sound *G* and *d* in *Good, M* in *Morning, M* in *Mrs*. And *H* and *n* in *Hen*.
- Recite the poem naturally, then recite another poem called "Good Morning" from *Sing a Song of Popcorn* or another favorite poem.

LITTLE LETTER CHANT

- Select as many lowercase letters as there are children in the class.
- Distribute the lowercase matches for each lowercase letter you selected to the children. Tell them you are going to play a matching game. Do not name the letters. Note which children name theirs spontaneously and correctly. Correct any error you hear.
- Say this chant as you hold up a letter: I have the little [letter name]. Take a look to see. If you have its match, please show it now to me.
- Proceed by using the lowercase matches for all of the letters distributed to children. Remind
 the first few children that they should say, "I have the little [letter name]!" when they hold up
 their cards.

Unit 6



Week 3

Large Group: Inch by Inch Measuring

Math LG

Standards: MELDS.M.MP.PS.6 MELDS.M.MD.PS.10 MELDS.M.MD.PS.11

Guiding Math Ideas:

- Living things grow and have life cycles (Enduring Understandings)
- Measurement as Practical and Purposeful: Measurable attribute of things that grow.

Math Concepts From Unit Learning Progressions:

- Using standard and non-standard measurement in different ways with different tools.
- Solving problems with measurement.

Adaptations for Using Large Group In Alternate Schedule Slots:

• Use the Inchworm motions and song in SWPL or transition times.

Materials:

- *Inch by Inch* by Leo Lionni
- A method of enlarging/projecting the book cover and/or other images of the inchworm
- Inchworm song [Optional- Attached]

Math Vocabulary:

- Measuring: a way of finding out more about something using numbers and tools
- Stretching: moving our muscles out and in
- Collage: art made out of a collection of different things glued together on a paper

Preparation:

You need the book, imagination, and a big area for children to spread out.

If you have access to an old overhead projector or internet or other projector, project a large image of the cover and a few pages, since the inchworm is relatively small in the illustrations,

There are so many things we have been learning about gardens, and growing plants and animals. This week, we are going to doing lots of measuring. How do we measure things? Here is a book about an insect that could measure with his whole body. *Inch by Inch* by Leo Lionni. He wrote the words and illustrated

Children give different definitions & examples.

Show cover. Project large image if possible. Children will search for the small inch worm and identify it. the pages with **collage**. We have made collages in art and math.

Look carefully at this picture. Do you see the insect I am talking about?
Yes it is a very small insect, call an Inchworm.

Let's read this book about a measuring Inchworm.

The inchworm used his body to measure. He stretched his body out and in, out and in as he measured parts of some birds.

Let's pretend to be inchworms and stretch our arms.

I'm going to read the book again. When the inchworm measures and counts, we can too!
Out and In; Out and In. The inchworm measured using his body and we can too.

On the robin, the inchworm measured 5 inches. On other pages, I will call out a number and we will measure that many times.

Get your Inchworm Arms ready- Here we go! Each time that the Inchworm measured, did the numbers get larger or smaller?

Yes, it seemed like the Inch Worm had to keep measuring longer and longer things!

Let's play again. We have an *Inchworm Song* to help us use our bodies to measure.

We will be playing this again in SWPL this week and you will have a chance.

Read book. As you read, move the finger and thumb of one hand in an inchworm-like motion. Some children may begin to imitate you.

Demonstrate stretching out your arms as far as they can go and saying- out. Bring them close to your body- say in.

Children move their Inchworms arms out and in.

Read book a second time with motions.

The Robin is measured as 5 inches. Have the children stretch out their arms and pull them back and count together. For other pages, call out numbers, choosing a larger number each time- 7 9 11, 13, etc. to model the ever lengthening measuring that the Inchworm does in the book.

When you get to the nightingale song, you can sing the simple Inchworm song [Optional- Also sung in SWPL]

Repeat as often as you have time.

Strategies to Provoke Math Thinking:

Non-standard measuring: The inchworm does not literally measure an inch each time it
moves. It is using non-standard measurement, however (How clever of it!). Non-standard
measurement prepares children for standard measurement. Big Ideas of Early Math-Erikson Early Math Collaboration, is an excellent resource for steps in measuring.

Provocation:

- There are lots of different ways to measure with our bodies. Invite the children to measure things with their bodies while outdoors on the playground or at large motor time. SWPL has suggestions for other ways to measure using our bodies.
- Science: Investigate inchworms and their unique ways of moving.

The Inchworm Song-- from U6 SWPL

Sung to the Tune of Go In and Out the Window

As you sing the words keep a rhythm of stretching either out and in or up and down in time with the music. You can use different body parts to mimic the motion: fingers, arms, legs (jumping jacks), heads, shoulders, whole bodies.

Stretch Out and In and Measure Stretch Out and In and Measure Stretch Out and In and Measure The Inchworm does its work.

Stretch High and Low and Measure Stretch High and Low and Measure Stretch High and Low and Measure The Inchworm does its work.



Let's Find Out About It: Edible Eggs

Standards: ELA.IT.D.PS.2 ELA.IT.D.PS.3 ELA.IT.I.PS.1-2 S.LS.PS.6





Materials:

- Make Way for Ducklings
- A Hat For Minerva Louise (from Unit 3)
- Chicken Egg images

Preparation: Set up materials.

Vocabulary:

- nest
- egg
- hatch
- oviparous

Let's Find Out About It:

"In Make Way for Ducklings, Mrs. Mallard sat on her **nest**. In A Hat for Minerva Louise, Minerva Louise and the hens also sat on **nests**. What do you notice?"

"Ducks and chickens are *oviparous- egg*-laying- animals. Mrs. Mallard's *nest* was outside by the riverbank. The chicken *nests* were inside the farmer's barn. Farmers keep chickens and gather their *eggs* for food."

"A chicken *egg* will *hatch* into a chick like Mrs. Mallard's *eggs hatched* into ducklings."

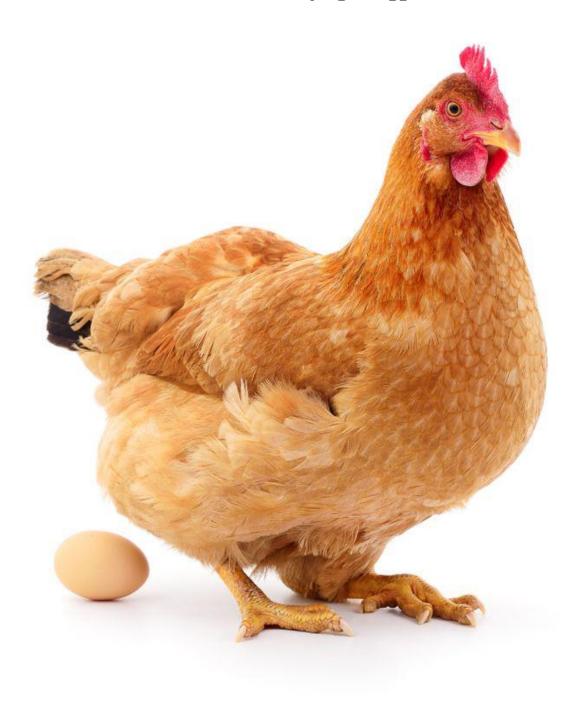
"**Eggs** that are used for food do not have baby chickens inside."

"Here are images of a hen *hatching* her *eggs*. How is this similar to or different from how Mrs. Mallard *hatched* her ducklings?"

Show illustrations. Children respond.

Show images.
Children respond.

The hen is laying an egg



The hen will lay on her eggs to keep them warm. She will also turn them several times a day.



She will begin to peck holes in the shells to let more air in for the babies to breathe while they are hatching.



By the 21st day, the eggs are already beginning to hatch. The chicks use their egg teeth (small, sharp points on the tip of the baby's beak that break off after hatching) to break a larger hole in the shell. The baby moves his body around the interior of the shell until he has completed a full circle of peck marks. After that he pushes on the pecked area for hours until he has completely broken free.





Chicks are nearly independent when first hatched. They have feathers, can walk, see, hear and follow their mothers. They are also capable of feeding themselves as long as food is provided shortly after hatching.





Let's Find Out About It: Oviparous Animals

Standards:

LA.IT.D.PS.1-3 ELA.IT.I.PS.1-2 ELA.IT.LTC.PS.1 S.LS.PS.6





Materials:

- Make Way for Ducklings
- Chickens Aren't the Only Ones

Preparation: Gather books.

Vocabulary:

- egg
- Oviparous- animals that lay eggs
- non-fiction
- fact
- Reptile a cold-blooded animal with a skeleton inside its body and dry scales or hard plates on its skin.
- Amphibian a small animal that spends part of its life cycle in water and part of its life cycle on land
- shell

Let's Find Out About It:

"In Make Way for Ducklings, Mrs. Mallard's ducklings hatched from **eggs**. What do you notice?"

"Ducks are oviparous--animals that lay eggs."

"The title of this book is Chickens Aren't the Only Ones. It is **non-fiction**; it has **facts**- information- about oviparous animals. What do you notice?"

"Frogs and salamanders are *amphibians*-- they live in water and on land. What do you notice?"

"Snakes and crocodiles are *reptiles*-- they live on land near the water. What do you notice?"

"How are bird *eggs* similar to or different from other *oviparous* animal eggs?

Show illustrations. Children respond.

Show illustrations. Children respond.

Page through the book, showing illustrations.
Children respond.

Show illustrations. Children respond.

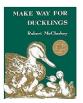
Guide children to notice differences in size, shape, and color; guide children to understand that some eggs have **shells** and some eggs do not.



Let's Find Out About It: Wheels And Tires

Standards: S.PS.PS.4 LA.IT.D.PS.1-3 ELA.IT.I.PS.1-2 ELA.IT.LTC.PS.1

S.LS.PS.6



Materials:

- Make Way For Ducklings
- images of wheelbarrow/ tractor/ wheelchair (see Resources)

Preparation: Set up materials.

Vocabulary:

- wheel
- tire
- balance
- roll
- smooth
- bumpy
- wheelchair
- groove
- tread

Let's Find Out About It:

"In Make Way For Ducklings, Mr. and Mrs. Mallard looked for a safe place to live. What do you notice?"

"They were almost run over by a 'horrid thing rushing by.' Mr. Mallard jumped back from the bicycle **wheels.**"

"Here are images of other wheels. What do you notice?"

"The wheelbarrow *balances* on one wheel. Bicycle riders *balance* on two *wheels.*"

"Here are images of *tires* that cover *wheels*. What do you notice?"

"The large, *smooth tires* on the *wheelchair* help it *roll* down the ramp. The *grooved treads* on the tractor tires help it *roll* over *bumpy* roads."

Show illustrations. Children respond.

Show illustrations.

Show images. Children respond.

Show images. Children respond.

Trace over tires.

Wheels



Wheels help us transport people, animals and things easier and faster.

A wheelbarrow has only one wheel



Bicycles and motorcycle have two wheels





Tricycles and some carts have three wheels





Cars, wheelchairs, shopping carts, and skateboards have four wheels.









Trains and big trucks have many wheels.





The large, smooth tires on the wheelchair help it roll down the ramp. The grooved treads on the tractor tires help it roll over bumpy roads.





Unit 6 Week 3	Make Way for Ducklings Story Sequencing: Puzzles and Manipulatives	ISTE-S Standard 5c	Standards: ELA.RL.KID.PS.1 -3 ELA.RL.IKI.PS.1-2 ELA.SL.CC.PS.1-
	Lower Level Technology Supplement: Please note that this activity involves Computational Thinking activity without a digital device		

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

Technology Concepts: Computational Thinking

- Process of Make Way for Ducklings broken down into a series of steps
- Children place making Make Way for Duckling pictures in order to create sequence
- Children recognize and describe sequences and algorithms in everyday life

Materials:

• Make Way for Duckling sequencing cards

Vocabulary:

- language used in original lesson
- Sequence
- Process of order
- Introduce the concept of algorithms (a process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.)

Preparation:

Place Make Way for Duckling sequencing cards in random order

Procedure:

Have children place the pictures in correct order - use computational thinking vocabulary to explain to children they are creating an algorithm

Unit 6
Week 3

Week 3

Materials for Nests: Discovery
Lower to Higher Level Technology
Supplement

Materials for Nests: Discovery

Lower to Higher Level Technology
Supplement

Standards:
ELA.LS.VAU.PS.2
CA.VA.PS.1
ELA.W.TTP.PS.1-2
M.G.PS.1 S.LS.PS.1,6

Technology Concepts

- Children construct new knowledge about the natural world through digital tool
- Children make new connections to learning through digital tool

Materials:

- Digital Microscope
- Laptop or other device
- Journal for recording results of observations
 To extend this activity, have children document
 using an app that allows for drawing/graphing
 (i.e. Educreations, Draw & Tell)

Vocabulary:

- Use language from original lesson
- Digital Microscope
- Compare
- Contrast
- Observe
- Describe

Preparation:

Connect digital microscope to laptop or other device Layout items in Discovery area Journal (and/or tablet) is ready for recording observations

Procedure:

Model for children how to use digital microscope so that children understand how to use device Introduce vocabulary and encourage children to use words as they observe Record observations

If using a tablet for documentation, save the children's documentation for later discussion. You can make the documentation available during the Unit for further reflection by children.

Documentation Extension:

Children use tablet to write down observations. Combine written observations with pictures taken and saved with digital microscope using Pages or Word to create a digital science journal