

Mathematics Daily Routine Supplement

Grade 2 Quarters 1-4 Daily Routine 1.01e (1x/week)



SCOS Objective(s)

- 1.01 Develop number sense for whole numbers through 999.
- 1.01e Estimate.

Materials Needed:

- 1 pack of napkins (unopened) for July
- 1 nametag, 1 piece of construction paper for August
- Base ten blocks for October, December, & April
- Estimation jars (2 – 1 for sample set of 10 or 25, the other to fill completely) for September, November, January, March
- Confetti for November
- Cards with dots or stars for December & February

Assessment References

Administer these assessment items at appropriate times throughout each quarter. The Quarterly Assessments were not designed to be administered in their entirety at the end of each quarter.

Grade Two Quarterly Assessment

Quarter 1: Question #7

Quarter 2: Questions #8, #9

Quarter 3: Question #5

Summative:

Vocabulary- Daily Review (1.01e)

**Estimate
Sample set
Reasonable**

Alignment Lesson- Daily Routine Estimation 1.01e (Ongoing)

This alignment lesson provides an open-ended framework for exploring estimation with your second grade class on an ongoing basis. It is recommended that students estimate at least once every two weeks as one way to further develop number sense. Estimations can be done at various times during the instructional day (i.e., during center activities or arrival time, in line for the bathroom or the water fountain) or for homework. Discussions (Math Talks) can be incorporated into the **Daily Routine** portion of the instructional day.

When estimating students can be shown a sample set to help them make an accurate estimation. For example, when you fill an estimation jar with objects, you may wish to show the same size jar with a sample set of 10. You may say, “This is a sample of 10. How many do you think are in the other jar?”

When estimating how many times something can be done in one minute, you may allow students to practice for 10 seconds then refine their prediction/estimation. Have students then do activity for 1 minute.

Questions to ask:

Can we use our sample set to help us?

How should we go about estimating using this problem?

How do we know if our estimate is reasonable?

After testing our estimate can we do another estimate using similar objects/items that would be more appropriate or reasonable?

Source: Classroom Strategies & Indicators

Monthly Ideas for (1.01e)

<p style="text-align: center;">July</p> <p><i>Are there enough chairs in our classroom for the students and their parents to be seated at the same time?</i></p> <p><i>Would there be enough napkins in this pack for everyone to have one?</i></p>	<p style="text-align: center;">January</p> <p><i>Estimation Jar: Place 25 marshmallows in a jar. Then fill a same-sized jar with marshmallows. Ask students to estimate the number of objects in the large jar.</i></p> <p><i>Show students a bag of grapes. Are there enough grapes for everyone to have 2 grapes?</i></p>
<p style="text-align: center;">August</p> <p><i>Estimate how many times you can touch your toes in one minute. Have students conduct the experiment.</i></p> <p><i>Show a nametag. Show a piece of construction paper – how many nametags do you think can be cut from this piece of paper?</i></p>	<p style="text-align: center;">February</p> <p><i>Have students estimate how many hearts are in one box of Conversation Hearts. Students find actual number. Can also graph by color or saying on the hearts.</i></p> <p><i>Show students cards with dots or stars. Students estimate whether there are closer to 20 or 50 dots. Group by 2s, 5s, 10s and discuss.</i></p>
<p style="text-align: center;">September</p> <p><i>Estimate how many jump and jacks you can do in 1 minute. Test your estimate by doing them for 10 seconds. Refine your estimate and do for 1 minute..</i></p> <p><i>Estimation Jar: Place 10 leaves (foam, plastic or real) in a jar. Then fill a same-sized jar with leaves. Ask students to estimate the number of objects in the large jar.</i></p>	<p style="text-align: center;">March</p> <p><i>Show a 6 inch line on a piece of paper. Ask students to estimate how long (in inches) they think the line is. Measure to check.</i></p> <p><i>Estimate how many times you can blink in one minute.</i></p>
<p style="text-align: center;">October</p> <p><i>Show 28 using base ten blocks on the overhead. Tell students to add 2 tens. Then, have students estimate how many.</i></p> <p><i>Students estimate how many candy corn pieces are in one bag when shown a group of 10. Students group and find actual number.</i></p>	<p style="text-align: center;">April</p> <p><i>Estimation Jar: Place 25 jelly beans in a jar. Then fill a same-sized jar with jelly beans. Ask students to estimate the number of objects in the large jar.</i></p> <p><i>Show 146 using base ten blocks on the overhead. Tell students to add 4 tens. Then, have students estimate how many.</i></p>
<p style="text-align: center;">November</p> <p><i>Estimation Jar: Place 10 feathers in a jar. Then fill a same-sized jar with feathers. Ask students to estimate the number of objects in the large jar.</i></p> <p><i>Show confetti on the overhead. Ask students to estimate how many. Group items by 2s, 5s, 10s to count.</i></p>	<p style="text-align: center;">May</p> <p><i>Estimate the number of times you can clap in one minute.</i></p> <p><i>Show students a box of raisins. Estimate how many raisins are in your box.</i></p>
<p style="text-align: center;">December</p> <p><i>Show students cards with dots or stars. Students estimate whether there are closer to 20 or 50 dots. Group by 2s, 5s, or 10s and discuss.</i></p> <p><i>Show students one base ten flat. Estimate how many flats will fill a box. Experiment.</i></p>	<p style="text-align: center;">June</p> <p><i>Estimate the number of times you can hop on one foot in a minute. Record.</i></p> <p><i>Show a 12 inch line on a piece of paper. Ask students to estimate how long (in inches) they think the line is. Measure to check.</i></p>

Mathematics Daily Routine Supplement

Grade 2 Quarters 1-4 Daily Routine 1.06 (1x/week)



SCOS Objective(s)

1.06 Define and recognize odd and even numbers.

Materials Needed:

- Beans (July)
- Paper clips (Sept.)
- Buttons (March)
- Library book (Oct., Nov.)
- Cubes (Oct., Dec.)
- Base ten blocks (Nov., March, May)
- Conversation Hearts (Feb.)

Assessment References

Administer these assessment items at appropriate times throughout each quarter. The Quarterly Assessments were not designed to be administered in their entirety at the end of each quarter.

Grade Two Quarterly Assessment

Quarter 1: Question #10

Summative:

Vocabulary- Daily Review (objective #)

Even
Odd
Pair

Alignment Lesson- Daily Routine Odd & Even Numbers 1.06 (Ongoing)

This alignment lesson provides an open-ended framework for exploring even and odd with your second grade class on an ongoing basis. It is recommended that students explore even/odd at least once every two weeks as one way to further develop number sense. Students can determine numbers as even or odd at various times during the instructional day (i.e., during center activities or arrival time, in line for the bathroom or the water fountain) or for homework. Discussions (Math Talks) can be incorporated into the **Daily Routine** portion of the instructional day.

Students should have experience with one, two, and three digit numbers. Students should be able to manipulate objects as they recognize numbers as even and odd. Students should be able to explain how they recognized the number to be even or odd.

Several of the activities involve student movement and participation. It is important that students are actively engaged in daily routines.

Questions to ask:

How do you know if a number is even or odd?

Can you show how to group the objects in pairs as you determine whether the number of objects is even or odd?

Count by 2s. Are there any items left over? Does that mean the number of items is even or odd?

Source: Classroom Strategies & Indicators

Monthly Ideas for (Odd & Even Numbers)

<p style="text-align: center;">July</p> <p><i>Stand up/come to the board if you have on glasses. Group students by 2s to indicate if there is an even or odd set of students up.</i></p> <p><i>Scoop 2 spoonfuls of beans onto the overhead. Guide students to find out whether there is an odd or even number of beans. Explain why.</i></p>	<p style="text-align: center;">January</p> <p><i>Groups choose a 3 digit number of their own to indicate if odd or even. Use manipulatives to show classmates how they determined if even or odd.</i></p> <p><i>Stand up/come to the board if you have on tennis shoes. Group students by 2s to indicate if there is an even or odd set of students up.</i></p>
<p style="text-align: center;">August</p> <p><i>Clap, snap even/odd from 1-20. Repeat with stomp, hop even/odd from 1-20.</i></p> <p><i>Do we have an even or odd number of students here today? How can we prove it? What if we added 1 student? What if two moved?</i></p>	<p style="text-align: center;">February</p> <p><i>Scoop 2 spoonfuls of Conversational Hearts onto the overhead. Guide students to find out whether there is an odd or even number of candies. Explain why.</i></p> <p><i>2nd grade round up. Do we have an even or odd number of 2nd graders? Group and discuss.</i></p>
<p style="text-align: center;">September</p> <p><i>Stand up/come to the board if you have a brother. Group students by 2s to indicate if there is an even or odd set of students up.</i></p> <p><i>Given a bag of paper clips- estimate the number. Group by 2s to indicate if even or odd.</i></p>	<p style="text-align: center;">March</p> <p><i>Show 124 using base ten blocks on the overhead. Students decide if there are an even or odd number of blocks and prove.</i></p> <p><i>Given a bag of buttons estimate the number. Then group buttons by 2s to determine if odd or even.</i></p>
<p style="text-align: center;">October</p> <p><i>Examine 2 digit page numbers in a library book. Decide if the page number is odd or even using manipulatives. Make conjectures about the number in the ones place.</i></p> <p><i>Show students a handful of cubes on the overhead. Estimate and group by 2s to determine if even or odd.</i></p>	<p style="text-align: center;">April</p> <p><i>Stand up/come to the board if you have an April birthday. Group students by 2s to indicate if there is an even or odd set of students up.</i></p> <p><i>Clap, snap even/odd from 21-40. Repeat with stomp, hop.</i></p>
<p style="text-align: center;">November</p> <p><i>Examine 3 digit page numbers in a book. Decide if the page number is odd or even using manipulatives. Make conjectures about the number in the ones place.</i></p> <p><i>Show 79 using base ten blocks on the overhead. Students decide if there are an even or odd number of blocks and prove.</i></p>	<p style="text-align: center;">May</p> <p><i>Show 156 using base ten blocks on the overhead. Students decide if there are an even or odd number of blocks and prove.</i></p> <p><i>Given a bag of rubber bands estimate the number. Then group rubber bands by 2s and determine if even or odd.</i></p>
<p style="text-align: center;">December</p> <p><i>Give each group of students a handful of manipulatives. Have groups group in 2s and decide if even or odd. Explain to class.</i></p> <p><i>Show students two handful of cubes on the overhead. Estimate and group by 2s to determine if even or odd.</i></p>	<p style="text-align: center;">June</p> <p><i>Stand up/come to the board if you are 8 years old. Group students by 2s to indicate if there is an even or odd set of students up.</i></p> <p><i>Clap, snap even/odd from 41-60. Repeat with stomp, hop.</i></p>

Mathematics Daily Routine Supplement

Grade 2 Quarters 1-4 Daily Routine 4.01 (1x/week)



SCOS Objective(s)

4.01 Collect, organize, describe, and display data using Venn diagrams (3 sets) and pictographs (2 sets) where symbols represent multiple units (2's, 5's, 10's).

Materials Needed:

- Chart paper or paper copies for pictograph
- Any relevant data collection tools (surveys, polls, response forms, etc)
- Markers
- Index cards or post-it notes for any labels or symbols for the pictograph

Assessment References 4.01

Administer these assessment items at appropriate times throughout each quarter. The Quarterly Assessments were not designed to be administered in their entirety at the end of each quarter.

Grade Two Quarterly Assessment

Items for Objective 4.01:

2nd Quarter: Item #

3rd Quarter: Item #

Summative: Item #

Vocabulary- Daily Review (4.01)

data
tally marks
graph
represent
2's, 5's, 10's
more/more than/most
less/less than/least

Alignment Lesson- Daily Routine

Data Collection- 4.01 Pictographs (Ongoing)

NOTE: This alignment lesson provides an open-ended framework for exploring data collection with your second grade class on an ongoing basis. It is recommended that students collect, organize, describe, and display data at least once every two weeks. Data can be collected at various times during the instructional day (i.e., during center activities or arrival time, in line for the bathroom or the water fountain) or for homework. Organizing, displaying and/or describing the data can be added to the **Daily Routine** portion of the instructional day.

Follow the **PCAI** process for statistical investigations with your students. The process is as follows:

1. **Pose a question:** Students should be engaged in helping to pose questions related to data they are interested in collecting. Please see **Data Collection Question Ideas** for suggestions.
 2. **Collect data:** Invite students (or targeted audience) to respond to the question through various data-collecting methods (i.e., surveys, polls, experiments). Early in the year, the teacher may have a poster or chart to collect data from the class. Later in the year, students may collect data using their own forms/methods of collection.
 3. **Analyze the data:** Involve students in the analysis of the data, selecting a method of representation to support the group's answer (i.e., pictograph).
 4. **Interpret the data:** Engage students in a discussion about the results of the data. Include questions such as:
How many...? How often...?
Which [category] has the most? Least?
How many more does [one category] have than [another category]?
How would we describe people in this group (i.e., our class) based on this data?
What might we want to ask next to learn more about this topic?
- Students may generate new questions after interpreting their results, and the PCAI process could begin again with a new question.**

Source: Teacher-created & Partners for Mathematics Learning

Monthly Data Collection Ideas

<p style="text-align: center;">July</p> <p>Back to School: How many consonants are in your full name? (Each symbol represents 5 letters.)</p> <p>Temperature/Weather Unit-Science Goal 2: Record the daily temperature on a graph for the month of July. (Each symbol represents 5 degrees.)</p>	<p style="text-align: center;">January</p> <p>New Year Calendar: Graph the number of letters in each month. (Each symbol represents 2 letters.)</p> <p>Geometry: (homework assignment) Collect data on the number of 3-D figures in your bedroom. Create a graph. (Each symbol represents 2 3-D figures.)</p>
<p style="text-align: center;">August</p> <p>National Aviation Day (August 19): How far does your airplane fly? (Make a paper airplane and measure in cm. Each symbol represents 10 cm.)</p> <p>Patterns: Create a pattern using 30 Pattern Blocks and 3 different shapes. Graph the number of shapes used. (Each symbol represents 2 Pattern Blocks.)</p>	<p style="text-align: center;">February</p> <p>Dental Health Month: How many teeth have you lost? (Each symbol represents 2 teeth.)</p> <p>Geometry: Use pattern blocks to create a mosaic. Graph the number of each Pattern Block used. (Each symbol represents 2 Pattern Blocks.)</p>
<p style="text-align: center;">September</p> <p>Johnny Appleseed's Birthday (9/26): How many cubes does it take to balance your apple? (Pairs of students will have an apple. Each symbol represents 5 cubes.)</p> <p>Reading Assignment: (Collect data over a 2-week period.) How many books did you read? (Each symbol represents 2 books.)</p>	<p style="text-align: center;">March</p> <p>St. Patrick's Day (3/17): Lucky Charms Pictograph: Scoop out 2 cups of cereal. Sort and graph the shapes. (Each symbol represents 2 shapes.)</p> <p>National Nutrition Month: For the month, collect data on how many students buy lunch on each day of the week. Use the data to create a graph. (Each symbol represents 2 students.)</p>
<p style="text-align: center;">October</p> <p>Halloween (10/31): How many seeds are in your pumpkin? (Each group has a small pumpkin. Each symbol represents 10 seeds.)</p> <p>Time: How many jumping jacks can you do in one minute? (Each symbol represents 2 jumping jacks.)</p>	<p style="text-align: center;">April</p> <p>April Showers (Weather Unit, Science Goal 2): How many inches of rain did it rain each day in April? (Each symbol represents 2 inches.)</p> <p>Area: Trace your hand on graph paper to find its area. Create a class graph using the results. (Each symbol represents 5 square units.)</p>
<p style="text-align: center;">November</p> <p>Thanksgiving (4th Thursday): How many people will you be with for Thanksgiving dinner? (Each symbol represents 2 people.)</p> <p>Money: (homework assignment) Sort the change in your piggy bank and graph the number of pennies, nickels, dimes and quarters. (Each symbol represents 5 coins.)</p>	<p style="text-align: center;">May</p> <p>National Physical Fitness and Sports Month: How far can you jump? (Each symbol represents 5 inches.)</p> <p>Life Cycles-Science Goal 1: How far did your origami frog jump? Measure in inches. (Each symbol represents 2 inches.)</p>
<p style="text-align: center;">December</p> <p>Candy Canes: How many candy canes does it take to balance your shoe? (Each symbol represents 2 candy canes.)</p> <p>Measurement: How far can you throw a football? Measure in cm. (Each symbol represents 10 cm.)</p>	<p style="text-align: center;">June</p> <p>Baseball: How long does it take to run around the bases? (Each symbol represents 10 seconds.)</p> <p>End of school Year: What is your favorite subject? Survey 100 students in the school to collect data. (Each symbol represents 10 students.)</p>

Mathematics Daily Routine Supplement

Grade 2 Quarters 1-4 Daily Routine 4.01(1x/week)



SCOS Objective(s)

4.01 Collect, organize, describe, and display data using Venn diagrams (3 sets) and pictographs (2 sets) where symbols represent multiple units (2's, 5's, 10's).

Materials Needed:

- Sorting circles or materials to create Venn diagrams (or string, hula hoops)
- Materials for sorting (see monthly ideas listed below)

Assessment References- 4.01

Administer these assessment items at appropriate times throughout each quarter. The Quarterly Assessments were not designed to be administered in their entirety at the end of each quarter.

Grade Two Quarterly Assessment
Items for Objectives 4.01:

3rd Quarter: Item#

Summative: Item #

Vocabulary- Daily Review 4.01

Venn Diagram
sorting
rule(s)
similarities/same
differences/different
examples
non-examples

Alignment Lesson- Daily Routine Venn Diagrams 4.01 Venn Diagrams (Ongoing)

NOTE: This alignment lesson provides an open-ended framework for exploring Venn Diagrams with your second grade class on an ongoing basis. It is recommended that students sort and classify objects using Venn Diagrams at least once every two weeks. Venn Diagram activities can occur at various times during the instructional day (i.e., during center activities or arrival time) or for homework. They can also be included in the **Daily Routine** portion of the instructional day.

Venn Diagrams can be approached in two different ways. The teacher might *select* the rules for students. In this case, students would write their name or place their item in the appropriate place on the Venn Diagram, based on the selected rules (pre-labeled on the Venn Diagram).

Or, the teacher might play "Guess My Rule". In this case, the teacher (or a Student Leader) would put one or two items as *examples* of the rules in the appropriate spaces on the Venn Diagram. The teacher or Student Leader would have the rules in mind, but they would not disclose the rules to classmates. Students would then place other items on the Venn Diagram where they think it might belong, asking, "Does this fit your rule?" The teacher (or Student Leader) would confirm whether or not this fit the rule. To facilitate the process, the Teacher or Student Leader might want to move "incorrect" items to their correct places on the Venn Diagram (again, without disclosing the rules), to provide more information for students. When students have placed most of the items in the correct places, a class discussion about the rules might follow. Ask questions such as, "What do you think the rules might be? Why, or why not?" Students can discuss their thinking, including what they thought the rules might have been earlier in the process, and how they refined their thinking as more items were added to the Venn Diagram. Ask questions such as, "Did you think it was a different rule at first? What happened that made you change your mind?"

Note: Keep in mind that there may be items that do not fit in any of the seven spots on the Venn Diagram. In this case, the item would be considered a *non-example*, and would be placed somewhere outside the Venn Diagram. Discuss how the non-examples can provide valuable information as well.

Source: Teacher-created & Partners for Mathematics Learning

Monthly Venn Diagram Ideas

July Venn Diagram Ideas

1st week (Beginning of School):

My first name has more than two vowels/My last name is longer than my first name/There are less than 20 letters in my first and last names.

3rd week (Responsible Citizenship-SS Goal 1):

I make my bed/I set the table/I wash the dishes

January Venn Diagram Ideas

1st week (Happy New Year-1/1): *I stayed up until Midnight/I went to bed early/I made a New Years Resolution.*

3rd week (Measure Your Feet Day-/23): *My foot is more than 8 inches long/My foot is less than 50 cm long/Together, my feet measure more than 15 inches long.*

August Venn Diagram Ideas

1st week (National Smile Week-1st Monday-Sunday): *I visit the dentist twice a year/I don't brush my teeth twice a day/I floss my teeth.*

3rd week (National Aviation Day-August 19): *I have flown on a plane/I know a pilot/I don't like to fly.*

February Venn Diagram Ideas

1st week (Wilhelm Grimm's Birthday-2/24): *Read 3 fairy tales and compare and contrast the stories.*

3rd week (President's Day-3rd Monday): *Compare and contrast George Washington, Abraham Lincoln and the current President.*

September Venn Diagram Ideas

1st week (Grandparents Day -1st Sunday following Labor Day):

Compare and contrast you, a parent and a grandparent.

3rd week (Communities-SS Goal 4):

Compare and contrast rural, urban and suburban areas.

March Venn Diagram Ideas

1st week (Music in our Schools Month/Sound Unit-Science Goal 4): *My instrument has strings/makes loud sounds/has bells .*

3rd week (National Nutrition Month): *I ate breakfast today/I drink milk everyday/I eat candy everyday.*

October Venn Diagram Ideas

1st week (Weather Unit-Science Goal 2): *I have seen a rainbow/I like rainy days/ I have played in the snow.*

3rd week (Halloween-10/31): *My pumpkin weighs more than 15 cubes/My pumpkin weighs less than 30 cubes/My pumpkin has a stem.*

April Venn Diagram Ideas

1st week (Easter): *Given a bag of assorted Easter candy, sort it using a Venn Diagram. Students should explain their rules.*

3rd week (National Library Month): *I like poetry/I like mysteries/I read at home everyday.*

November Venn Diagram Ideas

1st week (Election Day-1st Tuesday after the 1st Monday): *Compare and contrast the role of the President, Governor and Mayor.*

3rd week (Thanksgiving-4th Thursday): *Compare and contrast the first Thanksgiving, today's Thanksgiving and what you think it will be like in 50 years.*

May Venn Diagram Ideas

1st week (Life Cycle of a Frog-Science Goal 1): *Compare and contrast a tadpole, frog and toad.*

3rd week (National Physical Fitness And Sports Month): *I can hop on one foot/I can shoot a basket/I can dance.*

December Venn Diagram Ideas

1st week (Jan Brett's Birthday-Dec. 1): *Compare and contrast 3 of Jan Brett's books.*

3rd week (Christmas, Hanukkah, and Kwanzaa): *Compare and contrast the three holidays.*

June Venn Diagram Ideas

1st week (End of Year): *I can explain the life cycle of a frog/I can tell you about a famous American/I can find something in this room that is a cone-shape.*

3rd week (End of Year): *Compare and contrast kindergarten, 1st and 2nd grades.*

Mathematics Daily Routine Supplement

Grade 2 Quarters 1-4 Daily Routine for 5.01 (1x/week)



SCOS Objective(s)

5.01 Identify, describe, translate and extend repeating and growing patterns.

Materials Needed:

- Calendars
- Weather charts
- Pattern blocks
- Various materials (see monthly ideas listed below)

Assessment References

Administer these assessment items at appropriate times throughout each quarter. The Quarterly Assessments were not designed to be administered in their entirety at the end of each quarter.

Grade Two Quarterly Assessment

Vocabulary- Daily Review 5.01

Patterns
Repeating patterns
Growing patterns
Extended patterns

Alignment Lesson- Daily Routine Patterns (Ongoing)

NOTE: This alignment lesson provides an open-ended framework for exploring patterns with your second grade class on an ongoing basis. It is recommended that students identify, describe, create and extend patterns at least once every two weeks. Pattern activities can occur at various times during the instructional day (i.e., during center activities or arrival time) or for homework. They can also be included in the **Daily Routine** portion of the instructional day.

When creating a growing pattern using a calendar, students should choose two different objects or pictures to use. Each day, the chosen object will be drawn in the calendar space and by the end of the month the growing pattern will be evident. For example, an apple and a tree may be used in September. On the 1st, an apple is drawn. A tree is drawn on the 2nd. The 3rd is an apple, as is the 4th. The 5th is a tree. The 6th, 7th and 8th are all apples. The 9th is a tree. This pattern is a pattern that grows by 1 each time.

AB, AAB, AAAB

The classroom teacher may choose to introduce growing patterns using the classroom calendar. Turning over each date on a daily basis to reveal the next piece of the pattern will provide students an opportunity to guess what the next pattern piece is going to be.

The weather patterns will require calendars or charts so that students can record the temperature and the day's type of weather. Students can draw a sun for a sunny day or can simply write an "S". At the end of the month, students may choose to put their data on a graph, as this may be easier to identify the patterns.

Source: Teacher-created & Partners for Mathematics Learning

Monthly Ideas for Patterns

<p style="text-align: center;">July Pattern Ideas</p> <p>1st week: (Beginning of School) Students will use Kid Pix on the computer to stamp out a repeating pattern. Students will name the pattern. (ie. ABBA, ABCD...)</p> <p>3rd week: Students will use at least 4 different shapes of pattern blocks to create a repeating pattern of at least 20 pattern blocks. Students can switch patterns with a classmate who can extend the pattern.</p>	<p style="text-align: center;">January Pattern Ideas</p> <p>1st week: Students will create a growing pattern on a January calendar.</p> <p>3rd week: Students will use Kid Pix on the computer to stamp out a growing pattern. Students will name the pattern.</p>
<p style="text-align: center;">August Pattern Ideas</p> <p>1st week: Students will study the works of M.C. Escher to look for patterns in his art. Then, students will create tessellations using pattern blocks.</p> <p>3rd week: (Hawaii Statehood Anniversary-8/21) Students will use various colors of tissue paper squares to create a patterned lei.</p>	<p style="text-align: center;">February Pattern Ideas</p> <p>1st week: (Abraham Lincoln's Birthday-2/12) Students will explore money combination and patterns by creating as many patterns as they can using 100 cents.</p> <p>3rd week: (Fairy Tales/Wilhem Grimm's Birthday-2/24) Students will read several fairy tales and will identify patterns found within all or most of the stories.</p>
<p style="text-align: center;">September Pattern Ideas</p> <p>1st week: (All-American Breakfast Month) Students will choose and record what foods or drinks they want to eat this month to create a pattern. (ie. cereal, cereal, toast, bagel, cereal, cereal, toast, bagel...)</p> <p>3rd week: (National Ice Cream Month) Students will use 20 paper ice cream scoops to create a repeating pattern.</p>	<p style="text-align: center;">March Pattern Ideas</p> <p>1st week: (Weather Unit-Sci. Goal 2) Students will record the daily temperature and weather (sunny, rainy, windy, snowy) for the month and will look for weather patterns.</p> <p>3rd week: (Music in Our Schools Month-Sci. Goal 4) Students will create a repeating or growing pattern using a musical instrument. They will share their pattern with the class, who will guess how the pattern continues.</p>
<p style="text-align: center;">October Pattern Ideas</p> <p>1st week: (National Pasta Month) Students will use various shapes of pasta to create a growing pattern. (ie. AB, AAB, AAAB, AAAAB...)</p> <p>3rd week: Students will read several Anansi stories and will identify and describe any patterns found within these tales.</p>	<p style="text-align: center;">April Pattern Ideas</p> <p>1st week: (Weather Unit-Sci. Goal 2) Students will continue to record the daily temperature and weather for the month and will compare the weather patterns between the two months.</p> <p>3rd week: (Mathematics Education Month) Starting with one square tile, students will add tiles to make the next largest square. The number of tiles will be recorded. Students will explore the pattern as they continue to add tiles to increase the size of the square.</p>
<p style="text-align: center;">November Pattern Ideas</p> <p>1st week: (Lois Ehlert's Birthday-11/9) After reading, <u>Red Leaf</u>, <u>Yellow Leaf</u>, students will identify patterns in nature by taking a nature walk. Students will be encouraged to find leaves, gourds, pine cones, etc. that show patterns and can be used to create a nature book of rubbings.</p> <p>3rd week: (Thanksgiving Day) Create a turkey using 20 feathers in a repeated pattern.</p>	<p style="text-align: center;">May Pattern Ideas</p> <p>1st week: (National Fitness Month) Students will create a kinesthetic repeating pattern (ie. jump forward, jump backward, hop, hop...) and teach it to their class, who will guess how the pattern continues.</p> <p>3rd week: (National Fitness Month) Students will research a specific dance (square dance, fox trot, line dance) to identify patterns in the dance steps. Students will share their findings with their class.</p>
<p style="text-align: center;">December Pattern Ideas</p> <p>1st week: (Gingerbread House Day-12/12) Students will build a gingerbread house using graham crackers and frosting. To decorate the house, students will use candy to form patterns.</p> <p>3rd week: (December Holidays) Given a blank piece of paper, students will use markers, stamps, stickers... to create gift wrap that has a holiday pattern.</p>	<p style="text-align: center;">June Pattern Ideas</p> <p>1st week: (Flag Day-6/14) Students will create a new flag using a repeating pattern.</p> <p>3rd week: (Life Cycles-Sci. Goal 1) Students will identify patterns by observing the life cycle of animals such as tadpole to frog and caterpillar to butterfly.</p>

Mathematics Daily Routine Supplement

Grade 2 Quarters 1-4 Daily Routine for 2.01a

(1x/week)



SCOS Objective(s)

2.01a Estimate and measure using appropriate units of length (meters, centimeters, feet, inches, yards).

Materials Needed:

- Inch rulers
- Yard sticks
- Centimeter rulers
- Activity sheets, as needed for specific activities
- Additional materials for specific activities include: watermelon seeds, books, yarn, pumpkin seeds, straws...

Assessment References

Administer these assessment items at appropriate times throughout each quarter. The Quarterly Assessments were not designed to be administered in their entirety at the end of each quarter.

Grade Two Quarterly Assessment

Vocabulary- Daily Review (2.01a)

standard units of measurement
non-standard units of measurement
inches
feet
yards
tape measure
estimation

Daily Routine 2.01a Measurement (Ongoing)

NOTE: This alignment lesson provides an open-ended framework for exploring measurement with your second grade class on an ongoing basis. It is recommended that students estimate and measure at least once every two weeks. Measuring activities can occur at various times during the instructional day (i.e., during center activities or arrival time) or for homework. They can also be included in the **Daily Routine** portion of the instructional day.

The lengths of measurement included in Objective 2.01 are centimeters, meters, feet, inches and yards. Students should be given ample time to practice measuring using all of these units of length. Time should also be provided for students to compare the differences between using these measuring tools. Some of the Daily Routine lessons list specific units of measurement. This can be modified to meet your students' needs. When a specific unit of measurement is not listed, the teacher should choose those in which students need the most practice.

Prior to beginning the daily routine lessons, students should engage in a conversation to discuss the differences between standard and non-standard units of measurement. Students should also be encouraged make estimations prior to measuring.

Source: **Teacher-created**

Monthly Ideas for Measurement

<p align="center">July Measurement Ideas</p> <p>1st Week: (<i>Back to School</i>) Students will use measuring tools to measure various distances in their classroom. (desk to door, door to window...)</p> <p>3rd Week: (<i>Watermelon</i>) After the class enjoys a watermelon snack, ask students to glue the seeds onto strips of paper. Students will line up the strips and will measure the length of all the watermelon seeds lined up.</p>	<p align="center">January Measurement Ideas</p> <p>1st Week: (<i>Drinking Straw Day-3</i>) Students will use straws to measure various distances around the classroom. These distances will be compared to standard units of measurement.</p> <p>3rd Week: (<i>Weather</i>) Students will leave a cup of water outside to freeze and will measure how much the water “grew” when it froze.</p>
<p align="center">August Measurement Ideas</p> <p>1st Week: (<i>Book Lovers Day-9</i>) Students will measure the height of every book they read that week. At the end of the week, they’ll add the inches together and graph the class results.</p> <p>3rd Week: (<i>Hawaii Statehood Anniversary-21</i>) Students will measure yarn to be used to create a yarn and tissue paper lei.</p>	<p align="center">February Measurement Ideas</p> <p>1st Week: (<i>Afro-American History Month</i>) Students will research a famous Afro-American to learn his/her height. Students will use this information to create lifesize drawing.</p> <p>3rd Week: (<i>Groundhog Day-2</i>) Students will measure their shadow at 3 different times of day and will discuss the differences.</p>
<p align="center">September Measurement Ideas</p> <p>1st Week: (<i>National Grandparents Day-1st Sunday after Labor Day</i>) Students will find out the height of one of their grandparents and compare that height to their own height.</p> <p>3rd Week: (<i>The Pilgrims Leave England on the Mayflower-16</i>) Students will use centimeters to design a boat on a paper and will then use the dimensions to build a boat. Students will test to see if it floats.</p>	<p align="center">March Measurement Ideas</p> <p>1st Week: (<i>The Largest Snowman Ever Built-5</i>) Using styrofoam balls, students will create a snowman and will estimate and measure its height.</p> <p>3rd Week: (<i>Music In Our Schools Month</i>) Students will estimate and measure how many feet they must stand away from the musician playing soft music using various instruments. (Best done outside)</p>
<p align="center">October Measurement Ideas</p> <p>1st Week: (<i>National Metric Week-6-12</i>) Students will use centimeter rulers, inch rulers and yard sticks to measure various classroom items and will discuss how they chose the appropriate tool to measure.</p> <p>3rd Week: (<i>Pumpkins</i>) Students will use tape measures to find the circumference of various sized pumpkins.</p>	<p align="center">April Measurement Ideas</p> <p>1st Week: (<i>Anniversary of the First Space Shuttle Launch-12</i>) Students will make a paper airplane and estimate and measure how far it flew using inches and centimeters.</p> <p>3rd Week: (<i>Mathematics Education Month</i>) Students will measure themselves and recreate a life-size drawing.</p>
<p align="center">November Measurement Ideas</p> <p>1st Week: (<i>Veterans Day-11</i>) Students will measure the American flag and use those measurements to create a new flag for our country. Students will justify the changes they made to their new flag.</p> <p>3rd Week: (<i>Money</i>) Students will line up the money in their piggy bank and will measure the length of the line.</p>	<p align="center">May Measurement Ideas</p> <p>1st Week: (<i>National Weather Observer’s Day-4</i>) Students will set out a rain gauge and measure the month’s rainfall.</p> <p>3rd Week: (<i>National Physical Fitness and Sports Month</i>) Students will use cm, inches and yards to estimate and measure how far they can throw a baseball.</p>
<p align="center">December Measurement Ideas</p> <p>1st Week: (<i>Poinsettia Day-12</i>) Students will measure the length of 5 different poinsettia leaves and graph the results.</p> <p>3rd Week: (<i>Gingerbread Man</i>) Students will use rulers to design a gingerbread house on paper. Then, graham crackers will be used to build it to scale. Measure to ensure lengths are correct.</p>	<p align="center">June Measurement Ideas</p> <p>1st Week: (<i>Animal Life Cycles</i>) Students will research an animal’s length and use the information to create a life size drawing of the animal.</p> <p>3rd Week: (<i>Father’s Day-3rd Sunday</i>) Students will measure their dad’s favorite tie in cm and inches. Use the data to create a class graph.</p>