Number Corner September

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Number Corner Student Book Pages
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September Sample Display

Of the items shown below, some are ready-made and included in your kit; you’ll prepare others from classroom materials and the included teacher masters. Refer to the Preparation section in each workout for details about preparing the items shown. The display layout shown fits on a 10’ × 4’ bulletin board or on two 6’ × 4’ bulletin boards. Other configurations can be used according to classroom needs. If you have extra space to work with, a Number Corner header may be made from bulletin board letters, student-drawn letters, or other materials. You will also need a standard pocket chart this month.

Finger Pattern Display Cards
These will be used in Number Corner workouts throughout the year.

Plastic Link Chains & Ten-Frames
Used in Days in School workouts. You might make a colored paper background for the collection.

Calendar Collector Pocket Chart
Extra red and blue cards can be kept in a zip-top bag pinned to the board.

Classroom Number Line
As you accumulate more strips, they can be moved below the display or to another location in the classroom.

Number Line Pocket Chart

Calendar Grid Pocket Chart
Remember to consult a calendar for the starting day for the month and year.

Other configurations can be used according to classroom needs.

Number Corner Kindergarten Teachers Guide
<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Calendar Grid</th>
<th>Calendar Collector</th>
<th>Days in School</th>
<th>Computational Fluency</th>
<th>Number Line</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td><strong>Activity 1</strong> Spinning for Cubes (p. 17)</td>
<td><strong>Activity 1</strong> One Dot, One Link &amp; One Number Each Day (p. 25)</td>
<td><strong>Activity 1</strong> Introducing the Number Line Pocket Chart (p. 39)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td><strong>Activity 1</strong> Introducing the Calendar Grid (p. 8)</td>
<td>Update</td>
<td></td>
<td><strong>Activity 2</strong> Counting Forward &amp; Backward (p. 41)</td>
<td></td>
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<tr>
<td>3</td>
<td></td>
<td><strong>Activity 2</strong> Patterns &amp; Predictions (p. 10)</td>
<td>Update</td>
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<tr>
<td>4</td>
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<td><strong>Activity 2</strong> Patterns &amp; Predictions (p. 10)</td>
<td>Update</td>
<td></td>
<td><strong>Activity 3</strong> Playing Hop &amp; Stop (p. 42)</td>
<td></td>
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</tr>
<tr>
<td>5</td>
<td></td>
<td>Update</td>
<td><strong>Activity 2</strong> Looking at the Weekly Collection Total (p. 18)</td>
<td>Update</td>
<td><strong>Activity 2</strong> Flash &amp; Show (p. 32)</td>
<td></td>
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</tr>
<tr>
<td>6</td>
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<td>Update</td>
<td><strong>Activity 1</strong> Spinning for Cubes (p. 17)</td>
<td>Update</td>
<td><strong>Activity 2</strong> Flash &amp; Show (p. 32)</td>
<td></td>
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<td>Update</td>
<td></td>
<td><strong>Activity 2</strong> Counting Forward &amp; Backward (p. 41)</td>
<td></td>
<td></td>
</tr>
<tr>
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<td><strong>Activity 2</strong> Patterns &amp; Predictions (p. 10)</td>
<td>Update</td>
<td></td>
<td><strong>Activity 2</strong> Flash &amp; Show (p. 32)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td><strong>Activity 2</strong> Patterns &amp; Predictions (p. 10)</td>
<td>Update</td>
<td></td>
<td><strong>Activity 3</strong> Playing Hop &amp; Stop (p. 42)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Update</td>
<td><strong>Activity 2</strong> Looking at the Weekly Collection Total (p. 18)</td>
<td>Update</td>
<td><strong>Activity 4</strong> Writing Numerals (p. 44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>Update</td>
<td><strong>Activity 1</strong> Spinning for Cubes (p. 17)</td>
<td><strong>Activity 2</strong> Ten &amp; Some More (p. 26)</td>
<td><strong>Activity 3</strong> Flash &amp; Build Five (p. 33)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td><strong>Activity 3</strong> Days of the Week (p. 11)</td>
<td>Update</td>
<td></td>
<td><strong>Activity 5</strong> The Number Behind the Red Door (p. 45)</td>
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</tr>
<tr>
<td>13</td>
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<td><strong>Activity 3</strong> Days of the Week (p. 11)</td>
<td>Update</td>
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<td>Baseline Assessment, Part 1 (p. 46)</td>
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</tr>
<tr>
<td>14</td>
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<td><strong>Activity 3</strong> Days of the Week (p. 11)</td>
<td>Update</td>
<td></td>
<td>Baseline Assessment, Part 2 (p. 48)</td>
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<tr>
<td>15</td>
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<td>Update</td>
<td><strong>Activity 3</strong> Flash &amp; Build Five (p. 33)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td><strong>Activity 4</strong> Shape Hunters (p. 12)</td>
<td><strong>Activity 3</strong> Estimating &amp; Counting the Month’s Total Collection (p. 20)</td>
<td>Update</td>
<td><strong>Activity 3</strong> Flash &amp; Build Five (p. 33)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td><strong>Activity 4</strong> Shape Hunters (p. 12)</td>
<td>Update</td>
<td></td>
<td><strong>Activity 2</strong> Counting Forward &amp; Backward (p. 41)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td><strong>Activity 4</strong> Shape Hunters (p. 12)</td>
<td>Update</td>
<td></td>
<td><strong>Activity 3</strong> Playing Hop &amp; Stop (p. 42)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td><strong>Activity 4</strong> Shape Hunters (p. 12)</td>
<td>Update</td>
<td></td>
<td><strong>Activity 4</strong> Writing Numerals (p. 44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td><strong>Activity 4</strong> Shape Hunters (p. 12)</td>
<td>Update</td>
<td></td>
<td><strong>Activity 4</strong> Completing the How Many to Five? Page (p. 34)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note**: On days when the Calendar Grid, Calendar Collector, and Days in School are not featured in an activity, the class will update them together. Update procedures are described at the beginning of each workout write-up. Summaries of the update procedures appear below.

**Calendar Grid** – Share predictions about and post the day’s marker, sing the matching shape song. After Activity 3, identify the day of the week as well.

**Calendar Collector** – Spin the spinner, count out the designated number of cubes, and add them to the pocket for the week.

**Days in School** – Add a dot to the ten-frame, a link to the chain, and a number to the number line.
Number Corner
September

Overview
The workouts in the first month of school focus on two-dimensional shapes—circles, rectangles, triangles, and squares—basic counting skills, and combinations of 5.

Activities

<table>
<thead>
<tr>
<th>Workouts</th>
<th>Day</th>
<th>Activities</th>
<th>D</th>
<th>G</th>
<th>SB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calendar Grid Circle, Rectangle, Triangle, Square</td>
<td>2</td>
<td>1 Introducing the Calendar Grid</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Calendar Collector Collecting Cubes</td>
<td>1, 6, 11</td>
<td>1 Spinning for Cubes</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>5, 10, 15</td>
<td>2 Looking at the Weekly Collection Total</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Days in School Dots, Links &amp; Numbers</td>
<td>1</td>
<td>1 One Dot, One Link &amp; One Number Each Day</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>2 Ten &amp; Some More</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Computation Fluency Quantities to Five</td>
<td>3</td>
<td>1 Introducing the Five-Frame</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>5, 6, 8</td>
<td>2 Flash &amp; Show</td>
<td></td>
<td></td>
<td>●  ●</td>
</tr>
<tr>
<td></td>
<td>11, 15, 16</td>
<td>3 Flash &amp; Build Five</td>
<td></td>
<td></td>
<td>●  ●</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>4 Completing the How Many? to Five Page</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Number Line Up to Ten &amp; Back Again</td>
<td>1</td>
<td>1 Introducing the Number Line Pocket Chart</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>2, 7, 17</td>
<td>2 Counting Forward &amp; Backward</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>4, 9, 18</td>
<td>3 Playing Hop &amp; Stop</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>10, 19</td>
<td>4 Writing Numbers</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>5 The Number Behind the Red Door</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Assessment Baseline Assessment</td>
<td>13</td>
<td>Baseline Assessment, Part 1</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introducing the Baseline Interview</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Baseline Assessment, Part 2</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Completing the Baseline Written Assessment</td>
<td></td>
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<td>●</td>
</tr>
</tbody>
</table>

D – Discussion, G – Game, SB – Number Corner Student Book
Teaching Tips
September is the month to establish procedures that ensure Number Corner runs smoothly all year. Kindergartners need specific instruction on many classroom routines, including how to move from their tables to the discussion area, show answers using their fingers, follow signals, share and explain their thinking, and work with partners. Plan to spend a bit more time on the Number Corner workouts this month while students are learning these routines. Please review the Number Corner Introduction for more detailed advice about routines, planning, teaching strategies, and pacing.

Note Consider using the Whole Turn? Cards described in the Number Corner Introduction to choose a calendar helper each day. Students will soon understand the system and begin to anticipate their turn.

Target Skills
The table below shows the major skills and concepts addressed this month. It is meant to provide a quick snapshot of the expectations for students’ learning during this month of Number Corner.

<table>
<thead>
<tr>
<th>Major Skills/Concepts Addressed</th>
<th>CG</th>
<th>CC</th>
<th>DS</th>
<th>CF</th>
<th>NL</th>
</tr>
</thead>
<tbody>
<tr>
<td>K.CC.1 Count to 20 by 1s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K.CC.3 Write numbers from 0 to 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K.CC.4a Count objects one by one, saying the numbers in the standard order and pairing each object with only one number name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K.CC.4b Identify the number of objects as the last number said when counting a group of objects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrate that each successive number name refers to a quantity that is one larger than the previous number name</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>K.CC.5 Count up to 20 objects arranged in a line, rectangular array, or circle to answer “how many?” questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supports K.OA Copy, extend, and describe simple repetitive patterns</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>K.OA.4 For any number from 1 to 4, find the number that makes 5 when added to that number</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K.G.1 Identify and describe objects in the environment using geometric shape names</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K.G.2 Identify shapes, regardless of orientation or size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>K.G.3 Identify shapes as two-dimensional or three-dimensional</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>K.G.4 Analyze and compare two-dimensional shapes, and use informal language to describe the parts and attributes of these shapes, as well as describe their similarities and differences</td>
<td></td>
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</tr>
<tr>
<td>K.MP.2 Reason abstractly and quantitatively</td>
<td></td>
<td></td>
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<tr>
<td>K.MP.4 Model with mathematics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>K.MP.7 Look for and make use of structure</td>
<td></td>
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<td></td>
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<tr>
<td>K.MP.8 Look for and express regularity in repeated reasoning</td>
<td></td>
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</tr>
</tbody>
</table>

CG – Calendar Grid, CC – Calendar Collector, DS – Days in School, CF – Computational Fluency, NL – Number Line
Assessments

This month, you will administer the Baseline Assessment in two parts: a short interview that will be conducted with individual students over a period of about three weeks and a brief written assessment that students will complete with your guidance in the third week of the month. The table below lists the skills assessed in each part of the Baseline Assessment.

The Baseline Assessment is a one-time tool, designed to inform your instruction rather than gauge students’ growth over time. Quarterly checkups that appear in October, January, March, and May serve a similar purpose: each provides a snapshot of individual students at that particular time of year, with regard to the skills that have been emphasized in the couple of months prior to the checkup. If you want to gauge students’ growth and progress over time with regard to the Common Core State Standards, you can use the optional Comprehensive Growth Assessment, located in the Kindergarten Number Corner Assessment Guide.

<table>
<thead>
<tr>
<th>Skills/Concepts Assessed</th>
<th>Baseline Interview</th>
<th>Baseline Written</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>K.CC.1</strong> Count to 10 by 1s</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td><strong>K.CC.3</strong> Write numbers from 0 to 10</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td><strong>Supports K.CC</strong> Read numbers from 0 to 10</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td><strong>K.CC.4a</strong> Count objects one by one, saying the numbers in the standard order and pairing each object with only one number name</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td><strong>K.CC.4b</strong> Identify the number of objects as the last number said when counting a group of objects</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td><strong>K.OA.2</strong> Add with sums to 10</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td><strong>K.G.5</strong> Model two-dimensional shapes in the world by drawing them</td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>
### Materials Preparation

Each workout includes a list of required materials by activity. You can use the table below to prepare materials ahead of time for the entire month.

<table>
<thead>
<tr>
<th>Task</th>
<th>Done</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Copies</strong></td>
<td>Run copies of Teacher Masters T1–T16 according to the instructions at the top of each master. If students do not have their own Number Corner Student Books, run a class set of pages 1–2.</td>
</tr>
<tr>
<td><strong>Charts</strong></td>
<td>Assemble Shape Posters according to preparation instructions in the Calendar Grid workout.</td>
</tr>
<tr>
<td><strong>Paper Cutting</strong></td>
<td>Create a class set of Shape Hunter Badges according to preparation instructions in the Calendar Collector workout.</td>
</tr>
<tr>
<td><strong>Special Items</strong></td>
<td>Prepare 17 or 18 sentence strips to serve as segments of the Classroom Number Line according to preparation instructions in the Number Line Workout. Create three pieces of card stock to serve as labels for the Calendar Collector pocket chart. They should be about the same size as the Week Cards—3” x 5” index cards, cut in half, work well. Consider laminating these for reuse. Prepare three Unifix cubes per student: 5 white and 5 red. Prepare arrow clips, Grasshopper Number Line Markers, and grasshopper pointers according to preparation instructions in the Number Line workout.</td>
</tr>
<tr>
<td></td>
<td>Prior to Number Line Activity 4, familiarize yourself with the numeral-writing rhymes provided in the teacher masters. Consider creating a display according to preparation instructions in the Number Line workout.</td>
</tr>
</tbody>
</table>
September Calendar Grid

Circle, Rectangle, Triangle, Square

Overview

The calendar markers this month feature four different shapes—circles, rectangles, triangles, and squares. Each of these shapes is shown in isolation and also in the form of familiar objects. Each day students have an opportunity to predict what shape they’ll see on the marker before it is posted. They’ll find many opportunities throughout the month to describe and compare the attributes of the four shapes, as well as identify circular, rectangular, triangular, and square objects in the classroom.

Skills & Concepts

- Copy, extend, and describe simple repetitive patterns (supports K.OA)
- Identify and describe objects in the environment using geometric shape names (K.G.1)
- Identify shapes, regardless of orientation or size (K.G.2)
- Identify shapes as two-dimensional or three-dimensional (K.G.3)
- Analyze and compare two-dimensional shapes (K.G.4)
- Use informal language to describe the parts and attributes of two-dimensional shapes, and to describe their similarities and differences (K.G.4)
- Look for and make use of structure (K.MP.7)
- Look for and express regularity in reasoning (K.MP.8)

Materials

<table>
<thead>
<tr>
<th>Activities</th>
<th>Day</th>
<th>Copies</th>
<th>Kit Materials</th>
<th>Classroom Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1</td>
<td>2</td>
<td>T1–T4</td>
<td>Shape Songs</td>
<td>• 4 pieces of 18&quot; × 24&quot; paper (see Preparation)</td>
</tr>
<tr>
<td>Introducing the Calendar Grid</td>
<td></td>
<td></td>
<td>Used in all Calendar Grid activities this month:</td>
<td>• Calendar Grid pocket chart</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• 2-D Shapes Calendar Markers</td>
<td>• erasable markers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Month, Day, and Year Cards</td>
<td>• pointer</td>
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<td>8, 9</td>
<td>Shape Posters (see Preparation)</td>
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<tr>
<td>Shape Hunters</td>
<td></td>
<td></td>
<td>• rug yarn or safety pins (see Preparation)</td>
<td>• colored construction paper or poster board (optional, see Preparation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• colored construction paper or poster board (optional, see Preparation)</td>
<td>• 12&quot; × 18&quot; piece of construction paper</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• colored construction paper or poster board (optional, see Preparation)</td>
<td>• a basket or other container</td>
</tr>
</tbody>
</table>

TM – Teacher Master, NCSB – Number Corner Student Book

Copy instructions are located at the top of each teacher master.

Vocabulary

An asterisk [*] identifies those terms for which Word Resource Cards are available.

circle*
corners
curved
different
Friday
length*
Monday
number words for 1–4
pattern*
rectangle*
same
Saturday
September
sides
square*
straight
Sunday
Thursday
triangle*
Tuesday
Wednesday
week
**Preparation**

**September Pattern Strip**
Post the September Pattern Strip in the Calendar Grid pocket chart on your Number Corner display board.

**Shape Posters**
Run a copy of each of the Shape Songs Teacher Masters. Glue each to the top of a 18" × 24" piece of paper to create a Shape Poster, and label each as shown below. Display the set of four on your Number Corner board in the sequence shown here. (Through the month, you will record more information on each poster. If you laminate these before you share them with students, and use erasable markers, you can re-use them each year.)

**Shape Hunter Badges**
Run the Shape Hunter Badges Teacher Masters on white or colored copy paper and cut them out. Make a badge for each student in your class. Consider backing each badge with colored construction paper or poster board and laminating them. Then punch a hole at the top of each shape and insert a safety pin for pinning the badge, or if you prefer, run a length of rug yarn through the hole for wearing the badge as a necklace.

**Mathematical Background**
Kindergartners typically recognize shapes by their appearance, often describing them in terms of familiar objects. If you ask a kindergartner how he knows the shape on the left is a triangle, he is likely to say that it’s a triangle because it looks like a shark’s tooth or a mountain. He is likely to tell you that the figure in the middle is not a triangle because it does not have a flat bottom, and the figure on the right is not a triangle because it is too long and skinny.

This month’s Calendar Grid activities are designed to help students begin to think of shapes in terms of their attributes and to understand that certain attributes—such as number of sides or number of corners—define what a shape is, while other attributes—such as size, color, and orientation—do not. The fact that the shapes appear in a patterned sequence facilitates this process. By mid-month, students will start to anticipate that they’ll always see a rectangle following a circle. So when the picture on the marker after the circular pizza shows a dollar bill tilted at an angle, they may begin to question their assumption that a rectangle is only a rectangle if it is sitting flat on one of its long sides.

**Literature Connections**
If you have access to the books listed here, or others like them, you might share them with your students this month to reinforce shape names and attributes.

- *So Many Circles, So Many Squares* by Tana Hoban
- *Shapes, Shapes, Shapes* by Tana Hoban
- *Mouse Shapes* by Ellen Stoll Walsh
- *When a Line Bends… A Shape Begins* by Rhonda Gowler Greene
- *Bear in a Square/ Oso en un Cuadrado* by Stella Blackstone
The term *pattern* may be brand new to some of your students. The intuitive ideas many preschoolers form about patterns are often limited to ABAB sequences—on, off, on, off; up, down, up, down; red, blue, red, blue—and some of the youngsters in your group may not identify the four-shape sequence as a pattern at all early in the month. Later in the month, however, as students become increasingly proficient at predicting what will come next based on the fact that the shapes always appear in the same sequence, the idea of a pattern will begin to take hold.

**About the Pattern**

The patterns featured this month are described below. Because patterns more complex than ABAB may be unfamiliar to some of your students, a pattern strip showing the four basic shapes is provided at the beginning of the month to scaffold students’ thinking and help them make predictions.

- The shapes appear in a predictable sequence that is repeated over and over: circle, rectangle, triangle, square, or ABCD, ABCD.
- These four shapes are presented in isolation, and then in the context of familiar objects, to form a larger ABAB pattern. By mid-month, many students will begin to anticipate when they are going to see a blue circle and when they are going to see an object shaped like a circle.
- The shapes presented in isolation are always the same size and color to provide some scaffolding for students who are unfamiliar with shape names or patterns. On the other hand, the shapes presented as objects are not the same color and size, helping students to understand that color and size do not define a shape.

**Key Questions**

Use questions and prompts like these to help students identify and describe shapes, and begin to make predictions based on patterns.

- What shape do you see on the marker we posted yesterday? How do you know it’s a circle (rectangle, triangle, square)?
- If I take the marker out of its pocket and turn it upside down, is the shape on the marker still a circle (rectangle, triangle, square)? How do you know?
- How do you know the shape on this marker is not a circle (rectangle, triangle, square)?
- What shape will you see on today’s marker? How do you know?
- Can you tell what color the shape will be? Why or why not?
- Will you see a circle (rectangle, triangle, square) or something shaped like a circle (rectangle, triangle, square)? How do you know?
- Everyone agrees that we’ll see something that is shaped like a circle (rectangle, triangle, square) on today’s marker. What might that object be? Can you think of anything shaped like a circle (rectangle, triangle, square)? Can you see anything in our classroom shaped like a circle (rectangle, triangle, square)?
Update

Begin updating after Day 4. Follow this update procedure every day that the Calendar Grid is not a featured activity. You’ll update the Calendar Grid as part of each activity as well.

Procedure

• Ask students to predict the shape and number on the day’s Calendar Grid marker, using the pattern strip for support.
• Invite a student helper to post the Calendar Grid marker for the day.
• Have the helper point out the matching Shape Poster.
• Lead the class in singing the song.
• Have students name the object (if the marker features an object that matches the shape) and make sure it matches the description on the poster.
• Record the name of the object on the poster.

Note

Starting after Activity 3, have students sing or recite the names of the days of the week as you or the helper points to each of the filled pockets on the Calendar Grid. When you reach the pocket for the day, have students identify the name of the day. Do this before the class makes predictions about the day’s marker.

Activity 1

Introducing the Calendar Grid

Even if your second instructional day of the school year falls after September 4, plan to introduce the Calendar Grid as described in this activity.

Post the first three markers in the Calendar Grid pocket chart before you conduct this activity.

1 Introduce the Calendar Grid.
   • Seat students close to the Number Corner display.
   • Call their attention to the Calendar Grid and the pattern strip.
   • Explain that you’ll put up a new marker each day of the month. Their job will be to predict what each day’s marker will look like, using the pattern strip to help.

2 When they’ve had a few moments to examine the markers on the Calendar Grid, ask students to examine the sequence of shapes shown on the pattern strip. What do they notice?
   Working with this very open-ended question will give you an opportunity to discover some of the things your students already know about shapes and patterns.

3 Help students name each of the four shapes on the pattern strip.
   SUPPORT If most students aren’t able to name the shapes on the pattern strip with you, say the name of each one first as you point to it, and have the students repeat it after you.
4. Then help students use the pattern strip to predict what shape will be posted next in the Calendar Grid pocket chart.
   - Choose a helper to come up and point to the shapes that are already posted on the Calendar Grid as you point to the matching shapes on the pattern strip.
   - Identify the next shape on the pattern strip with students and solicit agreement that the shape on today’s calendar marker will match.

   **Teacher** (Selects a student helper.) Will you please come up and point to each of the big shapes on the Calendar Grid while I point to the little shapes on our pattern strip? Let’s say the names of the big shapes we can see, ready?

   **Students and Teacher** Circle, rectangle, triangle…

   **Teacher** What shape comes next on our pattern strip?

   **Students** That one that looks like a box.

   That’s a square!

   **Teacher** I bet today’s calendar marker will have a big square on it. What do you think?

   **Students** Yeah! Can we see?

   **Teacher** I’ll hand you the marker, and you put it in the next pocket.

5. Next, work with the class to identify the matching Shape Poster, and sing the Shapes song that applies.
   Sing the song through once. Then sing it a second time and have students sing with you.

6. Finally, take a moment to re-examine the shape on today’s marker. How many sides does it have? How many corners? Does it match the description in the song?
Activity 2

Patterns & Predictions

Days 3, 4, 7, 8, 9

Post any markers needed to bring the Calendar Grid up to date, not including the marker for today.

1. Before posting the new marker for the day, help students use the pattern strip to predict what shape they’ll see on today’s marker.
   Ask students to make predictions about the number that will appear on the marker as well.
   SUPPORT: Point to the numbers on the markers posted so far and read them with the class. Then have students tell what number comes next. Is that the number they’ll see on today’s marker?

2. Select a helper to post the card in the chart.

3. If the marker for the day shows one of the shapes in isolation, repeat steps 5 and 6 from Activity 1. If the marker for the day shows an object rather than an isolated shape, continue with steps 4–7 below.

4. Give students a few moments to examine the new marker, and then ask them to pair-share what they notice about the marker.
   Call on several volunteers to share their observations with the class.

5. Explain that many of the objects in the world around us are shaped like circles, rectangles, triangles, or squares. Ask students to identify the shape that the object on this marker most resembles.
   SUPPORT: Take today’s marker out of its pocket and hold it up below each of the first four markers. Ask students to identify the shape that is the best match for the object on the marker.

6. Then work with the class to identify the matching Shape Poster, and sing the Shapes song that applies.
   Sing the song through once. Then sing it a second time and have students sing with you.

7. Ask students to examine the object on today’s marker very carefully. How many sides does it have? How many corners? Does it match the description in the song?
   Record the name of the object on the Shape Poster.
Activity 3

Days of the Week

1. Before posting the new marker for the day, explain that a calendar helps people find out what day of the week it is.
   Point to each of the Day Cards at the top of the Calendar Grid, starting with Sunday. As you point to each card, read the name of the day.

2. Then explain that you have a song to teach the class that will help them learn and remember the names of the days of the week.
   Sing the names of the days of the week, starting with Sunday, to the tune of “Alouette” (just the first two lines):
   
   Sunday, Monday,
   (Alouette)
   Tuesday, Wednesday, Thursday,
   (gentille Alouette)
   Friday, Saturday,
   (Alouette)
   And then we start again.
   (je te plumerai.)

3. Sing the song a second time, touching each of the Day Cards as you sing its name.

4. Use the song to identify today’s name.
   • Starting with the first marker pocket on the chart (whether or not it has a marker in it), point and touch each pocket as you sing the name of the day for that marker.
   • Have the students chime in as soon as they are able.
   • When you reach today’s (still empty) pocket, call out the name of the day. Then move your pointer up the column to touch the name of the day at the top and read it to students.

---

September 2013 Calendar Grid

Days 12, 13, 14

1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17
Now continue with Steps 1–3 or 1–7 from Activity 2, depending on whether today’s marker shows a shape in isolation or an everyday object. Use some of the Key Questions to deepen students’ understanding of the shapes and patterns on the grid.

Activity 4

Shape Hunters Days 16, 17, 18, 19, 20

Divide your class into four equal groups and list the names of students in each group on the board. Draw one of the four shapes above each list of names.

1 Update the Calendar Grid for the day with the class. Then explain to students that starting tomorrow, they’ll each have a turn to be a shape hunter.
   - Show them one Shape Hunter badge in each shape. Have them name the shape of each badge as you hold them up one by one. Then read the text on each badge to the students.
   - Show students the lists of names you wrote on the board, and let them know that each day for the next four days, you will have one of the groups hunt for a certain shape.

2 The following day give each of the students in one of the groups a Shape Hunter badge.
   - Choose the group that is assigned the shape that will be posted on the Calendar Grid today.
   - Give each a badge as soon as they come in.
   - Have them look around the room for a few minutes and find one object that matches the shape on their badge.
   - Advise these students to look everywhere—in the collection of blocks, games, and table toys; among the math tools; on the walls; on the shelves; even in some of the books. Ask them to find flat shapes rather than solids, and show them an example of each.
   - When they find the object they want to share, have them place it in a basket or other container on your desk.
   - It’s fine if the object they find can’t be moved, but it must be something that’s visible from the Number Corner discussion area. If two students find and want to share the same object, that’s fine too.

3 Update the Calendar Grid for the day with the class. Then ask your Shape Hunters to share the objects they found.
   - Place the 12” × 18” piece of construction paper in the middle of the discussion circle.
   - Hold up each of the objects the hunters placed in your basket one by one. Invite the student who found it to tell what it is, and how she knows it matches the shape on the Calendar Grid marker for today. Then have her place it on the sheet of construction paper.
   - If one or more of the day’s Shape Hunters found an object they couldn’t place in your basket, have them leave the discussion area, stand beside the object they found, tell what it is and how they know it matches the shape on today’s marker.
• Record the name of each object on the appropriate Shape Poster.

![Shape Poster](image)

Circles We See in the World

- clock
- penny
- checker
- lid
- magnifying glass

4. When all the objects are placed on the construction paper, have students describe what makes them all match the shape on today’s marker.

Guide the class to the understanding that it’s not size, color, material, orientation, or location that defines the shape of these objects. Rather, it is the number of sides, the number of corners, and the lengths of the sides relative to one another.

**Teacher**  My goodness! What a lot of different things we have here. Let’s name them as I point to each one. Ready?

**Students**  A penny, a checker, a magnifying glass, a lid, a picture of the sun, and the clock on the wall.

**Teacher**  These objects are all different sizes and colors. The penny is small and brown. The checker is just a little bigger than the penny and red. The magnifying glass is clear with a silver rim. The lid is small and white. The clock is large and white with black numbers.

How can these all be circles? Tell the person next to you, and then I’ll call on a few people to share their ideas.

**Aja**  They’re all round. They have to be circles.

**Hunter**  They go around and around. They could roll away.

**Teacher**  Do any of them have straight sides?

**Students**  No!

**Teacher**  How many corners do these shapes have?

**Students**  None!

You’re just trying to trick us. Circles don’t have corners!

5. Repeat steps 2–4 each day for the next three days until each group has a chance to find and share objects that match one of the shapes featured on the calendar markers for this month.
September Calendar Collector
Collecting Cubes

Overview
Each day for the first three weeks of school, a helper spins a spinner numbered 1–4 and collects the designated number of Unifix cubes to place in the pocket of a specially designed collection chart. At the end of each week, students count the cubes to see how many they collected. At the end of the month, students combine all three collections, estimate, and then count to see how many cubes they collected in all.

Skills & Concepts
- Count to 30 or 40 by 1s and by 10s (K.CC.1)
- Count objects one by one, saying the numbers in the standard order and pairing each object with only one number name (K.CC.4a)
- Identify the number of objects as the last number said when counting a group of objects (K.CC.4b)
- Count collections of objects in different ways to demonstrate that the arrangement of objects and the order in which they are counted do not change the total number of objects (K.CC.4b)
- Count up to 20 objects arranged in a line, rectangular array, or circle to answer “how many?” questions (K.CC.5)
- Decompose numbers from 11 to 19 into a group of 10 and some 1s (K.NBT.1)
- Reason abstractly and quantitatively (K.MP.2)
- Look for and express regularity in repeated reasoning (K.MP.8)

Materials

<table>
<thead>
<tr>
<th>Activities</th>
<th>Day</th>
<th>Copies</th>
<th>Kit Materials</th>
<th>Classroom Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1</td>
<td>1, 6, 11</td>
<td>Calendar Collector pocket chart, Calendar Collector Display Cards, 1–4 Spinner, Numbers to Ten Counting Mat (several)</td>
<td>Unifix cubes in one color (about 60, see Preparation), 9” × 12” piece of construction paper</td>
<td></td>
</tr>
<tr>
<td>Activity 2</td>
<td>5, 10, 15</td>
<td>two 3” × 5” index cards, cut in half, for label cards (see Preparation), chart paper or writing surface, markers, 9” × 12” piece of construction paper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity 3</td>
<td>16</td>
<td>chart paper or writing surface, tray or shallow container</td>
<td></td>
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</tr>
</tbody>
</table>

TM – Teacher Master, NCSB – Number Corner Student Book
Copy instructions are located at the top of each teacher master.

Vocabulary
An asterisk [*] identifies those terms for which Word Resource Cards are available.
collection count* estimate* estimation
number words for 1–30 ones* tens*
ten-frame sum or total*
**Preparation**

**Weekly Collection Display**

Use the Calendar Collector pocket chart and the Calendar Collector Display Cards to set up the collection display. Post it in your Number Corner area and keep a small container of about 60 single-colored Unifix cubes close by.

**Label Cards**

Prepare three piece of card stock about the same size as the Week Cards—3” × 5” index cards, cut in half, work well. These fit into the pockets under the Week Cards and will serve as labels for the weekly collection total in Activity 2. If you laminate and label the cards and use dry-erase marker to write on them, you can use them again in future months.

---

**Unifix Cubes**

Week 1

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Week 2

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Week 3

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**Mathematical Background**

Children love to collect objects they find interesting, such as sea shells, stickers, and action figures. The Calendar Collection workout capitalizes on students’ inclination to make collections. This month’s activities provide opportunities to develop a host of different counting skills including instant recognition of small groups, one-to-one correspondence, cardinality, rote counting to 30 or more, and numeral recognition to 4 and beyond.

---

**Key Questions**

Use the following questions and prompts to guide students as they count the cubes each day.

- What number did we spin today?
- Let’s count out that number of cubes onto the five-frame side of one of our counting mats.
- If we dump the cubes off the counting mat and onto this piece of paper, will we still have the same number? How do you know?
- If we spread the cubes out in a long line on the paper, will we still have the same number? How do you know?
- If we connect the cubes to make a short train, will we still have the same number? How do you know?

---

**Update**

For the first three weeks of the month, have a student helper follow this update procedure every day that the Calendar Collector is not a featured activity. You’ll update the Calendar Collector as part of Activities 1 and 2 as well.

**Procedure**

- Spin the 1–4 Spinner to determine the number of cubes to collect.
- Count out that many cubes onto the five-frame side of a Numbers to Ten Counting Mat as other students watch.
- Help the class recount the cubes (possibly more than once—see Activity 1, Step 6) to confirm the quantity.
- Place the day’s cubes in the appropriate weekly collection pocket.
Activity 1

Spinning for Cubes

Days 1, 6, 11

1. To introduce the Calendar Collector, tell students about something you enjoy collecting. Then invite a few volunteers to tell the class about something they collect.

2. Explain that in the Calendar Collector workouts this year, students will make a new collection together each month. This month, they will collect linking cubes.
   Show students the container of cubes you prepared.

3. Show students the 1–4 Spinner, and ask volunteers to share observations.

4. Explain how they will use the spinner and the Calendar Collector pocket chart to collect cubes.
   - Point to the numerals on the spinner in counting order, and read each of them with the class as you point.
   - Explain that a student helper will spin the spinner each day. The helper will count that many cubes out of the cube container, and put them in the weekly collection pocket.

5. Have a student helper spin the spinner and get the designated number of cubes out of the container.
   - Select a student to spin the spinner.
   - When the spinner arrow lands, read the numeral with the class.
   - Set a Numbers to Ten Counting Mat on the floor, five-frame side up, and have the helper count the designated number of cubes onto the mat, placing one cube in each box.
   *Let the student work at her own pace, but assist if necessary.*

6. Have the class recount the cubes in several different ways to confirm the total.
   - Ask all students to count the cubes on the mat as the helper touches each one. Count along, and at the end of the count, ask how many cubes are on the mat.
   - Then place the 9” × 12” sheet of construction paper on the floor next to the counting mat. Tell students you are going to dump the cubes from the mat onto the piece of paper. Will there still be the same number?
   - Gently pour the cubes off the counting mat onto the construction paper and let them remain where they fall rather than arranging them in any way. Ask students if the number of cubes is the same or different. Give them a few moments to consider the question. Then point to each cube as the class counts them by 1s.
   - Snap the cubes together into a short train as students watch. Ask them if the number of cubes is the same or different now. Give them a few moments to consider the question, and then point to each cube as the class counts them by 1s.

Key Questions

Use the following questions and prompts to guide students as they count the cubes at the end of each week and determine the total near the end of the month.

- Let’s take all the cubes out of the pocket for this week and set them on this tray where everyone can see them clearly. Do you think we have enough to fill all the boxes on a ten-frame mat? Do you think we have enough to fill all the boxes on two ten-frame mats?
- Let’s count the cubes together as we set them onto the ten-frame side of one of our counting mats.
- Do you think we’ll need more than one counting mat? Why?
- How many cubes are there on the mat when it’s full?
- Let’s count on from 10 to find the total.
- Now let’s go back and count the collection by 1s. Will we get the same total? How do you know?
These brief exercises are intended to help students develop cardinality and conservation of quantity—the understanding that the last number stated when counting a set represents the total quantity, and the understanding that the quantity does not change, regardless of how the objects are arranged. Repeat this exercise during updates if you have time. Other ways to arrange the cubes include spreading them far apart on the construction paper, putting a cube on each of your fingertips, or counting them on the mat from right to left rather than left to right.

7 Ask the student helper to place the cubes in the appropriate pocket on the Calendar Collector pocket chart.

**Activity 2**

**Looking at the Weekly Collection Total**

*Days 5, 10, 15*

*Always do this workout on the last day of the week (usually Friday).*

1. After completing the update procedure, let students know it’s time to find out how many cubes they collected over the past few days.
   - Lay the sheet of construction paper out on the floor.
   - Then take all the cubes out of the pocket for the week just completed, and place them in a heap on the construction paper.

2. Work with students to count the cubes.
   - Give students a few moments to examine the pile of cubes quietly.
   - Then set a Numbers to Ten Counting Mat out on the floor beside the construction paper, ten-frame side up. Count the boxes on the mat with students and ask if they think there are enough cubes in the pile to fill each of the boxes.
   - Have students count with you as you move each of the cubes from the pile onto the counting mat. When you fill seven or eight boxes, ask students whether you’ll need another mat to finish counting all the cubes. Call on several volunteers to share their thinking with the class, and encourage them to explain their reasoning. Students’ responses will vary, and will also depend on how many cubes were collected over the week.

Teacher  *How many cubes have we moved from the yellow paper to the counting mat?*

Students  *Seven!*

1, 2, 3, 4, 5, 6... 7—it’s 7!

Teacher  *Do you think there are enough boxes on the counting mat to hold the rest of the cubes, or will we need another mat? Turn and tell the person sitting next to you. (Gives students a few moments to pair-share.) Who would like to share their idea with the group?*
Sara I think we’ll need another mat.
Teacher Why?
Sara Because there are only 3 boxes left, and still 5 cubes on the paper.
Teacher Does someone have a different idea?
Max I think they can all fit.
Teacher How are you thinking about that?
Max Because there’s only a little on the paper.
Teacher Let’s find out!

3 Continue counting the cubes onto the mat with the class. If you fill one mat and there are more cubes on the construction paper, get a second mat and continue.

4 When you finish, ask the students how many cubes are on the counting mat(s).
Some of your students probably have enough of a sense of cardinality to report the total immediately, and will likely carry the group. If the quantity is much above 5, however, you can be sure that a fair number of students have recounted to be sure. To honor their stage of development, acknowledge the students who are sure of the total without counting, and then go back and count the quantity a second time with the class, just to be sure.

5 If there are more than 10 cubes, count the collection by 10s and 1s, and then one last time by 1s.
• Circle the full mat with your finger and review the fact that there are 10 on that mat.
• Model counting on from 10 to get the total (e.g., 10 … 11, 12) as you circle the full mat with your finger and then point to each of the single cubes on the other mat.
• Have students count with you as you circle and count on a second time.
• Finally, recount the cubes by 1s with the class.

Teacher How many cubes are there on the mat that’s full?
Students Ten!
Teacher Let’s count our collection in a different way. I’m going to say the ten as I circle this mat with my finger, and then keep on counting—10 … 11, 12. Twelve in all. You try it with me. Circle your finger in the air for the 10, and clap on the 1s … here we go!
Students 10 … 11, 12.
Tasha Let’s count them the real way now!

6 When you have reconfirmed the total with the class in several different ways, write the number on one of your prepared label cards, and read it with the class.

7 Then have a student helper gather all the cubes, put them back in the correct pocket, and post the card below that pocket on the Calendar Collector pocket chart.
By the end of the third week, you will have three labeled collections of cubes in the Calendar Collection chart.
Activity 3

Estimating & Counting the Month’s Total Collection  Day 16

1. Draw students’ attention to the Calendar Collector pocket chart with its labeled collection of cubes for each of the first three weeks of the month. Point to each of the labels and read the number with the class.

   ![Unifix Cubes](image)

   **CHALLENGE** Ask students which of the three numbers is greatest and which is least. Take the three labels out of their pockets and work with input from students to sequence them from least to greatest along a chalk ledge or in one of the rows of a standard pocket chart.

2. Explain that it’s time to find out how many cubes the class collected for the whole month.
   - Take the cubes out of all three pockets and place them on a tray or other shallow container.
   - Move the tray around the group so all students get a quick close-up look at the collection.
   - Ask students to turn to the person sitting next to them and whisper how many cubes they think are on the tray.

3. Call on students to share their estimates, and write them on the board or a piece of chart paper where the class can see them. As you write, say each number name.
   - Don’t react to students’ estimates, some of which are likely to seem more than a little far-fetched. (Remember that a hundred is often the way a young child expresses the idea of “really a lot.”)
   - Call on students quickly until everyone who wants to share has had a turn. It is fine if a student chooses to pass. Collect their estimates quickly so the group doesn’t lose interest.
   - If a student says a number that is already written, draw a line under it to indicate that another person also chooses this number.
Work with students to count the cubes.

- Set one of the Numbers to Ten counting mats, ten-frame side up, next to the tray on the floor.
- Move the cubes one by one from the tray to the mat, counting with the students as you go.
- Stop after the first mat is filled and ask students if they think there are enough cubes left on the tray to fill another ten-frame.
- Set a second mat next to the first, and keep moving the cubes and counting with the class, continuing on from 10.

**CHALLENGE.** Stop when you fill two mats and ask students whether they can eliminate any of the estimates you recorded earlier. Also invite them to make new estimates and record those on the chart in a different color.

*Teacher* We have counted out 20 of the cubes, and there are still some on the tray. Are there any estimates on our chart we can cross out?

*Ricky* The 5!

*Teacher* Why?

*Ricky* Because we already have 20. It can’t be 5 or 6 or 10.

*Zane* I think you should cross out 20.

*Teacher* Why do you think that?

*Zane* Because we have 20 but there are still more on the tray. It can’t be 20.

*Teacher* Does anyone want to make a new estimate?

*Gabriela* I think 30.

*Teacher* Why do you think 30?

*Gabriela* Because we have 20, and I think there are about 10 more left.

Continue to count, adding another mat as needed. When you finish, ask students how many there are total. Then go back and recount the collection with the class by 10s and 1s.

When you count by 10s and 1s, circle each of the full mats with your finger, and then point to each of the single cubes on the last mat. Have students watch and listen the first time, and then count with you the second time, making a circle in the air with one finger for each 10, and clapping on each of the 1s.
Students … 35, 36, 37, 38, 39!

Teacher So how many cubes did we collect this month?

Students Thirty-nine!

Teacher How many mats do we have that are completely filled?

Students Four!
No, 3! That last one isn’t full all the way.

Teacher How many cubes are on each of the full mats?

Students Ten!

Teacher I’m going to count our collection by 10s and 1s. Please listen the first time, and then count with me the second. Ready? My turn … 10, 20, 30… 31, 32, 33, 34, 35, 36, 37, 38, 39. Your turn now. Make a circle in the air for each 10, and clap on the 1s as I point to them. Here we go.

Finally, recount the entire collection one-by-one with the class. Post the total amount, along with the cube collection itself, near the Number Corner display board.
September Days in School
Dots, Links & Numbers

Overview
The Days in School workout is intended to be a quick routine, introduced the first day of school and continued through the year. The teacher and students work together to add an adhesive dot to a paper ten-frame, a plastic link to a chain, and a numeral to a number line to keep track of the number of days they have been in school. The instructional focus this month centers on helping students develop basic counting skills.

Skills & Concepts
- Count to 20 by 1s (K.CC.1)
- Read numbers from 0–20 (supports K.CC)
- Count objects one by one, saying the numbers in the standard order and pairing each object with only one number name (K.CC.4a)
- Identify the number of objects as the last number said when counting a group of objects (K.CC.4b)
- Demonstrate that each successive number name refers to a quantity that is one larger than the previous number name (K.CC.4c)
- Model with mathematics (K.MP.4)
- Look for and express regularity in repeated reasoning (K.MP.8)

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<tr>
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<td></td>
<td>• plastic links (10 in each of 2 different colors)</td>
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</table>

TM – Teacher Master, NCSB – Number Corner Student Book
Copy instructions are located at the top of each teacher master.

Preparation

Links and Dots
On the Number Corner display, post one of the ten-frames from the Ten-Frames Teacher Master. Nearby, stick a pin into the board for hanging the first plastic link. Students will attach additional links to the first through the tenth day of school, and then you’ll stick a second pin into the board several inches to the right of the first for hanging the link that starts the second chain. Keep the plastic links and adhesive dots in small containers near this display.

If you’d like to make a title for the links and dots, label a 3" × 24" sentence strip “How Many Days Have We Been in School?”

Classroom Number Line
Prepare a colored 3" × 24" sentence strip as described here, and post it on the display board. Draw a line about a half-inch from the top of the strip and make 10 dots along the line. Mark the first and tenth dots about 1.2" from the edge of the strip. Make the second dot 2.4" from the first dot, the third dot 2.4" from the second dot, and so on. (You won’t be able to measure to the tenth of an inch, so these measurements are approximate.)

Vocabulary
An asterisk [*] identifies those terms for which Word Resource Cards are available.

- count*
- day
- finger patterns
- number words for 1–10
- row*
- set
- ten-frame
Before you post the first strip, use it to help prepare 16 or 17 more sentence strips, half in the same color as the first strip and half in a second color. If you draw the line on all of the strips, you can use the first strip you marked with dots as a guide for making all of the other dots without having to measure each time. You will post one of these strips after each set of 10 school days has passed, alternating colors each time to highlight the counting-by-10s pattern. (If you laminate all the strips and use an erasable pen to write the numbers, you can erase them at the end of the school year and reuse them each year—Mr. Clean Magic Eraser, Scotch Easy Erasing Pad, and others—are quick and effective.)

Mathematical Background
Counting the days of school is a simple way to give purpose to daily counting, talking about and learning to read numbers, and celebrating students’ growth from one day, week, or month to the next.

Classroom Number Line
Teacher and students assemble this number line over time, adding one number a day to a growing set of colored sentence strips, each of which includes ten numbers (1–10, 11–20, 21–30, and so on). Because kindergartners are expected to learn to count by 10s to 100, consider highlighting the multiples of 10 (10, 20, 30, and so on) in some way. You can write them in red, embellish them with a sticker, or draw a shape around each one.

It is important to note that in contrast to the number line students will make next year in first grade, this one starts with 1 rather than 0, and each strip ends with the number that opens the door to the next decade. This is because most young students are accustomed to starting at 1 when counting, and treating each numeral rather than the interval between each pair of numerals as an object for counting. The Classroom Number Line helps students keep track of their counting as they recite the number sequence, connect the number words to the written numerals, and discover some of the many patterns and relationships in the numbers to 100 and beyond.

✔️ Update
Follow this update procedure with the class every school day. When Days in School is the featured activity, do this update as the first step in the activity.

Procedure
- The student helper points to each of the dots on the ten-frame as the class counts.
- The teacher asks students how many dots there will be after the dot for today is added.
- The student helper adds a new dot to the ten-frame and points to each dot as the class counts to confirm the new total.
- The same set of three actions is repeated with the links in the chain.
- The teacher points to each of the numerals on the Classroom Number Line as students read and count together, and then works with input from students to record the next number.
- On Day 11, the class starts a new frame of dots and a new chain of links, and adds another sentence strip to the class number line. Updates continue as described above. Students count the dots on both frames and the links on both chains, first by 1s, then by counting on from the first set of 10 (10 … 11, 12, 13, and so on), and finally by 1s again to reconfirm the day’s total.

Key Questions
Use the questions below to help students develop basic counting skills to 10 and begin to use groups of 5 and 10 as benchmarks.

- How many dots did we have on the ten-frame yesterday? Can you show with your fingers? How did you count the dots?
- How many dots will we have on the ten-frame after we add the dot for today? How do you know?
- How many more dots do we need to add to the ten-frame to complete the first row of 5? How many more to fill every box on the frame to 10? How do you know?
- How many links did we have in our chain yesterday? Can you show with your fingers? Let’s count to check.
- How many links will we have in the chain after we add 1 for today? How do you know?
- How many more links do we need to add to our chain to make a group of 5? How many more to make a group of 10? How do you know?
- What number do we need to write on our class number line today?
Activity 1

One Dot, One Link & One Number Each Day  

Day 1

Plan to post the first Finger Pattern Display Card on the first day of class. Add the second card the next day, the third the next, and so on—so by the tenth day of school, all ten cards are on display. Post them somewhere students can see them from the Number Corner discussion area.

1. Let students know that one of the things they will do each day during Number Corner is show and count how many days they have been in school. Today, and for the next few days, you will take the lead, but soon plan to invite a different student to help each day.

2. Draw students’ attention to the ten-frame, and explain that you will place 1 dot in the first square in the top row to show that you have been in school for 1 day.
   - Place the dot in the top-left box on the frame.
   - Then call students’ attention to the Finger Pattern Display Card for 1.
   - Show them how to hold up one finger as shown on the card.
   - Have them practice holding up one finger and saying the number 1 a couple of times.
   - Then point to the dot and ask students to hold up one finger to match while they say the number 1 aloud.

3. Show students the container of plastic links and explain that you will hang one link on the display board to show that you and they have been in school together for one day.
   - Hang the link from the pin.
   - Then point to it and have students show how many links by using the finger formation they just learned.

4. Finally, draw their attention to the sentence strip you prepared. Explain that this is the start of a number line, and you will write a number each day to show how many days they have been in school.
   - Have them show how many days they have been in school using the finger formation they just learned.
   - Write a 1 below the first dot on the sentence strip, and have the students read it with you.

Repeat this sequence each day for the first ten days of school. Refer to the Key Questions list and the Update Procedure as you add a dot, a link, and a number to the display each day. Here is how the display will look by the tenth day.

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Number Corner Kindergarten Teachers Guide  
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Activity 2

Ten & Some More  Day 11

Before you meet with students for Number Corner on the 11th day of school, fasten another ten-frame below the first, stick a second pin into the board several inches to the right of the first, and post another sentence strip in a different color end-to-end with the first.

Plan to leave the Finger Pattern Display Cards on display for several months to come, but move them to a different location if they are taking up too much room on the Number Corner display.

1. Draw students’ attention to the ten-frame that was entirely filled the previous day, and ask them to show with their fingers how many dots they see.

2. Show them the empty ten-frame below the first, and explain that each time one of the frames is filled, you’ll add a new one to the board.

3. Then ask students to turn to the person sitting closest to them and tell them how many dots there will be in all when the student helper adds a new one to the empty frame for today.

4. Invite several students to share and explain their answers.

5. Invite your helper up to place a dot in the top-left box on the second ten-frame. Then have that student lead the class in counting the dots by 1s as she points to each to confirm that the total is 11.

6. Model for students how to count the quantity as 10 and some more.
   - Circle the first frame with your finger as you say “10.” Then point to the dot on the second frame as you say “11.”
   - Have students do this with you a second time, holding up all 10 fingers to represent the 10, and clapping as they say “11.”
   - Then recount the dots with the students by 1s. When you finish, ask them how many dots there are in all to reinforce the fact that the last number in the counting sequence represents the total number of dots.

7. Draw students’ attention to the chain of 10 links. Explain that just as the frame is full when there is a dot in each of the 10 boxes, the chain is finished as soon as it has 10 links.
   - Confirm that the chain has 10 links by counting them with the students.
   - Then have the helper hang a link on the second pin.
   - With the class, count the links by 1s, then as 10 and some more (10 … 11), and then one more time by 1s.

8. Finally, point to each of the numbers on the Class Number Line and read them with students. Have them tell you what number to write at the beginning of the next strip, and confirm with them that they have been in school for 11 days.
Repeat this sequence each day through the 20th day of school. You might also begin to talk with students about how many dots or links it will take to complete the next set of 5 or the next set of 10. Take a little time some days to ask students to count the dots on the second frame or the links in the second chain and hold up their fingers using the appropriate finger pattern to show the number. Invite two or three volunteers to share how they counted the dots or links, and you may discover that some students are starting to use strategies that are more efficient than counting each item one at a time.

Teacher  Before we start today, take a look at the dots in the second frame (points to the second frame), and hold up your fingers to show how many you see. Wow, we have some really fast counters here! Raise your hand if you’d like to share how you counted the dots in this frame.

Students  I just counted 1, 2, 3, 4, 5, 6 real fast.
I know there are 5 on the top, and one more is 6.
I saw 2, and then 2, and then 2. It makes 6.
September Computational Fluency

Quantities to Five

Overview

Students are introduced to the empty five-frame, and then they consider frames filled with between 0 and 5 black dots. Then they play two quick games using the five-frames to help build instant recognition of quantities to 5, as well as combinations of 5 (pairs of numbers that make 5). A Number Corner Student Book page is available for independent practice.

Skills & Concepts

- Write numbers from 0 to 5 (K.CC.3)
- Count objects one by one, saying the numbers in the standard order and pairing each object with only one number name (K.CC.4a)
- Identify the number of objects as the last number said when counting a group of objects (K.CC.4b)
- Demonstrate that each successive number name refers to a quantity that is one larger than the previous number name (K.CC.4c)
- Count up to 5 objects arranged in a line to answer “how many?” questions (K.CC.5)
- Recognize the number of objects in a collection of 5 or fewer, arranged in a row (supports K.CC)
- For any number from 1 to 4, find the number that makes 5 when added to that number (K.OA.4)
- Look for and make use of structure (K.MP.7)
- Look for and express regularity in repeated reasoning (K.MP.8)

Materials

| Activities                  | Day | Copies | Kit Materials                                      | Classroom Materials
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TM – Teacher Master, NCSB – Number Corner Student Book
Copy instructions are located at the top of each teacher master.

Vocabulary

An asterisk [*] identifies those terms for which Word Resource Cards are available.
- count*
- finger patterns
- five-frame
- number words for 1–5
- sum or total*

Preparation

One very easy way to organize your Unifix cubes for easy distribution is to snap them together in trains of 10, all 5 white cubes together and all 5 red cubes together. If you have a set of 1,000 cubes in your classroom, you will have enough red and white cubes for 20 students. See if you can borrow some extra red and white cubes from another classroom on the days you conduct the Flash & Build Five activity.
Mathematical Background

The Computational Fluency activities this month are meant to help students practice counting objects one by one and then transition to quick recognition of quantities from 1 to 5, which is called *subitizing*. The activities feature two models that promote instant recognition of quantities: the five-frame and finger patterns.

The five-frame is simply a rectangular frame that contains 5 squares in a row. The frame can hold between 0 and 5 dots. In this month's activities, the dots are arranged from left to right, as shown here. As students become accustomed to this simple, orderly arrangement, they begin to subitize, that is, to quickly recognize quantities of 1 to 5 dots without having to count them.

In addition to the five-frames, students use the finger patterns shown here to represent quantities displayed on the five-frames.

As they count the dots on a five-frame, they hold up their fingers to keep track of the count and use the final finger pattern to report how many dots are shown. Later, without counting out their fingers one by one, students use the finger patterns as a way to represent the number of dots shown on the five-frame. In this way, the activities move students from counting by 1s to instantly recognizing quantities on the five-frames, as well as quickly representing those quantities by displaying a finger pattern. The finger patterns provide students with a way to represent quantity, long before they are able to write the numerals that correspond to those quantities.

### Activity 1

#### Introducing the Five-Frame

**Day 3**

1. Gather students in the Number Corner area, and hold up the empty Five-Frame Display Card.

---

**Key Questions**

Specific questions are integrated into the activities that follow. Consider using the more general questions listed here to draw out student thinking and dialog related to the key skills addressed this month.

- How many dots do you see? Let's count them together.
- I'll show you the five-frame for just a moment. See if you can quickly see how many dots there are without counting them. How many dots did you see? How could you tell?
- So how many dots are there? (Ask after students have counted some number of dots in order to promote *cardinality*, which is the understanding that when counting, the last number said indicates the total quantity.)
- How many white beans? How many red beans? How many beans in all?
2 Ask students to be silent for a moment and think about what they notice about the card. Then invite students to share some observations.

   Students  It looks like a long window.
   I thought it looked like a train.
   I think it might be a candy bar.
   It looks like part of a jungle gym to me, like the monkey bars.
   It has some squares.

3 Count the squares in the frame together as a class.

   SUPPORT  You can give each student a Numbers to Ten Counting Mat so that they can touch the squares while you count together. However, it might be distracting for them to have the mats when you move on to step 4, so use your discretion.
   - Invite the class to count out loud with you to determine how many squares are in the frame.
   - Point to each box as you count from 1 to 5.
   - When you finish counting, ask students how many boxes there are in all.

4 Post the card in a pocket chart or on your whiteboard. Then count together as a class again, pointing to the squares with one hand and showing finger patterns from 1 to 5 with your other hand, while students do the same.
   - Invite students to count together again to check.
   - Explain that this time, you’d like them to keep track of the count using their fingers and that you’ll show them how.
   - Count out loud together. With one hand, point to the squares in the frame. With the other, model the finger patterns from 1 to 5 and ask students to follow along using their own fingers.
   - When you finish counting, ask all students to hold up their hands and say how many squares they counted.

5 Explain that because there are 5 squares in the frame, this picture is called a five-frame.

6 Hold up the Five-Frame Display Card with 3 dots, and ask students to think silently to themselves for just a moment about how many dots are on this card.

7 Count the dots together as a class. Model how to hold up 1 finger at a time to keep track of the count, and ask students to do the same.
   - Have students begin with their pointer finger for 1.
   - They can fold their thumb over their other fingers to keep them from popping up.
   - Then they raise 1 more finger each time they say the next number.

8 When you finish counting, ask students to hold up their fingers and say how many dots are on the card.

9 Repeat with other Five-Frame Display Cards if you have time.
Activity 2

Flash & Show  Days 5, 6, 8

1 Quickly review the standard finger patterns from 1 to 5.
   See the Mathematical Background section for illustrations of the finger patterns.

2 Explain how to play Flash & Show.
   • Flash & Show is a quick game that the whole class plays together in order to practice recognizing different numbers of dots without having to count them.
   • The teacher holds up (flashes) a Five-Frame Display Card for just a moment while students look very carefully to see how many dots are on the card.
   • Then the teacher hides the card.
   • Without talking, students show with their fingers how many dots they saw on the card. If there are no dots, they can just hold up a closed fist to show 0.
   • When everyone has shown a number with their fingers, the teacher reveals the card again.
   • Everyone counts the dots together by 1s and keeps track using their fingers.
   • All at the same time, students hold up the finger pattern and say the total number of dots.

3 Play as many rounds of Flash & Show as time allows, flashing the cards in order from 0 to five. If it seems appropriate at this time, you can go in order both forward and backward (0–5 and then 5–0). Repeat the sequence as time allows.
   Flashing the cards in order gives students the chance to begin seeing patterns and understanding the relationships between quantities. Many kindergartners might not understand that 2 is just 1 more than 1, or that 4 is 1 less than 5. Over time, they will be able to see very quickly that the card shown here has 4 dots, because there are 5 in all and just 1 is missing. During the first month or two of school, though, these ideas will be new to many of your students. Pace this activity and others accordingly.

4 When students are ready (probably the second or third time you repeat this activity this month), flash the cards in random order.
   You might be able to give students just a second or two with the 0, 1, and 5 cards. For the numbers 2, 3, and 4, keep the card shown for about two or three seconds. Pay attention to how easily students recognize each number, and adjust the amount of time you flash each card accordingly. If you can, make note of whether students are counting out their fingers one by one to show the finger patterns or whether they can display at least some of the finger patterns without counting.

5 You’ll repeat this activity quite a few times during the first two weeks of the month. At some point, spend a little extra time talking with students about how they can quickly determine the number of dots without counting.

   Teacher  We’re trying to tell how many dots are on the card very quickly, without counting every dot each time. You all got this one pretty quickly this time. Can someone tell everybody how they knew?
Students  It's 2. I can just see it. I don't need to count them anymore.
First there's 1, and then you just go 2 because there's another dot next
to the first one.
I just see them together, like 2 eyes on a face.
Yeah, it looks like somebody peeking out!

Activity 3

Flash & Build Five  Days 11, 15, 16

1 Convene the class in the Number Corner area. Each student will need the
following materials:
• 1 Numbers to Ten Counting Mat (five-frame side up)
• 10 Unifix cubes, 5 white and 5 red

2 Ask students to arrange their materials as shown here.

SUPPORT You can use this as an opportunity to talk about left and right. If students are
having trouble keeping their materials organized in this way, they can keep the white
cubes above and the red cubes below the mat.

3 Explain the game Flash & Build Five.
• The game is a lot like Flash & Show, but instead of using their fingers to show how
many dots, students put Unifix cubes on their mats to show.
• The teacher holds up (flashes) a Five-Frame Display Card for just a moment while
students look very carefully to see how many dots are on the card.
• Then the teacher hides the card.
• Without talking, students put white Unifix cubes on their own five-frames to show
how many dots they saw.
• When everyone is ready, the teacher reveals the card again so everyone can check their work.
• Everyone counts their cubes together by 1s.
• Then each student uses the red cubes to fill in the rest of the five-frame.
• When everyone is ready, they all count their red cubes together, and then recount all
the cubes to confirm that the total is 5 each time.

4 Play as many rounds of Flash & Build Five as time allows.
Activity 4

Completing the How Many to Five? Page

1. Assign the How Many to Five? page when you want to provide independent practice with the following skills:
   - Matching quantities shown on five-frames with finger patterns
   - Writing numerals to match quantities shown on five-frames

2. Read the instructions and review an example for each prompt with the whole class.

3. Then ask students to work quietly and independently to complete the page.

4. Students who finish early can turn to the next page in their books and try prompt 3, which is a challenge item inviting them to draw different numbers of dots on empty five-frames. Students who do not want to work on that prompt can draw in the empty space at the bottom of the page.

5. Collect students’ work and review it at a later time to see whether they can match quantities on five-frames with the correct finger patterns (prompt 1). You’ll also get a sense of how comfortable students are writing numerals when you review their work on prompt 2.
September Number Line
Up to Ten & Back Again

Overview
Students are introduced to the Number Line pocket chart and meet Hap, the Happy Grasshopper, who guides them as they count forward and backward from 1 to 10, starting and stopping on a variety of numbers shown on the number line. The game Hop & Stop is introduced to reinforce numeral recognition, identification, and counting. Students also learn short rhymes to support correct formation for writing numerals 1–5.

Skills & Concepts
• Count to 10 by 1s (K.CC.1)
• Count backward from any number in the range of 10 to 1 (supports K.CC)
• Count forward from a given number, rather than starting at 1 (K.CC.2)
• Read numbers from 1 to 15 (supports K.CC)
• Write numbers from 1–5 (K.CC.3)
• Count objects one by one, saying the numbers in the standard order and pairing each object with only one number name (K.CC.4a)
• Identify the number of objects as the last number said when counting a group of objects (K.CC.4b)
• Locate numbers from 0–20 on a number line (supports K.CC)
• Look for and make use of structure (K.MP 7)
• Look for and express regularity in repeated reasoning (K.MP.8)

Materials

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<td>• dowel, ruler, or similar item to make grasshopper pointer (see Preparation)</td>
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<td></td>
<td>• Used in all Number Line activities this month:</td>
<td></td>
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<tr>
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<td>» Number Line pocket chart</td>
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<td></td>
<td></td>
<td>» Number Line Display Cards, numerals 1–10 plus 9 blue and 1 red cards</td>
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<td>Activity 2: Counting Forward &amp; Backward</td>
<td>2, 7, 17</td>
<td>• Numerals to Ten Display Cards (see Preparation)</td>
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<tr>
<td>Activity 3: Playing Hop &amp; Stop</td>
<td>4, 9, 18</td>
<td>• Numerals to Ten Display Cards (see Preparation)</td>
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</tbody>
</table>
| Activity 4: Writing Numbers | 10, 19     | TM T10–T14
Numerical Writing Rhymes 1–5                                                 | • student whiteboards, markers, and erasers (class set, plus 1 of each for the teacher) |
| Activity 5: The Number Behind the Red Door | 12         | • Number Line Display Cards, numerals 1–15 plus 14 blue and 1 red cards       |                                        |

TM – Teacher Master, NCSB – Number Corner Student Book
Copy instructions are located at the top of each teacher master.

Vocabulary
An asterisk [*] identifies those terms for which Word Resource Cards are available.

after*
backward
before*
between*
count*
choral count
digit*
forward
identify
number*
number words for 1–10
ones family
**Preparation**

**Number Line Pocket Chart**

Prior to Activity 1, post the Number Line pocket chart on your Number Corner display board low enough for students to reach it easily. Place Number Line Display Cards 1–10 in order in the first ten pockets, leaving the last ten pockets empty for now. Then place one of the red cards in front of the number 10, and cover each of the numbers 1–9 with a blue card.

Prior to Activity 5, reveal the numbers 1–9 and post 11–15, each behind a blue card. Keep 10 behind the red card.

**Grasshopper Number Line Markers**

You’ll probably find it most convenient to prepare all the clips and pointers that you will use throughout the school year now. You’ll use the arrow clip and grasshopper pointer in Number Line activities this month; put aside the grasshopper range marker clips (made with cards that show grasshoppers from the top rather than the side) until later in the year.

Find the arrow in the set of Grasshopper Number Line Markers. With a hot glue gun, affix it to a clothespin, with the arrow pointing to the closed end of the clothespin.

Next, use the two cards showing grasshoppers from the top to create grasshopper range marker clips. Glue each grasshopper to a clothespin, and mark the end of the pin that clips with a black dot of permanent ink, as shown.

**Literature Connections**

There are many counting and number books available for young students. Here are some notable ones you might want to share with your students.

- **Mother Goose Numbers on the Loose** by Leo & Diane Dillon
  This is a collection of 24 nursery rhymes featuring numbers and counting.

- **Mouse Count** by Ellen Stoll Walsh
  This book counts mice from 1–10 as a snake prepares to eat them, and then counts backward as the mice get away.

- **My Granny Went to Market** by Stella Blackstone
  A Round-the-World Counting Rhyme

- **One Frog Sang** by Shirley Parenteau and Cynthia Jabar
  This book counts both forward and backward. Students will enjoy joining in while you read.

- **There Were Ten in the Bed** by Susan Chapman Calitri
  This is one of the newer versions of this countdown classic and features dogs as the characters.
Next, create the grasshopper pointer. With a hot glue gun, affix the two side-view grasshopper cards to either side of a wooden dowel, ruler, paint stirrer, or similar item to create a grasshopper pointer. The grasshopper will appear to hop to the left or right depending on how the pointer is turned.

**Numerals to Ten Display Cards**
Prior to Activity 3, locate the set of Numerals to Ten Display Cards in your Number Corner Kit. Remove cards 0 and 10 and set these aside. Display cards 1–9 face-down in your standard pocket chart.

**Numeral Writing Rhymes**
Prior to Activity 4, familiarize yourself with the numeral writing rhymes for numerals 1–5 provided in your teacher masters. You may want to run one copy of each rhyme to post and use with students. Or copy all of them onto one sheet of chart paper or poster board to display for the class. Sequences for writing numerals 1–5 are introduced this month and 6–10 are introduced in October.

**Mathematical Background**
Students use the number line to track their counting. Because they are accustomed to starting at 1 when counting, the number line begins with a 1 rather than a 0. The teacher points to the numbers as students count forward and backward within the range of 1–10, and later in the month, 1–15, starting and stopping on a variety of numbers. The Number Line pocket chart helps students keep track of their counting as they recite the number sequence and connect the number words to the written numerals.

Young students can often recite number sequences before they are able to recognize and identify numbers. The Number Line workouts this month and throughout the year teach numeral recognition and identification while reinforcing counting sequences. Recognizing a number refers to selecting a specific numeral from a group of numerals. For example, a student is shown several numerals and asked to find the 6.

**Literature Connections**
The following books feature grasshoppers. Your students may enjoy hearing them read aloud this month.

*Are You a Grasshopper?*
*Backyard Books* by Judy Allen
This simple nonfiction book will delight young entomologists.

*Grasshopper on the Road* by Arnold Lobel
Grasshopper meets many different insects on his journey in this story about friendship and accepting differences.

*The Ant and the Grasshopper* by Aesop
There are many versions of this classic fable with its “There’s a time for work and a time for play” moral.
Numeral Identification is the ability to say the name of a specific numeral when shown. This is a more mentally challenging skill than being able to locate a specific numeral within a group of numerals.

What number is on this card?

Students may be able pick out a numeral from a group of numerals (numeral recognition) before they are able to identify or name it on their own. Asking students to identify a numeral presented in a sequence, as shown above, is an easier task than identifying a numeral presented on its own, because students can use their knowledge of other numbers and the counting sequence to retrieve the numeral’s name. This task is more challenging than the previous example:

What is the name of the number on this card?

The colored cards on the Number Line pocket chart allow for support and differentiation as needed.

Key Questions

Use these questions to help students recognize and identify numerals.

• Show several numeral cards and ask, “Can you find the 6?” or any revealed number.

• Point to a numeral card and ask students what is this number’s name?

• If this number is 4 (2, 5, 8) what will this number be (point to the next number in the sequence)?

• How does saying the counting sequence help you find a number in the Number Line pocket chart?

These questions will be more challenging:

• What number comes after (any given number 0–9)? How do you know?

• What number comes before (any given number 1–10)? How do you know?

• What number(s) comes between (two given numbers)? Can you prove it?
Activity 1

Introducing the Number Line Pocket Chart Day 1

Prior to beginning this activity, lift the blue cards to reveal the numbers 1–9 on the Number Line pocket chart. Card 10 should remain hidden under the red card.

1. Direct students’ attention to and discuss the Number Line pocket chart.

   - Tell students that this is the Number Line pocket chart that they will use all year to learn number names and counting patterns.
   - Invite students to share with a partner something they notice about the numbers in the chart.
   - Call on a few students to share their ideas.

2. Next, introduce the grasshopper pointer. Tell students that the grasshopper’s name is Hap, the Happy Hopper, and he likes to hop forward and backward along the number line while hearing the names of the numbers he hops upon.

3. Invite the students to choral count forward while you point to the numbers 1–9 using the grasshopper pointer.

   Teacher  Hap is going to hop over here (moves pointer to number 1).
   What number is Hap on?
   Students  One.

   Teacher  We’re going to choral count. That means we’ll count together as Hap hops to each number in the ones family. Ready? Let’s count forward.
   Teacher and Students  1, 2, 3, 4, 5, 6, 7, 8, 9!

   SUPPORT  If a few students are not counting, invite the students to say the number names as soon as they hear them. If more than a few students are not counting, take the lead and ask students to repeat the number words after you.

   Teacher  I’m going to say the number name, then you say it after me.
   One (Teacher moves pointer to 1).
   Students  One.
   Teacher  Two (moves pointer to 2).
   Students  Two.
4 Choose a number on the Number Line pocket chart, mark it with the arrow clip, and count forward from numbers other than 1.

5 Repeat step 4, counting forward from 3, 7, and 4 stopping on 9 each time.

6 End this activity by teaching students Hap’s Hopping Song and inviting them to hop the number of times shown on the card indicated by the arrow clip.

   Teacher  You’ve done wonderful counting today. Hap wants you to hop and sing along with him. Everyone stand up and make sure you’re not standing too close to anyone. What number is our arrow pointing to?

   Students  Four.

   Teacher  We’re going to sing, “If you’re happy and you know it hop 4 times.” Be sure to count as you hop so you only hop 4 times. Ready? Sing.

Song sung to the traditional tune:

If you’re happy and you know it hop [4] times.
(Students hop [4] times, counting as they hop.)

If you’re happy and you know it hop [4] times!
(Students hop [4] times, counting as they hop.)

If you’re happy and you know it, then Hop with Hap and show it.
If you’re happy and you know it hop [4] times.
(Students hop [4] times, counting as they hop.)

7 Repeat the song with other numbers if time and interest allows.
Activity 2

Counting Forward & Backward

On Days 2 and 7, students count forward and backward in the range of 1–9. After the red door is opened and the numeral 10 revealed on Day 12, students count forward and backward in the range of 1–10. If students are fluently counting forward and backward from 1–10, you may increase the range to 1–15 on these days by sliding open the cards.

1. Invite students to choral count forward from 1 to 9 as you use the grasshopper pointer to point to the numbers on the Number Line pocket chart.

   When you repeat this activity during the month, choose students to each have a turn pointing to the sequence of numbers and saying the number names. When the teacher is pointing and the class is choral counting, the pace is naturally faster and more fluent. Students need the opportunity to count at their own pace while saying only one number name for each card they touch.

2. Ask students to start counting at numbers other than 1 (e.g., 5, 3, and 7) and count forward to 9 while you point to each number with the grasshopper pointer.

   **CHALLENGE** If students are doing well with the forward number word sequence, consider hiding some of the numbers behind the doors when students are counting.

3. Invite students to **choral count** backward from 9 to 1 while you point to the numbers using the grasshopper pointer.

   **SUPPORT** If students are having difficulty counting backward from 9, try counting back smaller chunks of numbers such as from 5. See additional suggestions listed in Activity 1, step 3.

   Although counting down from 10 to 0 is mathematically sound, this may cause a problem for some students if they begin counting forward from 0. As students develop one-to-one correspondence between objects and the spoken counting sequence, some students may say the word "zero" for the first object counted. For this reason, counting backward ends with the last number displayed in the Number Line pocket chart.

4. Ask students to count backward from numbers other than 9 (e.g., 4, 6, and 8) while you point.

   **CHALLENGE** When you repeat this activity, consider hiding some of the numbers behind the doors when students are counting.

5. Then slide the cards down to hide the numbers 2, 4, 6, and 8.

6. Ask students to name the numbers that are hiding behind the cards. After students share their answer, lift the blue door to reveal the number and then close it again.

   Consider using a signal such as tapping the blue card with your finger to allow all students to have think time before giving the answer.

   **Teacher** Think in your mind the name of the number hiding behind this card. Don't call out the answer until I tap the card. Watch my finger.

   **SUPPORT** If students need more support to name the numbers under the cards, have them count forward from a known number to the hidden number.
7 Use a different configuration of open and closed cards when you repeat this activity on following days, such as covering all the odd-numbered cards or leaving one card uncovered followed by two cards covered.

### Activity 3

**Playing Hop & Stop**

**Days 4, 9, 18**

1 Prior to this activity, place the Numerals to Ten Display Cards 1–9 face-down in your standard pocket chart. Cover all numbers on the Number Line pocket chart as shown. You will also need your grasshopper pointer and arrow clip.

2 Explain to the class that they will be hopping with Hap, the grasshopper, some more today as they practice identifying numbers and counting.

3 Place the arrow marker on one of the first five pockets. Choose a student helper to lift the card, and ask students to name the revealed number.

4 Review Hap’s Hopping Song and invite students to hop the number of times shown on the card indicated by the arrow marker.

5 Tell the class that they are going to play a game called Hop & Stop, and then explain the directions.
   - First, you choose a student helper to turn over one of the numeral cards in the standard pocket chart.
   - Next students identify the number and hop in place the number of times shown on the card as Hap hops forward across the pockets on the Number Line pocket chart.
   - Students count as they hop, stopping when they reach the number shown on the card.
   - The teacher places the arrow clip on the pocket Hap stops upon.
   - Then a student helper lifts the card to see if the numbers are a match.

6 Choose a student helper to turn over one of the cards in the standard pocket chart and ask students to identify the number.

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**About This Activity**

Young students learn by touching, feeling, and moving. Kinesthetic experiences such as playing this game help students acquire and retain information. Hop & Stop is a particularly powerful way to help students develop the understanding that the last number they name in a sequence represents the number of objects just counted.
Invite students to stand up and hop in place the number of times shown on the card, counting while they hop. As students count and hop, use the grasshopper pointer to touch one pocket for each hop. When the number is reached, place the arrow clip on the pocket as shown.

Choose a student helper to lift the card. What number is revealed? Does it match the number shown on the card turned over in the standard pocket chart?

Continue to choose student helpers to turn over cards and play the game following steps 6–8 as time allows.

End this part of the session by asking students to count forward and backward from 1–9 while you point to the pockets and revealed numbers in the Number Line pocket chart.

Activity 4

Writing Numerals

On the first day of this activity, students practice writing the numerals 1, 2 and 3. On Day 19 students work with numerals 4 and 5. You will need the prepared Numeral Writing Rhymes. Students will each need a whiteboard, marker, and eraser.

1. Explain that today students are going to learn and practice rhymes that will help them write the numerals 1, 2, and 3.

2. Invite a student helper to uncover the first card on the Number Line pocket chart and name the number.

3. Show students the Numeral 1 rhyme poster you prepared, and read it aloud to the class.
Model writing the numeral in the air with your finger as you say the rhyme. *You will need to turn your back so the students see you form the numeral correctly.*

Invite students to write the numeral in the air as they say the rhyme with you.

Next, using a whiteboard, demonstrate saying the rhyme and writing the numeral simultaneously, again turning so students see the numeral formed correctly.

Invite students to recite the rhyme and write the numeral on their whiteboards.
- Students who write quickly may write the number more than one time.
- Repeat the rhyme for each numeral more than once if necessary.

Repeat steps 2–7 with numerals 2 and 3, covering all cards on the Number Line pocket chart except for the number you are writing.

End this part of the session by counting forward and backward, 1–5, and then again, 1–9.

On Day 19, repeat this activity to teach correct formation of numerals 4 and 5. Step 10 should include forward and backward counting from 1–10 or 1–15, whichever sequence is best for your students.

### Activity 5

The Number Behind the Red Door

Prior to beginning this activity, post numbers 11–15 in the Number Line pocket chart and cover each with a blue card. Reveal numbers 1–9. Number 10 should remain hidden under the red card.

1. Direct students’ attention to the Number Line pocket chart, and invite them to count forward from 1 to 9 as you point to each number.
   - Ask students to whisper to a partner what number they think is behind the red door.
   - Call on a couple of students to share their thinking with the class.

2. Invite a student helper to pull up the red card to reveal the number 10. *Have students gently slap their hands on their thighs to produce a drumroll while the helper reveals the hidden number.*

3. Explain that 10 is the first number in the teens number family. Each of the teen numbers has two digits.

4. Take a sneak peek at the next five numerals, 11–15, saying each number’s name as you lift the card and close it again.

5. Invite students to first choral count forward from 1 to 10 while you point to the numbers using the grasshopper pointer. Then have students count backward from 10 to 1 while you point to the numbers using the grasshopper pointer.

   **CHALLENGE** If students are able to count from 1 to 10 and back again with ease, challenge them to count forward from 1 to 15 and backward from 15 to 1.
September Assessment
Baseline Assessment

Overview
During the third week of school, the teacher introduces a short interview that will be conducted individually with each student as time allows over the next few weeks. The following day, the teacher administers a one-page written assessment to the entire class, either all at once, or in small groups of 4–6 students. These two instruments comprise the Baseline Assessment, which is designed to help teachers ascertain students’ current skills with basic counting, numeral reading and writing, and shapes.

Skills & Concepts
- Count to 10 by 1s (K.CC.1)
- Write numbers from 0 to 10 (K.CC.3)
- Read numbers from 0 to 10 (supports K.CC)
- Count objects one by one, saying the numbers in the standard order and pairing each object with only one number name (K.CC.4a)
- Identify the number of objects as the last number said when counting a group of objects (K.CC.4b)
- Add with sums to 10 (K.OA.2)
- Model two-dimensional shapes in the world by drawing them (K.G.5)

Materials

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<td>Baseline Interview Student Response Sheet</td>
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<tr>
<td>Introducing the Baseline Interview</td>
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<td></td>
<td>• Number Cards (1 deck, see Preparation)</td>
<td>• Unifix cubes (7 red, 3 blue)</td>
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<td>Baseline Written Assessment</td>
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TM – Teacher Master, NCSB – Number Corner Student Book
Copy instructions are located at the top of each teacher master.

Preparation
- Pull one card for each number, 0–10, out of a deck of Number Cards. Set the rest of the cards aside for now.
- Consider wearing a special hat when you are conducting individual interviews so the other students know that you’re not to be disturbed. The more colorful and attention-grabbing the hat, the better.

Mathematical Background
The Baseline Assessment, as the title implies, is designed to provide a baseline reading on each student’s skill level very early in the school year. The Baseline Interview and Baseline Written Assessment gauge incoming students’ proficiency with essential numeracy and geometry skills. The two parts of the Baseline Assessment are intended to guide your instruction by providing information about which students can (and cannot) count to 10 by rote, count as many as 10 objects with one-to-one correspondence, read and write numerals to 10, and draw several basic shapes. The interview should take about 5 minutes per student, while the written assessment will take no more than 15 minutes.

Vocabulary
An asterisk [*] identifies those terms for which Word Resource Cards are available.

- box
- circle*
- count*
- draw
- number*
- number words for 0–10
- shape
- square*
- triangle*
- write
After conducting these assessments, you will be in a better position to plan daily instruction and make the minute-to-minute instructional decisions so crucial to good teaching. On the basis of students’ strengths and weaknesses, you might decide to emphasize certain aspects of Number Corner instruction while minimizing others, and you will have at least some of the information needed to pitch questions and prompts at levels appropriate to different students. The Baseline Assessment may also be considered an early warning system. While it is risky to make hard-and-fast judgments about incoming kindergartners, you will want to keep a close eye on students who are unable to perform the assessment tasks, as some of these students may emerge as candidates for special services either this year or in first grade.

Baseline Assessment, Part 1

Introducing the Baseline Interview

Day 13

1. Let students know that you will be talking with each of them about math for a few minutes sometime over the next couple of weeks.
   - Assure students that they will each get a turn.
   - Explain that you’re going to ask them some questions so you can find out more about what they know about math.
   - Let them know that this will help you do a better job of teaching them.

2. Show the class a copy of the Baseline Interview Student Response Sheet Teacher Master and explain how you will use it.
   - Explain that you will be reading questions to them from this sheet, and also writing down some of the things they tell you.
   - It is not important that students see the actual items on the sheet.

3. Then share an example of each of the questions you will ask during the interview, and have the students practice responding.
   - Explain that the first thing you will do when you meet with each student is ask him or her to count. Then have the students practice by counting from 1 to 10. Stop them when they reach 10.
   - Show them your set of Number Cards. Explain that when you meet with each student, you will ask him or her to tell the name of the number on each card. Hold up several of the cards in random order. As you hold up each one, ask the class to name the number out loud.
   - As students watch, place a pile of 5 or 6 red Unifix cubes on the floor where everyone can see them. Explain that you’re going to ask each of them to count some red cubes just like these. Then touch and move each of the cubes as students count them with you.
   - When you and the class finish counting the cubes, ask students how many they just counted.
   - After students confirm the quantity, add 2 blue cubes to the pile on the floor. Ask students to examine the collection quietly and show thumbs-up when they believe they know how many cubes there are in all.
   - Call on several volunteers to share how many cubes there are in all, and explain how they determined the total.

   Students  It’s 7, because it’s 1, 2, 3, 4, 5, 6, 7.
   It’s 7 because there were 5, and then 6, 7.

   Student  (Shows 7 fingers.)
Conclude your introduction by telling students that you’re excited to talk with each of them sometime soon.

As you begin conducting the interviews, keep the following points in mind.

- Most students are not likely to remember your introduction, and the practice you provided during the introduction is not likely to give any of them an advantage in terms of demonstrating skills they don’t actually yet possess. However, your introduction will save you the time and trouble of having to explain to each student why you are doing the interview, and the preview may help students enter the situation with a little more confidence.

- Once you introduce the Baseline Interview to the class, you will start pulling individual students aside as time allows, perhaps during math stations, literacy centers, or recess. If your students have specials taught by other adults, such as gym, library, or music, you might be able to squeeze in a few interviews then as well.

- Give yourself the luxury of several weeks to complete the interviews. The next interview opportunity will appear at the end of October, so if you don’t finish the first set until the third week in October, that will be fine.

- You may want to meet with your most confident students first and leave students who are obviously struggling (either with school in general, or with math in particular) until the last week or so.

- Considering labeling the Baseline Interview sheets with students’ names, and putting the sheets in the order you plan to interview the students ahead of time.

**ELL** In order to find out whether students who aren’t yet fluent with English have one-to-one correspondence, invite them to count the cubes in their own language when you get to items 3 and 4 on the Baseline Interview. Even if some of these students can’t count to 10 by rote or identify the numerals to 10 by name, they may demonstrate that they have the skill of counting objects one by one and pairing each object with only one number name. If this is the case, you might be able to ascertain that they can also count by rote and identify the numerals in their own language. Knowing this, you’ll understand that the learning targets for these students are language related, rather than math based.
Baseline Assessment, Part 2

Completing the Baseline Written Assessment

Day 14

1. Let students know that you are going to ask them to draw some shapes and write some numbers today.
   Reassure them that if they don't know how to draw some of the shapes or write all of their numbers, that's fine. They will learn how to do these things and more this year. Right now, you just need to know what they can already do, so that you can do a better job of teaching them the things they need to learn.

2. Seat the students at their table spots or desks, and make sure they each have a pencil.
   • Explain that although you usually ask them to work together, today they need to do their own work quietly so you can see what each of them can do.
   • You might want to move a few students to other locations so they have adequate privacy and a comfortable amount of working space before distributing students’ papers.

3. Display your copy of the Baseline Written Assessment Teacher Master, and give each student a copy.

4. Using your copy of the sheet, show students how to write their name at the top on the line provided.

5. Administer the first item on the assessment.
   • Read the instructions at the top of the page for item 1 to the class, and place your finger near the star on your copy of the sheet.
   • Then look quickly around the room to be sure all students have placed a finger on the star on their sheet.
   • Read the instructions for items 1a, 1b, and 1c, leaving time in between each for students to draw the designated shape in each box.
   • Ask students to do their best to draw each of the shapes, and reassure them that if they don’t know what one or more of the shapes look like right now, that’s OK. They can leave those boxes blank or take their best guess.

6. Administer the second item on the assessment.
   • Read item 2, sentence 1 to the class.
   • Then look quickly around the room to be sure all students have placed a finger on the butterfly near the middle of the sheet.
   • Read the rest of the instructions and clarify as needed.
   • When students understand what to do, give them time to write the numbers 1–10, one number in each box.
   • Reassure students that if they don’t know how to write all the numbers, it’s fine to just write those they do know for now.
   • Circulate while students are working to observe and collect their papers as they finish.

About This Assessment

You may prefer to conduct the Baseline Written Assessment with small groups of 4–6 students instead of as an entire group, as described here. If you conduct it with small groups, you might rotate students through a set of activities, some of which (including this one) are supervised by adults and some of which are independent.
Shape Songs, Circles
(to the tune of “Row, Row, Row Your Boat”)

Round and round
The circles go,
No corners can you see,
Like the sun and the full moon,
We find them high and low.
Shape Songs, Rectangles
(to the tune of “Row, Row, Row Your Boat”)

1, 2, 3, and 4,
The sides and corners go,
Rectangles here, rectangles there,
They're everywhere you know.
**Shape Songs, Triangles**

(to the tune of “Row, Row, Row Your Boat”)

1, 2, 3 straight sides,  
And corners there are three,  
Triangles here, triangles there,  
Lots for you and me.
Shape Songs, Squares
(to the tune of “Row, Row, Row Your Boat”)

1, 2, 3 and 4,
The sides are all the same,
Corners too, 1, 2, 3, 4,
The square is this shape's name.
Shape Hunter Badges, Circles

I am a Circle Hunter!

I am a Circle Hunter!

I am a Circle Hunter!

I am a Circle Hunter!
Shape Hunter Badges, Rectangles

I am a Rectangle Hunter!

I am a Rectangle Hunter!

I am a Rectangle Hunter!

I am a Rectangle Hunter!
Shape Hunter Badges, Triangles

I am a Triangle Hunter!

I am a Triangle Hunter!
Shape Hunter Badges, Squares

I am a Square Hunter!

I am a Square Hunter!

I am a Square Hunter!

I am a Square Hunter!
Ten-Frames
Numeral Writing Rhyme 1

Number 1

is like a stick,
a straight line down
that's very quick!
Numeral Writing Rhyme 2

For number 2
go right around,
Then make a line
across the ground!

2

1
Numeral Writing Rhyme 3

Go right around.
What will it be?
Go round again
to make a 3!

Go right around.
What will it be?
Go round again
to make a 3!
Numeral Writing Rhyme 4

Down and over
and down some more.
That's the way
to make a 4!
Numeral Writing Rhyme 5

Go down and around, then you stop.
Finish the 5 with a line on top!


Baseline Student Response Sheet

<table>
<thead>
<tr>
<th>Materials</th>
<th>Common Core State Standards Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Number Cards 0–10</td>
<td>1 K.CC.1</td>
</tr>
<tr>
<td>• 7 red Unifix cubes</td>
<td>2 Supports K.CC</td>
</tr>
<tr>
<td>• 3 blue Unifix cubes</td>
<td>3a K.CC.4a</td>
</tr>
<tr>
<td></td>
<td>3b K.CC.4b</td>
</tr>
<tr>
<td></td>
<td>4 K.OA.2</td>
</tr>
</tbody>
</table>

1. Say, "Start counting forward from 1 and I'll tell you when to stop." Stop student at 10.
   Circle student's response below.

<table>
<thead>
<tr>
<th>Unsuccessful; counts to _____</th>
<th>Correct, but not fluent</th>
<th>Correct and fluent</th>
</tr>
</thead>
</table>

2. Using the deck of Number Cards, randomly show one card at a time and ask, "What is the name of this number?"
   Check numbers that are named correctly; record incorrect answers.

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Circle the behavior closest to what the student exhibits.

<table>
<thead>
<tr>
<th>Not able to name all the numbers correctly</th>
<th>All correct, but with some hesitation on one or more</th>
<th>All correct and automatic</th>
</tr>
</thead>
</table>

3. Using 7 red Unifix cubes:
   a. Place all 7 Unifix cubes on the table and ask, "How many cubes are there?"
   b. When the student finishes counting the cubes ask, "How many cubes did you just count?"

   Circle student's response below.

<table>
<thead>
<tr>
<th>a</th>
<th>Incorrect</th>
<th>Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>Incorrect or recounts from 1</td>
<td>Correct (responds automatically)</td>
</tr>
</tbody>
</table>

   Observations/Comments

4. Leave the red Unifix cubes where they are and place 3 blue Unifix cubes next to the red ones at random intervals. Ask, "How many are there now?"

   Circle student's response below.

   | Incorrect | Correct, starts over again at 1 to count all the cubes | Correct, counts on from 7 to get the total | Correct, knows the total without counting |
Baseline Written Assessment

Instructions to the teacher: Read the directions for each item to students. Pause between each item to give students time to respond.

1. Put your finger on the star. I am going to ask you to draw a shape in each box in this row.
   
   a. Put your finger on the first box next to the star. Draw a circle in that box.
   b. Put your finger on the next box. Draw a square in that box.
   c. Put your finger on the last box. Draw a triangle in that box.

![Star](image)

2. Put your finger on the butterfly. Write the numbers from 1 to 10 in the boxes below the butterfly. Write one number in each box.

![Butterfly](image)
How Many to Five? page 1 of 2

1. Draw a line from each five-frame to the finger pattern that shows how many.

2. Practice writing the numbers that show how many dots are in each five-frame.

(continued on next page)
How Many to Five? page 2 of 2

3 CHALLENGE Fill in the number of dots on the five-frames.

1

2

3

4

5