NUMBER® CORNER

SECOND EDITION

TEACHERS GUIDE

FEBRUARY

GRADE K

Published by The MATH LEARNING CENTER Salem, Oregon

Number Corner February

February Sample Display & Daily Planner

February Introduction 1

February Calendar Grid One Dot, Many Dots 5

Introducing the February Calendar Markers ..... Day 1 8

Introducing Comparison Words ..... Day 2 9

Recording Our Observations ..... Days 3, 6, 9, 11, 14, 16 10

February Calendar Collector Ones & Fives with Pennies & Nickels 13

How Many to Five? ..... Days 1, 7, 13, 19 15

Penny Stories ..... Days 5, 10, 15, 20 17

The Five Pennies Problem ..... Optional 20

February Days in School One Hundred Days & Counting 21

Introducing Crandall the Crab ..... Day 3 24

Counting Around the Circle by Tens ..... Days 10, 15, 18 25

February Computational Fluency Representing Addition & Subtraction on the Farm 27

Farm Animal Story Problems to Ten ..... Days 4, 8 28

The Case of the Missing Animals ..... Days 12, 17 31

February Number Line Ten & More 35

Playing Flash & Find ..... Day 2, 5 37

Playing Capture My Number ..... Days 7, 9 39

Making Partner Numbers ..... Days 13, 14 40

Playing Roll & Count On from Ten ..... Days 16, 19 42

Completing the More Hops with Hap Page ..... Day 20 43

Teacher Masters

Pages renumber each month.

Crandall the Crab T1

Counting by Tens Strips T2

Number Corner Student Book Pages

Page numbers correspond to those in the consumable books.

The Five Pennies Problem 16

More Hops with Hap 17

© The Math Learning Center | mathlearningcenter.org

February 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. You may need to rearrange some items this month to make room for the Our Month in School pocket chart, which replaces the Calendar Collector pocket chart.

Finger Pattern Display Cards
Used in Number Corner throughout the year.

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

Plastic Link Chains & Ten-Frames
Keep the collected chains and ten-frames from previous months separate, off to the side; you'll add later months' chains and ten-frames to this space.

Classroom Number Line
As you accumulate strips, you may need to move them to another location in the classroom. If possible, keep the number line where students can interact with it—below the bulletin board, for example.

Our Month in School Pocket Chart & Coin Display Cards
See the Calendar Collector workout for preparation instructions. You can store your Calendar Collector pocket chart—you won't need it again this year.

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

© The Math Learning Center | mathlearningcenter.org

February Daily Planner

Day	Date	Calendar Grid	Calendar Collector	Days in School	Computational Fluency	Number Line
1		**Activity 1** Introducing the February Calendar Markers (p. 8)	**Activity 1** How Many to Five? (p. 15)	*Update*		
2		**Activity 2** Introducing Comparison Words (p. 9)	*Update*	*Update*		**Activity 1** Playing Flash & Find (p. 37)
3		**Activity 3** Recording Our Observations (p. 10)	*Update*	**Activity 1** Introducing Crandall the Crab (p. 24)		
4		*Update*	*Update*	*Update*	**Activity 1** Farm Animal Story Problems to Ten (p. 28)	
5		*Update*	**Activity 2** Penny Stories (p. 17)	*Update*		**Activity 1** Playing Flash & Find (p. 37)
6		**Activity 3** Recording Our Observations (p. 10)	*Update*	*Update*		
7		*Update*	**Activity 1** How Many to Five? (p. 15)	*Update*		**Activity 2** Playing Capture My Number (p. 39)
8		*Update*	*Update*	*Update*	**Activity 1** Farm Animal Story Problems to Ten (p. 28)	
9		**Activity 3** Recording Our Observations (p. 10)	*Update*	*Update*		**Activity 2** Playing Capture My Number (p. 39)
10		*Update*	**Activity 2** Penny Stories (p. 17)	**Activity 2** Counting Around the Circle by Tens (p. 25)		
11		**Activity 3** Recording Our Observations (p. 10)	*Update*	*Update*		
12		*Update*	*Update*	*Update*	**Activity 2** The Case of the Missing Animals (p. 31)	
13		*Update*	**Activity 1** How Many to Five? (p. 15)	*Update*		**Activity 3** Making Partner Numbers (p. 40)
14		**Activity 3** Recording Our Observations (p. 10)	*Update*	*Update*		**Activity 3** Making Partner Numbers (p. 40)
15		*Update*	**Activity 2** Penny Stories (p. 17)	**Activity 2** Counting Around the Circle by Tens (p. 25)		
16		**Activity 3** Recording Our Observations (p. 10)	*Update*	*Update*		**Activity 4** Playing Roll & Count On from Ten (p. 42)
17		*Update*	*Update*	*Update*	**Activity 2** The Case of the Missing Animals (p. 31)	
18		*Update*		**Activity 2** Counting Around the Circle by Tens (p. 25)		
19		*Update*	**Activity 1** How Many to Five? (p. 15)	*Update*		**Activity 4** Playing Roll & Count On from Ten (p. 42)
20		*Update*	**Activity 2** Penny Stories (p. 17)	*Update*		**Activity 5** Completing the More Hops with Hap Page (p. 43)
			Activity 3 The Five Pennies Problem (optional; p. 20)			

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 – Sing the Days of the Week Song, make predictions about and post the day's marker, and record observations about the marker.
Calendar Collector – Add a penny to the pocket chart, work with the students to write a number tree representing the number of empty and filled pockets in the current row, count the total number of pennies posted on the chart so far.
Days in School – Add a dot to the ten-frame and a link to the chain, and have the students figure out how many more are needed in one of the collections to make 10. Count all the dots and links collected so far, and record the result on the Classroom Number Line.

© The Math Learning Center | mathlearningcenter.org

Number Corner
February

Overview

Counting is heavily featured this month. During the Calendar Grid workout, students count and compare sets of dots to 30. The class collects pennies and nickels during the Calendar Collector as a way to practice counting on from 5 and developing greater fluency with combinations of 5. During Days in School, students practice counting by 10s to 100 with Crandall the Crab and his nine cousins. During the Number Line workout, students focus on counting and reading numbers to 20 as they deepen their understandings of teen numbers, and the Computational Fluency workout features story problems to 10.

Activities

Workouts	Day	Activities	D	G	SB
Calendar Grid One Dot, Many Dots Each of the calendar markers this month features a set of dots corresponding to the date (1 dot on the first, 2 dots on the second, and so on). Some of the markers have only blue or red dots while others have both colors, sometimes in equal number and sometimes not. The markers and activities offer opportunities to develop and extend the concepts, skills, and language involved in counting and comparing sets.	1	**1** Introducing the February Calendar Markers	●		
	2	**2** Introducing Comparison Words	●		
	3, 6, 9, 11, 14, 16	**3** Recording Our Observations	●		
Calendar Collector Ones & Fives with Pennies & Nickels This month the class collects a penny each day in the form of a Coin Display Card. The penny cards are placed in a new pocket chart that has 5 rows of 5 pockets. Teacher and students work together each day to represent the number of full and empty pockets in the most current row, using number trees early in the month and equations later in the month. At the end of each week, or as soon as a row of 5 pennies is complete, a nickel card is posted beside the pocket chart to indicate that 5 pennies are worth a nickel, and students solve several simple story problems that involve subtracting different numbers from 5.	1, 7, 13, 19	**1** How Many to Five?	●		
	5, 10, 15, 20	**2** Penny Stories	●		
		3 The Five Penny Problem (optional)			●
Days in School One Hundred Days & Counting The Days in School workout continues as a short daily routine for most days this month. During the first activity, the teacher introduces Crandall the Crab, a creature who happens to have 10 legs. During Activity 2, Crandall and nine of his cousins help the students play a simple circle game to practice counting by 10s to 100.	3	**1** Introducing Crandall the Crab	●		
	10, 15, 18	**2** Counting Around the Circle by Tens	●		
Computational Fluency Representing Addition & Subtraction on the Farm Students use Unifix cubes in two different colors to represent and solve story problems about farm animals. Later in the month, students focus on different combinations that make 10 using story problems as a context. Using their mats and cubes, they solve for the second addend that makes 10, and work with support from the teacher to write matching number trees.	4, 8	**1** Farm Animal Story Problems to Ten	●		
	12, 17	**2** The Case of the Missing Animals	●		
Number Line Ten & More Thinking about teen numbers as 10 ones and some more ones is the focus of this month's Number Line. Students identify quantities on ten-frame and double ten-frame cards and then locate the numbers that represent these quantities on the number line. A new activity called Partner Numbers is introduced as a way to think about decomposing teen numbers into 10 ones and some more ones using finger patterns. Interval counting is also reinforced as students use the number line to add single-digit quantities to 10 to get a teen number total.	2, 5	**1** Playing Flash & Find		●	
	7, 9	**2** Playing Capture My Number		●	
	13, 14	**3** Making Partner Numbers	●		
	16, 19	**4** Playing Roll & Count On from Ten		●	
	20	**5** Completing More Hops with Hap Page			●

D – Discussion, **G** – Game, **SB** – Number Corner Student Book

 © The Math Learning Center | mathlearningcenter.org

Teaching Tips

School calendars vary from district to district, but almost all schools will reach their 100th day of instruction during the month of February. In honor of this event, the Days in School workout features a special guest and a new game to provide practice counting by 10s to 100. If you need additional ideas about how to commemorate the 100th Day, you'll find a list of activity books and books to share with your students in the Literature Connections near the beginning of the Days in School workout.

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.

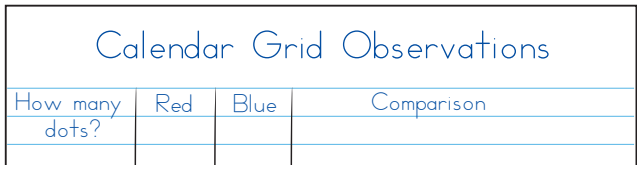
Major Skills/Concepts Addressed	CG	CC	DS	CF	NL
K.CC.1 Count to 20 by ones					●
K.CC.1 Count to 100 by ones and by tens			●		
K.CC.2 Count within the given range starting from numbers other than 1	●	●			●
K.CC.3 Write numerals from 0 to 20 to represent a number of objects					●
K.CC.4a Count objects one by one, saying the numbers in the standard order and pairing each object with only one number name			●		
K.CC.4b Identify the number of objects as the last number said when counting a group of objects			●		
K.CC.4c Demonstrate that each successive number name refers to a quantity that is one larger than the previous number name	●				●
K.CC.5 Count objects in a scattered configuration to answer "how many?" questions	●				
K.CC.5 Given a number from 1–20, count out that many objects				●	
K.CC.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group for groups of up to 10 objects	●				
K.OA.1 Represent addition and subtraction with objects, fingers, drawings, acting out situations, numbers, and equations		●		●	
K.OA.2 Solve addition and subtraction story problems		●		●	
K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way		●			
K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to that number			●	●	
K.OA.4 Record pairs of numbers whose sum is 10 using numbers				●	
K.OA.5 Fluently add and subtract within 5		●			
K.NBT.1 Decompose numbers from 11 to 19 into a group of 10 and some 1s					●
K.MP.2 Reason abstractly and quantitatively		●			
K.MP.4 Model with mathematics				●	
K.MP.6 Attend to precision	●				●
K.MP.7 Look for and make use of structure	●		●		●
K.MP.8 Look for and express regularity in repeated reasoning		●	●		●

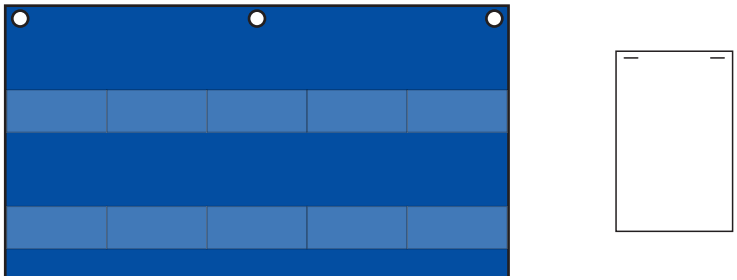
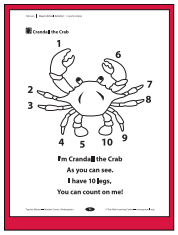
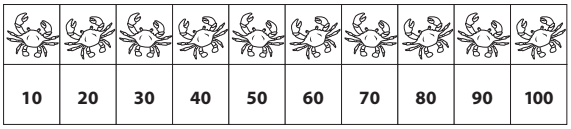
CG – Calendar Grid, **CC** – Calendar Collector, **DS** – Days in School, **CF** – Computational Fluency, **NL** – Number Line

 © The Math Learning Center | mathlearningcenter.org

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.

Task		Done
Copying	Run copies of Teacher Masters T1–T5 according to instructions at the top of each master.	
	If students do not have their own Student Books, run a class set of Student Book pages 16–17.	
Charts	Make a Calendar Grid Observations Chart from two sheets of lined chart paper. Label the top of one piece "Calendar Grid Observations." Laminate both sheets. Next, use an erasable marking pen and yardstick to draw 4 columns on each sheet. Label the columns at the top of the first sheet as illustrated.  Post the 10 Word Resource Cards for all, equal, greater than, least, less, less than, more, most, none, and one to the left of the Calendar Grid, or in a pocket chart near the grid if you don't have room on the wall.	
	Pocket Chart and Coin Display Cards Take down the Calendar Collector pocket chart and store it away safely—you won't need it again until next September. Replace it with the Our Month in School pocket chart. Also, find the Coin Display Cards in your Number Corner Kit, and find a place to keep them so they'll be easy to access during your Number Corner activities. There are 20 penny cards and 4 nickel cards in the set, and you'll need all of them.	
	Number Line Pocket Chart Prior to Activity 1, place the numbers 1–20 in order in the Number Line pocket chart. Cover each of the numbers 1–9 and 11–19 with a blue card. The numbers 10 and 20 are covered with red cards that serve as reference points for students. Activity 1 starts will all slides up and the numbers revealed, but the slides need to be in position for students to close.  	

Paper Cutting	**Recording Pad** Cut 10 sheets of copy paper in half. Staple them together with 2 staples at the top to form a recording pad. Post the pad about 5 inches to the right of the Our Month in School pocket chart, as shown below. 	
	Crab and Counting by Tens Strip Prior to conducting Activity 1, run a copy of the Crandall the Crab Teacher Master and post it on your Number Corner display board. Also, run a copy of each of the sheets for the Counting by Tens Strip. Trim each sheet and glue the pieces together to form one long strip. Post the Counting by Tens Strip on the Number Corner display board or near the Number Corner discussion area at a height your students can easily reach.  	
Special items	Add new sentence strips to the Classroom Number Line as needed.	
	Have students help put together trains of 10 Unifix cubes, each train in a single color. Make half the trains in dark colors, such as brown, black, or burgundy, and half the trains in light colors, such as white, yellow, or light blue. Prepare enough trains for each student to have one in a light shade and one in a dark shade.	
	Ten-Frame and Double Ten-Frame Pair-Wise Display Cards Prior to Activity 1, locate your Ten-Frame and Double Ten-Frame Pair-Wise Display Cards. Remove the 0 card and 10 card from the set of Ten-Frame Pair-Wise Cards so that you are only using cards 1–9. You will need cards 10–20 from your Double Ten-Frame Pair-Wise set. Even though the cards are different sizes, randomly mix the two sets together, keeping them face-down in a pile. You may want to place these in a plastic bag or envelope to keep them together, as you will need them throughout the month.	
	Place a 4–9 numbered die from your Number Corner Kit in a mini plastic storage container with a clear lid to make a dice shaker box.	

February Calendar Grid

One Dot, Many Dots

Overview

Each of the calendar markers this month features a set of dots corresponding to the date (1 dot on the first, 2 dots on the second, and so on). Some of the markers have only blue or red dots while others have both colors, sometimes in equal number and sometimes not. The markers and activities offer opportunities to develop and extend the concepts, skills, and language involved in counting and comparing sets.

Skills & Concepts

- Count within the given range starting from numbers other than 1 (K.CC.2)
- Demonstrate that each successive number name refers to a quantity that is one larger than the previous number name (K.CC.4c)
- Count objects in a scattered configuration to answer "how many?" questions (K.CC.5)
- Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group for groups of up to 10 objects (K.CC.6)
- Attend to precision (K.MP.6)
- Look for and make use of structure (K.MP.7)

Materials

Activities	Day	Copies	Kit Materials	Classroom Materials
Activity 1 Introducing the February Calendar Markers	1		Used in all Calendar Grid activities this month: • Calendar Grid pocket chart (see Preparation) • One Dot, Many Dots Calendar Markers • Month, Day, and Year Cards	• pointer
Activity 2 Introducing Comparison Words	2		• Word Resource Cards for *all, equal, greater than, least, less, less than, more, most, none, one* (see Preparation)	
Activity 3 Recording Our Observations	3, 6, 9, 11, 14, 16			• 2 pieces of lined chart paper (see Preparation) • erasable marking pens • red and blue Unifix cubes • 1 ½″ × 2″ sticky notes (optional, see Extensions)

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

Preparation

- Post the 10 Word Resource cards to the left of the Calendar Grid, or in a pocket chart near the grid if you don't have room on the wall.
- Make a Calendar Grid Observations Chart from two sheets of lined chart paper. Label the top of one piece "Calendar Grid Observations." Laminate both sheets. Next, use an erasable marking pen and yardstick to draw four columns on each sheet. Label the columns at the top of the first sheet as illustrated.

Vocabulary

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

all*
compare*
count*
count on*
day
equal*
February
Friday
greater than*
least*
less*
less than*
Monday
month
more*
most*
none*
one*
pattern*
Saturday
Sunday
Thursday
Tuesday
Wednesday
week

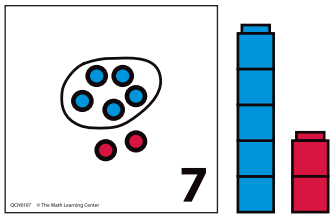
 © The Math Learning Center | mathlearningcenter.org

Calendar Grid Observations			
How many dots?	Red	Blue	Comparison

Use the second piece of chart paper to extend the chart midway through the month. Use an erasable marking pen to record students' observations so that you can re-use the chart in March and May, and again next year.

Mathematical Background

The activities in the Calendar Grid workout this month provide opportunities for students to develop matching and counting strategies to determine whether one group is greater than, less than, or equal to the number of objects in another group. These relationships are fundamental to an understanding of numbers as well as to the comparison of unenumerated quantities, as when kindergartners compare the lengths of two ribbons by laying them side by side and even at one end, or compare the mass of two objects by placing each on one side of a balance scale.



Zane *There are more blues than reds today.*

Teacher *Thumbs up if you agree that the number of blue dots is greater than the number of red dots on today's calendar marker. How do you know?*

Tyrone *I can see from the cubes. The blues ones go up more.*

Amelia *I know there are 5 blue dots in the loop, and I can see there are 2 red ones. Five is more than 2, so I know there are more blue dots.*

About the Pattern

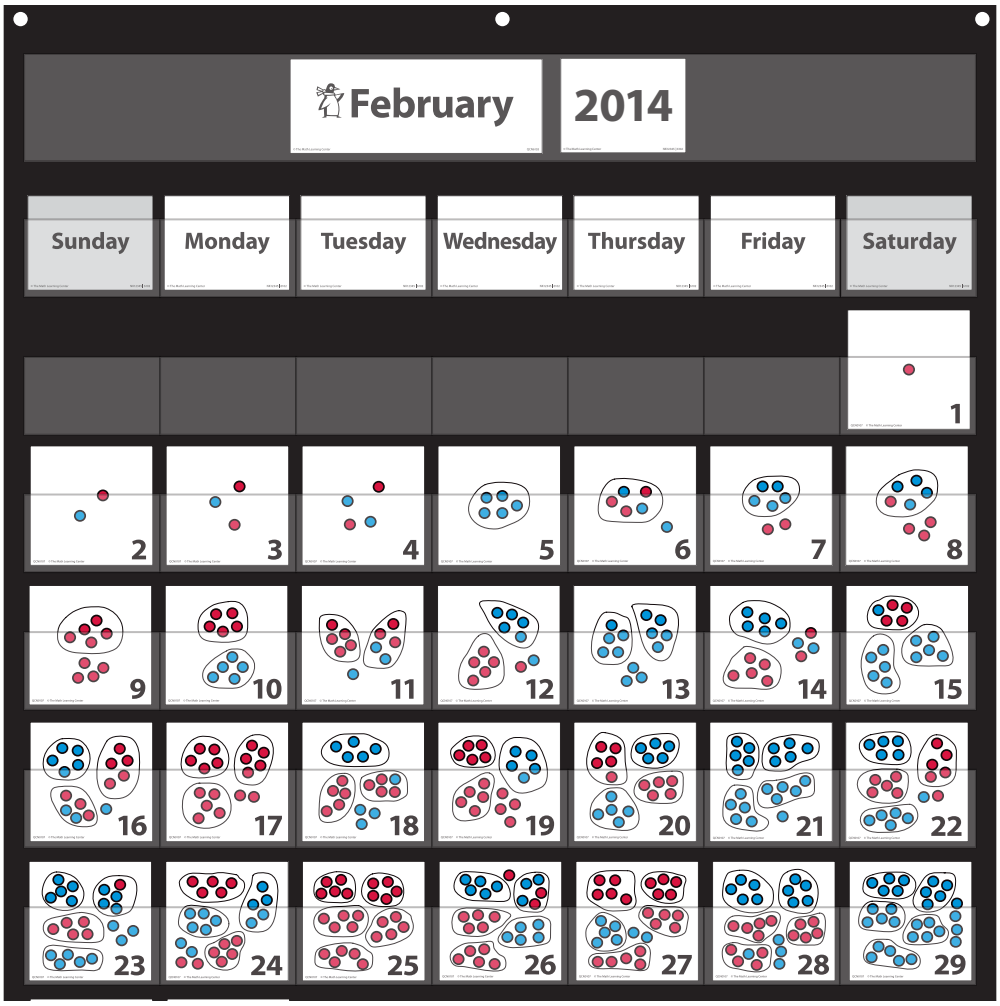
The patterns featured this month are described below. Students will make and test predictions about the markers each day, discovering patterns as new markers are added and their predictions are confirmed or proven false. Don't tell them what the patterns are: instead, allow them to pursue their own ideas and investigations.

- This sequence of markers starts with one dot on the first day and grows by one more dot each day.
- The number of dots on each marker always corresponds to the date.
- There is an equal number of red and blue dots on every even-numbered marker.
- Every fourth marker, starting with Marker 1, displays dots in only one color, and the colors alternate. Marker 1 shows 1 red dot. Marker 5 shows 5 blue dots. Marker 9 shows 9 red dots, Marker 13 shows 13 blue dots, and so on.
- The dots are looped in groups of 5 to make them easier to count; a new loop appears on every 5th marker starting with Marker 5.

Key Questions

Use questions and prompts like these to help students develop counting skills and precision in the language they use to compare sets through the month.

- How many dots are there on the marker today? How many are red? How many are blue?
- Are there more blue or more red dots? How do you know?
- How many dots will we see on tomorrow's marker? How do you know?
- Do you think there will be more reds, more blues, or an equal number of each color on our next marker? Why?
- Are there any markers where all of the dots are the same color? Which ones? Do you think there will be other markers like that this month? Can you point to where you think the next one will show up? Why do you think it will be there?
- Which markers so far have an equal number of red and blue dots? Do you think we'll see any other markers like that this month? Which ones? How do you know?
- Which marker so far has the most blue dots? The least or fewest blue dots? The most red dots? The least or fewest red dots?



Update

Begin updating after Day 3. Follow this update procedure every day that the Calendar Grid is not a featured activity.

Procedure

- 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 today, have students identify the name of the day.
- Ask students to make predictions about the marker for the day before it is posted.
- Invite a student helper to post the Calendar Grid marker for the day.
- Once the marker is posted, have students count the total number of dots on that marker and compare the sets of reds and blues that appear. Work with their input to record a comparison statement, along with the other information about the dots on the Calendar Grid Observations Chart.

Note

Starting on the 6th or 7th day, ask a volunteer to set out 1 red or blue Unifix cube for each dot on the day's marker, and then link the cubes into stacks by color. Have students count along with your volunteer, and then place the stacks on display for all to see. This will make it easier for students to see and compare the quantities, and will become increasingly important as the number of dots increases through the month.

Activity 1

Introducing the February Calendar Markers — Day 1

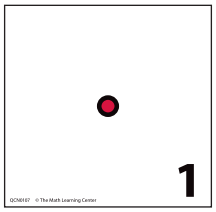
The Calendar Grid pocket chart should be empty of markers when the students join you in the discussion area, showing only the name of the new month and the Days of the Week Cards.

1 Take a minute or two to help students understand that one month has just ended and a new month has started.

- Ask students to join you in the discussion area and seat them close to the Number Corner display.
- Note with them that the calendar markers from the previous month are gone and there are no new markers in the Calendar Grid pocket chart right now.
- Explain that the month of January is over. A new month has started, and you have a whole new set of calendar markers to share with them.
- Draw students' attention to the month card at the top of the pocket chart. Read the card to the class, noting that the word *February* starts with a capital F and ends with the letters "a, r, y."

2 Identify the day on which February started with the class, and post the first marker in the correct pocket.

- Point to the Days of the Week Cards, starting with Sunday, and sing the Days of the Week song once through with the class, pointing to each card as you go. Start the song a second time, but stop on the day February started.
- Post the marker in the pocket for that day.
- Take a minute to discuss the first marker with the class.



Students *It's a tiny little circle.*

It's red. A little red dot.

It's so little I can hardly see it!

3 Ask students to predict what they might see on the next marker, first in pairs and then as a class.

Students *Maybe another dot!*

It could be a blue or green one.

Or maybe a square, not a circle.

I think it will be two dots!

4 Then post the second marker and as many more as you need to bring the Calendar Grid up to date.

This will vary from one to two markers, depending on the day of the week February starts each year. Briefly discuss each marker as you post it, encouraging students to share their observations with one another.

Activity 2

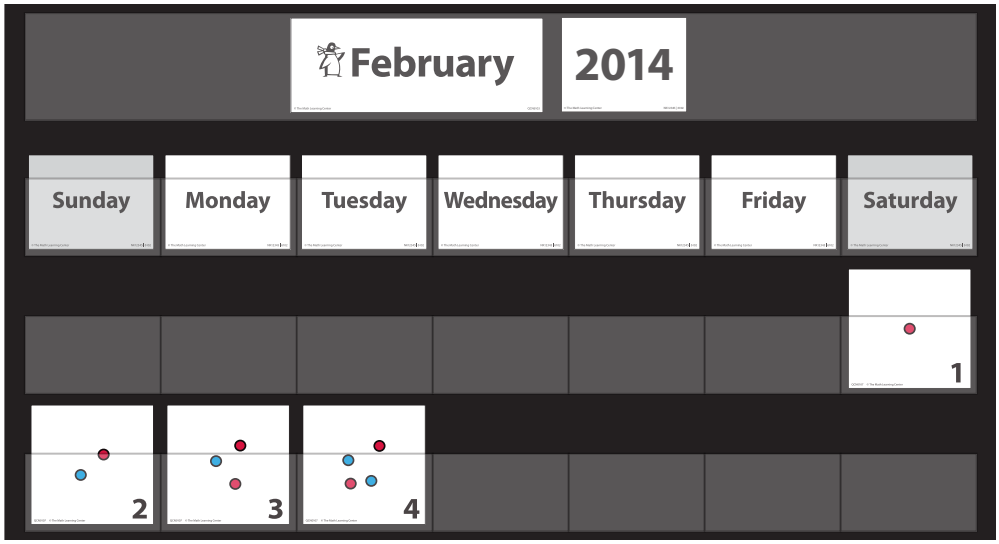
Introducing Comparison Words — Day 2

1 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 today, have students identify the name of the day.

2 Ask students to predict what the next marker will show before you place it on the chart.

3 Once the new marker is posted, ask students to pair-share their observations, and then call on a few volunteers to share with the group.



Students *Four dots today—just like I thought!*

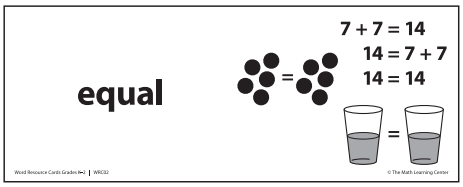
Two are red and 2 are blue.

It's 2 and 2—that's 4.

I think every day we'll get another dot.

4 Next, draw students' attention to the word cards you posted near the Calendar Grid.

- Explain that these are words people use when they count and compare sets of objects.
- Point to each of the cards and read it to the class.
- Return to two of words on display—*equal* and *more*. Read each and work with input from students to clarify the meaning as necessary. Then ask students to use those words to describe the markers you have posted so far.



Teacher *I'm going to read two of the cards in our display again. As I point to the card and read it, I'd like you to think of a way to use it to describe the dots on one of our markers. The first word is* equal. *What*

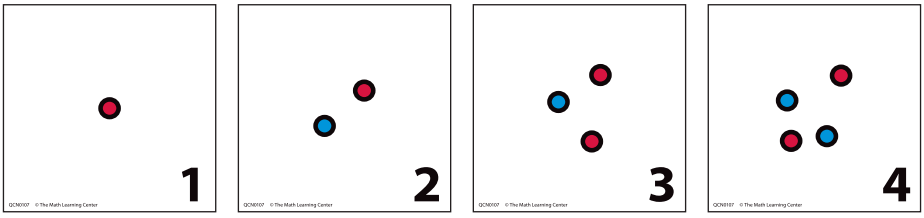
do you notice about the picture on this card? Can anyone tell us what the word equal means?

Students *There are dots and glasses of juice on that card.*

I think equal means the same, because there are 5 dots and 5 dots on that card. They're the same.

The juice is the same in both of the glasses.

Teacher *That's right. Equal means the same—the same number, the same amount, the same value. Can you think of a way to use that word to describe one of our calendar markers so far? Talk to the person next to you for a few moments, and then I'll call on a couple people to share their ideas.*

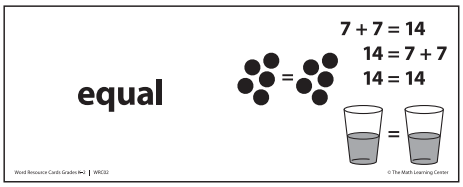


Students *There are the same dots on the 2 marker.*

One red and one blue—they're equal.

It's the same on the 4 marker too—2 of red and 2 of blue.

Teacher *And here's the other word—*more. *Can you think of a way to use the word more to describe the dots on our markers so far?*



Students *There's more reds than blues on the 3 marker.*

Yep, 2 reds and only 1 blue.

Activity 3

Recording Our Observations — Days 3, 6, 9, 11, 14, 16

Post the Calendar Grid Observations Chart you prepared on or near the Number Corner display board prior to conducting this activity.

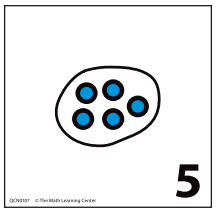
1. Have students sing or recite the names of the days of the week as you or the helper points to each of the filled pockets on the Calendar Grid.

   When you reach the pocket for today, have students identify the name of the day.

2. Ask students to predict what the next marker will show before you place it on the chart.

3. Once the new marker is posted, ask students to pair-share their observations, and then call on a few volunteers to share with the group.

   During the discussion, highlight a couple more word cards, and ask students to use these words in their observations.



4 Then draw students' attention to the recording chart you prepared. Work with input from the class to enter information about all the markers you have on display so far, starting with Marker 1.

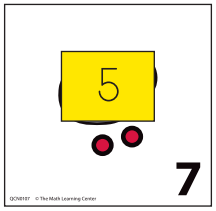
- Challenge students to use at least one of the words on display to compare the red and blue dots on each marker.
- Take the opportunity to review the symbols for *equal, greater than*, and *less than* when possible.

Calendar Grid Observations

How many dots?	Red	Blue	Comparison
1	1	0	There is only one dot
2	1	1	Red and blue are equal. 1 = 1
3	2	1	There are more reds than blues. 2 〉 1
4	2	2	Red & blue are the same. 2 = 2
5	0	5	None of the dots are red. All are blue.

Extensions

- Before posting each of the markers 7, 8, and 9, cover the loop of 5 with a small sticky note labeled with the number 5. Even if the sticky note does not cover the dots in the loop perfectly, it will still serve to nudge students in the direction of counting on from 5 rather than counting each of the individual dots. Once students count on to determine the number of dots on the marker, remove the sticky note to confirm their thinking and allow them to count and compare the red and blue dots. (You can reuse the sticky note from one marker to the next.)



Teacher *What do you notice about our marker today?*

Students *Some of the dots are covered up!*

There's 5 under there!

Teacher *Thumbs up if you agree that there are 5 dots under the little sticky note. How do you know?*

Students *I remember from before!*

You can know because it's like on the other marker before it.

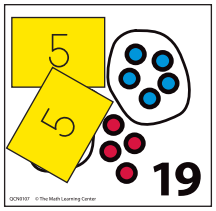
It says 5 on the little paper!

Teacher *Let's count on from 5 to find out how many dots there are on this marker, ready?*

Students and Teacher *5 … 6, 7.*

Teacher *Let's take the sticky note off and see how many reds and how many blues we have today.*

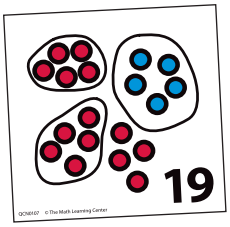
- Cover both loops of 5 on the 10th marker with sticky notes labeled 5. Encourage students to figure out how many dots there are in all on the marker and explain their thinking. Then remove one of the sticky notes and have the class count on from 5 to determine the total. Finally, remove the other sticky note so students can see and compare the number of red and blue dots on the marker.
- Continue to cover two of the loops before you post at least some of the markers over the course of the month. Point to the sticky notes and support students in counting 5, 10, and then counting the rest of the dots from 10.

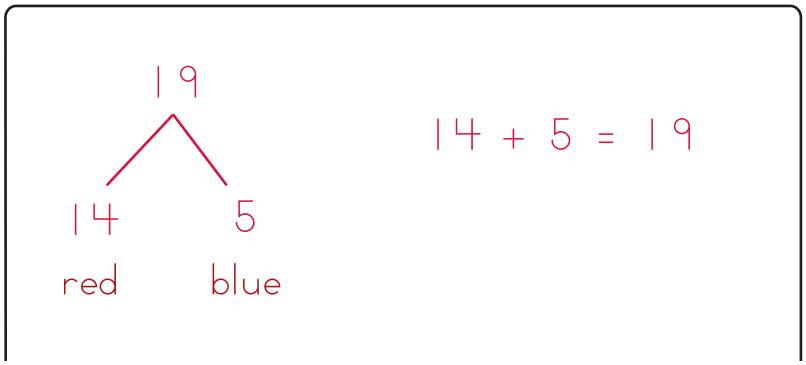


> ***Teacher*** *Let's figure out how many dots there are on today's marker. Ready to count on?*
>
> ***Students and Teacher*** *5, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19.*
>
> ***Teacher*** *Now let's take the sticky notes off so we can see how many blues and how many reds we have today.*

CHALLENGE Once you reach the 16th of the month, cover all three of the loops of 5 with sticky notes labeled 5. Continue to add more sticky notes as the month progresses, so students are counting as far as 25 by 5s before counting on by 1s to determine the total number of dots each day.

- On days when the Calendar Grid is one of the featured activities for the day, work with input from students to write on a piece of chart paper or the whiteboard a number tree or an addition equation to represent the number of blue and red dots on the marker. (This would be in addition to recording a comparison statement on the Calendar Grid Observations Chart.)





- It may not be long before some students discover that every other marker in the sequence is composed of an equal number of red and blue dots. If this comes up in discussion, you might take the opportunity to introduce the idea of even numbers as quantities where each member of the set has a partner.
- Encourage students to use red and blue Unifix cubes to build their predictions about upcoming markers. Prediction trains can be placed near the Calendar Grid and examined the following day as the next marker is posted.

February Calendar Collector

Ones & Fives with Pennies & Nickels

Overview

This month the class collects a penny each day in the form of a Coin Display Card. The penny cards are placed in a new pocket chart that has 5 rows of 5 pockets. Teacher and students work together each day to represent the number of full and empty pockets in the most current row, using number trees early in the month and equations later in the month. At the end of each week, or as soon as a row of 5 pennies is complete, a nickel card is posted beside the pocket chart to indicate that 5 pennies are worth a nickel, and students solve several simple story problems that involve subtracting different numbers from 5.

Skills & Concepts

- Count forward from a given number, rather than starting at 1 (K.CC.2)
- Represent addition and subtraction with objects, fingers, drawings, acting out situations, numbers, and equations (K.OA.1)
- Solve subtraction story problems (K.OA.2)
- Decompose numbers less than or equal to 10 into pairs in more than one way (K.OA.3)
- Fluently add and subtract within 5 (K.OA.5)
- Reason abstractly and quantitatively (K.MP.2)
- Look for and express regularity in repeated reasoning (K.MP.8)

Materials

Activities	Day	Copies	Kit Materials	Classroom Materials
Activity 1 How Many to Five?	1, 7, 13, 19		• Our Month in School pocket chart (see Preparation) • Coin Display Cards (20 pennies and 4 nickels)	• 10 sheets of copy paper (see Preparation) • marking pen • student whiteboards, markers, & erasers (class set)
Activity 2 Penny Stories	5, 10, 15, 20		• Coin Display Cards (20 pennies and 4 nickels) • Numbers to Ten Counting Mats (1 per student, plus 1 for display)	• 5 different stickers or 2″ × 2″ construction paper squares, each in a different color • a single desk or small table • Unifix cubes (5 in a single color per student) • student whiteboards, markers, & erasers (class set)
Activity 3 The Five Pennies Problem (optional)		**NCSB 16*** The Five Pennies Problem		• Unfix cubes OR pennies, real or plastic (5 cubes in a single color OR 5 pennies per student)

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

** Run 1 copy of this sheet for display.*

Vocabulary

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

add*
cent*/cents
count*
count on*
equation*
left/left over
nickel*
penny*
row*
subtract*
sum or total*

 © The Math Learning Center | mathlearningcenter.org

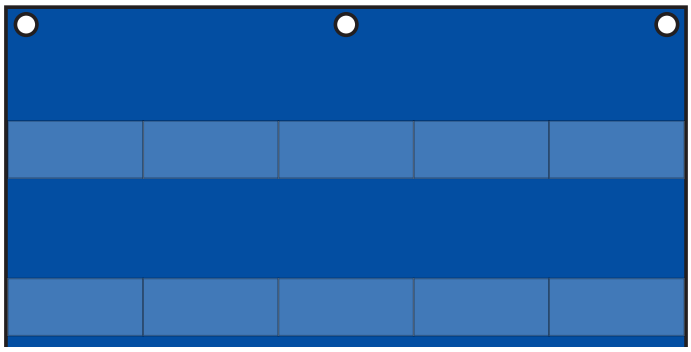
Preparation

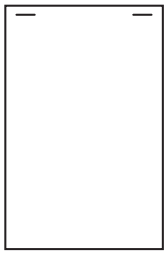
Pocket Chart and Coin Display Cards

As you set up your Number Corner display board for February, take down the Calendar Collector pocket chart and store it away safely—you won't need it again until next September. Replace it with the Our Month in School pocket chart. Also, find the Coin Display Cards in your Number Corner Kit, and find a place to keep them so they'll be easy to access during your Number Corner activities. There are 20 penny cards and 4 nickel cards in the set, and you'll need all of them.

Recording Pad

Cut 10 sheets of copy paper in half. Staple them together with two staples at the top to form a recording pad. Post the pad about 5 inches to the right of the Our Month in School pocket chart, as shown below.





Mathematical Background

This month's activities help students continue to develop a strong sense of 5 and all the combinations into which it can be decomposed. Students also have an opportunity through the month to model and solve very simple subtraction story problems. Although money isn't formally addressed until Grade 2, coins are readily found in most homes and usually of great interest to young children, making them good subject material for story problems. The fact 1 silver coin is worth the same as 5 copper coins is accessible to some kindergartners, a few of whom may already know that silver coins—whether they be nickels, dimes, or quarters—have more purchasing power than the copper ones. There is no expectation that students will master the names and values of the two coins featured this month, although some may know these already, and more will be familiar with them by the end of the month.

Update

Begin updating after Day 1. 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

- Ask the student helper to post a new penny on the pocket chart.
- Work with input from the class to write a number tree on the recording pad to represent the number of filled and empty pockets in the *current row*. (Use a fresh sheet each day, tearing off the sheet from the previous day and either recycling it or posting it in another location in the classroom.)
- Once the first row is filled and the class has moved on to the second row, help students count to find out how many pennies total are posted so far for the month, first by 1s, and then by pointing to the nickel posted beside the top row and counting on from 5. When you fill the first two rows and move into the third row, count the pennies by 1s each day, and then by 5s and 1s (e.g., 5, 10, 11, 12, 13).

Key Questions

Use the following questions and prompts to guide students as you conduct the Calendar Collector workouts this month.

- How many pennies do we already have in the first (second, third, fourth) row?
- How many pennies will we have in the first (second, third, fourth) row after we add 1 for today? How do you know?
- How many more pennies do we need to fill the first (second, third, fourth) row? How do you know?
- How many pockets are there in the first (second, third, fourth) row? How many are filled and how many are empty? How can we show that situation with a number tree?
- If we add the number of filled and the number of empty pockets in the first (second, third, fourth) row, how many will we have in all?
- How many pennies do we have on the whole chart today? Let's count them by 1s. Now let's take the shortcut and count them by 5s and 1s.

Activity 1

How Many to Five? Days 1, 7, 13, 19

1 Open the first Calendar Collector activity by drawing students' attention to the new Our Month in School pocket chart you'll be using for the rest of the year.

- Give students a few moments to examine the new pocket chart quietly. Then ask them to share observations, first in pairs and then as a whole class.
- If it doesn't come from the class, establish the fact that there are five pockets in each row by having students count them with you.

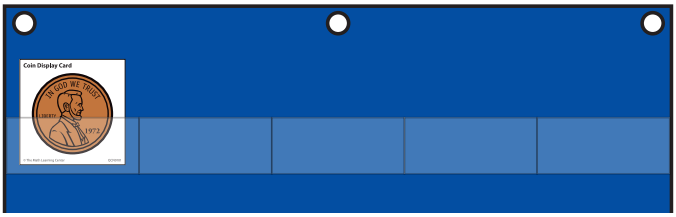
CHALLENGE Invite students to determine how many pockets there are on the entire chart. Give them a minute to figure this out. Then ask them to share their answers, and invite several volunteers to explain how they counted the pockets.

2 Then explain that this month the class is going to collect 1 penny each school day.

- Show students the penny cards and explain that each day, the student helper will put one of these cards into a pocket on the new chart, starting at the left side of the top row.
- Have your student helper post the first card. (You might explain that even though these aren't real pennies, they're easier for everyone to see.)

3 Ask students how many more penny cards they'll need to collect to fill the first row.

- Pose the question and give students a minute to talk it over with the people sitting nearest them.
- Have students show the answer on their fingers, and then invite several volunteers to explain how they figured it out.



Corey *I counted the pockets that don't have any pennies in them. There are 1, 2, 3, 4.*

Brittany *I could just see it was 4—I didn't have to count them.*

Jalen *I know it's 4 because it's 5 in the whole row and the first pocket already has a penny, so that leaves 4.*

4 Work with input from students to record a number tree on the pad beside the pocket chart representing the total number of pockets in the first row, the number of pennies posted so far, and the number of pockets left to fill.

Teacher *Let's write a number tree on our recording pad to tell about the first row on our chart today. How many pockets are there in the first row?*

Students *Five!*

Teacher *Yep, 5—that's right. I'll write a 5 at the top of the sheet. And how many pennies do we have posted in the first row so far?*

Literature Connections

If you have access to the books listed below, or similar publications, you might share them with your students this month.

Benny's Pennies by Pat Brisson

Picking Peas for a Penny by Angela Shelf Medearis

Bunny Money by Rosemary Wells

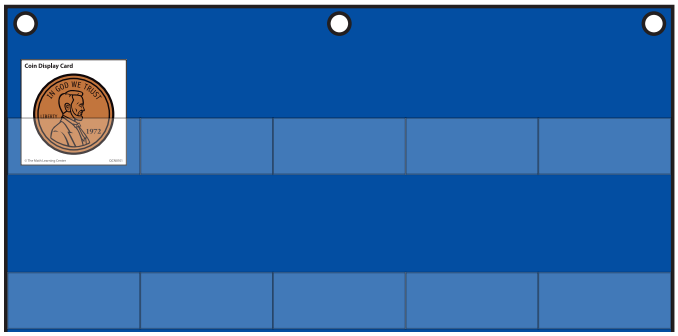
Alana *One! Only 1 so far—we still need to get 4 to fill up the row.*

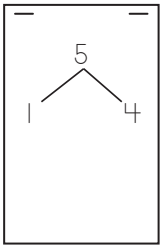
Teacher *So, I'm going to write a 1 below the first branch to show that we have only collected 1 penny so far. Then I'll write a 4 below the other branch to show… what?*

Students *How many empty pockets.*

How many more pennies we have to get.

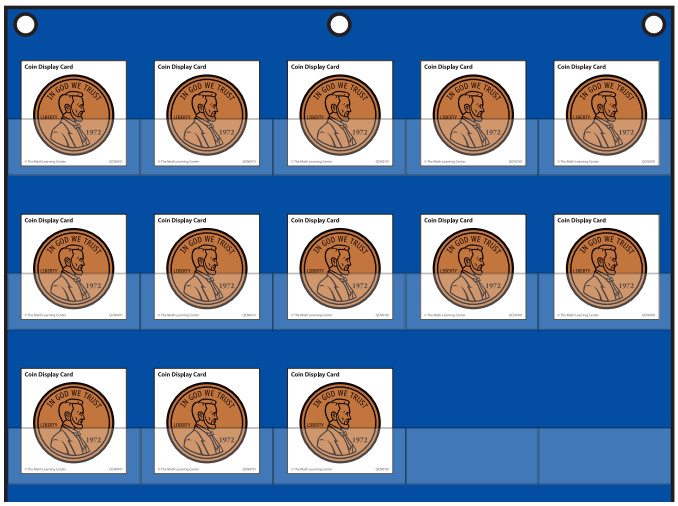
How many more we need to get to 5.

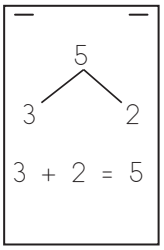




5 When you repeat this activity later in the month, you can use the following variations:

- Give students whiteboards, markers, and erasers, and have them record a number tree along with you to show how many pennies are posted and how many more need to be posted to reach a total of 5 in the current row.
- Write an addition equation to go along with the number tree later in the month, and read it with the class. Help them understand the connection between the two different formats.





- Toward the end of the month, have students write both a number tree and an equation to represent the number of pennies and the number of pockets left to fill to make 5 in the current row.

CHALLENGE Rather than modeling the number tree and matching equation the last time you conduct this activity, ask students to use numbers and drawings on their whiteboards to represent the number of pennies and the number of pockets left to fill in the current row. Have students share their work in pairs, and then invite volunteers to share the work on their whiteboards with the class.

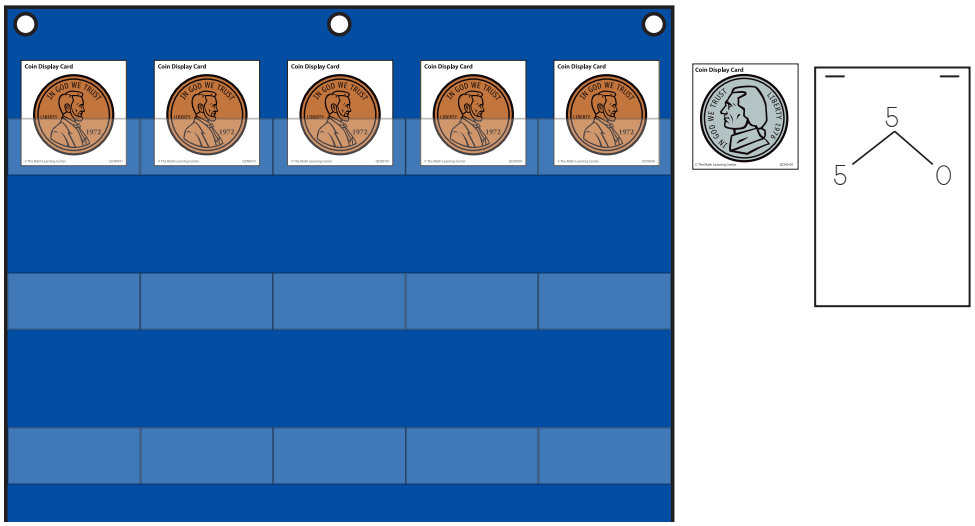
Activity 2

Penny Stories — Days 5, 10, 15, 20

1 After completing the update procedure to fill the current row, pin a nickel card to the right of the row to show that 5 pennies are worth a nickel.

Discuss this with students briefly.

> ***Teacher*** *Now that we filled all the pockets in the first row, we're going to add something special to our collection. The coin on the card I'm holding up is a nickel, and it's worth 5 pennies. I'm going to pin it here at the end of the row, like this. What do you notice about the coin on this card?*



> ***Students*** *It's bigger than a penny.*
>
> *It's a different color.*
>
> *That's silver, and the pennies are copper. I know about them from my mom.*
>
> *I have some nickels in my bank at home, and I have some pennies too.*
>
> *You can't really buy anything with a penny, but you can get something really little with a nickel sometimes.*

2 Explain that you are going to tell some story problems about a kindergartner who took 5 pennies to the store, and the students will act them out.

- Choose a student at random to act out the first problem.
- Invite that student up to the front of the group and hand her 5 of the penny cards from your supply. Ask the rest to count aloud as you hand each penny card to the student, so they can be sure she has 5.
- Then explain that you'll act the part of the storekeeper.

3 Set the stage for the story problems.

- Tell the students that a penny doesn't buy much, but there's a store you know of that sells stickers for a penny each. The stories you tell today will be about buying stickers at that store.
- Pull the single desk or small table to the front of the group, and set the stickers or squares of construction paper on it.

4 Tell the first story problem. Act it out with the student you selected, and have the rest of the class keep track of the action with their fingers.

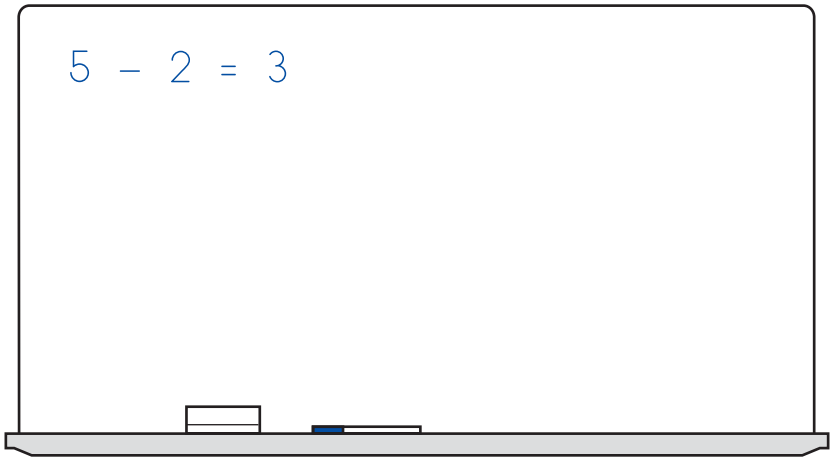
- Tell the following story problem (or one like it):

> *One day, _____ (use the child's name) went to the store with her mom. She brought 5 pennies with her because she knew that she could buy stickers, 1 for a penny. She went up to the counter with her 5 pennies. (Invite the child up to the desk or small table where you have set the stickers. Have the rest of the students hold up 5 fingers to show the pennies.) She looked at the stickers and saw 2 that she liked. She gave the storekeeper 2 of her pennies to pay for the stickers. (Have the child give you 2 of the penny cards, while the rest of the students put down 2 of their fingers.) How many pennies did _____ have left? (Have the child hold up the 3 penny cards while the rest of the students hold up 3 fingers to show how many pennies remain.) The storekeeper gave ____ the 2 stickers, and _____ went home with her mom.*

5 Write a subtraction equation on the chart paper or whiteboard to summarize the story.

- Explain each number and symbol as you record it, and then read the entire equation to the class.

> ***Teacher*** *I'm going to use numbers to write a very short sentence about our story problem. I'll start by writing a 5 because _____* (child's name) *brought 5 pennies to the store. Then I'm going to write a subtraction or minus sign to show that she gave some of the pennies to the storekeeper. How many pennies did _____ spend at the store? That's right—it was 2, so I'll write that next. And how many pennies did _____ have left when she went home? Yep, 3. So, here's the whole equation: 5 take away 2 leaves 3.*



- Have students read the equation a second time along with you.
- Work with students to relate each number and symbol back to the story you just told.

> ***Teacher*** *What is the 5 for? Why did I start by writing a 5?*
>
> ***Students*** *That's for the pennies she took to the store.*
>
> *She brought 5 pennies with her.*
>
> ***Teacher*** *And what about the 2?*
>
> ***William*** *She spent 2 of her pennies.*

> ***Teacher*** *Can anyone tell us about the short line between the 5 and the 2?*
>
> ***Bo*** *I think that means take away, because she gave 2 pennies to the storekeeper.*
>
> ***Teacher*** *That's right. That line is a minus or subtraction sign. It means that _____ spent some of her pennies. And what about the 3 at the end?*

6 Collect the rest of the penny cards from the student who acted out the first problem, and confirm with the class that you have a total of 5 again. Have that student sit down, and select another for the next actor.

7 Repeat steps 4 and 5 a couple more times.

- Tell a story similar to the first one each time, but vary the number of stickers the child buys. You might even tell a story in which the child buys all 5 stickers and has 0 pennies remaining when he leaves the store.
- Have the rest of the students continue to track the action with their fingers.

8 Collect all 5 penny cards, put the desk or table and stickers aside, and let students know that you'll tell more penny stories the next time a row on the pocket chart fills.

9 When you repeat this activity later in the month, you can use the following variations:

- Give each student a Numbers to Ten Counting Mat and 5 Unifix cubes in a single color. Have the class act out each story problem you tell using the cubes on the five-frame side of their mat. (You can continue to act out the stories with different volunteers if you like, or shift to just having the students model and solve the story problems on their mats.)
- Use alternate scenarios (and props, if you're having the students act out the stories) that fit the interests of your students (e.g., a yard sale where tiny Lego figures are on sale at a penny each; a thrift store where buttons are on sale at a penny each; and so on).
- Toward the end of the month, give students each a whiteboard, marker, and eraser. Tell and act out with students' help two or three penny problems, and have the rest of the students record the action with drawings. Then have them record a subtraction equation along with you to summarize each story.

CHALLENGE When you tell and act out the problems with the class, have each actor bring a nickel card rather than 5 penny cards to the store.

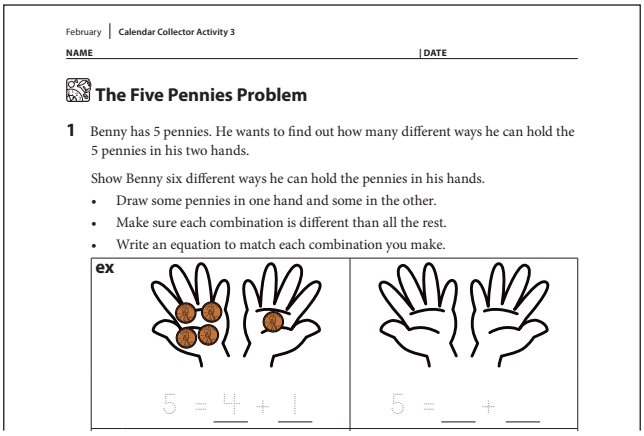
Activity 3

The Five Pennies Problem — Optional

1 Display your copy of the Five Pennies Problem Student Book page, and have students find the corresponding page in their books.

2 Give students a few moments to examine the page and share observations with the people sitting nearest them.

3 Read the instructions at the top of the page, and clarify them as necessary. Complete the example at the top with the class by tracing the equation as the students do so on their pages.



February | Calendar Collector Activity 3

NAME | DATE

The Five Pennies Problem

1 Benny has 5 pennies. He wants to find out how many different ways he can hold the 5 pennies in his two hands.

Show Benny six different ways he can hold the pennies in his hands.

- Draw some pennies in one hand and some in the other.
- Make sure each combination is different than all the rest.
- Write an equation to match each combination you make.

ex

5 = 4 + 1

5 = ___ + ___

4 Make Unifix cubes or pennies (real or plastic if you have them) available to students by placing a small tub of one or both at each table.

Encourage students to use the materials to model each combination so they can be sure it's different from any of the others on the sheet.

5 When students understand what to do, give them time to complete the sheet.

Circulate to provide assistance as needed.

About This Activity

If you have a little extra time for Number Corner toward the end of the month, consider using this activity. You might also assign it to some or all of your students for homework.

Extension

Students may be interested to know that the penny features a picture of the one of the presidents we honor in February—Abraham Lincoln. You might want to share this information with them at some point during the month, and perhaps read a related book to the class. You might also let students know that it's Thomas Jefferson who appears on the nickel, while George Washington appears on a larger silver coin—the quarter.

 © The Math Learning Center | mathlearningcenter.org

February Days in School

One Hundred Days & Counting

Overview

The Days in School workout continues as a short daily routine for most days this month. During the first activity, the teacher introduces Crandall the Crab, a creature who happens to have 10 legs. During Activity 2, Crandall and nine of his cousins help students play a simple circle game to practice counting by 10s to 100.

Skills & Concepts

- Count to 100 by ones and by tens (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)
- For any number from 1 to 9, find the number that makes 10 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	Ancillaries	Kit Materials	Classroom Materials
Activity 1 Introducing Crandall the Crab	3	**TM T1** Crandall the Crab (see Preparation) **TM T2–5** Counting by Tens Strip, sheets 1–4	• plastic links (10 or more in each of 2 different colors)	• ¾" adhesive dots in 2 different colors • Classroom Number Line sentence strips (prepared in September) • Chain-Link Measuring Strip (prepared in October) • black erasable marker • pointer
Activity 2 Counting Around the Circle by Tens	10, 15, 18			• ten sticky notes (3" × 3" or smaller will work) • pointer • Crandall the Crab Poem from Activity 1 • Counting by Tens Strip from Activity 1

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.

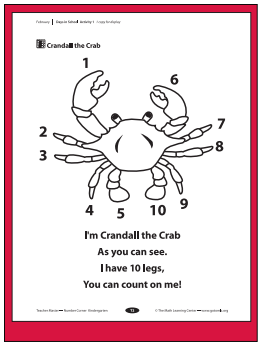
count*
number words for 1–10
ones*
tens*
ten-frame

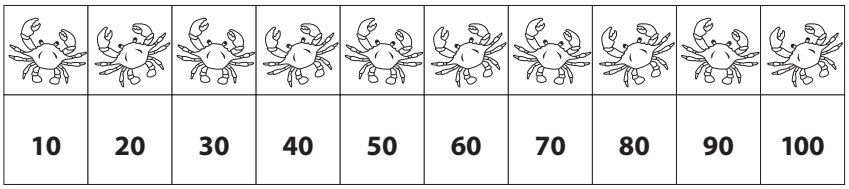
 © The Math Learning Center | mathlearningcenter.org

Preparation

Crab and Counting by Tens Strip

Prior to conducting Activity 1, run a copy of the Crandall the Crab Teacher Master and post it on your Number Corner display board. Also, run a copy of each of the sheets for the Counting by Tens Strip. Trim each sheet and glue the pieces together to form one long strip. Post the Counting by Tens Strip on the Number Corner display board or near the Number Corner discussion area at a height your students can easily reach.





Filled Frames, Completed Chains, and the Classroom Number Line

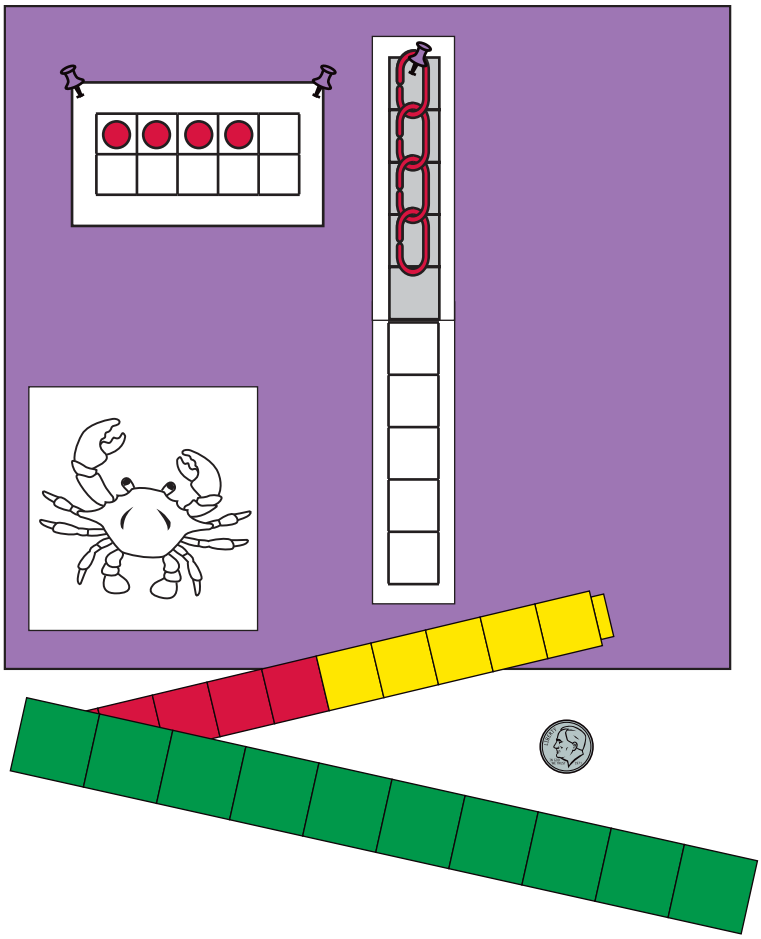
If you and your students completed a ten-frame and a chain of 10 links at the end of January, move them to the side, along with all the rest of the completed frames and chains. If you still have a ten-frame and chain to complete from the previous month, leave them posted on the Number Corner display board until they're finished and then move them. Add new sentence strips to the Classroom Number Line as needed. (You'll probably be on your 10th strip at the start of February, and possibly nearing the 100th day of school, depending on how many instructional days you had through the fall and early winter.)

Dots and Links for This Month

If you started a new ten-frame near the end of January or will just be starting a new one on the first day of class in February, display the new or partly filled frame in a prominent location on the Number Corner display board, alongside the Chain-Link Measuring Strip from last month.

Mathematical Background

The Days in School routine continues through February, punctuated with four activities in which students practice counting by 10s to 100 with a little help from a friendly crab named Crandall. Crabs are part of a larger group of crustaceans known as decapods. *Decapod* means ten-footed, and in fact, all crabs have 10 legs. The introduction of Crandall nudges students toward the understanding that 10 is both a set of 10 discrete objects or units, such as 10 dots in a ten-frame, or 10 links in a chain, and also a unit in and of itself. As a single creature with 10 legs, Crandall does double duty, providing a visual model of 10 in 1, similar to the frame that holds 10 dots and the measuring strip that accommodates 10 links. While Crandall cannot be composed and decomposed like a train of 10 Unifix cubes, he is less abstract than the strip of 10 in a set of base ten area pieces and far less abstract than a dime.



Update

Follow this update procedure with the class every school day including the days on which Days in School is one of the featured workouts.

Procedure

- Draw students' attention to the ten-frame currently on display, and ask them to show on their fingers how many dots there will be after the one for today is added.
- Have the student helper add a new dot to the ten-frame, and point to each dot as the class counts to confirm the new total.
- Repeat the same actions with the links in the chain.
- Ask students how many more dots are needed to fill the frame for a total of 10, and give them a few moments to find the answer. Then call on several students to give their answer and explain how they figured it out. (This can be done with the dots on the ten-frame some days, and with the links on the measuring strip on other days.)
- Have the class determine how many days they have been in school by counting the dots in the filled frames by 10s and the dots on the current frame by 1s. Record the number on the Classroom Number Line. (Students can count the links in the completed chains by 10s and the links currently being collected by 1s instead of the dots some days.)

Note

If time allows some days, have students count all the dots or all the links in the whole collection by 1s to reconfirm the total.

Key Questions

Use the questions and prompts below this month as students continue to develop skill at counting by 1s and by 10s to 100 and beyond.

- How many dots/links did we have on the ten-frame/chain yesterday? Can you show with your fingers? How did you count the dots/links?
- How many dots/links will we have on the ten-frame/chain after we add the dot/link for today? How do you know?
- How many more dots/links do we need to add to the ten-frame/chain to complete the first row/set of 5? How many more to fill every box on the frame/measuring strip to 10? How do you know?
- Can you use your train of 10 Unifix cubes to show how many dots we have on the ten-frame right now and how many more we need to make 10 in all?
- Let's count the dots in the filled frames by 10s and the dots on the frame we're working on right now by 1s to find out how many days we've been in school so far this year.
- Will we get the same total if we count all our finished chains by 10s and the links on the chain we're working on right now by 1s? How do you know?
- How many more days until we've been in school for 100 days?

 © The Math Learning Center | mathlearningcenter.org

Note When you fill the first ten-frame and complete the first chain of 10 for the month, move the frame and the chain off to the side with the rest of the filled frames and completed chains. Post a new, empty ten-frame on the display board. However, leave the Chain-Link Measuring Strip in place, and use it as a mat on which to build the next chain of 10 links.

Activity 1

Introducing Crandall the Crab — Day 3

1 Draw students' attention to the copy of the Crandall the Crab Teacher Master you posted on your Number Corner display board.

- Give students a few moments to examine the sheet quietly.
- Then ask them to share observations, first in pairs and then as a whole group.

2 Explain that this is a picture of Crandall the Crab, who is friends with Hap the Grasshopper.

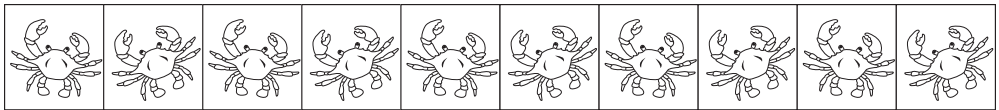
- Let students know that Hap invited Crandall to join the class in order to help them practice counting by 10s.
- Then read the poem to students and point to each of Crandall's legs as the class counts to confirm that Crandall has 10 legs.

3 Next, draw students' attention to the Counting by Tens Strip you posted in or near the Number Corner.

Again, give students a few moments to examine the strip quietly and then share observations, first in pairs and then as a group.

4 Work with students to establish the connection between the crabs and the numbers on the strip.

- Have students count each of the crabs, one by one, as you point to them.
- When the class establishes that there are 10 crabs on the strip, explain that these are pictures of Crandall and 9 of his cousins.
- Point to the first crab on the strip and ask students how many legs he has.
- Point to the second crab and pose the same question. Then ask the students how many legs the two crabs have in all. After they've had a few moments to consider the question, work with students to count the legs on the first two crabs, first by 1s and then by 10s.
- Repeat this with the next crab or two, helping students start to understand that each new crab in the sequence contributes 10 more legs.



10	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**

5 Finally, have a student helper point to each of the crabs on the counting strip as you and the rest of the class count the legs by 10s to 100.

Literature Connections

It's quite likely that you will reach the 100th day of school sometime in February. Since 100 is synonymous with "really a lot" for many young children, this may seem like a real landmark to your kindergartners, and one you might want to take note of and celebrate. Here are two books with ideas about how to commemorate the day, as well as some stories your students might enjoy.

100 Days of School by Trudy Harris

100th Day of School (Celebrations in My World) by Reagan Miller

100 School Days by Anne Rockwell

Happy 100th Day! by Susan Milord

*The Night Before the 100th Day of Schoo*l by Natasha Wing

Miss Bindergarten Celebrates the 100th Day of Kindergarten by Joseph Slate

Activity 2

Counting Around the Circle by Tens — Days 10, 15, 18

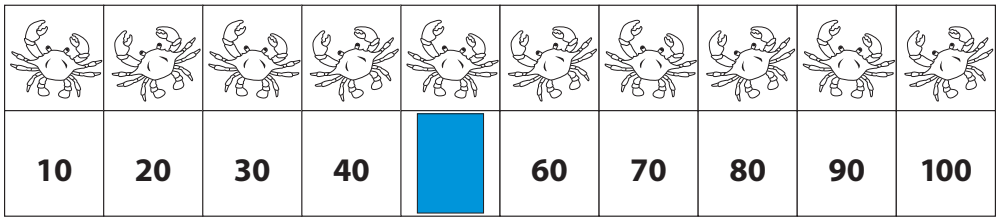
1 Read the Crandall the Crab poem to the class again, and point to each of his legs as students reconfirm that he has 10 of them.

2 Then quickly re-examine the Counting by Tens Strip with the class.
- Review the fact that each of the crabs on the strip has 10 legs, and that the numbers below the crabs tell how many legs the crabs up to that point have in all.
- Point to each of the numbers on the strip as you and the students count by 10s.

3 Then explain to the class that they are going to play a game called Counting Around the Circle, and Crandall and his cousins on the Counting Strip are going to help.

4 Briefly describe the game.
- Tell the class that in a minute, they will stand up and form a circle in the Number Corner discussion area.
- When they are ready, you will choose one of them to start the game by saying the first number in the counting-by-10s sequence: 10.
- You will walk around the outside of the circle, gently touching each of them on the shoulder with your pointer as the class continues to count by 10s, saying one number for each student you tap on the shoulder.
- As they are counting and you are walking around the outside of the circle, you will stop behind one of them and say "stop" to signal the counting to stop.
- When you stop the count, you will hand the student who said the last number a sticky note. That student will find that number on the Counting by Tens Strip and cover it with the sticky note.
- Then the student will return to the circle. The class will repeat the number on which you stopped, and the count will begin again from that number.

5 After you've explained the game, invite students to stand up and form a circle. Then position yourself outside the circle and begin.
- Stand behind one of the students, tap her on the shoulder with your pointer, and have all the students say "ten."
- Walk slowly around the outside of the circle, tapping each student you pass gently on the shoulder as you and students verbalize one of the numbers in the sequence.
- After you tap the fourth or fifth student and verbalize the number with the class, say "stop," and hand a sticky note to that student.
- Have that student leave the circle, find the number on the Counting Strip, and cover it with the sticky note.



6 Have the student return to the circle. Repeat the number you stopped on with the class, and continue walking around the circle.

7 After every few numbers say "stop" to pause the count. Give the student you stopped behind a sticky note. Have him leave the circle, find the number on the Counting Strip, and cover it with the sticky note.

- When you and the students reach 100, start again at 10 and continue counting.
- Keep stopping every few numbers, making sure to stop on a number that is not yet covered, and asking the student behind whom you stopped to cover the number.

SUPPORT As you choose students to cover the numbers, keep in mind that finding the number becomes easier as the game goes on since there are fewer and fewer numbers to choose from.

8 Continue to play until all of the numbers on the Counting Strip are covered.

- Then have all the students sit down facing the Counting Strip.
- Reassure them that if they didn't get a turn to cover one of the numbers on the strip today, you'll be playing the game again later in the month.
- Conclude the game by removing each of the sticky notes from the Counting Strip as you and the class count by 10s. (Save the sticky notes to use the next time you play the game with the class.)

9 When you play the game again later in the month, here are a couple of variations you might want to try if your students seem ready to play at a more challenging level.

- Rather than having the whole class count by 10s with you, ask each student to verbalize the next number in the sequence as they count around the circle by 10s.
- Start the game with all the numbers on the Counting Strip covered. When you say "stop," and the student at whom you stopped leaves the circle, have her *remove* a sticky note from the strip. Continue to play until all the numbers on the strip are revealed.

 © The Math Learning Center | mathlearningcenter.org

February Computational Fluency

Representing Addition & Subtraction on the Farm

Overview

Students use Unifix cubes in two different colors to represent and solve story problems about farm animals. Later in the month, they focus on different combinations that make 10 using story problems as a context. Using their mats and cubes, they solve for the second addend that makes 10, and work with support from the teacher to write matching number trees.

Skills & Concepts

- Given a number from 1–20, count out that many objects (K.CC.5)
- Represent addition and subtraction with objects, verbal explanations, and numbers (K.OA.1)
- Solve addition and subtraction story problems (K.OA.2)
- For any number from 1 to 9, find the number that makes 10 when added to that number (K.OA.4)
- Record pairs of numbers whose sum is 10 using numbers (K.OA.4)
- Reason abstractly and quantitatively (K.MP.2)
- Model with mathematics (K.MP.4)

Materials

Activities	Day	Copies	Kit Materials	Classroom Materials
Activity 1 Farm Animal Story Problems to Ten	4, 8		• Five-Frame Display Cards (see Preparation) • Numbers to Ten Counting Mats (1 per pair of students, plus 1 for display)	• Unifix cubes (see Preparation) • marker
Activity 2 The Case of the Missing Animals	12, 17			• Unifix cubes (2 trains of 10, each in a single, different color per student pair, and 2 trains for display) • marker • student whiteboards, markers, and erasers (half-class set)

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

Preparation

- Mix the Five-Frame Display Cards so they're in random order and place them in a stack, face-down, where you can access them easily as you're conducting the workout in the Number Corner discussion area.
- Prior to conducting the first activity, have students help put together trains of 10 Unifix cubes, each train in a single color. Make half the trains in dark colors, such as brown, black, or burgundy, and half the trains in light colors, such as white, yellow, or light blue. Prepare enough trains for each student to have one in a light shade and one in a dark shade. (You will only need half as many trains the first time you conduct the activity because students will be working in pairs. The second time around, each student will need trains in two different colors.)

Vocabulary

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

add*
count*
in all
number tree
plus
story problem
sum or total*
ten-frame

 © The Math Learning Center | mathlearningcenter.org

Mathematical Background

Starting this month, students will add to ten in the context of themed story problems. During the first half of the month, they pose and solve problems, and the teacher models how to write addition equations to represent the situations. During the second half of this month, students focus specifically on composing ten. They are presented with a single number and asked to determine how many more are needed to make 10. Making 10 is a powerful strategy that supports addition and subtraction to 10 and 20 and can be generalized to work with sums to 100 and beyond, because students are able to consider the structure of the number system and use repeated reasoning.

Activity 1

Farm Animal Story Problems to Ten — Days 4, 8

1 Have your students join you in the Number Corner discussion area and prepare to conduct the activity.

- After students are seated in a circle, pair them up, and give each pair a Numbers to Ten Counting Mat to put between them with the ten-frame side facing up.
- Then pass out one train of 10 cubes to each student. Make sure that one student in each pair gets a light-colored train of 10 and the other student gets a dark-colored train of 10.
- While you are passing out the materials, ask students to name some farm animals they know, No doubt, there will be some mooing and baaing. Consider it part of the staging!

2 Let students know that you're going to work with them to tell some story problems about farm animals. Explain that they'll work with their partners to show and solve each problem using cubes on their counting mat.

SUPPORT Before you start, have students count the squares by 1s on their counting mats (ten-frame side up). How many squares are there on the mat?

3 Then ask students to each count the cubes in their train so they can be sure they have 10.

You'll want to have a few extra cubes on hand in case a few students discover they're short by a cube or two.

4 Start the first story:

Once there were three dairy cows in the field eating grass.

5 Ask the partners with the light-colored cubes to put 3 cubes on their counting mats to represent the dairy cows in the field, while you model the representation on a mat of your own.

6 Then continue the story:

Four more cows came to eat grass with them.

7 Ask students to turn to their partners and share what they might do next with their cubes.

Invite a few volunteers to share their thinking with the class. Students will likely suggest that the partners with the dark-colored cubes add theirs to the mats. If this is not the case, make the suggestion yourself.

Students *We need 4 more cubes for the new cows.*

I think we need the other color cubes.

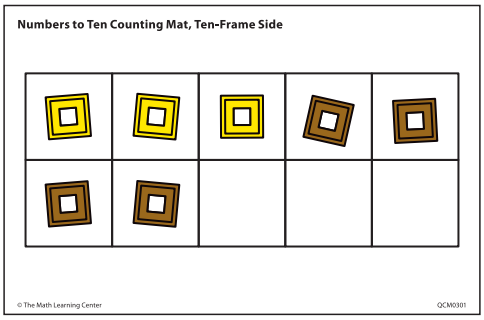
Key Questions

Use questions like the following to prompt students to consider a variety of combinations for a single number and to extend their thinking about addition toward subtraction, as an unknown addend problem.

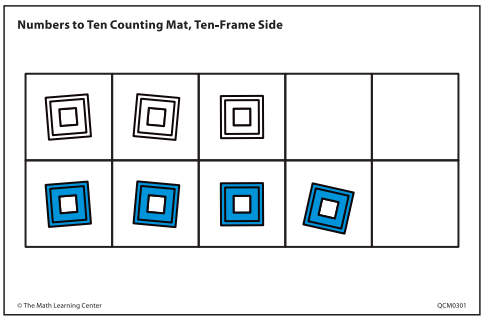
- In our first problem, there were 3 cows in the barn, and then 4 more came to join them. How many in all? How did you figure it out?
- Can 3 + 4 = 7, if 4 + 3 = 7? Are they the same? How do you know? Can you use your Unifix cubes to show the equivalence and prove why it is so?
- The farmer thought he had 10 horses, but there were only 3 in the stable. How many were missing? How did you figure it out?
- What number tree might we write to show the situation?
- You added 3 to get to 10. What would you have if you took the 3 back off the mat?

 © The Math Learning Center | mathlearningcenter.org

Put 2 up here at the top, and then add the other 2 at the bottom.



There are more cows now. Look 3 on top, 4 on the bottom. There's 1 more cow in the bottom row.



8 Ask students to count the total number—the whole collection—of cubes on their mats with their partners, and be ready to share their solutions and strategies with the class.

Teacher *How many cows are in the field now? Work with your partner to find out, and then I'll ask some of you to share your strategies for finding the total.*

Students *I counted 1, 2, 3… 4, 5, 6, 7.*

We knew there were 3 cows, so we started with the second color, 4, 5, 6, 7.

We got 7 too! We started with the 4 cows and then counted the cows on top, 5, 6, 7.

9 After students share some of their strategies, record an equation to summarize the problem on the chart paper or whiteboard.

- Read the equation as you write it, and then have students read it with you a second time.
- Ask students to link each number and symbol in the equation back to the original story problem.

Teacher *Even though you used different strategies, everyone seems to agree that 3 cows and then 4 more cows makes a total of 7 cows. I'm going to write an equation on the board to show our work. Watch and show thumbs up if you agree with what I write. Here I go… 3 cows plus 4 more cows makes 7 cows in all.*

Literature Connections

You might want to share a book or two about farm animals with your students early in the month to spark their creativity in telling story problems. Here are a couple of our favorites.

Farmer Brown by Debbie Knill

Click, Clack, Moo: Cows That Type by Doreen Cronin

3 + 4 = 7

Teacher *Let's read the equation together, ready?*

Students and Teacher *Three plus 4 makes 7.*

Teacher *What does the 3 in this equation mean? Why did I start with a 3?*

Nia *Because there were 3 cows eating grass.*

Teacher *What about the 4?*

Trevone *That's for the other cows that came.*

Teacher *Why is there an addition or plus sign between the 3 and the 4?*

Azalea *Because more cows came. There were 3, and then 4 more came, so it's more.*

Isaac *More came, so you have to add.*

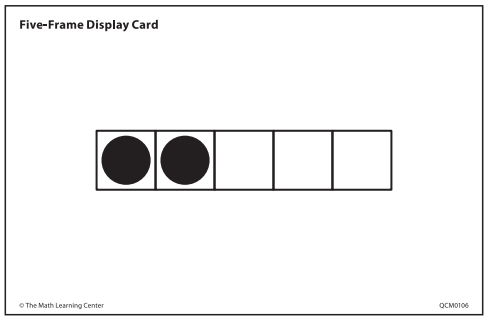
Teacher *And what about the 7 at the end of the equation? What does the 7 mean?*

Students *That's how many cows!*

There were 3 and then 4 more, so now it's 7, see?

10 Work with the class to pose and solve another farm animal story problem.

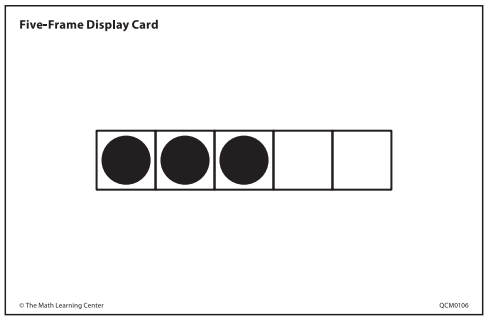
- Ask a student to suggest a new farm animal for the next story problem.
- Ask a second student to draw a card from the stack of Five-Frame Display Cards and hold it up for all to see.



- Use the animal named and the number shown on the Five-Frame Display Card to provide the starting point for the second story problem.

Teacher *OK, we just heard a suggestion that we use horses for our next story problem. How many dots were there on the card we looked at? Two? OK, there were 2 horses in the stable. Can you show that on your mats?*

- Have the student with the light-colored cubes in each pair place the designated number of cubes on the counting mat.
- Then invite a third member of the class to pull another Five-Frame Card from the stack to represent the second addend and hold it up for all to see. Use the number to tell the second part of the story problem.



Teacher *How many dots are there on the card he's holding up? That's right, it's 3. So, the farmer brought 3 more horses into the stable. How many horses were there in all?*

- Have the student with the dark-colored cubes in each pair place the second quantity on the counting mat.
- Ask students to count the total number of cubes on their mats with their partners, and be ready to share their solutions and strategies with the class.

11 Discuss students' strategies for finding the total, including counting all, counting on from the first addend, and counting on from the larger quantity.

CHALLENGE Discuss which of the strategies shared is most efficient.

12 Write an equation on the chart paper or whiteboard to summarize the story problem.

Read and discuss the equation with the class.

13 Repeat steps 10–12 once or twice more, depending on the time available.

14 When you conduct this activity a second time, vary it by giving each student a counting mat and two trains of Unifix cubes in different colors, rather than having students work in pairs.

Activity 2

The Case of the Missing Animals — Days 12, 17

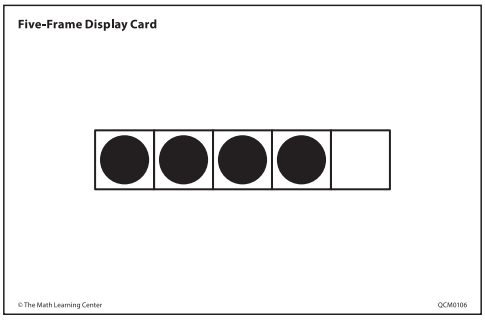
1 Have your students join you in the Number Corner discussion area and prepare to conduct the activity.

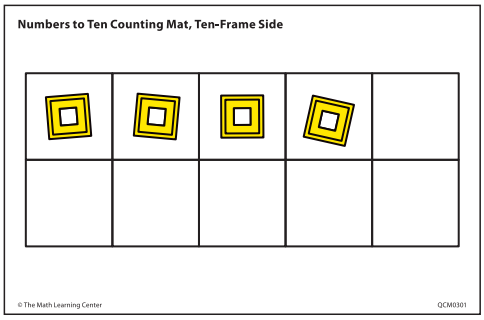
- After students are seated in a circle, pair them up, and give each pair a Numbers to Ten Counting Mat to put between them with the ten-frame side facing up.
- Then pass out one train of 10 cubes to each student. Make sure that one student in each pair gets a light-colored train of 10 and the other student gets a dark-colored train of 10.

2 Let students know that today they'll be trying to get 10 animals rounded up on the farm. Work with their help to set the stage for the first problem.

- Select two students at random.
- Ask the first student to name a farm animal to play the starring role in the first story problem.
- Ask the second student to draw one card from the Five-Frame Display Card deck to establish the starting number.

3 Have each pair of students set out enough cubes in one color on their counting mat to match the number of dots on the Five-Frame Card, as you do so on your own mat.





4 Explain that the farmer thought he had 10 of the animals named by your first student, but now some of them are missing!

Create a bit of drama around this situation. How many animals are missing from the pen, stable, or barnyard? Where did they go? When will they return?

> ***Teacher*** *Our farmer had 10 chicks but now there are only 4 in the pen! Where did the others go? Whisper to your neighbor, where do you think they are? Now we have a big math problem. We have to help our farmer figure out how many chicks are missing.*

5 Ask students in each pair to work together to figure out how many animals are missing.

Give them a minute to work with the cubes on their mat. Some students may use cubes in a second color to figure out how many animals are missing, while others may use the empty boxes on the mat.

> ***Students*** *4, 5, 6, 7, 8, 9, 10. Ten are missing.*
>
> *I don't think that's right. There were 4, so it can't be 10 missing.*
>
> *Count only the second color! That's how many more are lost. 1, 2, 3, 4, 5, 6.*
>
> *Six are missing. That's the second color.*
>
> *I can see 1 is missing in the top row, and 5 more are missing in the bottom row, so that's 6 in all. Maybe they went to find their mom.*

6 Then invite volunteers to share their solutions and strategies.

Don't be too concerned if some of your students are a bit puzzled by the problem, and don't seem to get it the first time around. They will have more opportunities during this and future activities to solve for missing addends.

7 Repeat steps 2–6 to pose and solve another story problem with students. This time, after a few of them share their solutions and strategies, work with input from the class to record a number tree on the chart paper or whiteboard representing the problem.

> ***Teacher*** *How many pigs did our farmer find in the pen this morning?*
>
> ***Students*** *Only 3!*
>
> *He was supposed to have 10, but some of them got out so they could go play in the mud!*
>
> *Seven of them got away. We could tell because there were 7 empty boxes.*

We put 7 brown cubes for the missing ones because they got all muddy!

Teacher *I'm going to make a number tree here on our chart paper to show what happened. How many piggies was the farmer supposed to have?*

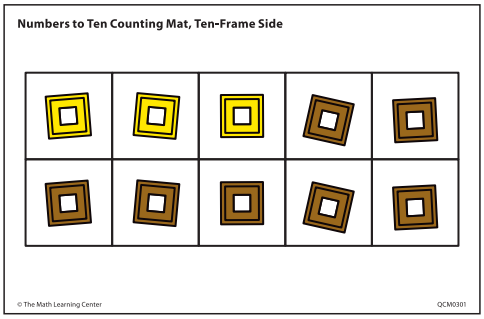
Students *Ten!*

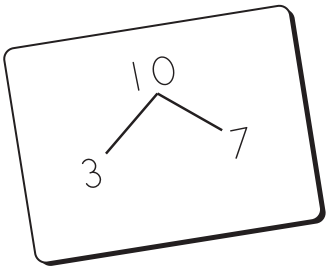
Teacher *So, I'll write 10 at the top of the tree. Then, how many did he find in the pen when he came to feed them?*

Students *Three! Only 3!*

Teacher *That's what I'll write on the tree branch on the left. And how many were missing—how many did the farmer have to find and herd back into the pen so they could have their breakfast?*

Students *Seven!*





8 Repeat steps 2–7 once or twice more, as time allows.

9 When you conduct this activity a second time later in the month, vary it using one or more of the following suggestions:

- Give each student a counting mat and trains of cubes, each in a different color, rather than having them work in pairs.
- Have students work in pairs, but ask one student to handle the cubes and the counting mat, while the other records a number tree on a student whiteboard to represent the first problem. Have students trade materials for the second problem, so they each have an opportunity to handle the cubes and record a number tree.

Continue to provide support by modeling each problem on your own counting mat and recording a number tree on the chart paper or whiteboard as students work with their materials.

February Number Line

Ten & More

Overview

Thinking about teen numbers as 10 ones and some more ones is the focus of this month's Number Line workout. Students identify quantities on ten-frame and double ten-frame cards, and then locate the numbers that represent these quantities on the number line. A new activity called Partner Numbers is introduced as a way to think about decomposing teen numbers into 10 ones and some more ones using finger patterns. Interval counting is also reinforced as students use the number line to add single-digit quantities to 10 to get a teen number total.

Skills & Concepts

- Count to 20 by 1s (K.CC.1)
- Count forward from a given number, rather than starting at 1 (K.CC.2)
- Write numerals from 0 to 20 to represent a number of objects (K.CC.3)
- Demonstrate that each successive number name refers to a quantity that is one larger than the previous number name (K.CC.4c)
- Decompose numbers from 11 to 19 into a group of 10 and some 1s (K.NBT.1)
- Attend to precision (K.MP.6)
- 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
Activity 1 Playing Flash & Find	2, 5		• Number Line pocket chart • Number Line Display Cards 1–20 (see Preparation) • Ten-Frame Pair-Wise Display Cards • Double Ten-Frame Pair-Wise Display Cards	
Activity 2 Playing Capture My Number	7, 9		• Number Line pocket chart • Number Line Display Cards 1–20 (see Preparation)	• student whiteboards, markers, and erasers (class set)
Activity 3 Making Partner Numbers	13, 14		• Number Line pocket chart • Number Line Display Cards 1–20 (see Preparation)	
Activity 4 Playing Roll & Count On from Ten	16, 19		• Number Line pocket chart • Number Line Display Cards 1–20 • grasshopper pointer • 1 die numbered 4–9	• small plastic food storage box with clear lid to make dice shaker box (see Preparation) • student whiteboards, markers, and erasers (class set)
Activity 5 Completing More Hops with Hap Page	20	**NCSB 17*** More Hops with Hap	• Number Line pocket chart	

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

** Run 1 copy of this page for display.*

Vocabulary

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

after*
before*
choral count
column*
digit*
forward
identify
interval
ones*
number words for 1–20
numeral
row*
strategy
tens*
ten-frame

 © The Math Learning Center | mathlearningcenter.org

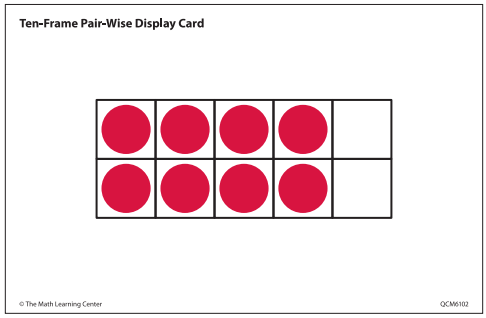
Preparation

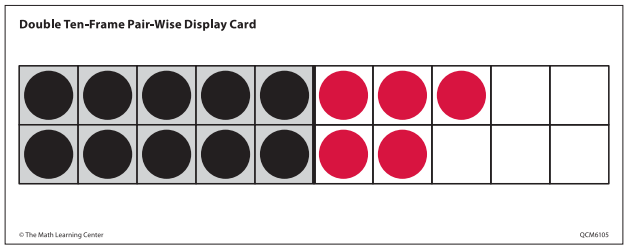
Number Line Pocket Chart

Prior to Activity 1, place the numbers 1–20 in order in the Number Line pocket chart. Cover each of the numbers 1–9 and 11–19 with a blue card. The numbers 10 and 20 are covered with red cards that serve as reference points for students. Activity 1 starts will all cards up and the numbers revealed, but the cards need to be in position for students to close.

Ten-Frame and Double Ten-Frame Pair-Wise Display Cards

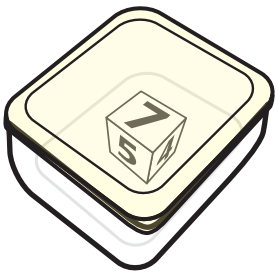
Prior to Activity 1, locate your Ten-Frame and Double Ten-Frame Pair-Wise Display Cards. Remove the 0 card and 10 card from the set of Ten-Frame Pair-Wise Cards so that you are using only cards 1–9. You will need cards 10–20 from your Double Ten-Frame Pair-Wise set. Even though the cards are different sizes, randomly mix the two sets together, keeping them face-down in a pile. You may want to place these in a plastic bag or envelope to keep them together as you will need them throughout the month.





Dice Shaker Box

Prior to Activity 4, place a 4–9 numbered die from your Number Corner Kit in a mini plastic storage container with a clear lid. This makes a dice shaker box that allows the die to be easily rolled, read, and contained. Students enjoy shaking the box, and the problem of runaway dice is solved!



Key Questions

Use these questions to help students think about comparing numbers:

- How are the ones and teens number families alike? How are they different?
- What does the first digit in the teens number tell you?
- Which number comes first on the number line—6 or 16 (8 or 18, 4 or 14, 2 or 12)? How do you know?

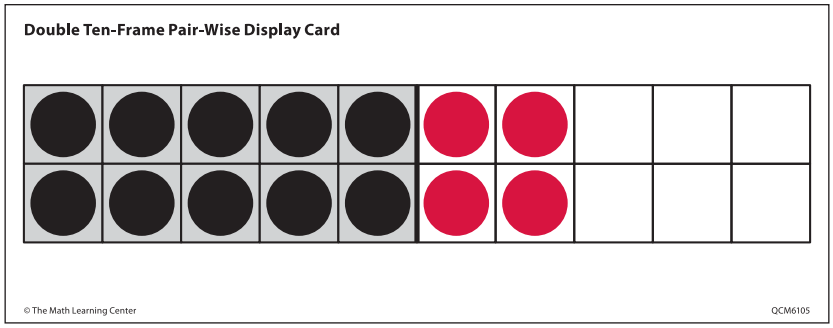
Use the following questions to challenge capable students:

- What is 10 and 4 more? Ten and 6 more? Ten and 3 more? Ten and any single-digit number? How do you know?
- If you have 17 (or any teen number) how many more would you need to make 20? Can you prove it?

Mathematical Background

The foundation for understanding place value and our base ten system begins in kindergarten as students learn to compose and decompose numbers from 11 to 19 into 10 ones and some more ones. Eleven is 10 ones and 1 more, 12 is 10 ones and 2 more, and so on. Working with teen numbers in this way lays the groundwork for first graders to develop unitization; the ability to see and understand 10 ones as a new unit called a 10.

Double ten-frames with the dots arranged in a pair-wise fashion are used this month to support students seeing teen numbers as "10 and some more." While both pair-wise and five-wise double ten-frames can be used to support this concept, the pair-wise structure shows 10 black dots on the left and some more dots on the right. This formation parallels the way we write teen numbers. This structure also encourages students to see "10 and some more" or "10 and a double" or "10 and a double plus or minus 1."



This double ten-frame card shows 10 black dots and 4 more. Ten and 4 is 14.

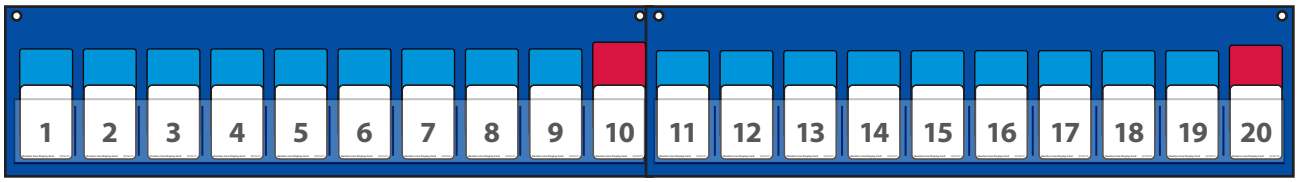
The games and activities introduced this month reinforce the concept that the teen numbers are made up of 10 and some 1s. If you observe that this is a difficult concept for some of your students, be sure to provide them with multiple opportunities to connect the quantity to the written form of number. Using two ten-frame counting mats arranged side-by-side, students can build what they see on the double ten-frame cards to reinforce their understanding of quantity.

Activity 1

Playing Flash & Find — Days 2, 5

For this activity you will need the set of Ten-Frame Pair-Wise Display Cards and Double Ten-Frame Pair-Wise Display Cards you prepared. Begin today's activity with all of the cards raised on the Number Line pocket chart, revealing the numerals 1–20 as shown.

1 Direct students' attention to the Number Line pocket chart. Explain to the class that today they are going to work together to lower some of the raised cards on the chart by naming numbers they see on ten-frame and double ten-frame cards.



2 Show the class your stack of prepared ten-frame cards and explain the game.

- Let students know that there is one card for each number showing on the Number Line pocket chart.

- You will flash the card quickly, and they will talk with their partner and determine the number of dots shown on the card.
- When they agree on a number, they should give thumbs up and wait for a signal before calling out the number.

3 Flash one of the ten-frame or double ten-frame cards for 2–3 seconds as you ask students to think about how many dots they see.

SUPPORT You may have a few students who need to see the display cards for an extended time. Consider having these students sit close to you, allowing them to look at the cards a bit longer without others who do not need this support viewing the cards.

- Invite students to talk with a partner about what they saw and give thumbs up when they have a number.
- On a signal such as a snap or a clap, ask the class how many dots they saw.

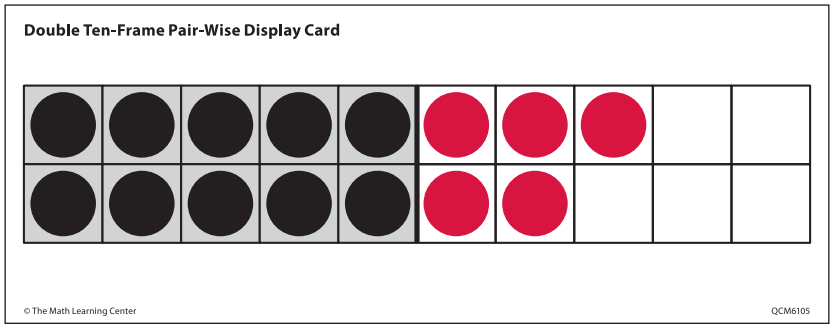
4 Call on one or two pairs of students to explain how they counted the dots or knew the number.

SUPPORT Watch for students who may be trying to count the dots by ones. Encourage students to think about the dots in chunks: Ask, "How many dots on top? How many dots on the bottom?" Or "How many black dots? How many red dots?"

5 When the class is in agreement, show the display card again and choose a helper to lower the card for that number.

6 Continue to flash display cards, repeating steps 4–5 until about half of the cards are shown and the cards are lowered on the corresponding numbers.

To keep the game moving along quickly, spend less time on the cards that are very familiar to most students, such as 1, 2, or 10. Encourage students to think in terms of 10 and more for the teen numbers. The Double Ten-Frame Pair-Wise Cards are a good model to encourage this thinking since they show 10 black dots, a filled ten-frame, on the left and more red dots on the right.



10 black dots and 5 red dots make 15 dots in all

7 If time allows, continue playing until all the display cards are shown, and all the numbers in the pocket chart are covered. Then play the entire game again the second time you conduct this activity with the class.

If time is limited, leave the Number Line pocket chart the way it is at the end of step 6, with half the cards still up, and continue the game the second time you conduct the activity with the class.

SUPPORT If students are having a difficult time determining the number of dots, consider separating the cards and showing all of the single-digit ten-frame numbers first. Then move on to the teen numbers shown on the double ten-frames.

CHALLENGE Start the game with all of the number cards hidden, and have students pull the red and blue cards up to reveal the numbers corresponding to the ten-frame and double ten-frame cards. Students will need to use what they know about number order and number relationships to find the numbers on the chart. The numbers will get easier to find as more numbers are uncovered, so you may want to call on students who need the most challenge to find numbers early in the game.

Activity 2

Playing Capture My Number — Days 7, 9

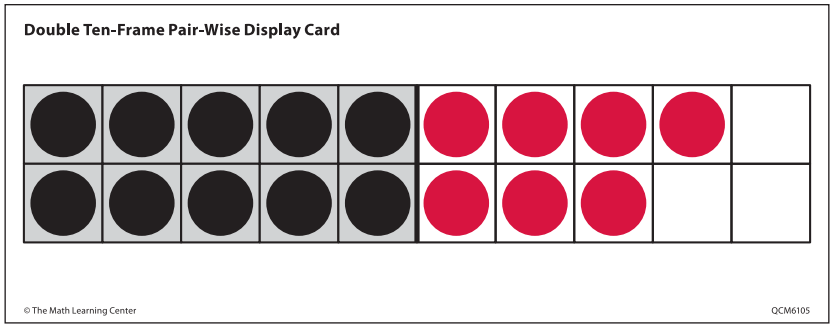
Today's activity begins with all of the numeral cards uncovered on the Number Line pocket chart. You will need your prepared ten-frame and double ten-frame cards from Activity 1. Students will need whiteboards, markers, and erasers.

1 Have students get their materials and join you in the Number Corner discussion area.

2 Tell the class that today they will play a new game called Capture the Number, and they will use the ten-frame and double ten-frame cards they worked with earlier this month.

3 Show students one or two of the Double Ten-Frame Pair-Wise Display Cards, and have them determine what number is represented on the card.

- After a few seconds of quiet thinking time, have students share ideas with partners.
- Then invite several students to share their strategies; emphasize counting a group of 10 and then some more.



Students *That card is almost full!*

I see 10 and 7 more. It's 17.

There's a 10 and 6 and 1 more. That's 17 because 6 and 1 make 7 and then you add the 10.

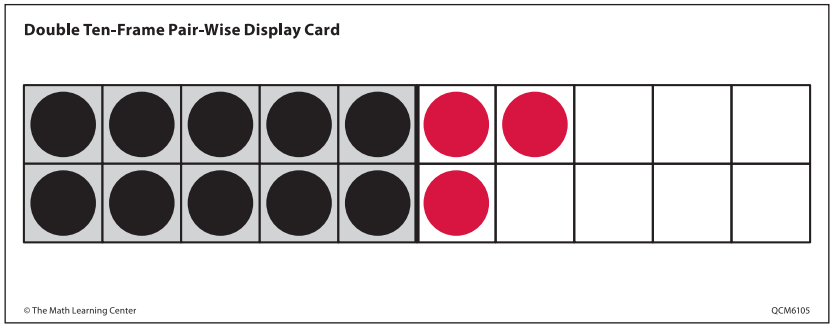
4 Explain to the class how to play the game.

- Tell the class that you will divide them into two teams for the game.
- Explain that members of each team will take turns drawing a card from the top of the stack of display cards.
- The team will identify the number of dots on the card to capture the number.
- When a number is captured, a team member will lower the card to lock in the captured number on the Number Line pocket chart.
- Teams will make a list of the numbers they captured by writing the captured number on their whiteboards.

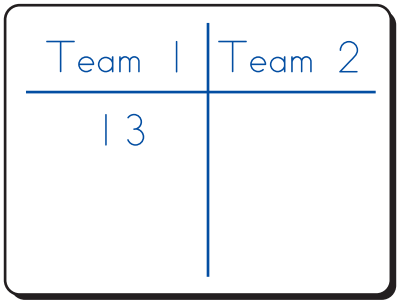
5 On your classroom whiteboard or a piece of chart paper, draw two columns and label the columns Team 1 and Team 2.

6 Have a student from one of the teams take a card from the top of the stack and show it to the class.

- Ask students on that team to determine how much is shown and share their strategies; emphasize counting a group of 10 and then some more when the double ten-frame cards are drawn.
- Encourage students on the other team to help, and offer your assistance as necessary.



7 Once the team agrees on the number, ask all students *on that team* to write the number on their whiteboard while you record it in the team's column.



8 Choose a team member to capture the number by lowering the card on the corresponding number in the pocket chart.

9 Invite a student from the other team to pick a card and repeat the procedure in steps 6–8.

10 Have students from each team take turns back and forth until all the cards are lowered, signaling that all of the numbers are captured.

11 At the end of the game, ask each team to take a turn touching and reading the numbers on their whiteboards—their captured numbers.

Note If time is short, play half the game during the first activity, and the other half during the second activity. If time allows, play the game through all the way twice.

Activity 3

Making Partner Numbers — Days 13, 14

Begin this activity with students seated in front of the Number Line pocket chart. The numeral cards 1–20 should be hidden with red and blue cards.

1 Ask students to sit shoulder-to-shoulder with a partner facing the Number Line pocket chart.

If you have an odd number of students present, choose one student to be your helper. Periodically, you will want to choose different helpers so that all students have the opportunity to participate in the activity.

2 Explain the activity to the class.

- The teacher or student helper will lift a card on the Number Line pocket chart to reveal a number.
- Students will work with their partners to show the number revealed with their fingers.
- If the number revealed is a teen number, partners will lean together with one partner showing 10 on his fingers and the other partner showing the remaining 1s on his fingers.

- Model this with your student helper or another student to show how to make the number with fingers, and then ask all student pairs to do the same.
- If the number revealed is a single-digit number, partners lean away from each other and each student shows the entire quantity with their own fingers because the number is not composed of a 10 and some more 1s.

- Model this with your student helper or another student and then, ask all student pairs to do the same.

3 Ask the students to sit at attention, neither leaning into or away from their partner, to begin the activity.

Have student pairs sit upright at attention between numbers as well.

4 Lift a card to reveal a number, and ask students to show the number as described in step 2.

 © The Math Learning Center | mathlearningcenter.org

5 Continue to randomly lift cards and reveal numbers. For each number, reinforce the fact that the number is either composed of a 10 and some 1s, or just 1s.

Students may enjoy doing this activity at other times during the day. Consider using it as a transitional activity when students are joining you in your discussion area or waiting to be dismissed.

6 If time allows, continue playing until you lift the cards on all the numbers in the pocket chart. Then play the entire game again the second time you conduct this activity with the class.

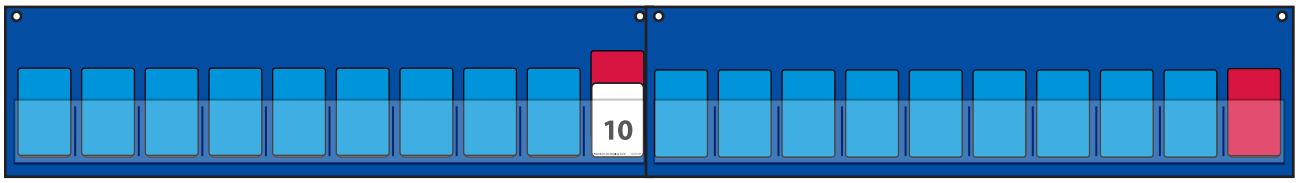
If time is limited, leave the Number Line pocket chart the way it is at the end of step 5, with about half the numeral cards uncovered, and continue the game the second time you conduct the activity with the class.

Activity 4

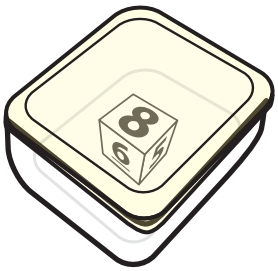
Playing Roll & Count On from Ten — Days 16, 19

Today's activity begins with all of the numeral cards covered on the Number Line pocket chart, except number 10. You will need your grasshopper pointer and dice shaker box with a die numbered 4–9 inside. Students will need whiteboards, markers, and erasers.

1 When students are seated with their materials in front of the Number Line pocket chart, introduce and play a new game, Roll & Count On from Ten.



- Explain to students that today they are going to help Hap count forward from 10 to find a teen number on the Number Line pocket chart.
- Tell the class that the number on the die will tell how many hops forward Hap will take starting from the number 10.
- Choose a student to shake the dice shaker box and read the die to the class.



- Remind students that Hap is on 10, so they will start the count on the pocket after 10.
- Have students count forward the designated number while you point to the screened cards. Students can hold up their fingers to keep track of the number of intervals counted.

> ***Teacher*** *Our helper got an 8. Let's count forward from 10 as Hap takes 8 hops.*
>
> ***Teacher and Students*** *10… 11, 12, 13, 14, 15, 16, 17, 18.*

- Lift the screen on the last number counted (18 in this case) to check whether you counted correctly.

CHALLENGE Ask students to predict the number they will land on before actually counting or raising the card. What will it look like? What will be the first digit? What will be the second digit?

2 Write an equation to represent Hap's hops forward from 10 on the classroom whiteboard or a piece of chart paper.

10 + 8 = 18

3 Repeat steps 1 and 2 a few more times, choosing new helpers to shake the dice shaker box each time.

- Have students record the equations on their whiteboards as you model for them each time.
- Lower the card on the second number after you record each equation so the only number showing at the start of each round is the 10.

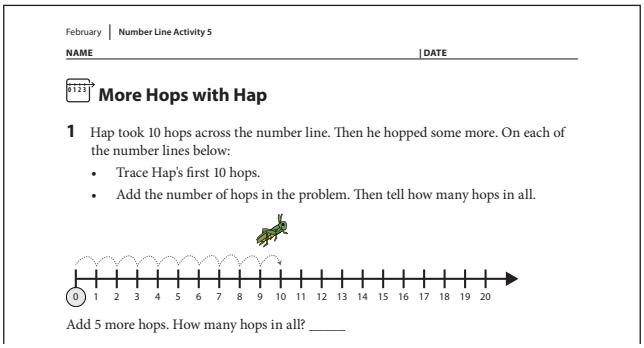
Activity 5

Completing the More Hops with Hap Page — Day 20

Students will sit at their desks or table spots for this activity and need their Number Corner Student Book and a pencil. Consider having these materials ready at their work areas, so they can leave the Number Corner discussion area and go quickly to this activity.

1 Once students are seated, explain that they are going to help Hap hop along a number line on a page in their Number Corner Student Books.

2 Display your copy of the More Hops with Hap page for all students to see.


February | Number Line Activity 5

NAME | DATE

More Hops with Hap

1 Hap took 10 hops across the number line. Then he hopped some more. On each of the number lines below:

- Trace Hap's first 10 hops.
- Add the number of hops in the problem. Then tell how many hops in all.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Add 5 more hops. How many hops in all? _____

- Give students a few moments to examine the page quietly. Ask them to show thumbs up when they have an observation they would like to share.
- Call on two or three students to share their observations.

3 Then ask students to find the More Hops with Hap page in their books. Have them look for Hap near the top of the page and put one finger on him.

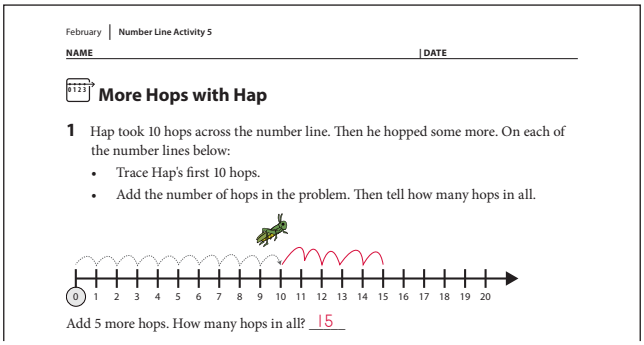
This allows you to scan the room quickly to make sure that everyone is on the correct page.

4 Explain to the class that Hap has been hopping on the number line. Ask students to count and see how many hops Hap has taken so far.

If needed, model for students how to use a finger to trace over the interval lines while counting Hap's hops, and invite students to do the same in their books.

CHALLENGE Note with students that Hap has taken 10 hops and landed on the number 10. Then ask them if this always works. If Hap starts on the 0 and takes 3 hops forward, will he land on the 3? If Hap starts on the 0 and takes 6 hops forward, where will he land? On the 6? Invite students to test this and see.

5 Next, model how to trace the first 10 hops along the line, draw and count the designated number of extra hops, and record the total number of hops in the space provided.


February | Number Line Activity 5

NAME | DATE

More Hops with Hap

1 Hap took 10 hops across the number line. Then he hopped some more. On each of the number lines below:

- Trace Hap's first 10 hops.
- Add the number of hops in the problem. Then tell how many hops in all.

Add 5 more hops. How many hops in all? 15

6 When students understand what to do, give them time to complete the page.

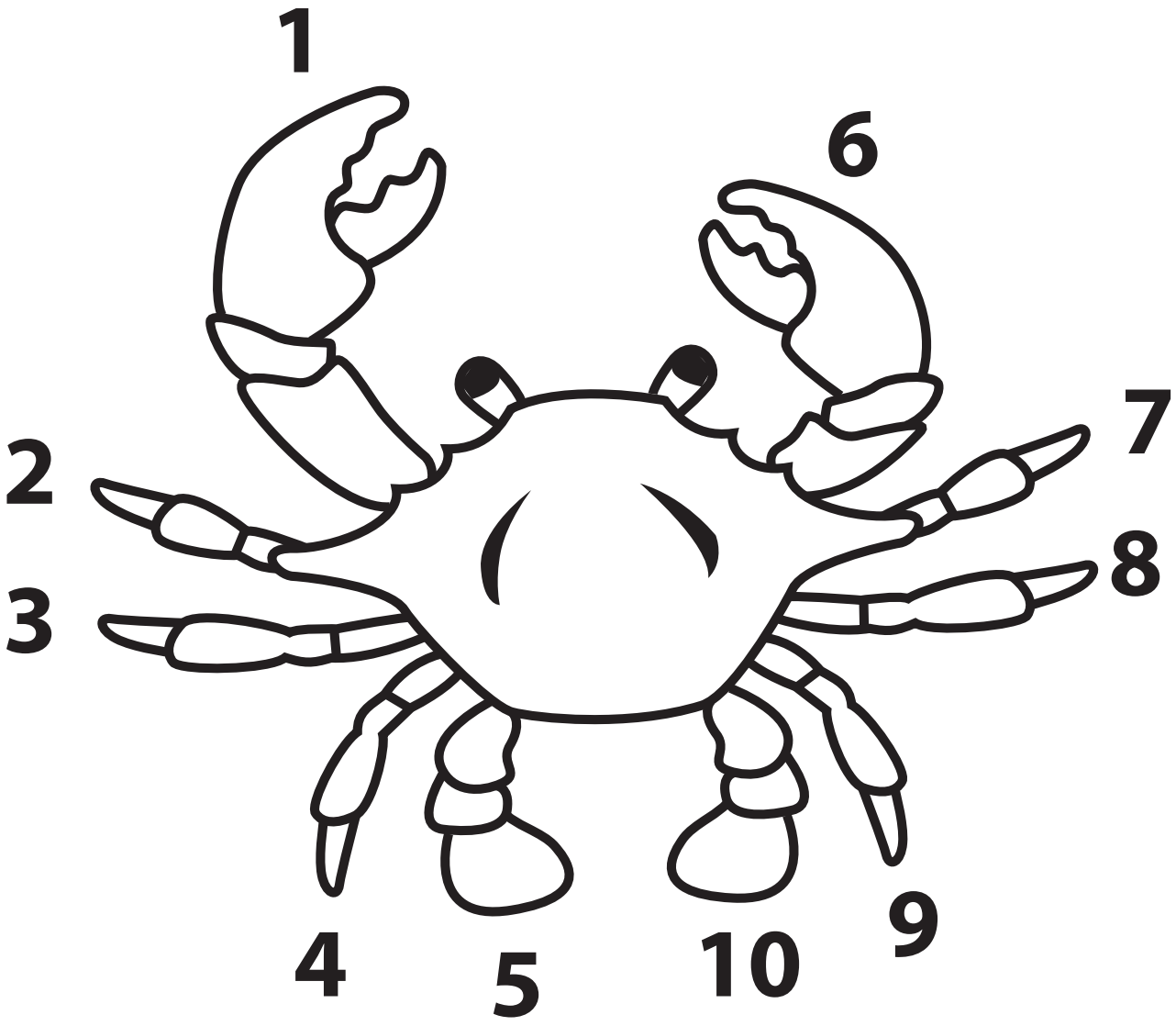
Circulate to assist as needed.

Teacher Masters

KINDERGARTEN – FEBRUARY

NUMBER®
CORNER

Crandall the Crab



I'm Crandall the Crab,

As you can see.

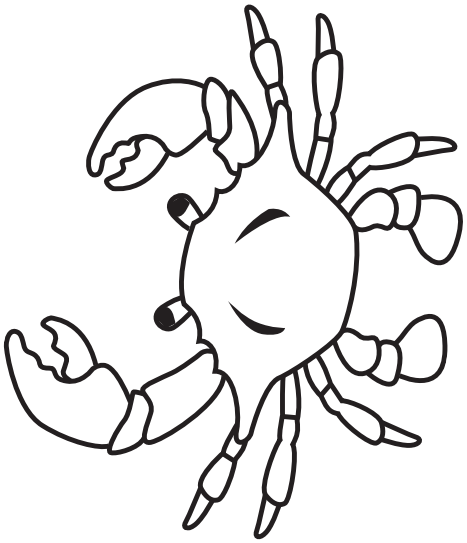
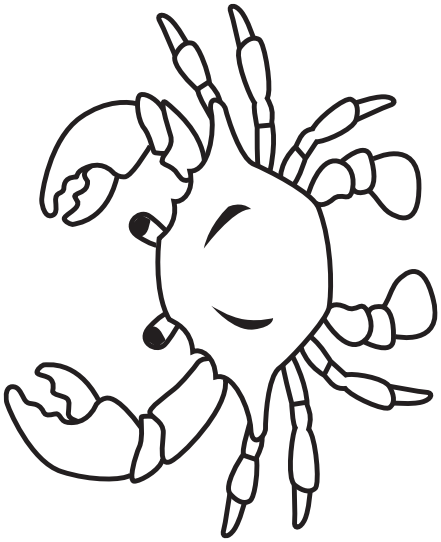
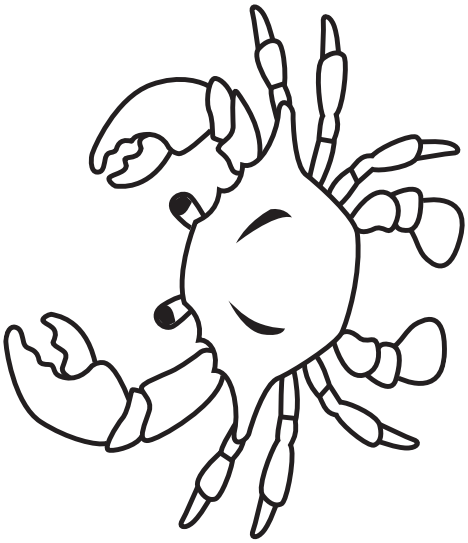
I have 10 legs;

You can count on me!

 © The Math Learning Center | mathlearningcenter.org

Counting by Tens Strips page 1 of 4

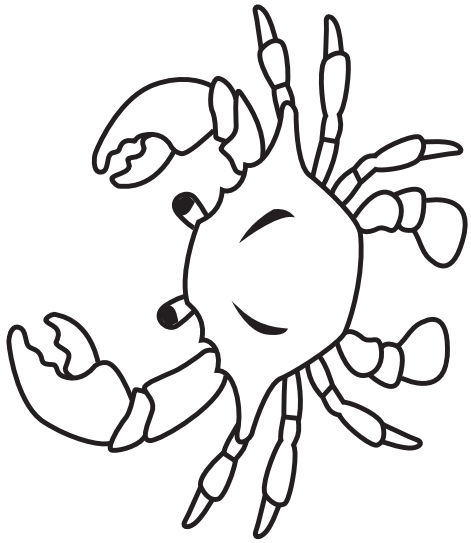
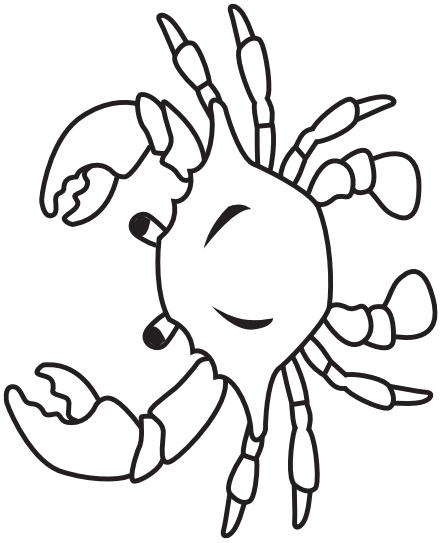
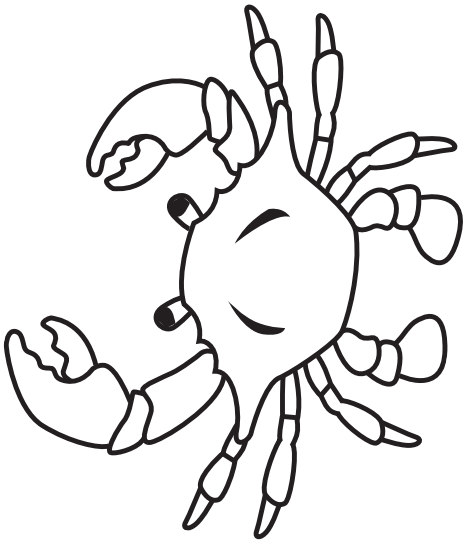
glue

	**30**
	**20**
	**10**

© The Math Learning Center | mathlearningcenter.org

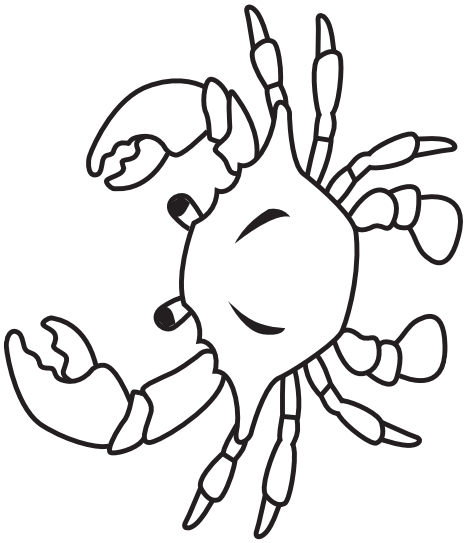
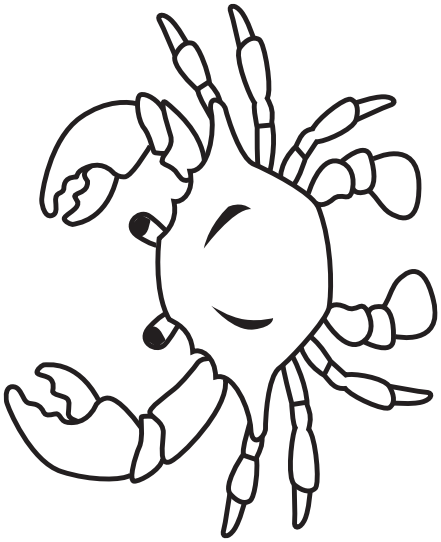
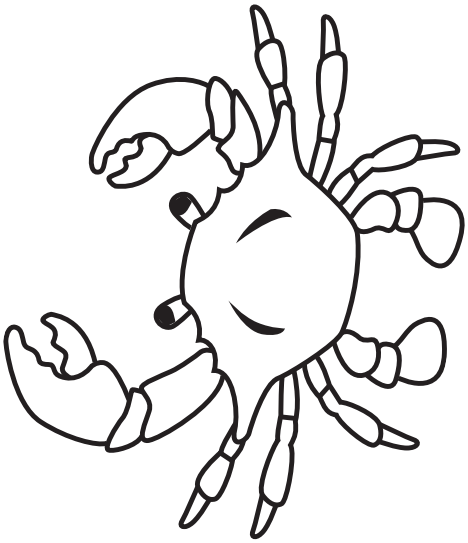
Counting by Tens Strips page 2 of 4

glue

	**40**
	**50**
	**60**

© The Math Learning Center | mathlearningcenter.org

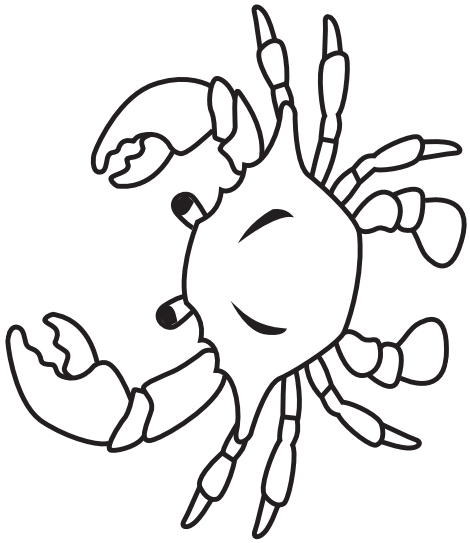
Counting by Tens Strips page 3 of 4

	**90**
	**80**
	**70**

glue

© The Math Learning Center | mathlearningcenter.org

Counting by Tens Strips page 4 of 4



100

© The Math Learning Center | mathlearningcenter.org

Student Book

KINDERGARTEN – FEBRUARY

NUMBER®
CORNER

NAME | DATE

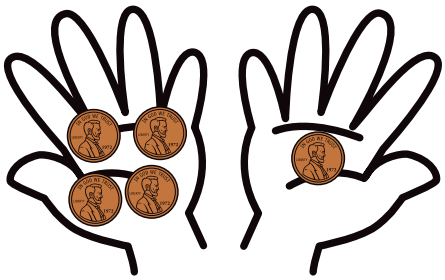
The Five Pennies Problem

1 Benny has 5 pennies. He wants to find out how many different ways he can hold the 5 pennies in his two hands.

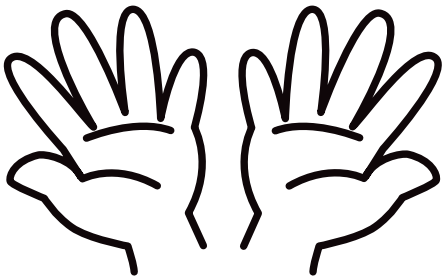
Show Benny six different ways he can hold the pennies in his hands.

- Draw some pennies in one hand and some in the other.
- Make sure each combination is different than all the rest.
- Write an equation to match each combination you make.

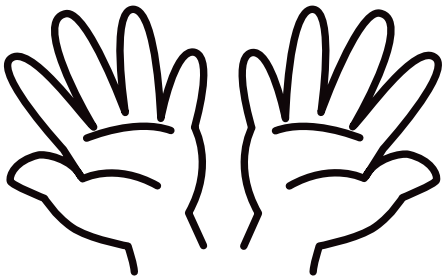
ex



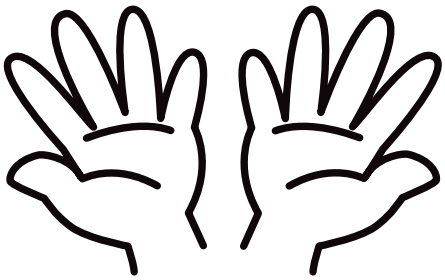
5 = 4 + 1



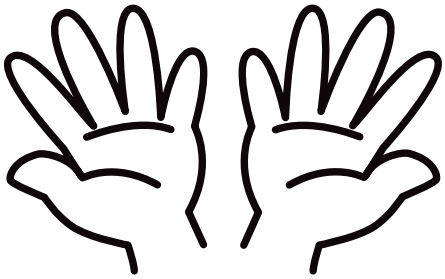
5 = ___ + ___



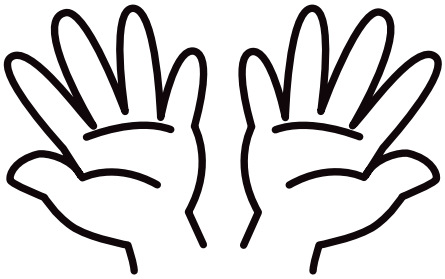
5 = ___ + ___



5 = ___ + ___



5 = ___ + ___



5 = ___ + ___

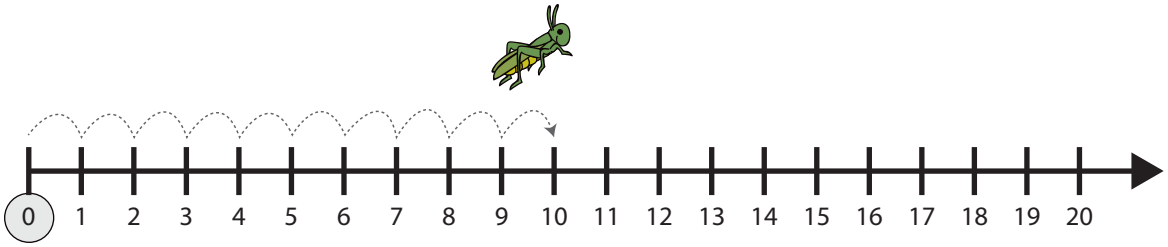
© The Math Learning Center | mathlearningcenter.org

NAME | DATE

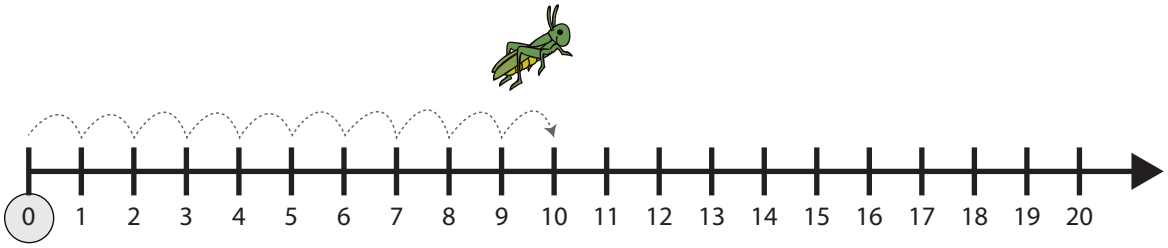
More Hops with Hap

1 Hap took 10 hops across the number line. Then he hopped some more. On each of the number lines below:

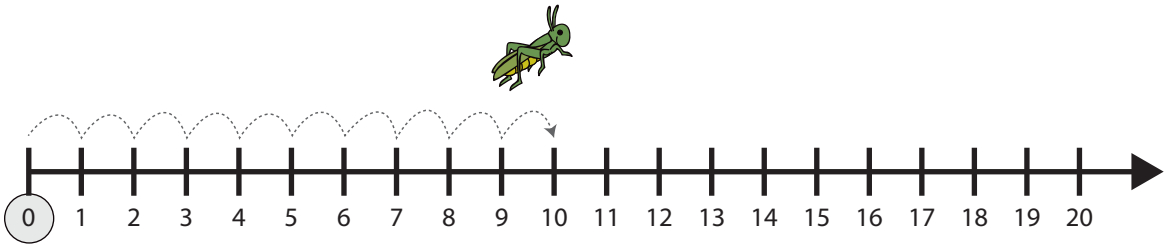
- Trace Hap's first 10 hops.
- Add the number of hops in the problem. Then tell how many hops in all.



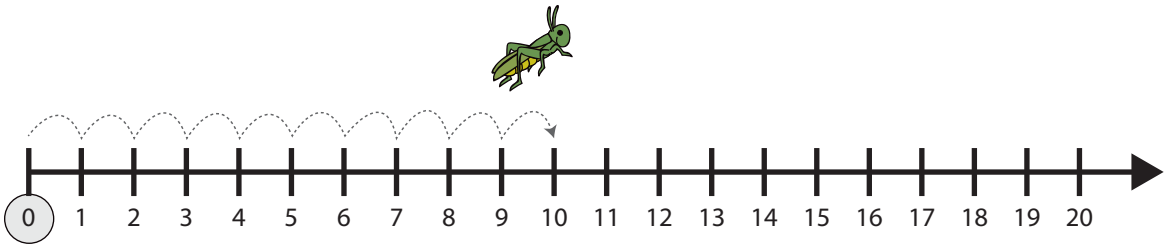
Add 5 more hops. How many hops in all? _____



Add 7 more hops. How many hops in all? _____



Add 3 more hops. How many hops in all? _____



Add 6 more hops. How many hops in all? _____

 © The Math Learning Center | mathlearningcenter.org