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| **Grade K Module 4: Number Pairs, Addition and Subtraction to 10** |
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TEKS Grade K Module 4 Fluencies

Lesson 1

**Fluency Practice (12 minutes)**

⬛ 5-Frames: Counting Dots and Spaces **K.2I** (3 minutes)

⬛ Making 3, 4, and 5 Finger Combinations **K.2I** (4 minutes)

⬛ Make 5 Matching Game **K.2I, K.3A** (5 minutes)

Note: The following fluency activities review hidden partners of 3–5. This review helps students recall familiar

relationships between numbers 1–5, preparing them to explore those relationships using the number bond

model.



**5-Frames: Counting Dots and Spaces (3 minutes)**

Materials: (T) Large 5-frame cards (Fluency Template 1)

T: Raise your hand when you have counted the dots, and then wait for the snap to

say the number. How many dots? (Show 4 dot card. Wait until all hands are

raised, and then give the signal.)

S: 4.

T: How many empty spaces? (Wait until all hands are raised, and then give the signal.)

S: 1.

Continue to show cards, exploring all of the decompositions of 5.

**Making 3, 4, and 5 Finger Combinations (4 minutes)**

T: I’ll show you some fingers. I want to make 3. Show me what is needed to make 3. (Show 2 fingers.)

S: (Show 1 finger.)

T: Raise your hand when you can say the number sentence. Start with my number.

S: 2 and 1 make 3.

Continue with number pairs for 3, 4, and 5. Once students understand the game, let them play with a

partner rapidly and energetically.

**Make 5 Matching Game (5 minutes)**

Materials: (S) Matching game cards (Fluency Template 2) (use only dots, dice, and fingers) per pair

1. Shuffle and place the cards facedown in two equal rows.

2. Partner A turns over two cards.

3. If the total of the numbers on both cards is 5, then she

collects both cards. If not, then Partner A turns them

back over in their original place facedown.

4. Repeat for Partner B.

Variation: Provide each partner with a stick of 5 cubes to help them

determine the missing part. For example, a student turns over 4,

then breaks off 4 cubes, revealing 1 as the missing part; that way, he

knows to look for the card with the number 1.

**Lesson 2**

**Fluency Practice (12 minutes)**

⬛ Draw Lines to Make a Bond of 3 **K.2I, K.3A** (4 minutes)

⬛ Hidden Numbers (5 as the Whole) **K.2I , K.3B** (4 minutes)

⬛ Say Ten Push-Ups **K.2E, K.2F** (4 minutes)

**Draw Lines to Make a Bond of 3 (4 minutes)**

Materials: (S) 3 beans, make a bond of 3 (Fluency Template 1) inserted into personal white board

Note: This fluency activity reinforces the part–total relationship

represented by the number bond. It helps students understand that the

lines of the number bond should connect the two parts with the total and

that the orientation of the parts and total do not affect the numerical

relationship.

T: Take out 3 beans. Point to the first number bond. Put 2 beans on

top of the 2 dots and 1 bean on top of the 1 dot.

S: (Place the beans on top of the number bond.)

T: Our job is to make 3. Slide your beans along the lines to make 3.

S: (Move the beans to the 3 dots on the number bond.)

T: Now, slide your beans back to take apart 3.

S: (Move the beans to the 2 and 1 dots.)

T: Let’s slide the beans again, and this time, tell how to make 3, like

this 2 and 1 make 3.

S: 2 and 1 make 3. (Move the beans to the 3 dots.)

T: Take them apart again.

S: (Move the beans to the 2 and 1 dots.)

T: This time, we’ll flip it: 1 and 2 make 3.

S: 1 and 2 make 3. (Move the beans to the 3 dots.)

T: Great. Now, leave your beans there. Draw (or trace) the lines to show how to make 3.

Continue guiding students through the process as necessary, and then allow them to complete the remainder

of the template independently. Circulate to ensure that they are saying the compositions aloud.

As a variation, have students state the decomposition (i.e., 3 is 2 and 1, 3 is 1 and 2).

**Hidden Numbers (5 as the Whole) (4 minutes)**

Materials: (S) Hidden numbers mat (Fluency Template 2) inserted into personal white board

Note: Finding embedded numbers anticipates the work of this module by developing part–whole thinking.

T: Touch and count the fish on your mat. Raise your hand when you know how many. (Wait for all

hands to go up, and then give the signal.) Ready?

S: 10.

T: 10 what?

S: 10 fish!

T: Put X’s on 5 of the fish. Pretend they swam away!

S: (Cross out 5 fish.)

T: How many fish are left?

S: 5 fish.

T: Circle a group of 4 of the fish who didn’t swim away. Pretend they swam away, too.

T: How many fish are left now?

S: 1 fish.

T: Let’s circle that 1 fish. How many did you circle altogether?

S: 5.

Repeat the process. This time, have 5 fish swim away again, but circle 3 fish, then another 2 fish, and ask how

many are circled. Repeat with other combinations equal to 5. Continue this procedure looking for hidden

numbers within groups of 3, 4, and 5. Pause occasionally to allow students to explain efficient ways of

locating the groups.

**Say Ten Push-Ups (4 minutes)**

Note: This activity reviews students’ understanding of numbers to 10 for the work of this module and extends

to teen numbers in anticipation of Module 5.

T: We are going to do Say Ten Push-Ups. First, let’s get ready to push up by counting to 10 the

Math Way.

S: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. (Students should start counting with 1 on the left pinky and continue to 10

on the right pinky.)

T: Great! Now that we have 10, we can continue counting with ten (push out both hands as if doing a

push-up exercise in the air) and (then, pause with closed fists close to body) 1 (push out the right

hand pinky finger). Repeat, please.

S: Ten (push out both hands as if doing a push-up exercise in the air) and (closed fists close to body) 1

(push out the left hand pinky finger).

T: Keep going with me. Ten (repeating push-up) and (closed fists close to body) 2 (push out the right

hand pinky and ring fingers).

S: Ten (repeating push-up) and (closed fists close to body) 2 (push out the left hand pinky and ring

fingers).

Continue to 20 (2 tens or 10 and 10)

**Lesson 3**

**Fluency Practice (14 minutes)**

⬛ Sprint: Number Order to 5 **K.2F** (12 minutes)

⬛ Penny or Nickel **K.4** (2 minutes)

**Sprint: Number Order to 5 (12 minutes)**

Materials: (S) Number Order to 5 Sprint (2 copies)

Note: Students grow more comfortable with the Sprint routine while completing a task that involves

relatively simple concepts. This activity continues to build confidence and enthusiasm for Sprints.

T: It’s time for a Sprint! (Briefly recall previous Sprint preparation activities, and have students locate

the Sprints.) Take out your pencil and one crayon, any color.

T: For this Sprint, using your pencil, you are going to fill in the missing number. On your mark, get set,

go!

T: (Ring the bell or give another signal for students to stop.) Pencils up!

T: Pencils down, crayons up!

T: It’s time to check answers. What do you do if the answer is right?

S: Circle it. (Circling correct answers instead of crossing out wrong ones avoids stigmatization.)

T: What do you say?

S: Yes.

T: We’ll begin at the top. Ready? 5.

S: Yes!

Continue checking the remaining answers, and then have students count how many correct, and write the

number at the top. Keep the mood celebratory.

T: Before we try again, let’s get our minds and bodies ready to work hard with an exercise. Stand up,

and push in your chairs. Let’s touch our toes while counting to 10. Ready?

S: 1, 2, 3, … , 10 (touch toes at every count).

T: Hands on your hips, twist slowly, counting down from 10. Ready?

S: 10, 9, 8, … , 1 (while twisting).

T: Have a seat. Locate your Sprint. Pencils up. Do you remember the number you got the first time?

S: Yes.

T: See if you can beat your score! Race against yourself! On your mark, get set, go!

Students work on the Sprint for a second time. Give the signal to stop, reiterating that it is okay not to finish.

Continue to emphasize that the goal is simply to do better than the first time. Proceed through the checking

answers procedure with more enthusiasm than ever. Then, facilitate a comparison of Sprint A to Sprint B.

Because students are still developing understanding of the concept of more, it may be necessary to circulate

and facilitate the comparison, either visually or numerically.

T: Stand up if you beat your score.

T: Let’s celebrate (congratulate each other, give three pats on the back, shake hands, have a

parade, etc.).

Variation: Allow students to finish, but provide an early finisher activity to do on the back.

**Penny or Nickel (2 minutes)**

Materials: (T) 1 penny, 1 nickel

Note: This fluency helps children learn to identify and differentiate between pennies and nickels. It is not

necessary for them to know the value of either coin.

T: (Display a penny.) What is this coin?

S: Penny.

T: (Display a nickel.) What is this coin?

S: Nickel.

Repeat by displaying both sides of both coins in random order.

**Lesson 4**

**Fluency Practice (12 minutes)**

⬛ Comparing Towers **K.2E, K.2G, K.7B** (5 minutes)

⬛ Show Me Part or Whole **K.2I, K.3A** (3 minutes)

⬛ Draw Lines to Make a Bond of 4 **K.2I, K.3A** (4 minutes)

**Comparing Towers (5 minutes)**

Materials: (S) Dice and 12 linking cubes per pair

Note: This fluency activity again relates length with number. It also encourages students to explore how many

more cubes are needed to make the towers the same length and number.

Each partner rolls a die and creates a tower using the number shown on the die. Students compare towers

and make a *less than* , *more than* , or *same as* statement. Then, students must add cubes to the shorter tower

so it is the same height as the longer tower. Consider providing cubes of different colors so students can easily

count how many more cubes they added to make the towers the same length.

**Show Me Part or Whole (3 minutes)**

Materials: (T) Familiar objects that exemplify the part–whole relationship such as a whole apple and an

apple slice or a whole banana and a banana peel

Note: This activity prepares students for today’s lesson by linking mathematical vocabulary to kinesthetic

movement and associating part–whole relationships with familiar objects.

T: Show me the sign for *whole* . (Model two hands clasped together.)

S: (Hold two hands clasped together.)

T: Let’s use our math muscles and take it apart

(exaggerate with facial expression as if straining

to pull the two hands apart).

S: (Pull two hands apart.)

T: Show me whole.

S: (Hold two hands clasped together.)

T: Show me parts.

S: (Pull two hands apart.)

T: Whole, part, whole, part, part, part, whole,

whole, part…

S: (Show hand gestures as indicated.)

T: Now, I’ll show you some objects, and I want you

to decide if it’s the whole thing (reinforce with

hand gestures) or just part of something

(emphasize with gesture). (Hold up an apple

slice.) Is this the whole apple or part of the

apple? Think. (Pause.) Now, show me.

S: (Hold hands apart, as before.)

T: Now, tell me. Is it whole (gesture) or part

(gesture)?

S: Part!

T: Very good. Look at what I have now. (Show a whole apple.) Whole or part? Think. (Pause.) Now, show

me.

S: (Clasp hands together to indicate *whole* .)

T: Raise your hand when you know the math word. (Wait for all hands to go up, and then signal.)

S: Whole!

Repeat with a few more objects, being careful to avoid a predictable pattern. Increase the pace, and reduce

scaffolding as students demonstrate mastery.

**Draw Lines to Make a Bond of 4 (4 minutes)**

Materials: (S) 4 beans, make a bond of 4 (Fluency Template) inserted into personal white board

Note: This fluency activity reinforces the part–total relationship represented by the number bond. It helps

students understand that the lines of the number bond connect the two parts with the total and that the

orientation of the parts and total do not affect the numerical relationship.

Conduct the activity as outlined in Lesson 2. As a variation, have students write the numerals into the parts

and wholes (on top of the dots) and then state the decomposition (e.g., 4 is 2 and 2).

**Lesson 5**

**Fluency Practice (12 minutes)**

⬛ Counting the Say Ten Way with the Rekenrek **K.2A, K.2F, K.5** (4 minutes)

⬛ Draw Lines to Make a Bond of 5 **K.2I, K.3A** (4 minutes)

⬛ Making 4 with Squares and Nickels **K.2I** (4 minutes)

**Counting the Say Ten Way with the Rekenrek (4 minutes)**

Materials: (T) 20-bead Rekenrek

Note: This fluency activity is an extension of students’ previous work with the Rekenrek and anticipates

working with teen numbers.

T: We can count with the Rekenrek the same way we do our Say Ten push-ups. (Keep the screen on the

right side of the Rekenrek to cover the beads that are not being counted. Slide over all of the beads

on the top row.) How many do you see?

S: 10.

T: Here’s 1 more. (Slide over 1 bead on the bottom row.) How many do you see?

S: Ten 1.

T: (Slide 1 more bead over on the bottom row.) How many do you see?

S: Ten 2.

T: (Slide 1 more bead over on the bottom row.) How many do you see?

S: Ten 3.

Continue counting forward and backward with the following suggested sequence: ten 1, ten 2, ten 3, ten 2,

ten 3, ten 4, ten 5, ten 4, ten 3, ten 4, ten 3, ten 2, ten 1.

**Draw Lines to Make a Bond of 5 (4 minutes)**

Materials: (S) 5 beans, make a bond of 5 (Fluency Template) inserted into personal white board

Note: This fluency activity reinforces the part–total relationship represented by the

number bond. It helps students understand that the lines of the number bond

connect the two parts with the total and that the orientation of the parts and total

do not affect the numerical relationship.

Conduct the activity as outlined in Lesson 2. Have students add numerals to the first

two bonds if needed to help them move from pictorial to abstract thinking.

**Making 4 with Squares and Nickels (4 minutes)**

Materials: (S) 4 nickels, paper or foam square

Note: This fluency activity is a familiar way for students to practice decompositions of 4 while reviewing

geometric properties of squares (4 corners). Using nickels allows students to have additional exposure to the

coin in order to identify it as a nickel. The value of the coin is not part of this lesson. Students take what they

know about this activity and apply it to number bonds.

T: Touch and count the corners of the square.

S: 1, 2, 3, 4.

T: Touch and count your nickels.

S: 1, 2, 3, 4.

T: Our job is to make 4. Use 3 nickels to mark 3 of the square’s corners. Keep the other one in your

hand. How many nickels on your square?

S: 3.

T: How many nickels in your hand?

S: 1.

T: We can tell how to make 4 like this: 3 and 1 make 4. Echo me, please.

S: 3 and 1 make 4.

Have students record this on a number bond. Continue with all the

number combinations, including 4 and 0.

**Lesson 6**

**Fluency Practice (12 minutes)**

⬛ Sprint: Make 5 **K.2I** (12 minutes)

**Sprint: Make 5 (12 minutes)**

Materials: (S) Make 5 Sprint (2 copies)

Note: This Sprint focuses on composing 5 in anticipation of the Concept Development. Students grow more

comfortable with the Sprint routine while completing a task that involves relatively simple concepts. This

process continues to build confidence and enthusiasm for Sprints.

T: It’s time for a Sprint! (Briefly recall previous Sprint preparation activities, and have students locate

the Sprints.) Take out your pencil and one crayon, any color. For this Sprint, you are going to circle the

number that will make 5. (Demonstrate the first problem as needed.)

Continue to follow the Sprint procedure as outlined in Lesson 3. Have students work on the Sprint for a second

time (they soon work on two different Sprints in a single day). Continue to emphasize that the goal is simply to

do better than the first time and celebrate improvement.

**Lesson 7**

**Fluency Practice (14 minutes)**

⬛ Number Bond Flash **K.2I** (5 minutes)

⬛ 5-Group on the Dot Path **K.2D, K.5** (4 minutes)

⬛ Make 6 Matching Game **K.2I, K.3A** (5 minutes)

**Number Bond Flash (5 minutes)**

Materials: (T) Magnetic shapes or dry-erase markers (S) Personal white board

Note: This is a maintenance activity to support fluent understanding of the relationships between numbers to

5 through number bonds.

T: (Show 3 red squares and 1 yellow square.) How many squares do I have?

S: 4 squares.

T: How many are yellow?

S: 1.

T: How many are red?

S: 3.

T: 1 and 3 are the parts. 4 is the whole. Draw a number bond to tell about my squares. Lift up your

board when you are done.

S: (Write number bonds using drawings or numerals. Lift boards to signal completion.)

T: Nice job.

Repeat with 2 + 2, 4 + 1, and 2 + 3. As students show mastery, stop naming the parts and whole before they

draw.

**5-Group on the Dot Path (4 minutes)**

Materials: (S) Dot path (Fluency Template 1) inserted into personal white

board Dot Path

Note: This activity helps students gain flexibility in grouping 5 and starting to count on from 5 pictorially. This

helps students think about 6 as 5 and 1 more in preparation for the day’s lesson.

T: Touch and count the dots on your dot path.

S: 1, 2, 3, … , 10.

T: What do you notice about the dot path?

S: There are 10 dots. → There are two different colors of dots. → The color changes after 5.

T: Yes. I’m going to ask you to circle a group of dots. Use

the color change after 5 to count and circle them as

fast as you can. Ready? Circle 5.

S: (Circle a group of 5 dots.)

T: How did you do that so fast?

S: I just circled all the light ones, and I knew it was 5.

T: Erase. Get ready for your next number. Circle 6.

S: (Circle a group of 6 dots.)

T: How did you count 6?

S: I counted all of the dots until I got to 6. → I counted 1

more than 5.

If students are starting to count on, let them share their

thinking with the class. Continue the process with numbers

to 10. Deviate from a predictable pattern as students show

mastery.

**Make 6 Matching Game (5 minutes)**

Materials: (S) Matching game cards 0–5 (Lesson 1 Fluency Template 2), matching game cards 6–10 (Fluency

Template 2) per pair (use 1 picture of each quantity 0–6)

Note: Reviewing the hidden partners of 6 helps students recall familiar relationships between numbers 1–6,

preparing them to depict those relationships using the number bond model.

1. Shuffle and place the cards faceup from 0 to 6 in one equal row.

2. Partner A chooses 2 cards that make 6.

3. If the total of the numbers on both cards is 6, then she collects both cards. If not, then Partner A puts

them back in their place.

4. Repeat for Partner B.

Have early finishers repeat the game, but this time put the cards in order from 0 to 6 to see if they notice that

they can take the cards from either end: 0 and 6, 1 and 5, etc.

**Lesson 8**

**Fluency Practice (12 minutes)**

⬛ Say Ten Push-Ups **K.2E, K.2F** (3 minutes)

⬛ Snap **K.2I** (5 minutes)

⬛ Comparing Towers **K.2E, K.2G, K.7B** (4 minutes)

**Say Ten Push-Ups (3 minutes)**

Note: This activity reviews students’ understanding of numbers to 10 for the work of this module and extends

to teen numbers in anticipation of Module 5.

Conduct the activity as outlined in Lesson 2, continuing to 20.

**Snap (5 minutes)**

Materials: (S) 5-stick of linking cubes

Note: This fast-paced game serves as a very concrete review of the composition and decomposition of

numbers to 5. It also supports the part–whole thinking needed in the upcoming lesson.

1. Partner A shows Partner B her 5-stick and then puts it behind her back.

2. When Partner B says, “Snap!” Partner A quickly breaks her stick into two parts.

3. Partner A shows Partner B one part.

4. Partner B tries to guess the hidden part.

5. Partner A shows the hidden part and checks Partner B’s guess.

Partners take turns, continuing with the 5-stick. If time permits, students can also play with a 4-stick, 3-stick,

etc.

**Comparing Towers (4 minutes)**

Materials: (S) Die and 14 linking cubes (per pair)

Note: This fluency activity relates length with numbers. It also encourages students to explore how many

fewer cubes are needed to make the towers the same length and number. The focus is on decompositions of 7

to prepare for the Concept Development.

Continue play as in Lesson 4, except that one partner starts with a 7-stick. The other partner rolls a die and

creates a tower using the number shown on the die. Students compare towers and make a *less than* or *more*

*than* statement. Then, students take cubes from the 7-stick so it is the same height as the shorter tower.

**Lesson 9**

**Fluency Practice (12 minutes)**

⬛ Making 8 with Squares and Beans **K.2I** (6 minutes)

⬛ Hidden Numbers **K.2I, K.3B** (6 minutes)

**Making 8 with Squares and Beans (6 minutes)**

Materials: (S) 8 beans, 2 paper or foam squares

Note: This fluency activity extends students’ familiarity with squares and the number 4 and applies it to the

number 8. This activity also anticipates the use of arrays in today’s lesson.

T: Let’s put one bean on each corner of our squares. Count each bean as you put it down.

S: 1, 2, 3, 4, 5, 6, 7, 8.

T: How many beans did you count?

S: 8 beans!

T: Let’s count the corners of the squares. As you count each

corner, move the bean a little off the corner, so you can

remember which ones you already counted.

S: 1, 2, 3, 4, 5, 6, 7, 8.

T: Our job is to make 8. Move 7 beans on the corners of your

squares. Leave the other one where it is. Count how many

beans are on your corners. Wait for the signal to tell me.

(Allow time to count; then, signal.)

S: 7.

T: How many beans are not on a corner?

S: 1.

Continue with all of the number combinations, including 8 and 0.

**Hidden Numbers (6 minutes)**

Materials: (S) Hidden numbers mat (Lesson 2 Fluency Template 2) inserted into personal white board

Note: Finding embedded numbers continues the work of this module by developing part–whole thinking.

T: Touch and count the fish on your mat. Raise your hand when

you know how many. (Wait for all hands to go up, and then give

the signal.) Ready?

S: 10.

T: Put Xs on 2 of the fish. Pretend they swam away!

S: (Cross out 2 fish.)

T: Circle a group of 7 from the fish who didn’t swim away.

T: How many fish are left?

S: 1.

T: Let’s circle that 1. How many did you circle altogether?

S: 8.

Repeat the process. This time, have 2 fish swim away again, but circle 5 fish, then another 3 fish, and ask

how many are circled. Repeat with other combinations equal to 8 as time allows. Pause occasionally to allow

students to explain efficient ways of locating the groups.

**Lesson 10**

**Fluency Practice (12 minutes)**

⬛ Sprint: Make 6 **K.2I** (12 minutes)

**Sprint: Make 6 (12 minutes)**

Materials: (S) Make 6 Sprint (2 copies)

Note: This Sprint focuses on composing 6 in anticipation of the Concept Development.

T: It’s time for a Sprint! (Briefly recall previous Sprint preparation activities, and have students locate

the Sprints.) Take out your pencil and one crayon, any color. For this Sprint, you are going to circle the

number that makes 6. (Demonstrate the first problem as needed.)

Continue to follow the Sprint procedure as outlined in Lesson 3. Have students work on the Sprint for a second

time (they soon work on two different Sprints in a single day). Continue to emphasize that the goal is simply to

do better than the first time and celebrate improvement.

**Lesson 11**

**Fluency Practice (12 minutes)**

⬛ Take Apart Groups of Circles **K.2I, K.3A** (4 minutes)

⬛ Finger Number Pairs **K.2I** (3 minutes)

⬛ Make 7 Matching Game **K.2I, K.3A** (5 minutes)

**Take Apart Groups of Circles (4 minutes)**

Materials: (S) Personal white board

Note: This activity anticipates today’s work with decomposition.

T: Draw three circles on your board. (Wait for students to do this.) Put Xs on two of them. How many

circles have Xs?

S: 2.

T: How many circles do not have an X?

S: 1.

T: How many circles are on your board?

S: 3.

T: We can tell how we took 3 apart like this: 3 is 2 and 1. Echo me, please.

S: 3 is 2 and 1.

T: Very good. Let’s go a little faster now. Erase. Draw 4 circles on your board. (Wait for students to

do this.) Put Xs on 3 of them. (Wait.) How many do not have an X?

S: 1.

T: Raise your hand when you can say the number sentence starting with 4. (Wait for all students to raise

hands, and then signal.) Ready?

S: 4 is 3 and 1.

Continue working through problems with totals of 1–5.

**Finger Number Pairs (3 minutes)**

Note: This activity gives students an opportunity to decompose numbers in more than one way, anticipating

the work of the lesson. It also serves as an active practice for the Make 7 Matching Game.

T: You’ve gotten very good at showing fingers the Math Way. I want to challenge you to think of other

ways to show numbers on your fingers. Hint … you can use two hands! First, I’ll ask you to show me

fingers the Math Way. Then, I’ll ask you to show me the number another way. Ready? Show me 5.

S: (Hold up all the fingers of the left hand.)

T: Now, show me another way to make 5, using two hands.

S: (Show 3 fingers on one hand and 2 on the other. → Show 1 finger on one hand and 4 on the other.)

T: How we can be sure that we’re still showing 5?

S: Count the fingers on both hands.

Continue the process with 6–8. For numbers where more than one combination is possible, have students try

each other’s combinations.

**Make 7 Matching Game (5 minutes)**

Materials: (S) Matching game cards 0–5 (Lesson 1 Fluency Template 2), matching game cards 6–10 (Lesson 7

Fluency Template 2) per pair (use 1 picture of each quantity 0–7)

Note: Students find the hidden partners of 7 in support of today’s work with composition and

decomposition.

Conduct the activity as outlined in Lesson 7, but now, have students find partners of 7.

**Lesson 12**

**Fluency Practice (12 minutes)**

⬛ Draw More to Make 5 **K.2I** (5 minutes)

⬛ 5-Group Hands **K.5** (3 minutes)

⬛ 5-Group on the Dot Path **K.2D, K.5** (4 minutes)

**Draw More to Make 5 (5 minutes)**

Materials: (S) Make 5 (Fluency Template 1)

Note: This activity focuses students on the number 5 in order to prepare students to explore the 5 + *n*

pattern.

After giving clear instructions and completing the first few problems together, allow students time to work

independently. Encourage them to do as many problems as they can within a given time frame. Go over the

answers, and direct students to energetically shout, “Yes!” for each correct answer.

**5-Group Hands (3 minutes)**

Materials: (T) Large 5-group cards (6–10) (Fluency Template 2)

Note: This activity helps to solidify students’ understanding of numbers to 10 in

relationship to the five, an important understanding as students deepen their work

with 6–10.

T: (Show the 6 dot card.) Raise your hand when you know how many dots are

on top. (Wait until all hands are raised; then, signal.) Ready?

S: 5.

T: Bottom?

S: 1.

T: We can show this 5-group on our hands. 5 on the top, 1 on the bottom, like this. (Demonstrate on

hands, one above the other.)

S: (Show 5 and 1 on hands, one above the other.)

T: Push your hands out as you count on from 5, like this. 5 (extend the top hand forward), 6 (extend the

bottom hand forward). Try it with me.

S: 5 (extend the top hand forward), 6 (extend the bottom hand forward).

Continue to 10, steadily decreasing guidance, until students can show the 5-groups on their hands with ease.

Variation: Complete this activity without using the 5-group cards as support.

**5-Group on the Dot Path (4 minutes)**

Materials: (S) Dot path (Lesson 7 Fluency Template 1) inserted into personal white board

Note: This activity helps students gain flexibility in grouping 5 and

understanding the 5 + *n* pattern for numbers 6–10.

Conduct the activity as outlined in Lesson 7.

**Lesson 13**

**Fluency Practice (12 minutes)**

⬛ Counting the Say Ten Way with the Rekenrek **K.2A, K.2F, K.5** (3 minutes)

⬛ Dot Cards of 6 **K.2D, K.2I** (3 minutes)

⬛ Draw More to Make 6 **K.5** (6 minutes)

**Counting the Say Ten Way with the Rekenrek (3 minutes)**

Materials: (T) 20-bead Rekenrek

Note: This activity is an extension of students’ previous work with the Rekenrek in anticipation of working

with teen numbers.

Conduct the activity as outlined in Lesson 5.

**Dot Cards of 6 (3 minutes)**

Materials: (T/S) Dot cards of 6 (Fluency Template 1)

Note: This activity deepens students’ knowledge of embedded numbers and develops

part–whole thinking.

T: (Show a card.) How many do you see?

S: 6.

T: How did you see them in two parts?

S: 5 on this side and 1 on that side. → 2 down and 4 up. → 3 up and 3 down.

Continue with other cards of 6. Distribute the cards to students for partner sharing time.

Have them pass on the card at a signal, and repeat with a new card.

**Draw More to Make 6 (6 minutes)**

Materials: (S) Make 6 (Fluency Template 2)

Note: This activity further develops students’ understanding of

the decompositions of 6.

After giving clear instructions and completing the first few

problems together, allow students time to work independently.

Encourage them to do as many problems as they can within a

given time frame. Go over the answers, and direct students to

energetically shout, “Yes!” for each correct answer.

**Lesson 14**

**Fluency Practice (12 minutes)**

⬛ Sprint: Make 7 **K.2I** (12 minutes)

**Sprint: Make 7 (12 minutes)**

Materials: (S) Make 7 Sprint (2 copies)

Note: This Sprint continues to support students’ understanding of part–total relationships. The addition

of numerals at the end of the Sprint gives students, who are comfortable with the partners of 7, an opportunity

to move from pictorial to more abstract thinking.

T: It’s time for a Sprint! (Briefly recall previous Sprint

preparation activities, and have students locate

the Sprints.) Take out your pencil and one crayon,

any color. For this Sprint, you are going to circle

the number that makes 7. (Demonstrate the first

problem as needed.)

Continue to follow the Sprint procedure as outlined in

Lesson 3. Have students work on the Sprint for a second

time (they soon work on two different Sprints

in a single day). Continue to emphasize that the goal

is simply to do better than the first time and celebrate

improvement.

**Lesson 15**

**Fluency Practice (12 minutes)**

⬛ 5-Groups: Counting Dots and Spaces **K.2I** (3 minutes)

⬛ Show Me Taller/Shorter **K.2G, K.7B** (4 minutes)

⬛ Make 8 Matching Game **K.2I, K.3A** (5 minutes)

**5-Groups: Counting Dots and Spaces (3 minutes)**

Materials: (T) Large 5-group cards (Lesson 12 Fluency Template 2)

Note: Students use the support of the 5-groups to find partners of 10 easily. This practice prepares them to

find partners of 10 and record the combination through drawings and equations in the second half of the

module.

T: Raise your hand when you know the number of dots, and then wait for the snap to say the number.

How many dots? (Show 9 dots.) (Snap.)

S: 9.

T: How many spaces?

S: 1.

Continue to show cards with the following possible sequence: 9, 1, 8, 2, 7, 3, 6, 4, 5.

**Show Me Taller/Shorter (4 minutes)**

Materials: (T) Number towers 1–10 showing color change at 5

Note: This maintenance activity gives students an opportunity to hone their

skills in comparing lengths and reiterates the relationship between length

and number. Having the color change at 5 reinforces students’ work with

the 5 + *n* pattern throughout this module.

T: Do you remember how we use our hands to show taller and shorter? Show me taller.

S: (Hold one hand above head.)

T: Good memories. Now, show me shorter.

S: (Hold hand lower than before, indicating less height.)

T: Nice. I want you to help me compare the height of my number towers. (Hold the 5 and 8 number

towers in your hand so it looks like the 5-stick is taller.) Do we know which one is taller?

S: No! → We can’t see all of the tower. → You need to line them up!

T: Okay, I’ll line up the endpoints. (Show the 8-stick and 5-stick with endpoints aligned.) Is my 5-stick

taller or shorter than my 8-stick?

S: The 5-stick is shorter than the 8-stick.

Continue, using the following sequence: 2 and 6, 9 and 4, 4 and 6, 2 and 3, 8 and 6, 7 and 6, 6 and 5. Starting

with numbers that are far apart makes it easier to compare. Make sure to set up the question so that the

answer fluctuates between taller and shorter.

**Make 8 Matching Game (5 minutes)**

Materials: (S) Matching game cards 0–5 (Lesson 1 Fluency Template 2), matching game cards 6–10

(Lesson 7 Fluency Template 2) per pair (use only dots, dice, and fingers for the quantities 0–8)

Note: Students find the hidden partners of 8 in support of today’s work with composition and decomposition.

Conduct the activity as outlined in Lesson 1, but now, have students find partners of 8.

**Lesson 16**

**Fluency Practice (12 minutes)**

⬛ Sprint: Make 8 **K.2I, K.3A** (12 minutes)

**Sprint: Make 8 (12 minutes)**

Materials: (S) Make 8 Sprint (2 copies)

Note: This Sprint focuses on composing 8 using both pictures

and numerals to support students’ work with equations in

today’s lesson.

T: It’s time for a Sprint! (Briefly recall previous Sprint preparation activities, and have students locate

the Sprints.) Take out your pencil and one crayon, any color. For this Sprint, you are going to circle

the number that means you count up to exactly 8. (Demonstrate the first problem as needed, both

by counting all and counting on.)

Continue to follow the Sprint procedure as outlined in Lesson 3. Have students work on the Sprint for a

second time (they soon work on two different Sprints in a single day). Continue to emphasize that the goal

is simply to do better than the first time, and celebrate improvement.

**Lesson 17**

**Fluency Practice (12 minutes)**

⬛ How Many? **K.2I, K.3A** (7 minutes)

⬛ Partners of 5 **K.2I** (5 minutes)

**How Many? (7 minutes)**

Materials: (S) Bags of red and white beans, number bond (Lesson 1 Template 2), blank paper or personal

white board, dice (with the 6 side covered on both dice or the 5 and 6 covered on one die)

Note: This fluency activity focuses on composition in preparation for today’s work. Students use the familiar

number bond model to refresh their understanding of part–total relationships before working with equations

in this lesson.

1. Partner A rolls a die and places that many red beans in one of the part circles in the number bond.

2. Partner B rolls a die and places that many white beans on the other part circle.

3. The partners move their beans to the total circle and count the total number of beans.

4. Both partners record the number bond using pictures or numerals.

Circulate to observe and provide support.

**Partners of 5 (5 minutes)**

Materials: (S) Personal white board

Note: Students write number bonds and number sentences to 5 using fingers and the more abstract

numerals.

T: Write your numbers 1, 2, 3, and 4. (Pause as students do so.)

T: (Draw a number bond with a 5 as the whole.) You are going to write number bonds that have 5 as the

total. Use only these numbers as parts. You can use your fingers if that will help you.

Encourage students to write at least two number bonds. Ask early finishers to write addition number

sentences to match their bonds.

**Lesson 18**

**Fluency Practice (12 minutes)**

⬛ Sprint: Make 5 **K.2I, K.3A** (12 minutes)

**Sprint: Make 5 (12 minutes)**

Materials: (S) Make 5 Sprint (2 copies)

Note: This Sprint extends the work that students did in Topic A with pictures to include numerals. Students

are moving toward a more abstract understanding of the relationships between numbers to 5, though they

may continue to rely on the support of pictures and objects throughout kindergarten.

T: It’s time for a Sprint! (Briefly recall previous Sprint preparation activities, and have students locate

the Sprints.) Take out your pencil and one crayon, any color. For this Sprint, you are going to circle the

number that makes 5. (Demonstrate the first problem as needed.)

Continue to follow the Sprint procedure as outlined in Lesson 3.

Have students work on the Sprint for a second time (they soon

work on two different Sprints in a single day). Continue to

emphasize that the goal is simply to do better than the first

time and celebrate improvement.

**Lesson 19**

**Fluency Practice (11 minutes)**

⬛ Happy Counting **K.5** (3 minutes)

⬛ Building *1 More* and *1 Less* Towers **K.2A, K.2C, K.2E** (4 minutes)

⬛ Make It Equal **K.2E, K.2G** (4 minutes)

**Happy Counting (3 minutes)**

Note: This activity helps students internalize the whole number counting sequence and become comfortable

changing directions in their count.

T: Let’s play Happy Counting! Remember, when I hold my hand like this (two fingers pointing up),

I want you to count up. If I put my hand like this (two fingers pointing down), I want you to count

down. If I do this (closed fist), that means stop, but try hard to remember the last number you said.

Ready?

S: (Teacher’s fingers up) 1, 2, 3, 4, 5 (closed fist, fingers pointing down), 4, 3, 2, 1 (closed fist, fingers

up), 2, 3 (closed fist, fingers down), 2, 1 (closed fist, fingers up), 2, 3, 4, 5 (closed fist, fingers down),

4, 3 (closed fist, fingers up), 4, 5, 6 (closed fist, fingers down), 5, 4 (closed fist, fingers up), 5, 6, 7, 8

(closed fist, fingers down), …

Continue Happy Counting to ten 3 (i.e., 13), increasing the numbers as students demonstrate mastery.

**Building *1 More* and *1 Less* Towers (4 minutes)**

Materials: (S) 10 linking cubes

Note: This activity helps students transition from addition to subtraction operations in preparation for today’s

lesson.

Guide students through the process of building a tower while stating the pattern as *1 more* . Maintain

consistency in the language: 1. 1 more is 2. 2. 1 more is 3. 3. 1 more is 4. (Continue to 10.)

Disassemble the tower while stating the pattern as *1 less* . Again, the language is crucial to students’

conceptual understanding: 10. 1 less is 9. 9. 1 less is 8. 8. 1 less is 7. (Continue to 0.)

If students are ready for the challenge, begin constructing the towers again, but stop the *1 more* sequence

at 5. Change directions, using the *1 less* sequence. Continue moving up and down according to the teacher

directions, as in Happy Counting.

**Make It Equal (4 minutes)**

Materials: (S) Bags of cubes, laminated paper or foam work mat, dice (per pair)

Note: Students add and take away objects in this fluency activity, helping to solidify the shared numerical

relationships underlying both addition and subtraction.

1. The teacher introduces the term *equal* as meaning *the same number* .

2. Both partners roll dice and put that many cubes on their mat.

3. Partner A has to make her cubes equal to her partner’s by taking off or putting on more cubes.

4. Partner B counts to verify.

5. Students switch roles and play again.

**Lesson 20**

**Fluency Practice (12 minutes)**

⬛ Sprint: Cross 1 Out and Write How Many **K.2F** (12 minutes)

**Sprint: Cross 1 Out and Write How Many (12 minutes)**

Materials: (S) Cross 1 Out and Write How Many Sprint (2 copies)

Note: This Sprint supports this topic’s lesson, giving students experience with taking away and determining

how many are left within the familiar context of *1 less* .

T: It’s time for a Sprint! (Briefly recall previous Sprint preparation activities, and have students locate

the Sprints.) Take out your pencil and one crayon—any color. For this Sprint, you are going to cross 1

out and write how many. (Demonstrate the first problem as needed.)

Continue to follow the Sprint procedure as outlined in Lesson 3. Have

students work on the Sprint for a second time. (They soon work on two

different Sprints in a single day.) Continue to emphasize that the goal is

simply to do better than the first time and celebrate improvement.

**Lesson 21**

**Fluency Practice (12 minutes)**

⬛ Take Away 1 **K.3A** (3 minutes)

⬛ Roll and Show 1 Less **K.2F** (4 minutes)

⬛ Hide and See **K.3A** (5 minutes)

**Take Away 1 (3 minutes)**

Note: Students begin to use subtraction sentences and their new *take away* language in the familiar context

of *1 less* .

T: Show me 3 fingers the Math Way.

S: (Hold up the left pinky, left ring finger, and the left middle finger to show 3 fingers the Math Way.)

T: Now, take away 1.

S: (Put down the left middle finger so that only the left pinky and left ring finger remain, showing 2 the

Math Way.)

T: How many fingers are you showing me now?

S: 2.

T: Say the number sentence after me. 3 take away 1 is 2.

Continue to take away 1 from numbers 1–5. (Show 0 as a closed fist.) Avoid showing students the finger

combinations. Some students may still need to count all of the fingers each time. Allow time to do so, but

invite students to share more efficient strategies.

**Roll and Show 1 Less (4 minutes)**

Materials: (S) Dice (with the 6-dot side covered as a scaffold or uncovered as an extension)

Note: Students begin to use subtraction sentences and their new *take away* language in the familiar context

of *1 less* .

1. Partner A rolls the die (or dice).

2. Both partners count the dots.

3. Partner B takes away 1 and shows that many fingers the Math Way and says, “4 take away 1 is 3.”

4. Partner A verifies that the number is 1 less.

5. Switch roles and play again.

Remind students that if they should roll a 1, they can show 1 less by indicating 0 as a closed fist. As students

get more comfortable with subtraction sentences, they can try to tell about their fingers.

**Hide and See (5 minutes)**

Materials: (S) 5 linking cubes

T: Show me 2 cubes.

S: 1, 2.

T: Hide 1 behind your back. How many can you see?

S: 1.

T: Put them back together. How many cubes do you have?

S: 2.

T: Say the number sentence with me. 2 take away 1 is 1.

Repeat using the following possible sequence: 3 – 1, 4 – 1, 5 – 1, 5 – 2, 4 – 2, 3 – 2, 4 – 3, 5 – 3, and 5 – 4.

**Lesson 22**

**Fluency Practice (12 minutes)**

⬛ Sprint: Complete the Number Bond **K.2I, K.3A** (12 minutes)

**Sprint: Complete the Number Bond (12 minutes)**

Materials: (S) Complete the Number Bond Sprint (2 copies)

Note: This Sprint focuses on part–whole relationships in anticipation of the Concept Development.

T: It’s time for a Sprint! (Briefly recall previous Sprint preparation activities, and have students locate

the Sprints.) Take out your pencil and one crayon—any color. For this Sprint, you are going to

complete the number bond. You can use drawings or numbers. (Demonstrate the first problem

as needed.)

Continue to follow the Sprint procedure as outlined in Lesson 3.

Today, students work on two different Sprints. Continue to

emphasize that the goal is simply to do better than the first time

and celebrate improvement.

**Lesson 23**

**Fluency Practice (11 minutes)**

⬛ Happy Counting **K.5** (3 minutes)

⬛ 5-Group Hands **K.2I** (4 minutes)

⬛ Take Away Fingers **K.3A** (4 minutes)

**Happy Counting (3 minutes)**

Note: Fluidity with counting forward and backward builds students’ number sense and sets the stage for

counting on strategies used in Grade 1.

Conduct the activity as described in Lesson 19. As a variation, add 11 and 12 to the count.

**5-Group Hands (4 minutes)**

Materials: (T) Large 5-group cards (1–10) (Lesson 12 Fluency Template 2)

Note: This activity helps to solidify students’ understanding of numbers to 10 in relationship to the five and

prepares them for using 5-groups with subtraction operations.

Show the 5-group cards, and have students show the 5-group using their hands (for numbers 6–10, 5 on the

top and some ones on the bottom). Suggested sequence: 4, 5, 6, 2, 3, 7, 8, 1, 9, 10. Repeat without using the

5-group cards as support.

**Take Away Fingers (4 minutes)**

Note: This fluency activity provides additional practice with subtraction using fingers, a set of manipulatives

always available to students. Some kindergartners need to count all of their fingers to determine how many

fingers are left, but when working within 5, many have the ability to subitize, especially after much practice

counting the Math Way.

T: Show me 3 fingers the Math Way.

S: (Hold up the pinky, ring, and middle fingers of the left hand.)

T: Take away 1 finger. (Students put down the middle finger.) How many fingers are left?

S: 2.

T: Say the number sentence with me: 3 minus 1 equals 2.

Continue with the following suggested progression: 3 – 2, 2 – 1, 4 – 1, 4 – 3, 4 – 2, 5 – 1, 5 – 4, 5 – 2,

and 5 – 3. Stop saying the number sentence along with students after two or three examples. Listen to

determine who has gained mastery.

**Lesson 24**

**Fluency Practice (12 minutes)**

⬛ Happy Counting **K.5** (3 minutes)

⬛ Roll and Draw 5-Groups **K.2I** (5 minutes)

⬛ Take Apart Groups of Circles **K.2I, K.3A** (4 minutes)

**Happy Counting (3 minutes)**

Note: Fluidity with counting forward and backward builds students’ number sense and sets the stage for

counting on strategies used in Grade 1.

Conduct the activity as described in Lesson 19, but continue the count to 20.

**Roll and Draw 5-Groups (5 minutes)**

Materials: (S) Pair of dice (with the 6 sides covered), personal white board

Note: This activity helps students see numbers in relationship to the five and prepares them for using

5-groups with subtraction operations.

Have students roll the dice, count the dots, and then draw the number as a 5-group. Observe to see which

students erase completely and begin each time from one rather than draw more or erase some to adjust to

the new number.

**Take Apart Groups of Circles (4 minutes)**

Materials: (S) Personal white board

Note: This activity anticipates today’s work with decomposition and subtraction equations.

T: Draw 4 circles on your personal white board. (Wait for students to do this.) Put Xs on two of them.

How many circles have Xs?

S: 2.

T: How many circles do not have an X?

S: 2.

T: Raise your hand when you can say the **subtraction** number sentence starting with 4. (Wait for all

students to raise hands, and then signal). Ready?

S: 4 minus 2 is 2.

Continue working through problems with subtrahends of 2 to 7. The following is a suggested sequence: 5 – 2,

6 – 2, 7 – 2, 3 – 2, 4 – 3, 5 – 4, 6 – 5, and 7 – 6.

**Lesson 25**

**Fluency Practice (13 minutes)**

⬛ Rekenrek Wave **K.2A, K.2F, K.5** (3 minutes)

⬛ 5-Group Flashes **K.2D, K.2I** (5 minutes)

⬛ Take Apart the Array **K.2I** (5 minutes)

**Rekenrek Wave (3 minutes)**

Materials: (T) 20-bead Rekenrek

Note: This fluency activity anticipates the work of Module 5. Developing automaticity with the counting

sequence in conventional language facilitates the work with teen numbers.

T: You’ve become very good at counting with the Rekenrek the Say Ten Way. I want to teach you the

regular way to say the numbers that come after 10. (Show 10 beads on the top row of the

Rekenrek). Here is 10. 1 more than 10 is 11. (Slide over 1 more bead.) Say “eleven.”

S: Eleven.

T: How many beads do you see?

S: 11.

T: 1 more than 11 is 12. (Slide over 1 more bead.) Say “twelve.”

S: Twelve.

T: How many beads now?

S: 12.

Repeat this process to 13. Then, continue with the following possible sequence: 11, 12, 11, 12, 13, 12, 13,

12, 11. Direct students to gradually raise their hands as the numbers increase and lower their hands as the

numbers decrease, mimicking the motion of a wave.

**5-Group Flashes (5 minutes)**

Materials: (T) Large 5-group cards (1–4) (Lesson 12 Fluency Template 2) (S) Personal white board

Note: This fluency activity seeks to build on students’ understanding of comparison to demonstrate the

relationship between number partners.

T: (Show 4 dots.) How many dots do you see?

S: 4.

T: How many more to make 5?

S: 1.

T: Say the number sentence.

S: 4 plus 1 equals 5.

T: Write the number sentence on your personal white board. Get ready. Show me.

S: (Display 4 + 1 = 5.)

Continue with the following possible sequence: 3, 2, 1, 4, 2, and 3.

**Take Apart the Array (5 minutes)**

Materials: (S) Array of 9 (Fluency Template), personal white board

Note: This activity prepares students to work with decomposing 9 at the pictorial level.

T: (Project or show array of 9.) Let’s count the dots. Ready?

S: 1, 2, 3, 4, 5, 6, 7, 8, 9.

T: So, our job is to take apart… ?

S: 9.

T: We can take apart the 9 dots by drawing a straight line like this. (Demonstrate.)

How many dots are in this part? (Point to indicate which part to count.)

S: 3.

T: The other part? (Provide wait time and a signal, such as a clap of the hands, for

the answer of 6 to allow time for those students who need to count all 6 dots).

S: 6.

T: (Record the number bond.) We can read it like this: 9 is 3 and 6. Echo me, please.

S: 9 is 3 and 6.

T: (Erase the line, but do not erase the number bond.) We can also take apart the

9 dots with a line that looks like an *L* . (Demonstrate.) How many dots are in

this part? (Point to indicate which part to count.)

S: 2.

T: The other part? (Provide wait time and a signal, such as a clap of the hands, for the answer of 7 to

allow time for those students who need to count all 7 dots.)

S: 7.

T: (Record the number bond.) We can read it like this: 9 is 2 and 7. Echo me, please.

S: 9 is 2 and 7.

T: Now, it’s your turn to take apart 9.

If necessary, complete another example with the class, or direct students to work independently on drawing

lines and recording decompositions of 9 as number bonds. After some time, invite students to explain how

they know they have found all of the ways to take apart 9.

**Lesson 26**

**Fluency Practice (12 minutes)**

⬛ Rekenrek Wave **K.2A, K.2F, K.5** (3 minutes)

⬛ Race to 5 Addition Game **K.2I** (4 minutes)

⬛ Make 9 Matching Game **K.2I, K.3A** (5 minutes)

**Rekenrek Wave (3 minutes)**

Materials: (T) 20-bead Rekenrek

Note: This fluency activity anticipates the work of Module 5. Developing automaticity with the counting

sequence in conventional language facilitates work with teen numbers.

Count with the Rekenrek the Say Ten Way as described in Lesson 25, but this time, continue to 15. After

introducing each new number name, use the following sequence while students use the wave hand motions

to indicate increasing and decreasing quantities: 10, 11, 12, 11, 12, 13, 12, 13, 14, 13, 14, 15, 14.

**Race to 5 Addition Game (4 minutes)**

Materials: (S) Die with the 6-dot side covered

Note: This activity develops automaticity with addition within 5, part of the fluency goal for this grade.

1. Both partners roll their dice and state their numbers respectively.

2. Both partners roll again and add the previous number to the new number on the die. Both partners

state their new equations.

3. Continue the addition race, rolling the dice and adding with speed and accuracy until one of the

partners reaches 5 as the total.

4. He must reach 5 exactly, so if either partner reaches a total more than 5, he can roll again.

Here is an example of how the game might unfold:

Partner A: Rolls a 2 and says “2.”

Partner B: Rolls a 3 and says “3.”

Partner A: Rolls a 1 and says “2 + 1 = 3.”

Partner B: Rolls a 2 and says “3 + 2 = 5,” winning the race to 5.

Begin a new round if time permits.

Extension: The next time this fluency activity is done, students can record the addition sentences on their

personal white boards.

**Make 9 Matching Game (5 minutes)**

Materials: (S) Matching game cards 0–5 (Lesson 1 Fluency Template 2), matching game cards 6–9 (Lesson 7

Fluency Template 2) per pair

Note: Students find the hidden partners of 9 in support of today’s work with composition and decomposition.

1. Shuffle and place the cards facedown in two equal rows.

2. Partner A turns over two cards.

3. If the total of the numbers on both cards is 9, then Partner A collects both cards. If not, then Partner

A turns them back over in their original place facedown.

4. Repeat for Partner B.

Scaffold: Provide each partner with a stick of 9 cubes to help the pair determine the missing part. For

example, a student turns over 4 and then breaks off 4 cubes, revealing 5 as the missing part. As a result, the

partners know to look for the card with the number 5.

**Lesson 27**

**Fluency Practice (12 minutes)**

⬛ Rekenrek Wave **K.2A, K.2F, K.5** (3 minutes)

⬛ What Is Less? **K.2F, K.3A** (5 minutes)

⬛ Take Apart the Array **K.2I** (4 minutes)

**Rekenrek Wave (3 minutes)**

Materials: (T) 20-bead Rekenrek

Note: This fluency activity anticipates the work of Module 5. Developing automaticity with the counting

sequence in conventional language facilitates work with teen numbers.

Count with the Rekenrek the Say Ten Way as described in Lesson 25, but now, continue to 20 if students are

ready. After introducing each new number name, use a similar sequence as before, while students use the

wave hand motions to indicate increasing and decreasing quantities.

Consider showing the numbers in the 5-group orientation as well so that students can gain flexibility

in recognizing the quantities. For example, 13 would be 5 red on the top row, 5 red on the bottom row

(mimicking a 5-group arrangement of 10), plus 3 white beads on the top row.

**What Is Less? (5 minutes)**

Materials: (S) Personal white board

Note: This fluency activity builds on students’ understanding of comparison. It also builds fluency with

subtraction facts for numbers to 5.

T: (Write 2 on the board.) Think of a number that is less than 2. Write it on your personal white board,

and show me.

S: (Write 1 or 0.)

T: Write this **subtraction sentence** on your board: 2 minus 1.

S: (Write 2 – 1.)

T: Write the answer, and show me.

S: (Write 2 – 1 = 1.)

T: Say the subtraction sentence.

S: 2 minus 1 equals 1.

Repeat with 3, 4, and 5. Use each of the smaller numbers students identify to build a subtraction equation

(e.g., 3 – 1, 3 – 2). Invite students who choose zero to write a subtraction equation using zero and show it to

the class. Addition and subtraction of zero is covered in Lesson 37.



**Take Apart the Array (4 minutes)**

Materials: (S) Array of 10 (Fluency Template) inserted into personal white board

Note: This fluency activity prepares students to work with decomposing 10 at the

pictorial level.

Conduct as described in Lesson 25, but now, with decompositions of 10.

**Lesson 28**

**Fluency Practice (12 minutes)**

⬛ Race to 0 Subtraction Game **K.2I** (4 minutes)

⬛ Number Bond Bracelet **K.2I** (3 minutes)

⬛ Make 10 Memory Game **K.2I, K.3A** (5 minutes)

**Race to 0 Subtraction Game (4 minutes)**

Materials: (S) Die with the 6-dot side covered

Note: This fluency activity develops automaticity with subtraction within 5, part of the fluency goal for this

grade.

1. The partners roll their dice and subtract the number on their die from 5. Both partners state their

equations respectively.

2. To win the game, subtract a number from 5 that equals 0 (only by rolling a 5). If neither partner rolls

a 5, they both state their subtraction sentences out loud.

3. Both partners roll again and subtract the new number on the die from 5. Both partners state their

respective new equations.

4. Continue the subtraction race, rolling the dice and subtracting with speed and accuracy until one of

the partners rolls a 5 and says, “5 – 5 = 0.”

5. They must reach 0 exactly, stating each subtraction equation before rolling again.

Below is an example of how the game might unfold. Begin a new round if time permits.

Partner A: Rolls a 2 and says “5 – 2 = 3.”

Partner B: Rolls a 3 and says “5 – 3 = 2.”

Partner A: Rolls a 4 and says “5 – 4 = 1.”

Partner B: Rolls a 5 and says “5 – 5 = 0,” winning the race to 0.

**Number Bond Bracelet (3 minutes)**

Materials: (S) Number bonds of 10 bracelet (Lesson 27), personal white board

Note: This fluency activity helps students develop automaticity with partners to 10, which is crucial to

learning more efficient methods of addition in Grade 1.

T: Do you remember how many beads are on your number bond bracelets?

S: 10.

T: Is 10 the whole (emphasize by clasping two hands together) or part of the beads? (Pull two hands

apart to reinforce the meaning.)

S: Whole.

T: Yes. Take 1 of the beads, and slide it away from the rest. Is 1 the whole or a part? (Emphasize with

gestures as before.)

S: Part.

T: Good. Raise your hand when you know the other part. (Wait for all hands to go up, and then signal.)

Ready?

S: 9.

T: Yes. Now, write the number bond.

Continue to provide guidance as necessary, and then direct students to work independently through the

partners of 10 using their bracelets.

**Make 10 Memory Game (5 minutes)**

Materials: (S) Matching game cards 0–5 (Lesson 1 Fluency Template 2), matching game cards 6–10 (Lesson 7

Fluency Template 2) per pair, 1 extra 5-card (so 1 of the partners can be 5 and 5)

Note: Students find the hidden partners of 10 in support of today’s work with composition and

decomposition.

Conduct the activity as outlined in Lesson 26, but now, have students find partners of 10.

Scaffold: Provide each partner with a stick of 10 cubes to help the pair determine the missing part. For

example, a student turns over 4 and then breaks off 4 cubes, revealing 6 as the missing part. Students then

know to look for the card with the number 6.

**Lesson 29**

**Fluency Practice (13 minutes)**

⬛ Grade K Fluency Differentiated Practice Sets **K.2I** (5 minutes)

⬛ 1, 2, 3, Sit on 10 and 20 **K.5** (4 minutes)

⬛ 5-Group Flashes **K.2D, K.2I** (4 minutes)

**Grade K Fluency Differentiated Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets

Note: During Topic F and for the remainder of this module, each

day’s fluency activity includes an opportunity for review and

mastery of the sums and differences with totals through 5 by means

of the Fluency Practice Sets or Sprints. Five options are

provided in this lesson for the Fluency Practice Sets, with

Sheet A being the most simple addition fluency of the grade and

Sheet E being the most complex (including mixed addition and

subtraction). Start all students on Sheet A. Keep a record of student

progress, so they can be moved to more complex sheets when they

are ready.

Students complete as many problems as they can in 96 seconds

(6 seconds per problem). One hundred percent accuracy and

completion are recommended before moving to the next level.

Collect any Practice Sets that have been completed within the

96 seconds, and check the answers. If students do not finish,

encourage them to take the sheets home and continue their

work. The next time Fluency Practice Sets are used,

be provided with the next level, and the other students can

work on a new Sheet A.

Consider assigning early finishers a counting pattern and start

number (e.g., count forward starting at 5, count backward starting

at 10). Celebrate improvement as well as advancement. Students

should be encouraged to compete with themselves rather than their

peers. Interview students on practice strategies. Notify caring adults

of each child’s progress.

**1, 2, 3, Sit on 10 and 20 (4 minutes)**

Note: In this activity, students improve on rote counting to 20, a

necessary skill for success in Module 5.

T: (Call students to stand in a circle on the rug. Refer

to Module 1, Lesson 22 for a variation of 1, 2, 3, Sit on 10.)

We’re going to play a fast counting game. You remember we used to play 1, 2, 3, Sit on 10. Well, now,

you can count to 20. Remember, each person says the next three numbers. So, if you come after 10,

you say… ?

S: 11, 12, 13.

T: Then, the next person says… ?

S: 14, 15, 16.

T: And the next person?

S: 17, 18, 19.

T: Here comes the change. The next person says 20, and he has to… ?

S: Sit.

T: That’s right! Should you be sad if you have to sit?

S: No.

T: Wait until you see what happens at the end. Okay, let’s get started.

S: 1, 2, 3.

S: 4, 5, 6.

Proceed around the circle to 20, and then start again at 1. Continue until all students are sitting.

**5-Group Flashes (4 minutes)**

Materials: (T) Large 5-group cards (Lesson 12 Fluency Template 2)

Note: This activity gives students practice subitizing or counting quantities in 5-group configurations in

preparation for the day’s objective.

Conduct the activity as described in Lesson 25. This time, work with numbers to 8.

**Lesson 30**

**Fluency Practice (12 minutes)**

⬛ Grade K Fluency Differentiated Practice Sets **K.2I** (5 minutes)

⬛ Spill the Pennies **K.2I, K.4** (4 minutes)

⬛ Flash Five **K.3A, K.3C** (3 minutes)

**Grade K Fluency Differentiated Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 29 Fluency Practice Sets)

Note: This activity assesses students’ progress toward mastery

of adding and subtracting within 5.

Give Practice Set B to students who correctly answered all the

questions on Practice Set A in the previous lesson. All other

students should try to improve their scores on Practice Set A.

Students complete as many problems as they can in 96 seconds.

Assign a counting pattern and start number for early finishers, or

have them play an independent game such as the Make 10

Memory Game (Lesson 28). Collect and correct any Practice

Sets completed within the allotted time.

**Spill the Pennies (4 minutes)**

Materials: (S) 5 pennies, cup, personal white board

Note: This activity leads students to mastery of adding and subtracting within 5, a fluency goal for kindergarten.

This activity also gives students an opportunity to differentiate between heads and tails on pennies.

T: Take a penny out of the bag and look at both sides of it. What do you see?

S: There’s a face on one side. → I see a building on one side.

T: The face on the penny is Abraham Lincoln, our 16th president. The face side of a penny is called

“heads.” The other side of the coin is called “tails.”

1. Take 3 pennies out of the bag, and place them in the cup.

2. Shake the cup gently, and then spill the pennies onto the personal white board.

3. Count the number of heads and the number of tails, and record as an addition sentence.

4. Erase, and repeat a few more times.

5. If students demonstrate mastery with addition to 3, then direct them to place 4 pennies in the cup to

practice addition to 4 and similarly with 5.

Challenge students to solve by counting on or subitizing to add more efficiently.

**Flash Five (3 minutes)**

Note: This activity allows students to practice more efficient methods of addition using fingers.

T: Quick! Show me 5 as fast as you can!

S: (Open one full hand quickly to show 5.)

T: Now, show me 5 on the other hand.

S: (Show 5 on the other hand.)

T: Great. Show me 1 the Math Way.

S: (Show the left pinky finger.)

T: We want to add 5 to it. I could do it this way. (Reveal

the 4 remaining fingers, plus 1 more from the other

hand.) 1, 2, 3, 4, 5. Can you think of a faster way? (If

students are unsure, elicit a response by flashing five

or opening and closing the full hand to show 5.)

S: We can just open the other hand! We have 5 fingers

on the other hand!

T: That’s right! We can flash five! How many fingers are

you showing now?

S: 6.

T: Say the addition sentence starting with 1, please.

S: 1 + 5 = 6.

Continue with the following possible sequence: 2 + 5, 3 + 5,

4 + 5, and 5 + 5.

**Lesson 31**

**Fluency Practice (12 minutes)**

⬛ Sprint: Fluency **K.2I** (9 minutes)

⬛ Ready, Set, Add! **K.3A** (3 minutes)

**Sprint: Fluency (9 minutes)**

Materials: (S) Fluency Sprint (2 copies)

Note: During Topic F and for the remainder of the module, each topic includes an opportunity for review and

mastery of the sums and differences with totals through 5 by means of the Fluency Sprints. Four Sprints are

provided in this lesson, with Sprint A being the most simple addition fluency of the grade and Sprint

D being the most complex (including addition and subtraction). Select the Sprint that is most appropriate for

the class. To correct the work as a class, all students should take the same Sprint.

T: It’s time for a Sprint! (Briefly recall previous Sprint preparation activities, and have students locate

the Sprints.) Take out your pencil and one crayon, any color. For this Sprint, you are going to subtract

to find how many are left. (Demonstrate the first problem as needed.)

Continue to follow the Sprint procedure as outlined in Lesson 3. Have students work on the Sprint a

second time. Continue to emphasize that the goal is simply to do better than the first time and celebrate

improvement.

**Ready, Set, Add! (3 minutes)**

Note: In this activity, students test their mastery of addition facts within 5, and when the total is greater than

5, they are able to rely on the strategies of counting all or counting on with fingers.

1. Assign partners. Both students put one hand behind their back.

2. With the hand that is in view, they pump their fists two times as they say, “Ready, set,” and then the

third time, they show a number of fingers as they say, “Add!” (The motion is similar to rock, paper,

scissors.)

3. Partners race to say an addition sentence that matches the number of fingers shown. The first

partner (fastest) repeats the addition sentence for both to hear.

4. The second partner flips the addition sentence.

5. Repeat.

At first, have students use only one, two, or three fingers. As they demonstrate mastery, invite them to include

four and five fingers as well.

**Lesson 32**

**Fluency Practice (12 minutes)**

⬛ Counting to 30 by Ones with the Rekenrek **K.2A, K.2F, K.5** (3 minutes)

⬛ Break Apart Numbers **K.2I** (4 minutes)

⬛ 5-Group Puzzles **K.2I** (5 minutes)

**Counting to 30 by Ones with the Rekenrek (3 minutes)**

Materials: (T) 100-bead Rekenrek

Note: Counting from 20 to 30 proves easier than learning the linguistically challenging counting sequence

of 11–20. Once students know the number word *twenty* , it becomes just a matter of extending a pattern.

T: (Slide 10 beads over.) How many?

S: 10.

T: (Slide over 10 more for a total of 20.) How many?

S: 20.

T: (Slide over 10 more for a total of 30.) How many?

S: 30.

T: (Show 20 beads.) How many?

S: 20.

T: (Slide over 1 more.) 20. 1 more is 21. How many?

S: 21.

T: (Slide over 1 more.) 21. 1 more is 22. How many?

S: 22.

Continue this process with as little or as much guidance as students require.

**Break Apart Numbers (4 minutes)**

Materials: (S) Break apart numbers (Fluency Template 1), personal white board

Note: Reviewing decomposing numbers to 5 supports adding and subtracting within 5. The activity also

prepares students to work with decomposition in today’s lesson.

Students complete as many *different* number bonds as they can in one minute. Students can work with

partners as needed. If students come up with number bonds including 0 as a part, invite them to draw more

number bonds on their sheets so they have enough to record all decompositions of a number. (They can even

add a number bond with a total of 1.) Take a poll of how many students completed all decompositions for 2,

3, etc., and celebrate accomplishments.

**5-Group Puzzles (5 minutes)**

Materials: (S) 5-group puzzles (Fluency Template 2) cut apart to show the decompositions of 10, personal

white board

Note: Assembling the 5-group cards gives students a way to visualize partners to 10, leading them to develop

automaticity with this essential skill for Grade 1.



Students assemble the dot cards to make 10 and then write the number bond.

**Lesson 33**

**Fluency Practice (12 minutes)**

⬛ Fluency Differentiated Practice Sets **K.2I** (5 minutes)

⬛ Reading a Pictograph **K.8C** (4 minutes)

⬛ Hide 1 **K.3A** (3 minutes)

**Fluency Differentiated Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 29 Fluency Practice Sets)

Note: This activity assesses students’ progress toward mastery of adding and subtracting within 5.

Have students locate Practice Sets A, B, or C based on student performance in Lesson 30. Students who

correctly answered all questions on a Practice Set in the previous attempt should move to the next Practice

Set. All other students should try to improve their scores on Practice Set A.

Students complete as many problems as they can in 96 seconds. Assign a counting pattern and start number

for early finishers, or have them play an independent game like the Make 10 Memory Game (Lesson 28).

Collect and correct any Practice Sets completed within the allotted time.

**Reading a Pictograph (4 minutes)**

Display a 2-column graph similar to the one shown here.

Note: This fluency activity provides students with an opportunity to draw conclusions from a pictograph.

Ask questions such as:

 What story does this graph tell?

 How many students preferred to swing? To slide?

 How many more students like to slide rather than swing?

 Finish this sentences: More students like to \_\_\_\_\_ than \_\_\_\_\_\_.

 How many students took part in the survey? Tell me how you know using

a number sentence.

 How many more students would rather slide than swing? Tell me how you

know using a number sentence.

 If we added another activity, how would it change our graph?

**Hide 1 (3 minutes)**

Materials: (T) Large 5-group cards (Lesson 12 Fluency Template 2)

Note: This activity prepares students to focus on subtraction in today’s lesson.

T: (Show the 3 dot card.) Raise your hand when you know how many dots.

(Wait for all hands to go up, and then give the signal.) Ready?

S: 3.

T: Now, hide 1. You can use your hand to hide 1 of the dots from your eyes,

or you can just see it in your mind. Now how many dots are left?

S: 2.

T: (Show the 4 dot card.) Raise your hand when you know how many dots.

(Wait for all hands to go up, and then give the signal.) Ready?

S: 4.

T: Hide 1. (Wait.) How many dots are left?

S: 3.

Continue with the following suggested sequence: 5, 1, 6, 7, 8, 9, and 10.

**Lesson 34**

**Fluency Practice (12 minutes)**

⬛ Hide 2 **K.3A** (3 minutes)

⬛ Reading a Pictograph **K.8C** (4 minutes)

⬛ Snap **K.2I** (5 minutes)

**Hide 2 (3 minutes)**

Materials: (T) Large 5-group cards (Lesson 12 Fluency Template 2)

Note: This activity prepares students to focus on subtraction in today’s lesson.

T: (Show the 4 dot card.) Raise your hand when you know how many dots are on the card. (Wait for all

hands to go up, and then give the signal.) Ready?

S: 4.

T: Now, hide 2. You can use your hand to hide 2 of the dots from your eyes, or you can just see

it in your mind. Now how many dots are left?

S: 2.

Continue with the following suggested sequence: 3, 5, 6, 7, 8, 9, and 10.

**Reading a Pictograph (4 minutes)**

Display a 3-column graph similar to the one shown here.



Note: This fluency activity provides students with an opportunity to draw conclusions from a pictograph.

Ask questions such as:

 What does this graph show?

 What transportation do most kindergarteners use to get to school? How do you know?

 How many more students walked than went by car?

 How many fewer students went by car than by bus? How do you know?

 Finish these sentences: The most number of kindergarteners \_\_\_\_\_\_\_ to school. The \_\_\_\_ number

of kindergarteners rode in a car.

 How many students took part in the survey? Tell me how you know using a number sentence.

 What number sentence tells us how many kindergartens in all walked and took the bus?

**Snap (5 minutes)**

Materials: (S) 5-stick of linking cubes

Note: This fast-paced game serves as a concrete review of the composition and decomposition of numbers

to 5. It also supports the part–whole thinking needed in the upcoming lesson.

1. Partner A shows Partner B her 5-stick and then puts it behind her back.

2. When Partner B says, “Snap!” Partner A quickly breaks her stick into two parts.

3. Partner A shows Partner B one part.

4. Partner B tries to figure out the hidden part.

5. Partner A shows the hidden part and checks Partner B’s guess.

6. Both partners say the subtraction sentence together (e.g., “5 take away 2 equals 3”).

Partners take turns, continuing with the 5-stick. If time permits, students can also play with a 4-stick,

3-stick, etc.

**Lesson 35**

**Fluency Practice (12 minutes)**

⬛ Fluency Differentiated Practice Sets **K.2I** (5 minutes)

⬛ Spill the Nickels **K.2I, K.4** (4 minutes)

⬛ Happy Counting **K.5** (3 minutes)

**Fluency Differentiated Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 29 Fluency Practice Sets)

Note: This activity assesses students’ progress toward mastery of adding and subtracting within 5.

Have students locate Practice Sets A, B, C, or D based on student performance in Lesson 33. Students who

correctly answered all questions on a Practice Set in the previous attempt should move to the next Practice

Set. All other students should try to improve their scores on Practice Set A.

Students complete as many problems as they can in 96 seconds. Assign a counting pattern and start number

for early finishers, or have them play an independent game like the Make 10 Memory Game (Lesson 28).

Collect and correct any Practice Sets completed within the allotted time.

**Spill the Nickels (4 minutes)**

Materials: (S) 5 nickels, cup, personal white board

Note: This activity leads students to mastery of the fluency goal for the grade: Add and subtract within 5.

Remind students that each coin has two sides. The side with the face is called “heads” and the other side

is called “tails.” You can mention that the head on a nickel is Thomas Jefferson.

Have students complete the following steps:

1. Take 3 nickels out of the bag, and place them in the cup.

2. Shake the cup gently, and then spill the nickels onto the personal white board.

3. Take away the nickels with heads showing, and record as a subtraction sentence (e.g., 3 – 2 = 1).

4. Erase, and repeat a few more times.

If students demonstrate mastery with subtraction to 3, repeat the process for 4 and 5.

**Happy Counting (3 minutes)**

Note: Fluidity with counting forward and backward builds students’ number sense and sets the stage for

counting on strategies used in Grade 1.

Conduct the activity as described in Lesson 19, but continue to 15 or 20.

**Lesson 36**

**Fluency Practice (12 minutes)**

⬛ Sprint: Fluency **K.2I** (9 minutes)

⬛ Counting to 30 by Ones with the Rekenrek **K.2A, K.2F, K.5** (3 minutes)

**Sprint: Fluency (9 minutes)**

Materials: (S) Fluency Sprint (2 copies of the Lesson 31 Sprints)

Note: This activity assesses students’ progress toward mastery of adding and subtracting within 5. Select the

Sprint that is most appropriate for the class. In order to correct the work as a class, all students should take

the same Sprint.

T: It’s time for a Sprint! (Briefly recall previous Sprint preparation activities, and have students locate

the Sprints.) Take out your pencil and one crayon—any color. For this Sprint, you are going to subtract

to find how many are left. (Demonstrate the first problem as needed.)

Continue to follow the Sprint procedure as outlined in Lesson 3. Have students work on the Sprint

a second time. Continue to emphasize that the goal is simply to do better than the first time and celebrate

improvement.

**Counting to 30 by Ones with the Rekenrek (3 minutes)**

Materials: (T) 100-bead Rekenrek

Note: Counting from 20 to 30 is easier than learning the linguistically challenging counting sequence of

11–20. Once students know the number word *twenty* , it becomes just a matter of extending a pattern.

Conduct as described in Lesson 32.

**Lesson 37**

**Fluency Practice (12 minutes)**

⬛ Imagine More to Add to 5 **K.2I** (5 minutes)

⬛ Hide 1 **K.3A** (3 minutes)

⬛ Cross Out 2 to Subtract Within 5 **K.3A** (4 minutes)

**Imagine More to Add to 5 (5 minutes)**

Materials: (S) Imagine more to add to 5 (Fluency Template 1)

Note: This activity bridges the pictorial to the abstract as students make progress on the grade level

fluency goal.

This activity is similar to Lesson 12 Draw More to Make 5; however, this activity challenges students to add

just by visualizing and then write the addition sentence. Students who are struggling can show more on their

fingers to solve, rather than drawing more.

After giving clear instructions and completing the first few problems together, allow students time to work

at their own pace. Encourage them to do as many problems as they can within a given time frame. Go over

the answers, and direct students to energetically shout, “Yes!” for each correct answer.

**Hide 1 (3 minutes)**

Materials: (T) Large 5-group cards 0–5 (Lesson 12 Fluency Template 2)

Note: This activity helps students represent subtraction situations using number sentences.

T: (Show the 2 dot card.) Raise your hand when you know how many dots are on the card. (Wait for all

hands to go up, and then give the signal.) Ready?

S: 2.

T: Now, hide 1. You can use your hand to hide 1 of the dots from your eyes, or you can just see

it in your mind. Now, how many dots are left?

S: 1.

T: Say the subtraction sentence starting with 2. (Pause.) Ready?

S: 2 – 1 = 1.

Continue with the following suggested sequence: 3, 4, 5, 1, and then random numbers.

Variation: Students can write the subtraction sentence on their personal white boards instead

of answering verbally.

**Cross Out 2 to Subtract Within 5 (4 minutes)**

Materials: (S) Cross out 2 (Fluency Template 2)

Note: Working with both addition and subtraction in this fluency activity prepares students for today’s lesson

by helping them gain flexibility with both operations.

After giving clear instructions and completing the first few problems together, allow students time to work

at their own pace. Encourage them to do as many problems as they can within a given time frame. Go over

the answers, and direct students to energetically shout, “Yes!” for each correct answer.

**Lesson 38**

**Fluency Practice (12 minutes)**

⬛ Fluency Differentiated Practice Sets **K.2I** (5 minutes)

⬛ Imagine 1 More **K.2F, K.3B, K.3C** (3 minutes)

⬛ Reading a Pictograph **K.8C** (4 minutes)

**Fluency Differentiated Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 29 Fluency Practice Sets)

Note: This activity assesses students’ progress toward mastery of adding and subtracting within 5.

Assign the appropriate Practice Set based on student performance in Lesson 35. (All sets can be found

in Lesson 29.) Students who correctly answered all questions on a Practice Set in the previous attempt should

move to the next Practice Set. All other students should try to improve their scores on Practice Set A.

Students complete as many problems as they can in 96 seconds. Assign a counting pattern and start number

for early finishers, or have them play an independent game like the Make 10 Memory Game (Lesson 28).

Collect and correct any Practice Sets completed within the allotted time.

**Imagine 1 More (3 minutes)**

Materials: (T) Large 5-group cards (0–5) (Lesson 12 Fluency Template 2)

T: (Show the 2 dot card.) Raise your hand when you know how many dots. (Wait for all hands to go up,

and then give the signal.) Ready?

S: 2.

T: Now, imagine that there is 1 more. Now how many dots with 1 more?

S: 3.

T: Say the addition sentence starting with 2. (Pause.) Ready?

S: 2 + 1 = 3.

T: Flip it!

S: 1 + 2 = 3.

To focus on the fluency goal of addition within 5, continue with the following suggested sequence: 3, 4, 1,

and 0. If students are ready for a challenge, consider working up to 10.

Variation: Students can write the addition sentence on their personal white boards instead of answering

verbally.

**Reading a Pictograph (4 minutes)**

Display a 3-column graph similar to the one shown here.



Note: This fluency activity provides students with an opportunity to draw conclusions from a pictograph.

Ask:

⬛ What does the title of the graph tell us?

⬛ What type of graph is this?

⬛ What does this picture mean? How do you know?

⬛ How many people were asked to pick a favorite meal? How do you know? Tell me how you know

using a number sentence.

⬛ Which meal was the favorite among these people who were asked?

⬛ How many more people liked breakfast compared to lunch? Tell me how you know using a number

sentence.

⬛ Altogether, how many people like lunch and dinner the most? Tell me how you know using a number

sentence.

**Lesson 39**

**Fluency Practice (12 minutes)**

⬛ Fluency Differentiated Practice Sets **K.2I** (5 minutes)

⬛ Growing Apples to 10 **K.2I, K.3A** (4 minutes)

⬛ 5-Group Peek-a-Boo **K.2I** (3 minutes)

**Fluency Differentiated Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 29 Fluency Practice Sets)

Note: This activity assesses students’ progress toward mastery of adding and subtracting within 5.

Assign the appropriate Practice Set based on student performance in Lesson 38. Students who correctly

answered all questions on a Practice Set in the previous attempt should move to the next Practice Set. All

other students should try to improve their scores on the same set they used in Lesson 38.

Students complete as many problems as they can in 96 seconds. Assign a counting pattern and start number

for early finishers, or have them play an independent game like the Make 10 Memory Game (Lesson 28).

Collect and correct any Practice Sets completed within the allotted time.

**Growing Apples to 10 (4 minutes)**

Materials: (S) Apple tree (Fluency Template), 10 red beans, die

Note: This activity prepares students for today’s lesson by providing the opportunity to practice partners

to 10 at the concrete level, before moving onto the pictorial and abstract.

Have students follow the directions below:

1. Roll the die.

2. Use the number on the die to determine how many red beans are placed on the apple tree. Arrange

the beans in 5-groups.

3. Count how many more are needed to make 10.

4. Say, “I have \_\_\_\_. I need \_\_\_\_\_ more to make 10.”

5. Do not remove the beans. Roll the die again. Count to see if there are enough spaces left over for

that many beans. If the number goes over 10, and there are not enough spaces, roll again to get

a smaller number. Then, place that many beans on the apple tree.

6. State the new amount and how many more it needs to make 10.

Continue until 10 is made. Remove the beans, and start again from 0 if time permits. This game can

be played with a partner, and a spinner can be substituted for the die.

**5-Group Peek-a-Boo (3 minutes)**

Materials: (T) Large 5-group cards (Lesson 12 Fluency Template 2)

T: I’m going to show you my 5-group cards, but only for a second, like this! (Hold up the card briefly, and

then, quickly take it out of view.) Quickly count the dots, and raise your hand when you know how many.

Remember to wait for the snap. (Wait for all students to raise hands, and then, give the signal.)

S: 9.

T: Raise your hand when you know how many more to make 10. (Wait for all hands to go up, and then,

signal.) Ready?

S: 1.

Continue with the following possible sequence: 8, 5, 10, 7, 6, 1, 4, 3, 5, 2, 9, and 0.

Variation: Have students play with a partner. Give each pair of students a set of 5-group cards.

**Lesson 40**

**Fluency Practice (12 minutes)**

⬛ Ready, Set, Add! **K.3A** (3 minutes)

⬛ Beep Number **K.2A** (4 minutes)

⬛ Draw More to Make 10 **K.2I, K.3A** (5 minutes)

**Ready, Set, Add! (3 minutes)**

Note: In this activity, students test their mastery of addition facts within 5, and when the total is greater than

5, they are able to rely on the strategies of counting all or counting on with fingers.

Conduct the activity as outlined in Lesson 31.

**Beep Number (4 minutes)**

Note: This activity extends students’ proficiency in number order, anticipating the work of the next module.

T: Let’s play Beep Number! Listen carefully while I count. Instead of saying a number, I’ll say “Beep.”

When you know what the beep number is, raise your hand.

T: 16, 17, beep! (Wait until all hands are raised, and then give the signal.)

S: 18.

T: 21, 22, beep, 24. (Wait until all hands are raised, and then give the signal.)

S: 23.

Continue in a thoughtful sequence, but return to a simpler sequence if students have difficulty. Numbers after

are easier to determine than numbers before, and crossing decades may prove difficult.

**Draw More to Make 10 (5 minutes)**

Materials: (S) Draw more to make 10 (Fluency Template)

Note: This activity gives students practice with partners to 10 at the pictorial level in preparation for today’s

work in recording how many more to make 10 with an addition sentence.

After giving clear instructions and completing the first few problems together, allow students time to work

at their own pace. Encourage them to do as many problems as they can within a given time frame.

**Lesson 41**

**Fluency Practice (9 minutes)**

⬛ Sprint: Fluency **K.2I** (9 minutes)

**Sprint: Fluency (9 minutes)**

Materials: (S) Fluency Sprint (2 copies of the Lesson 31 Sprints)

Note: This activity assesses students’ progress toward mastery adding and subtracting within 5. Select the

Sprint that is most appropriate for the class. In order to correct the work as a class, all students should take

the same sprint.

T: It’s time for a Sprint!

Briefly recall previous Sprint preparation activities, and have students locate the Sprints.

T: Take out your pencil and one crayon, any color. For this Sprint, you are going to subtract to find how

many are left.

Demonstrate the first problem as needed.

Continue to follow the Sprint procedure as outlined in Lesson 3. Have students work on the Sprint

a second time. Continue to emphasize that the goal is simply to do better than the first time, and celebrate improvement.