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| **Grade 2 Module 6: Foundations of Multiplication and Divisions** | | | | |
| **Topic A: Formation of Equal Groups** | | | |  |
| **Lesson 1** | [Grade 2 Fluency Practice Sets **(2.4A)**](#GradeTwoFluency1) | [Get the Ten Out and Subtract **(2.4A)**](#GettheTenOut1) | [Subtract Common Units **(2.4A, 2.4B)**](#SubtractCommonUnits1) |  |
| **Lesson 2** | [Grade 2 Fluency Practice Sets **(2.4A)**](#GradeTwoFluency2) | [Using the Nearest Ten to Subtract **(2.4A, 2.4B)**](#UsingtheNearestTen1) | [Subtracting Multiples of Hundreds and Tens **(2.4B)**](#SubtractingMultiples1) |  |
| **Lesson 3** | [Happy Counting by Fives **(2.2C)**](#HappyCountingbyFives1) | [Sprint: Subtraction Within 20 **(2.4A)**](#Sprint1) |  |  |
| **Lesson 4** | [Happy Counting by Fives **(2.2C)**](#HappyCountingbyFives2) | [Sprint: Adding Crossing Ten **(2.4A)**](#Sprint2) |  |  |
| **Topic B: Arrays and Equal Groups** | | | | |
| **Lesson 5** | [Making the Next Ten to Add**(2.4A, 2.4B)**](#MakingtheNextTen1) | [Grade 2 Fluency Practice Sets **(2.4A)**](#GradeTwoFluency3) | [Happy Counting by Tens: Crossing 100 **(2.2C)**](#HappyCountingbyTens1) |  |
| **Lesson 6** | [Making the Next Hundred Drill **(2.4A, 2.4B)**](#MakingtheNextHundred1) | [Grade 2 Fluency Practice Sets **(2.4A)**](#GradeTwoFluency4) | [Happy Counting by Tens: Crossing 100 **(2.2C)**](#HappyCountingbyTens2) |  |
| **Lesson 7** | [Coin Drop **(2.5A)**](#CoinDrop1) | [Sprint: Sums to the Teens **(2.4A, 2.4B)**](#Sprint3) |  |  |
| **Lesson 8** | [Using the Nearest Ten to Subtract **(2.4A, 2.4B)**](#UsingtheNearestTen2) | [Sprint: Subtraction from Teens **(2.4A)**](#Sprint4) |  |  |
| **Lesson 9** | [Get the Ten Out and Subtract **(2.4A)**](#GettheTenOut2) | [Grade 2 Fluency Practice Sets **(2.4A)**](#GradeTwoFluency5) | [Happy Counting by Tens: Crossing 100 **(2.2C)**](#HappyCountingbyTen3) |  |
| **Topic C: Rectangular Arrays as a Foundation of Multiplication and Division** | | | | |
| **Lesson 10** | [Happy Counting by Tens: Crossing 100 **(2.2C)**](#HappyCountingbyTens4) | [Sprint: Sums to the Teens **(2.4A)**](#Sprint5) |  |  |
| **Lesson 11** | [Happy Counting by Tens: Crossing 100**(2.2C)**](#HappyCountingbyTens5) | [Sprint: Subtraction Crossing Ten**(2.4B)**](#Sprint6) |  |  |
| **Lesson 12** | [Compensation**(2.4A, 2.4B)**](#Compensation1) | [Identify the Shape **(2.8C)**](#IdentifytheShape1) | [Grade 2 Fluency Practice Sets (2.4A)](#GradeTwoFluency7) |  |
| **Lesson 13** | [Making the Next Ten to Add **(2.4A, 2.4B)**](#MakingtheNextTen2) | [Grade 2 Fluency Practice Sets **(2.4A)**](#GradeTwoFluency6) |  |  |
| **Lesson 14** | [Count the Square Units **(2.9F)**](#CounttheSquareUnits1) | [Coin Drop **(2.5B)**](#CoinDrop2) | [More and Less **(2.4A, 2.4B)**](#MoreandLess) |  |
| **Lesson 15** | [Sprint: Subtract Crossing the Ten **(2.4A, 2.4B)**](#Sprint7) | [Using the Nearest Ten to Subtract **(2.4A, 2.4B)**](#UsingtheNearestTen3) | [Subtract Common Units **(2.4A, 2.4B)**](#SubtractCommonUnits2) |  |
| **Lesson 16** | [Get to 10, 20, or 30 **(2.4A)**](#GetTo1) | [Count by Ten or One with Dimes and Pennies **(2.4A)**](#CountbyTen1) | [Grade 2 Fluency Practice Sets **(2.4A)**](#GradeTwoFluency8) |  |
| **Topic D: The Meaning of Odd and Even Numbers** | | | | |
| **Lesson 17** | [Subtraction Patterns **(2.4A, 2.4B)**](#SubtractionPatterns1) | [Grade 2 Fluency Practice Sets **(2.4A)**](#GradeTwoFluency9) |  |  |
| **Lesson 18** | [Skip-Counting by Twos **(2.2C)**](#SkipCountingbyTwos1) | [Sprint: Subtraction from Teens **(2.4A)**](#Sprint8) |  |  |
| **Lesson 19** | [Making the Next Ten to Add **(2.4A, 2.4B)**](#MakingtheNextTen3) | [Sprint: Sums to the Teens **(2.4A)**](#Sprint9) |  |  |
| **Lesson 20** | [Skip-Counting by Twos **(2.2C)**](#SkipCountingbyTwos2) | [Grade 2 Fluency Practice Sets **(2.4A)**](#GradeTwoFluency10) |  |  |

TEKS Grade 2 Module 5 Fluencies

Lesson 1

Fluency Practice (14 Minutes)

**Grade 2 Fluency Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets

Note: During Topic A and for the remainder of the year, each day’s Fluency Practice includes an opportunity for review and mastery of the sums and differences with totals through 20 by means of the Fluency Practice Sets or Sprints. Five options are provided in this lesson for the Fluency Practice Set, with Set A being the simplest and Set E the most complex. Start all students on Set A.

Students complete as many problems as they can in 120 seconds. One hundred percent accuracy and

completion is recommended before moving to the next level. Collect any Practice Sets that have been

completed within the 120 seconds, and check the answers. The next time Fluency Practice Sets are

used, students who have successfully completed their set can move on to the next level. Keep a record of student progress.

Consider assigning early finishers a counting pattern and start number (e.g., count by fives from 195).

Celebrate improvement as well as advancement. Students should be encouraged to compete with

themselves rather than their peers. Discuss with students possible strategies to solve. Notify caring adults of each student’s progress.

**Get the Ten Out and Subtract (5 minutes)**

Note: Students practice taking out the ten and subtracting.

T: For every expression I give, subtract the ones from ten. When I say, “12 − 4,” you say,

10 − 4 = 6. Ready?

T: 12 − 4.

S: 10 − 4 = 6.

T: 13 − 7.

S: 10 − 7 = 3.

Students practice taking the ten out of expressions fluently before adding the ones back.

T: Now, let’s add back the ones.

T: 12 − 4. Take from ten.

S: 10 − 4 = 6.

T: Now, add back the ones.

S: 6 + 2 = 8.

Continue with the following possible sequence: 13 − 7, 11 − 8, 13 − 9, 15 − 7, and 14 − 8.

**Subtract Common Units (4 minutes)**

Materials: (S) Personal white board

Note: This activity reminds students of the importance of the subtraction algorithm.

T: (Project 88.) Say the number in unit form.

S: 8 tens 8 ones.

T: (Write 88 – 22 = \_\_\_\_.) Say the subtraction sentence and answer in unit form.

S: 8 tens 8 ones – 2 tens 2 ones = 6 tens 6 ones.

T: Write the subtraction sentence in standard form on your personal white board.

Continue with the following possible sequence: 66 − 33, 99 − 22, 299 − 22, 77 − 33, and 777 − 33.

Lesson 2

Fluency Practice (12 Minutes)

* Grade 2 Fluency Practice Sets 2.4A (5 minutes)
* Using the Nearest Ten to Subtract 2.4A, 2.4B (5 minutes)
* Subtracting Multiples of Hundreds and Tens 2.4B (2 minutes)

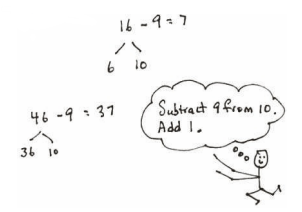
**Grade 2 Fluency Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 1 Fluency Practice Sets)

Note: During Topic A and for the remainder of the year, each day’s Fluency Practice includes an opportunity for review and mastery of the sums and differences with totals through 20 by means of the Fluency Practice Sets or Sprints. Practice Sets, along with details about the process, are provided in Lesson 1.

**Using the Nearest Ten to Subtract (5 minutes)**

Note: Students apply bonds of 10 to subtracting with larger numbers.



T: (Post 16 − 9 on the board.) Raise your hand

when you know the answer.

S: 7.

T: (Write the bond of 16 as 6 and 10.) 10 − 9 is…?

S: 1.

T: 1 + 6 is…?

S: 7.

T: 16 − 9 is…?

S: 7.

T: 46 − 9 is…? (Pause.)

S: 37.

T: (Write the bond of 46 as 36 and 10.) 10 − 9 is…?

S: 1.

T: 36 + 1 is…?

S: 37.

T: 46 − 9 is…?

S: 37.

Continue with the following possible sequence: 15 − 9 and 45 − 9, 13 − 8 and 33 − 8, 15 − 7 and 35 − 7, 12 − 9 and 42 − 9, 13 − 7 and 53 − 7, 16 − 9 and 46 − 9, 14 − 8 and 54 − 8, 13 − 5 and 43 − 5, and 16 − 9 and 36 − 9.

**Subtracting Multiples of Hundreds and Tens (2 minutes)**

Note: Students review subtracting multiples of hundreds and tens to maintain their ability to isolate and

manipulate place value units.

T: What is 2 tens less than 130?

S: 110.

T: Give the subtraction number sentence.

S: 130 − 20 = 110.

T: What is 2 hundreds less than 350?

S: 150.

T: Give the subtraction number sentence.

S: 350 − 200 = 150.

Continue with the following possible sequence: 6 tens less than 150, 3 hundreds less than 550,

and 7 tens less than 250.

Lesson 3

Fluency Practice (12 Minutes)

* Happy Counting by Fives 2.2C (3 minutes)
* Sprint: Subtraction Within 20 2.4A (9 minutes)

**Happy Counting by Fives (3 minutes)**

Note: This activity promotes the grade level fluency standard of skip-counting by 5s and anticipates telling time to the nearest five minutes in Module 7.

T: Let’s count by fives, starting at 0. Ready? (Point up rhythmically until a change is desired. Close hand

to indicate a stopping point. Point down to count in the opposite direction. Continue, periodically

changing direction.)

S: 0, 5, 10, 15, 20 (switch) 15, 10 (switch) 15, 20, 25, 30, 35, 40 (switch) 35, 30, 25 (switch) 30, 35, 40,

45 (switch) 40, 35, 30 (switch) 35, 40, 45, 50 (switch) 45, 40, 35 (switch) 40, 45, 50 (switch) 45, 40, 35,

30, 25, 20, 15.

T: Excellent! Try it for 30 seconds with your partner, starting at 0. Partner A, you are the teacher today.

**Sprint: Subtraction Within 20 (9 minutes)**

Materials: (S) Subtraction Within 20 Sprint

Note: This fluency activity promotes mastery of subtracting from teen numbers to address the grade level fluency standard.

Lesson 4

Fluency Practice (12 Minutes)

* Happy Counting by Fives 2.2C (3 minutes)
* Sprint: Adding Crossing Ten 2.4A (9 minutes)

**Happy Counting by Fives (3 minutes)**

Note: Students fluently skip-count by fives with an emphasis on crossing one hundred in anticipation of

counting coins in Module 7 and telling time in Module 8.

T: Let’s count by fives, starting at 50. Ready? (Point up

rhythmically until a change is desired. Close hand to

indicate a stopping point. Point down to count in the

opposite direction. Continue, periodically changing

direction.)

S: 50, 55, 60, 65, 70 (switch) 65, 60 (switch) 65, 70, 75,

80, 85, 90 (switch) 85, 80, 75 (switch) 80, 85, 90, 95,

100 (switch) 95, 90, 85 (switch) 90, 95, 100, 105

(switch) 100, 95, 90 (switch) 95, 100, 105 (switch)

100, 95, 90, 85, 80, 75, 70.

T: Excellent! Try it for 30 seconds with your partner,

starting at 50. Partner B, you are the teacher today.

**Sprint: Adding Crossing Ten (9 minutes)**

Materials: (S) Adding Crossing Ten Sprint

Note: Students add numbers within 20 to help gain mastery of the grade level fluency standard.

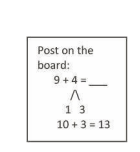
Lesson 5

Fluency Practice (12 Minutes)

* Making the Next Ten to Add 2.4A, 2.4B (4 minutes)
* Grade 2 Fluency Practice Sets 2.4A (5 minutes)
* Happy Counting by Tens: Crossing 100 2.2C (3 minutes)

**Making the Next Ten to Add (4 minutes)**

Note: This fluency activity reviews the make ten addition strategy.



T: When I say “9 + 4,” you say “10 + 3.” Ready? 9 + 4.

S: 10 + 3.

T: Answer.

S: 13.

Continue with the following possible sequence, one column at a time:

19 + 4, 49 + 4

9 + 6, 19 + 6, 59 + 6

8 + 3, 18 + 3, 68 + 3

8 + 5, 18 + 5, 78 + 5

7 + 4, 17 + 4, 87 + 4

7 + 6, 17 + 6, 97 + 6

**Grade 2 Fluency Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 1 Fluency Practice Sets)

Note: During Topic B and for the remainder of the year, each day’s Fluency Practice includes an opportunity for review and mastery of the sums and differences with totals through 20 by means of the Fluency Practice Sets or Sprints. Practice Sets, along with details about the process, are provided in Lesson 1.

**Happy Counting by Tens: Crossing 100 (3 minutes)**

Note: Students skip-count by tens as a foundation for counting rows and columns in today’s lesson.

T: This time, let’s play Happy Counting, skip-counting by tens!

T: Watch my fingers to know whether to count up or down. A closed hand means stop. (Show signals

while explaining.)

T: Let’s count by tens, starting at 60. Ready? (Point up rhythmically until a change is desired. Close hand

to indicate a stopping point. Point down to count in the opposite direction. Continue, periodically

changing direction.)

S: 60, 70, 80, 90, 100, 110, 120, 130, 140 (switch) 130, 120, 110, 100, 90 (switch) 100, 110, 120, 130,

140, 150, 160, 170, 180, 190, 200, 210, 220 (switch) 210, 200, 190, 180.

T: Excellent! Try it for 30 seconds with your partner, starting at 80. Partner A, you are the teacher

today.

Lesson 6

Fluency Practice (12 Minutes)

* Making the Next Hundred Drill 2.4A, 2.4B (4 minutes)
* Grade 2 Fluency Practice Sets 2.4A (5 minutes)
* Happy Counting by Tens: Crossing 100 2.2C (3 minutes)

**Making the Next Hundred Drill (4 minutes)**

Note: This fluency activity reviews foundations that lead into today’s lesson.

T: (Write 170 on the board.) Let’s find the missing part to make the next hundred. What is the next

hundred?

S: 200.

T: If I say “170,” you say the missing number needed to make 200. Ready? 170.

S: 30.

T: Tell me the addition sentence.

S: 170 + 30 = 200.

Continue with the following possible sequence: 190, 160, 260, 270, 370, 380, 580, 620, 720, 740, 840, 844, 846, 916, 914, and 924.

**Grade 2 Fluency Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 1 Fluency Practice Sets)

Note: During Topic B and for the remainder of the year, each day’s Fluency Practice includes an opportunity for review and mastery of the sums and differences with totals through 20 by means of the Fluency Practice Sets or Sprints. Practice Sets, along with details about the process, are provided in Lesson 1.

**Happy Counting by Tens: Crossing 100 (3 minutes)**

Note: Students skip-count by tens as a foundation for counting rows and columns in today’s lesson.

T: Let’s count by tens, starting at 90. Ready?

S: 90, 100, 110, 120, 130, 140 (switch) 130, 120, 110, 100, 90 (switch) 100, 110, 120, 130, 140, 150, 160,

170, 180, 190, 200, 210, 220 (switch) 210, 200, 190, 180.

T: Excellent! Try it for 30 seconds with your partner, starting at 180. Partner B, you are the teacher today.

Lesson 7

Fluency Practice (12 Minutes)

* Coin Drop 2.5A (3 minutes)
* Sprint: Sums to the Teens 2.4A, 2.4B (9 minutes)

**Coin Drop (3 minutes)**

Materials: (T) 10 dimes, 30 pennies, metal can or plastic container

Note: In this fluency activity, students prepare for Module 7 by adding and subtracting ones and tens using

coins.

T: (Hold up a penny.) Name my coin.

S: A penny.

T: How much is it worth?

S: 1 cent.

T: Listen carefully as I drop coins in my can. Count along in your minds.

Drop in some pennies, and ask how much money is in the can. Take out some pennies, and show students. Ask

how much money is still in the can. Continue adding and subtracting pennies for a minute or so. Repeat the activity with dimes and then with dimes and pennies.

**Sprint: Sums to the Teens (9 minutes)**

Materials: (S) Sums to the Teens Sprint

Note: This Sprint gives practice in the grade level fluency of sums to 20.

Lesson 8

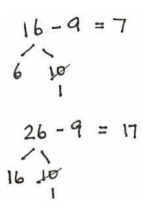
Fluency Practice (14 Minutes)

* Using the Nearest Ten to Subtract 2.4A, 2.4B (5 minutes)
* Sprint: Subtraction from Teens 2.4A (9 minutes)

**Using the Nearest Ten to Subtract (5 minutes)**

Note: Students use bonds of 10 when subtracting as a mental strategy to help subtract fluently with

larger numbers.



T: (Post 16 − 9 on the board.) Raise your hand when you know 16 − 9.

S: 7.

T: (Write in the bond.) 10 − 9 is…?

S: 1.

T: 6 + 1 is…?

S: 7.

T: 16 − 9 again is…?

S: 7.

T: (Post 26 − 9 on the board.) Raise your hand when you know 26 − 9.

S: 17.

T: (Write in the bond.) 10 − 9 is…?

S: 1.

T: 16 + 1 is…?

S: 17.

T: 26 − 9 again is…?

S: 17.

Continue with the following possible sequence:

a. 36 − 9, 46 − 9

b. 11 − 9, 21 − 9, 41 − 9

c. 12 − 8, 22 − 8, 42 − 8

d. 11 − 8, 41 − 8, 61 − 8

e. 25 − 9, 26 − 9, 27 − 9

f. 35 − 19, 45 − 19, 55 − 9

**Sprint: Subtraction from Teens (9 minutes)**

Materials: (S) Subtraction from Teens Sprint

Note: This Sprint builds fluency with the grade level fluency goal of subtracting within 20 using mental

strategies.

Lesson 9

Fluency Practice (12 Minutes)

* Get the Ten Out and Subtract 2.4A (4 minutes)
* Grade 2 Fluency Practice Sets 2.4A (5 minutes)
* Happy Counting by Tens: Crossing 100 2.2C (3 minutes)

**Get the Ten Out and Subtract (4 minutes)**

Note: Students practice taking out the ten when subtracting.

T: For every expression I give, subtract the ones from ten. When I say, “12 − 4,” you say,

“10 − 4 = 6.” Ready?

T: 12 − 8.

S: 10 − 8 = 2.

T: 13 − 7.

S: 10 − 7 = 3.

Students practice taking the ten out of expressions fluently before adding the ones back.

T: Now, let’s add back the ones.

T: 12 − 8. Take from ten.

S: 10 − 8 = 2.

T: Now, add back the ones.

S: 2 + 2 = 4.

T: 12 − 8 is…?

S: 4.

T: True or false: 2 + 2 = 12 − 8.

S: True.

Continue with the following possible sequence: 13 − 7, 11 − 8, 13 − 9, 15 − 7, and 14 – 8.

**Grade 2 Fluency Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 1 Fluency Practice Sets)

Note: During Topic B and for the remainder of the year, each day’s Fluency Practice includes an opportunity for review and mastery of the sums and differences with totals through 20 by means of the Fluency Practice Sets or Sprints. Practice Sets, along with details about the process, are provided in Lesson 1.

**Happy Counting by Tens: Crossing 100 (3 minutes)**

Note: Students skip-count by tens as a foundation for counting equal groups in today’s lesson.

T: Let’s count by tens, starting at 160. Ready? (Point up rhythmically until a change is desired. Close

hand to indicate a stopping point. Point down to count in the opposite direction. Continue,

periodically changing direction.)

S: 160, 170, 180, 190, 200, 210, 220, 230, 240 (switch) 230, 220, 210, 200, 190 (switch) 200, 210, 220,

230, 240, 250, 260, 270, 280, 290, 300, 310, 320 (switch) 310, 300, 290, 280.

T: Excellent! Try it for 30 seconds with your partner, starting at 300. Partner B, you are the teacher today.

Lesson 10

Fluency Practice (12 Minutes)

* Happy Counting by Tens: Crossing 100 2.2C (3 minutes)
* Sprint: Sums to the Teens 2.4A (9 minutes)

**Happy Counting by Tens: Crossing 100 (3 minutes)**

Note: Students skip-count by tens as a review of counting equal groups.

T: Let’s count by tens, starting at 270. Ready? (Point up rhythmically until a change is desired. Close

hand to indicate a stopping point. Point down to count in the opposite direction. Continue,

periodically changing direction.)

S: 270, 280, 290, 300, 310, 320, 330, 340 (switch) 330, 320, 310, 300, 290 (switch) 300, 310, 320, 330,

340, 350, 360, 370, 380, 390, 400, 410, 420 (switch) 410, 400, 390, 380 (switch) 390, 400, 410.

T: Excellent! Try it for 30 seconds with your partner, starting at 300. Partner A, you are the teacher

today.

**Sprint: Sums to the Teens (9 minutes)**

Materials: (S) Sums to the Teens Sprint

Note: This Sprint gives practice in the grade level fluency goal of sums to 20.

Lesson 11

Fluency Practice (12 Minutes)

* Happy Counting by Tens: Crossing 100 2.2C (3 minutes)
* Sprint: Subtraction Crossing Ten 2.4B (9 minutes)

**Happy Counting by Tens: Crossing 100 (3 minutes)**

Note: Students skip-count by tens as a review of counting equal groups.

T: Let’s count by tens, starting at 360. Ready? (Point up rhythmically until a change is desired. Close

hand to stop. Point down to count in the opposite direction.)

S: 360, 370, 380, 390, 400, 410, 420, 430, 440 (switch) 430, 420, 410, 400, 390 (switch) 400, 410,

420,430, 440, 450, 460, 470, 480, 490, 500, 510, 520 (switch) 510, 500, 490, 480.

T: Excellent! Try it for 30 seconds with your partner, starting at 440. Partner B, you are the teacher

today.

**Sprint: Subtraction Crossing Ten (9 minutes)**

Materials: (S) Subtraction Crossing Ten Sprint

Note: Students subtract a single-digit number from a teen number and continue the subtraction pattern when subtracting from multiples of ten and some ones.

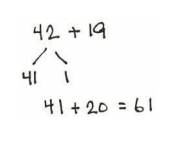
Lesson 12

Fluency Practice (15 Minutes)

* Compensation 2.4A, 2.4B (5 minutes)
* Identify the Shape 2.8C (5 minutes)
* Grade 2 Fluency Practice Sets 2.4A (5 minutes)

**Compensation (5 minutes)**

Note: This activity reviews the mental math strategy of compensation. By making a multiple of 10, students solve a much simpler addition problem. Draw a number bond for the first problem on the board to help students visualize the decomposition.



T: (Write 42 + 19 = \_\_\_\_\_.) Let’s use a mental math strategy to add.

How much more does 19 need to make the next ten?

S: 1 more.

T: Where can 19 get 1 more from?

S: From the 42.

T: Take 1 from 42, and give it to 19. Say the new simplified

number sentence with the answer.

S: 41 + 20 = 61.

T: So, 42 + 19 is…?

S: 61.

T: 37 + 19.

S: 36 + 20 = 56.

Continue with the following possible sequence: 29 + 23, 38 + 19, 52 + 19, 24 + 18, and 34 + 28.

**Identify the Shape (5 minutes)**

Note: This fluency activity reviews properties and vocabulary that are used during today’s Concept

Development.

T: (Project a triangle.) How many sides does this shape have?

S: 3.

T: Name the shape.

S: Triangle.

Continue with the following possible sequence: quadrilateral (trapezoid), quadrilateral (rhombus),

quadrilateral (square), and quadrilateral (rectangle).

**Grade 2 Fluency Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets

Note: During Topic C and for the remainder of the year, each day’s fluency activities include an opportunity for review and mastery of the sums and differences with totals through 20 by means of the Fluency Practice Sets or Sprints. Five options are provided in this lesson for the Fluency Practice Set, with Set A being the most simple and Set E being the most complex. Start all students on Set A.

Students complete as many problems as they can in 120 seconds. One hundred percent accuracy and completion is recommended before moving to the next level. Collect any Practice Sets that have been completed within the 120 seconds, and check the answers. The next time Fluency Practice Sets are used, students who have successfully completed their set can be provided with the next level. Keep a record of student progress.

Consider assigning early finishers a counting pattern and start number (e.g., count by fives from 195). Celebrate improvement as well as advancement. Students should be encouraged to compete with themselves rather than their peers. Discuss with students possible strategies to solve. Notify caring adults of each student’s progress.

Important note: These Practice Sets are different from the Practice Sets used in Topic A.

Lesson 13

Fluency Practice (11 Minutes)

* Making the Next Ten to Add 2.4A, 2.4B (6 minutes)
* Grade 2 Fluency Practice Sets 2.4A (5 minutes)

**Making the Next Ten to Add (6 minutes)**

Note: This fluency activity reviews making a ten to add.

T: When I say “9 + 4,” you say “10 + 3.” Ready? 9 + 4.

S: 10 + 3.

T: Answer.

S: 13.

Continue with the following possible sequences:

19 + 4, 29 + 4, 29 + 14, 59 + 14, 9 + 6, 19 + 6, 19 + 16, 49 + 16, 8 + 3, 18 + 3, 18 + 13

8 + 5, 18 + 5, 18 + 15, 38 + 15, 7 + 6, 17 + 6, 17 + 16, 37 + 16, 7 + 4, 17 + 4, 67 + 4.

**Grade 2 Fluency Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 12 Fluency Practice Sets)

Note: During Topic C and for the remainder of the year, each day's fluency activities include an opportunity for review and mastery of the sums and differences with totals through 20 by means of the Fluency Practice Sets or Sprints. Practice Sets, along with details about the process, are provided in Lesson 12.

Lesson 14

Fluency Practice (13 Minutes)

* Count the Square Units 2.9F (6 minutes)
* Coin Drop 2.5B (3 minutes)
* More or Less 2.4A, 2.4B (4 minutes)

**Count the Square Units (6 minutes)**

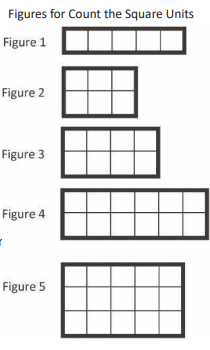
Note: This fluency activity reviews finding total area using

square units.

T: (Project a 1 × 5 tiled array similar to Figure 1 on the

right.) What’s the area of the rectangle? (Pause.)

S: 5 square units.



Continue with Figures 2–5.

**Coin Drop (3 minutes)**

Materials: (T) 10 dimes, 10 pennies, metal or plastic can

Note: In this activity, students practice adding and subtracting ones and tens using coins in preparation

for Module 7.

T: (Hold up a penny.) Name my coin.

S: A penny.

T: How much is it worth?

S: 1 cent.

T: Listen carefully as I drop coins in my can. Count along in your minds.

Drop in some pennies, and ask how much money is in the can. Take out some pennies, and show students. Ask how much money is still in the can. Continue adding and subtracting pennies for a minute or so. Repeat the activity with dimes and then with dimes and pennies.

**More and Less (4 minutes)**

Materials: (T) 10 dimes, 10 pennies

Note: In this activity, students practice adding and subtracting ones and tens using coins.

T: Let’s count by tens. (Move dimes to the side while counting.)

S: 10, 20, 30, 40, 50, 60.

T: How many dimes are shown?

S: 6 dimes.

T: What is the value of 6 dimes?

S: 60 cents.

T: What is 5 cents more? (Move 5 pennies.)

S: 60 cents.

T: Give the number sentence.

S: 60 cents + 5 cents = 65 cents.

T: What is 10 cents less? (Move one dime.)

S: 55 cents.

T: Give the number sentence.

S: 65 cents – 10 cents = 55 cents.

Repeat this line of questioning by starting with 7 dimes, removing 3 dimes, and asking for the number

sentence. Continue by adding 3 pennies and asking for the number sentence, adding 4 dimes and asking for the number sentence, and so forth.

Lesson 15

Fluency Practice (12 Minutes)

* Sprint: Subtract Crossing the Ten 2.4A, 2.4B (8 minutes)
* Using the Nearest Ten to Subtract 2.4A, 2.4B (2 minutes)
* Subtract Common Units 2.4A, 2.4B (2 minutes)

**Sprint: Subtract Crossing the Ten (8 minutes)**

Materials: (S) Subtract Crossing the Ten Sprint

Note: Students practice crossing the ten in preparation for the lesson, as well as to gain mastery of the sums and differences within 20.

**Using the Nearest Ten to Subtract (2 minutes)**

Note: Reviewing the Grade 1 skill of counting up and down to 10 to subtract gives students a mental strategy

to subtract fluently with larger numbers.

T: (Post 16 − 9 on the board.) Raise your hand when you know the

answer to 16 − 9.

S: 7.

T: Break 16 apart into 10 and 6. (Write in the bond.) What is 10 − 9?

S: 1.

T: 1 + 6 is…?

S: 7.

Continue with the following possible sequence: 14 − 9, 15 − 8, 16 − 7, 13 − 7, 12 − 9, 12 − 7, 22 − 7, 25 − 7, 25 − 9, 26 − 9, 27 − 9, 27 − 19, 37 − 9, 37 − 19, 35 − 19, 45 − 19, 47 − 18, and 48 − 29.

**Subtract Common Units (2 minutes)**

Materials: (S) Personal white board

Note: Reviewing this mental math Fluency Practice prepares students for understanding the importance of the subtraction algorithm and place value.

T: (Project 44.) Say the number in unit form.

S: 4 tens 4 ones.

T: (Write 44 − 22 = \_\_\_\_.) Say the subtraction sentence and answer in unit form.

S: 4 tens 4 ones − 2 tens 2 ones = 2 tens 2 ones.

T: Write the subtraction sentence on your personal white board.

Continue with the following possible sequence: 77 − 33, 88 − 55, 99 − 33, 199 − 33, and 999 − 33.

Lesson 16

Fluency Practice (12 Minutes)

* Get to 10, 20, or 30 2.4A (4 minutes)
* Count by Ten or One with Dimes and Pennies 2.4A (4 minutes)
* Grade 2 Fluency Practice Sets 2.4A (5 minutes)

**Get to 10, 20, or 30 (4 minutes)**

Materials: (S) 3 dimes and 10 pennies

Note: This fluency activity uses dimes and pennies to help students become familiar with coins while

simultaneously providing practice with missing addends to ten(s).

For the first two minutes:

Step 1: Lay out 0–10 pennies in a 5-group formation, and ask students to identify the amount shown

(e.g., 9 cents).

Step 2: Ask for the addition sentence to get to a dime (e.g., 9 cents + 1 cent = 1 dime).

For the next two minutes:

Repeat Steps 1 and 2. Then, add a dime, and ask students to identify the amount shown (e.g.,

1 dime 9 cents + 1 cent = 2 dimes).

**Count by Ten or One with Dimes and Pennies (3 minutes)**

Materials: (T) 10 dimes and 10 pennies

Note: This activity uses dimes and pennies as abstract representations of tens and ones to help students

become familiar with coins while simultaneously providing practice with counting forward and back by ten or one.

First minute: Place and take away dimes in a 5-group formation as students count along by 10.

Second minute: Begin with 2 pennies. Ask how many ones there are. Instruct students to start at 2 and add and subtract 10 as dimes are placed and taken away.

Third minute: Begin with 2 dimes. Ask how many tens there are. Instruct students to begin at 20 and add and subtract 1 as pennies are placed and taken away.

**Grade 2 Fluency Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 12 Fluency Practice Sets)

Note: During Topic C and for the remainder of the year, each day’s fluency activities include an opportunity for review and mastery of the sums and differences with totals through 20 by means of the Fluency Practice Sets or Sprints. Practice Sets, along with details about the process, are provided in Lesson 12.

Lesson 17

Fluency Practice (10 Minutes)

* Subtraction Patterns 2.4A, 2.4B (5 minutes)
* Grade 2 Fluency Practice Sets 2.4A (5 minutes)

**Subtraction Patterns (5 minutes)**

Materials: (S) Personal white board, math notebook or loose-leaf paper

Note: Students practice subtraction in order to gain mastery of the sums and differences within 20 and to see the relationship with larger numbers.

T: After I say a basic fact for you to solve, make a pattern sequence by adding 10 to the whole and then

subtracting. Continue until I say to stop. So, after solving 11 − 9, you would solve 21 − 9, and then…?

S: 31 − 9, 41 − 9, 51 − 9.

T: Yes. Solve as many as you can on your personal white board before I give the signal to stop. Let’s

begin. 11 − 9.

When every student has completed at least two problems, stop the class, and give the next expression.

Continue with the following possible sequence: 12 − 8, 11 − 8, and 13 − 9.

**Grade 2 Fluency Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 12 Fluency Practice Sets)

Note: During Topic D and for the remainder of the year, each day’s fluency activities includes an opportunity for review and mastery of the sums and differences with totals through 20 by means of the Fluency Practice Sets or Sprints. Practice Sets, along with details about the process, are provided in Lesson 12.

Lesson 18

Fluency Practice (12 Minutes)

* Skip-Counting by Twos 2.2C (4 minutes)
* Sprint: Subtraction from Teens 2.4A (8 minutes)

**Skip-Counting by Twos (4 minutes)**

Note: This fluency activity is foundational to understanding the relationship between skip-counting and

multiplication and division in Grade 3.

T: On my signal, count by ones from 0 to 20 in a whisper. Ready? (Tap the desk while students are

counting; knock on the twos. For example, tap, knock, tap, knock, etc.)

T: Did anyone notice what I was doing while you were counting? I started out tapping by ones, but I

knocked on every other number. Let’s count again, and try knocking and tapping with me.

S: 1 (tap), 2 (knock), 3 (tap), 4 (knock), 5 (tap), 6 (knock), …

T: Now, let’s count only when we knock. Ready?

S: (Tap), 2 (knock), (tap), 4 (knock), (tap), 6 (knock), (tap), 8 (knock), …

Continue this routine up to 40 and back down again.

**Sprint: Subtraction from Teens (8 minutes)**

Materials: (S) Subtraction from Teens Sprint

Note: Students practice subtraction from teens in order to gain mastery of the sums and differences

within 20.

Lesson 19

Fluency Practice (14 Minutes)

* Making the Next Ten to Add 2.4A, 2.4B (5 minutes)
* Sprint: Sums to the Teens 2.4A (9 minutes)

**Making the Next Ten to Add (5 minutes)**

Note: Students practice this mental strategy to gain mastery of sums within 20 and to relate the strategy

to larger numbers.

T: When I say “9 + 4,” you say “10 + 3.” Ready? 9 + 4.

S: 10 + 3.

T: Answer.

S: 13.

Continue with the following possible sequences:

9 + 6, 9 + 16, 19 + 16 8 + 7, 8 + 17, 18 + 17 7 + 6, 7 + 16, 17 + 16

9 + 8, 9 + 18, 19 + 18 8 + 5, 8 + 15, 18 + 15 7 + 4, 17 + 4, 17 + 14

**Sprint: Sums to the Teens (9 minutes)**

Materials: (S) Sums to the Teens Sprint

Note: Students practice crossing the ten when adding to gain mastery of sums within 20.

Lesson 20

Fluency Practice (9 Minutes)

* Skip-Counting by Twos 2.2C (4 minutes)
* Grade 2 Fluency Practice Sets 2.4A (5 minutes)

**Skip-Counting by Twos (4 minutes)**

Note: This fluency activity is foundational to understanding the relationship between skip-counting and

multiplication and division in Grade 3.

T: On my signal, count by ones from 0 to 20 in a whisper. Ready? (Tap the desk while students are

counting; knock on the twos. For example, tap, knock, tap, knock, etc.)

T: Did anyone notice what I was doing while you were counting? I started out tapping by ones, but I

knocked on every other number. Let’s count again, and try knocking and tapping with me.

S: 1 (tap), 2 (knock), 3 (tap), 4 (knock), 5 (tap), 6 (knock), …

T: Now, let’s count only when we knock. Ready?

S: (Tap), 2 (knock), (tap), 4 (knock), (tap), 6 (knock), (tap), 8 (knock), …

Continue this routine up to 40 and back down again.

**Grade 2 Fluency Practice Sets (5 minutes)**

Materials: (S) Fluency Practice Sets (Lesson 12 Fluency Practice Sets)

Note: During Topic D and for the remainder of the year, each day’s fluency activities includes an opportunity for review and mastery of the sums and differences with totals through 20 by means of the Fluency Practice Sets or Sprints. Practice Sets, along with details about the process, are provided in Lesson 12.