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TEKS Grade 2 Module 7 Fluencies

Lesson 1

Fluency Practice (10 Minutes)

* Count by 10 or 5 with Dimes and Nickels 2.2C (5 minutes)
* Grade 2 Fluency Differentiated Practice Sets 2.4A (5 minutes)

**Count by 10 or 5 with Dimes and Nickels (5 minutes)**

Materials: (T) 20 dimes, 20 nickels

Note: This activity uses dimes and nickels as representations of tens and fives to help students become familiar with coins while providing practice with counting forward and back by 10 or 5.

* Arrange 10 nickels in a ten-frame formation, and count up by 5 from 50 to 100. Ask how many nickels make 100 cents, how many fives are in 100 cents, and how many ones are in 100 cents. Add and subtract by 5 as you place and take away nickels.
* Arrange 9 dimes in a ten-frame formation, and count up by 10 from 90 to 150. Ask how many dimes make 150 cents, how many tens are in 150 cents, how many fives are in 150 cents, and how many ones are in 150 cents. Continue counting to 200. Ask how many dimes make 200 cents, how many tens are in 200 cents, and how many ones are in 200 cents. Add and subtract by 10 as you place and take away dimes.

**Grade 2 Fluency Differentiated 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 Sheet A being the most simple to Sheet E being the most complex. Start all students on Sheet A.

Lesson 2

Fluency Practice (10 Minutes)

* Grade 2 Fluency Differentiated Practice Sets 2.4A (5 minutes)
* Coin Drop 2.5A (5 minutes)

**Grade 2 Fluency Differentiated 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. The process is detailed and Practice Sets are provided in Lesson 1.

**Coin Drop (5 minutes)**

Materials: (T) 10 dimes, 10 nickels, 10 pennies, can

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

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

S: A nickel.

T: How much is it worth?

S: 5 cents.

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

Drop in some nickels, and ask the value of the money in the can. Take out some of the nickels, and show them. Ask how much money is still in the can. Continue adding and subtracting nickels for a minute or so. Then, repeat the activity with dimes, then with nickels and pennies, and then dimes and pennies.

Lesson 3

Fluency Practice (12 Minutes)

* Sprint: Addition and Subtraction by 5 2.4B (9 minutes)
* Coin Drop 2.5A (5 minutes)

**Sprint: Addition and Subtraction by 5 (9 minutes)**

Materials: (S) Addition and Subtraction by 5 Sprint

Note: This Sprint gives practice adding and subtracting by 5 in preparation for counting nickels in Topic B.

**Coin Drop (3 minutes)**

Materials: (T) 10 dimes, 5 nickels, can

Note: In this activity, students practice adding and subtracting fives and tens.

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

S: A nickel.

T: How much is it worth?

S: 5 cents.

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

Drop in some nickels, and ask how much money is in the can. Take out some of the nickels, and show them. Ask how much money is still in the can. Continue adding and subtracting nickels for a minute or so. Then, repeat the activity with dimes and nickels.

Lesson 4

Fluency Practice (12 Minutes)

* Coin Drop 2.5A (5 minutes)
* Sprint: Skip-Counting by 5 1.5B (9 minutes)

**Coin Drop (3 minutes)**

Materials: (T) 2 quarters, 10 pennies, can

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

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

S: A quarter.

T: How much is it worth?

S: 25 cents.

T: Watch carefully as I drop the quarter and some pennies in my can. Count along in your minds.

Drop in a quarter and some pennies, and ask how much money is in the can. Take out some pennies, and show them. Ask how much money is still in the can. Continue adding and subtracting pennies for a minute or so. Then, repeat the activity with two quarters and some pennies.

**Sprint: Addition and Subtraction by 5 (9 minutes)**

Materials: (S) Addition and Subtraction by 5 Sprint

Note: This Sprint gives practice adding and subtracting by 5 in preparation for counting nickels in Topic B.

Lesson 5

Fluency Practice (10 Minutes)

* Grade 2 Fluency Differentiated Practice Sets 2.4A (5 minutes)
* Coin Drop 2.5A (5 minutes)

**Grade 2 Fluency Differentiated 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. The process is detailed and Practice Sets are provided in Lesson 1.

**Coin Drop (3 minutes)**

Materials: (T) 2 quarters, 10 pennies, can

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

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

S: A quarter.

T: How much is it worth?

S: 25 cents.

T: Watch carefully as I drop the quarter and some pennies in my can. Count along in your minds.

Drop in a quarter and some pennies, and ask how much money is in the can. Take out some pennies, and show them. Ask how much money is still in the can. Continue adding and subtracting pennies for a minute or so. Then, repeat the activity with two quarters and some pennies.

Lesson 6

Fluency Practice (11 Minutes)

* Grade 2 Fluency Differentiated Practice Sets 2.4A (5 minutes)
* Coin Drop 2.5A (5 minutes)

**Grade 2 Fluency Differentiated 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. The process is detailed and Practice Sets are provided in Lesson 1.

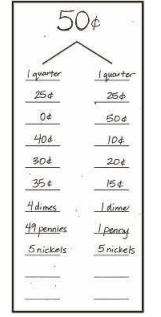
**Decomposition Tree (6 minutes)**

Materials: (S) Decomposition Tree (Fluency Template)

Note: Students are given 90 seconds to decompose a specified amount in as many ways

as they can. This fluency activity allows students to work at their own skill levels and

decompose amounts in a multitude of ways in a short amount of time.



T: (Post a blank decomposition tree.) I’m going to think of a way to break 50 cents

into two parts. I know 2 quarters makes 50 cents, and each quarter is worth 25

cents.

T: Watch me as I track our thinking on this decomposition tree. It is called a

decomposition tree because we are decomposing the number at the top. The

tree is like a number bond because the sum of the two parts is equal to the

whole.

T: Raise your hand when you have another way to break 50 cents into two parts.

S: 0¢ and 50¢. ->40¢ and 10¢. -> 30¢ and 20¢. -> 35¢ and 15¢. -> 4 dimes and 1 dime. -> 49 pennies

and 1 penny. -> 5 nickels and 5 nickels.

T: (Write each correct student response on the posted decomposition tree.)

T: Great! You are on a roll! Now, let’s see what you can do on your own. (Direct students to find the

decomposition tree template.)

T: You are going to break apart 60¢ on your own tree for 90 seconds. Make as many pairs as you can.

Go!

S: (Work for 90 seconds.)

T: Now, exchange your tree with your partner, and check each other’s work. (Allow students 30–45

seconds to check.)

T: Return each other’s papers. Did you see another way to make 60¢ on your partner’s paper? (Allow

students to share for another 30 seconds.)

T: Turn your paper over. Let’s break apart 60¢ for another minute.

Lesson 7

Fluency Practice (12 Minutes)

* Skip-Count by $5 and $10 Between 85 and 205 2.2C (3 minutes)
* Sprint: Subtraction Across a Ten 2.4A (9 minutes)

**Skip-Count by $5 and $10 Between 85 and 205 (3 minutes)**

Materials: (T) 20 ten-dollar bills, 10 five-dollar bills

Note: Bring students to an area where the bills can be laid on the carpet or central location. Students apply their knowledge of skip-counting by fives and tens to counting bills in preparation for solving word problems with bills in the next lesson.

T: (Lay out $85 in bills so that all students can see.) What is the total value of the bills?

S: $85.

T: Count in your head as I change the value. (Lay down ten-dollar bills to make 95, 105, 115.)

T: What is the total value of the bills now?

S: $115.

T: (Remove ten-dollar bills to make 105, 95.) What is the total value of the bills now?

S: $95.

T: (Add more ten-dollar bills to make 105, 115, 125, 135, 145, 155, 165, 175, 185.) What is the total

value of the bills?

S: $185.

T: (Lay down five-dollar bills to make 190, 195, 200.) What is the total value of the bills?

S: $200.

Continue to count up and back by 5 and 10, crossing over the hundred and where students struggle.

**Sprint: Subtraction Across a Ten (9 minutes)**

Materials: (S) Subtraction Across a Ten Sprint

Note: This Sprint gives practice with the grade-level fluency of subtracting within 20.

Lesson 8

Fluency Practice (12 Minutes)

* Sprint: Adding Across a Ten 2.4A (9 minutes)
* More and Less 2.4A, 2.4B (3 minutes)

**Sprint: Adding Across a Ten (9 minutes)**

Materials: (S) Adding Across a Ten Sprint

Note: This Sprint gives practice with the grade level fluency of adding within 20.

**More and Less (3 minutes)**

Note: In this activity, students practice adding and subtracting coins. Because the addition of the value of a quarter may still be challenging for some, the use of a signal to invite a choral response is suggested.

T: The value of one dime more than a quarter is …?

S: 35 cents.

T: Give the number sentence using cents as the unit.

S: 25 cents + 10 cents = 35 cents.

T: Wait for the signal. The value of 1 quarter more than 35 cents is …? (Signal when students are

ready.)

S: 60 cents!

T: Give the number sentence.

S: 35 cents + 25 cents = 60 cents.

T: The value of 1 quarter more than 60 cents is …?

S: 85 cents.

T: Give the number sentence.

S: 60 cents + 25 cents = 85 cents.

T: The value of a dime and nickel more than 85 cents is …?

S: 100 cents. -> 1 dollar!

T: Give the number sentence.

S: 85 cents + 15 cents = 100 cents.

Continue to repeat this line of questioning as time permits, restarting at zero after reaching 100 cents.

Lesson 9

Fluency Practice (10 Minutes)

* Grade 2 Fluency Differentiated Practice Sets 2.4A (5 minutes)
* Decomposition Tree 2.4A, 2.4B (5 minutes)

**Grade 2 Fluency Differentiated 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. The process is detailed and Practice Sets are provided in Lesson 1.

**Decomposition Tree (5 minutes)**

Materials: (S) Decomposition Tree (Lesson 6 Fluency Template)

Note: Students are given 90 seconds to decompose a specified amount in as many ways as they can. This fluency activity allows students to work at their own skill levels and decompose amounts in a multitude of ways in a short amount of time. When decomposing the number a second time, students are more likely to try other representations that they saw on their partners’ papers.

T: You are going to break apart 75¢ on your decomposition tree for 90 seconds. Make as many pairs as

you can. Go!

S: (Work for 90 seconds.)

T: Now, exchange your tree with your partner, and check each other’s work carefully.

T: (Allow students 30–45 seconds to check.) Return each other’s papers. Did you see another way to

make 75¢ on your partner’s paper?

S: (Share for 30 seconds.)

T: Turn your paper over. Let’s break apart 75¢ for another minute.

Lesson 10

Fluency Practice (10 Minutes)

* Grade 2 Fluency Differentiated Practice Sets 2.4A (5 minutes)
* Decomposition Tree 2.4A, 2.4B (5 minutes)

**Grade 2 Fluency Differentiated 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. The process is detailed and Practice Sets are provided in Lesson 1.

**Decomposition Tree (5 minutes)**

Materials: (S) Decomposition Tree (Lesson 6 Fluency Template)

Note: Today, students decompose 95 cents, applying their work from earlier in the topic.

T: You are going to break apart 95¢ on your decomposition tree for 90 seconds. Make as many pairs as

you can. Go!

S: (Work for 90 seconds.)

T: Now, exchange your tree with your partner, and check each other’s work. (Allow students 30–45

seconds to check.)

T: Return each other’s papers. Did you see another way to make 95¢ on your partner’s paper?

(Allow students to share for another 30 seconds.)

T: Turn your paper over. Let’s break apart 95¢ for another minute.

Lesson 11

Fluency Practice (12 Minutes)

* Sprint: Subtraction from Teens 2.4B (9 minutes)
* Coin Exchange 2.4B (3 minutes)

**Sprint: Subtraction from Teens (9 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.

**Coin Exchange (3 minutes)**

Materials: (S) Personal white board

Note: In this activity, students review Lesson 10 by exchanging change combinations for the fewest coins.

T: I have 2 dimes and a nickel. How much do I have?

S: 25 cents.

T: On your personal white boards, show me at least one more way to make the same amount.

T: (Allow students time to work.) Show me your boards. (Review students’ boards.)

T: Which way uses the fewest coins?

S: 1 quarter.

T: I have 4 dimes and 2 nickels. How much do I have?

S: 50 cents.

T: On your boards, show me at least one more way to make the same amount.

T: Which way uses the fewest coins?

S: 2 quarters.

Continue with the following possible sequence: 7 nickels, 6 dimes, and 2 dimes.

Lesson 12

Fluency Practice (12 Minutes)

* Sprint: Adding Across a Ten 2.4A
* Making $1 2.4A, 2.4B (9 minutes) (3 minutes)

**Sprint: Adding Across a Ten (9 minutes)**

Materials: (S) Adding Across a Ten Sprint

Note: This Sprint gives practice with the grade level fluency of adding within 20.

**Making $1 (3 minutes)**

Note: Students review making $1 by counting up with change unknown problems as a review of previous

lesson concepts.

T: (Post 45 cents + \_\_\_\_\_\_\_ = 100 cents.) Read the problem. How many cents are in $1?

S: 100 cents.

T: I have 45 cents. What is the next ten cents I can make?

S: 50 cents.

T: 45 cents needs how much more to make 50 cents?

S: 5 cents.

T: 50 cents needs how much more to make 100 cents?

S: 50 cents.

T: 45 cents and what makes 1 dollar?

S: 55 cents.

Continue with the following possible sequence: 28 cents, 73 cents, and 14 cents.

Lesson 13

Fluency Practice (10 Minutes)

* Grade 2 Fluency Differentiated Practice Sets 2.4A (5 minutes)
* Decomposition Tree 2.4A, 2.4B (5 minutes)

**Grade 2 Fluency Differentiated 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. The process is detailed and Practice Sets are provided in Lesson 1.

**Decomposition Tree (5 minutes)**

Materials: (S) Decomposition Tree (Lesson 6 Fluency Template)

Note: Students are given 90 seconds to decompose a dollar.

T: You are going to break apart $1 on your decomposition tree for 90 seconds. Make as many pairs as

you can. Go!

S: (Work for 90 seconds.)

T: Now, exchange your tree with your partner, and check each other’s work. (Allow students 30–45

seconds to check.)

T: Return each other’s papers. Did you see another way to make $1 on your partner’s paper? (Allow

students to share for another 30 seconds.)

T: Turn your paper over. Let’s break apart $1 for another minute.

Lesson 14

Fluency Practice (12 Minutes)

* Coin Drop 2.5A (6 minutes)
* Decomposition Tree 2.4A, 2.4B (6 minutes)

**Coin Drop (6 minutes)**

Materials: (T) 2 quarters, 10 dimes, 10 nickels, 10 pennies, opaque container

Note: In this activity, students practice adding and subtracting, 25, 10, 5, and 1.

T: (Hold up a quarter.) Name this coin.

S: A quarter.

T: How much is it worth?

S: 25 cents.

T: Watch carefully as I drop the quarter and some dimes in the container. Count along in your minds.

S: (Count silently: 25 cents, 35 cents, 45 cents, 55 cents.)

T: What is the value of the coins in the container?

S: 55 cents.

Continue by taking out one dime at a time and have students tell the value of the coins remaining in the container. Continue adding and subtracting dimes for a minute or so. Then, repeat the activity with

a quarter and nickels, a quarter and pennies, a quarter with dimes and nickels, and then 2 quarters with dimes, nickels and pennies.

**Decomposition Tree (6 minutes)**

Materials: (S) Decomposition Tree (Lesson 6 Fluency Template)

Note: Students are given 90 seconds to decompose a specified amount of money in as many ways as they can. This fluency activity allows students to work at their own skill levels and decompose amounts of money in a multitude of ways in a short amount of time. When decomposing the number a second time, students are more likely to try other representations that they saw on their partners’ papers.

T: Use your decomposition tree to decompose 85¢ for 90 seconds. Make as many pairs as you can. Go!

S: (Work for 90 seconds.)

T: Now, exchange your tree with your partner, and check each other’s work carefully.

T: (Allow students 30–45 seconds to check.) Return each other’s papers. Did you see another way to

make 85¢ on your partner’s paper?

S: (Share for 30 seconds.)

T: Turn your paper over. Let’s break apart 85¢ for another minute.

Lesson 15

Fluency Practice (12 Minutes)

* Coin Drop 2.5A (6 minutes)
* Decomposition Tree 2.4A, 2.4B (6 minutes)

**Coin Drop (6 minutes)**

Materials: (T) 2 quarters, 10 dimes, 10 nickels, 10 pennies, opaque container

Note: In this activity, students practice adding and subtracting, 25, 10, 5, and 1.

T: (Hold up a quarter.) Name this coin.

S: A quarter.

T: How much is it worth?

S: 25 cents.

T: Watch carefully as I drop the quarter and some dimes in the container. Count along in your minds.

S: (Count silently: 25 cents, 35 cents, 45 cents, 55 cents, 65 cents, 75 cents.)

T: What is the value of the coins in the container?

S: 75 cents.

Continue by taking out one dime at a time and have students tell the value of the coins remaining in the container. Continue adding and subtracting dimes for a minute or so. Then, repeat the activity with

a quarter and nickels, a quarter and pennies, a quarter with dimes and nickels, and then 2 quarters with dimes, nickels and pennies.

**Decomposition Tree (6 minutes)**

Materials: (S) Decomposition Tree (Lesson 6 Fluency Template)

Note: Students are given 90 seconds to decompose a specified amount of money in as many ways as they can. This fluency activity allows students to work at their own skill levels and decompose amounts of money in a multitude of ways in a short amount of time. When decomposing the number a second time, students are more likely to try other representations that they saw on their partners’ papers.

T: You are going to break apart 90¢ on your decomposition tree for 90 seconds. Make as many pairs as

you can. Go!

S: (Work for 90 seconds.)

T: Now, exchange your tree with your partner, and check each other’s work carefully.

T: (Allow students 30–45 seconds to check.) Return each other’s papers. Did you see another way to

make 90¢ on your partner’s paper?

S: (Share for 30 seconds.)

T: Turn your paper over. Let’s break apart 90¢ for another minute.

Lesson 16

Fluency Practice (15 Minutes)

* Coin Drop 2.5A (6 minutes)
* Decomposition Tree 2.4A, 2.4B (6 minutes)
* More and Less 2.4A, 2.4B (3 minutes)

**Coin Drop (6 minutes)**

Materials: (T) 2 quarters, 10 dimes, 10 nickels, 10 pennies, opaque container

Note: In this activity, students practice adding and subtracting, 25, 10, 5, and 1.

T: (Hold up a quarter.) Name this coin.

S: A quarter.

T: How much is it worth?

S: 25 cents.

T: Watch carefully as I drop the quarter and some dimes in the container. Count along in your minds.

S: (Count silently: 25 cents, 35 cents, 45 cents.)

T: What is the value of the coins in the container?

S: 45 cents.

Continue by taking out one dime at a time and have students tell the value of the coins remaining in the container. Continue adding and subtracting dimes for a minute or so. Then, repeat the activity with

a quarter and nickels, a quarter and pennies, a quarter with dimes and nickels, and then 2 quarters with dimes, nickels and pennies.

**Decomposition Tree (6 minutes)**

Materials: (S) Decomposition Tree (Lesson 6 Fluency Template)

Note: Students are given 90 seconds to decompose a specified amount of money in as many ways as they can. This fluency activity allows students to work at their own skill levels and decompose amounts of money in a multitude of ways in a short amount of time. When decomposing the number a second time, students are more likely to try other representations that they saw on their partners’ papers.

T: You are going to break apart 98¢ on your decomposition tree for 90 seconds. Make as many pairs as

you can. Go!

S: (Work for 90 seconds.)

T: Now, exchange your tree with your partner, and check each other’s work carefully.

T: (Allow students 30–45 seconds to check.) Return each other’s papers. Did you see another way to

make 98¢ on your partner’s paper?

S: (Share for 30 seconds.)

T: Turn your paper over. Let’s break apart 98¢ for another minute.

**More and Less (3 minutes)**

Note: In this activity, students practice adding and subtracting coins. Because the addition of the value

of a quarter may still be challenging for some, the use of a signal to invite a choral response is suggested.

T: The value of one dime less than a quarter is …?

S: 15 cents.

T: Give the number sentence using cents as the unit.

S: 25 cents – 10 cents = 15 cents.

T: Wait for the signal. The value of 1 quarter more than 15 cents is …? (Signal when students are ready.)

S: 40 cents!

T: Give the number sentence.

S: 15 cents + 25 cents = 40 cents.

T: The value of 1 quarter more than 40 cents is …?

S: 65 cents.

T: Give the number sentence.

S: 40 cents + 25 cents = 65 cents.

T: The value of a nickel less than 65 cents is …?

S: 60 cents.

T: Give the number sentence.

S: 65 cents – 5 cents = 60 cents.

T: The value of 1 dime more than 60 cents is …?

S: 70 cents.

T: Give the number sentence.

S: 60 cents + 10 cents = 70 cents.

T: The value of a quarter more than 70 cents is …?

S: 95 cents.

T: Give the number sentence.

S: 70 cents + 25 cents = 90 cents.

T: The value of 1 nickel more than 95 cents is …?

S: 100 cents. -> 1 dollar!

T: Give the number sentence.

S: 95 cents + 5 cents = 100 cents.

Continue to repeat this line of questioning as time permits, restarting at zero after reaching 100 cents.

Lesson 17

Fluency Practice (10 Minutes)

* Subtraction Fact Flash Cards 2.4A (5 minutes)
* Grade 2 Fluency Differentiated Practice Sets 2.4A (5 minutes)

**Subtraction Fact Flash Cards (5 minutes**)

Materials: (T) Subtraction fact flash cards set 2 (Fluency Template)

Note: This is a teacher-directed, whole-class activity. By practicing subtraction facts, students gain mastery of differences within 20.

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

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

Note: During Topic D 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. The process is detailed and Practice Sets are provided in Lesson 1.

Lesson 18

Fluency Practice (11 Minutes)

* Sprint: Adding and Subtracting by 2 2.4B (9 minutes)
* Subtraction Fact Flash Cards 2.4A (2 minutes)

**Sprint: Adding and Subtracting by 2 (9 minutes)**

Materials: (S) Adding and Subtracting by 2 Sprint

Note: Students practice adding and subtracting by 2 to gain mastery of the sums and differences within 20.

**Subtraction Fact Flash Cards (2 minutes)**

Materials: (T) Subtraction fact flash cards set 2 (Lesson 17 Fluency Template)

Note: By practicing subtraction facts, students gain mastery of differences within 20.This can be a teacher-directed, whole-class activity or an opportunity for students to work in pairs. The teacher can hold the cards and use choral response or distribute the cards and have students pair up to question each other.

Lesson 19

Fluency Practice (11 Minutes)

* Sprint: Adding and Subtracting by 3 2.4B (9 minutes)
* Subtraction Fact Flash Cards 2.4A (2 minutes)

**Sprint: Adding and Subtracting by 2 (9 minutes)**

Materials: (S) Adding and Subtracting by 3 Sprint

Note: Students practice adding and subtracting by 3 to gain mastery of the sums and differences within 20.

**Subtraction Fact Flash Cards (2 minutes)**

Materials: (T) Subtraction fact flash cards set 2 (Lesson 17 Fluency Template)

Note: This is a teacher-directed, whole-class activity. By practicing subtraction facts, students gain mastery of differences within 20.

Lesson 20

Fluency Practice (10 Minutes)

* Subtraction Fact Flash Cards  2.4A (5 minutes)
* Grade 2 Fluency Differentiated Practice Sets 2.4A (5 minutes)

**Subtraction Fact Flash Cards (2 minutes)**

Materials: (T) Subtraction fact flash cards set 2 (Lesson 17 Fluency Template)

Note: This is a teacher-directed, whole-class activity. By practicing subtraction facts, students gain mastery of differences within 20.

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

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

Note: During Topic E 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. The process is detailed and Practice Sets are provided in Lesson 1.

Lesson 21

Fluency Practice (10 Minutes)

* Decomposition Tree 2.4A (5 minutes)
* Grade 2 Fluency Differentiated Practice Sets 2.4A (5 minutes)

**Decomposition Tree (5 minutes)**

Materials: (S) Decomposition Tree (Lesson 6 Fluency Template)

Note:  Students are given 90 seconds to decompose 20 inches. Students apply knowledge of sums and

differences within 20 to length.

T: You are going to break apart 20 inches on your decomposition tree for 90 seconds. Make as many

pairs as you can. Go!

S: (Work for 90 seconds.)

T: Now, exchange your tree with your partner, and check each other’s work. (Allow students

30–45 seconds to check.)

T: Return each other’s papers. Did you see another way to make 20 inches on your partner’s paper?

(Allow students to share for another 30 seconds.)

T: Turn your paper over. Let’s break apart 20 inches for another minute.

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

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

Note: During Topic D 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. The process is detailed and Practice Sets are provided in Lesson 1.

Lesson 22

Fluency Practice (11 Minutes)

* Subtraction from Tens 2.4A, 2.4B (2 minutes)
* Sprint: Subtraction Patterns 2.4B (9 minutes)

**Subtraction from Tens (2 minutes)**

Note: This fluency activity reviews mental math strategies within 100 and subtraction of 9 or 8 from any number.

T: When I say a basic fact, you add 10 to the whole and continue until I say to stop. So, after 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.

**Sprint: Subtraction Patterns (9 minutes)**

Materials: (S) Subtraction Patterns Sprint

Note: Students practice subtraction to gain mastery of the sums and differences within 20 and see

relationships with higher numbers.

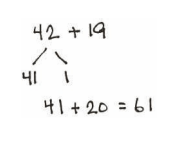
Lesson 23

Fluency Practice (10 Minutes)

* Compensation 2.4B (2 minutes)
* Sprint: Subtraction Patterns 2.4B (8 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.

**Sprint: Subtraction Patterns (8 minutes)**

Materials: (S) Subtraction Patterns Sprint

Note: Students practice subtraction to gain mastery of the sums and differences within 20 and identify

relationships with higher numbers.

Lesson 24

Fluency Practice (10 Minutes)

* Roll and Follow the Rule 2.4A (5 minutes)
* Grade 2 Fluency Differentiated Practice Sets 2.4A (5 minutes)

**Roll and Follow the Rule (5 minutes)**

Materials: (S) 1 die per student or pair, math journal or notebook

Note: Give students a base number such as 9. They roll their die to find the “rule.” For example, if they roll a 5, they add 5 repeatedly: 9 + 5 = 14, 14 + 5 = 19, 19 + 5 = 24. Students track their number sentences in their notebooks and count the total of number sentences they have written after 30 seconds. Continue the process with a different base number and/or operation.

Base numbers for addition: 38, 156, 291. Base numbers for subtraction: 40, 100

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

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

Note: During Topic F 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. The process is detailed and Practice Sets are provided in Lesson 1.

Lesson 25

Fluency Practice (10 Minutes)

* Compensation 2.4B (5 minutes)
* Grade 2 Fluency Differentiated Practice Sets 2.4A (5 minutes)

**Compensation (5 minutes)**

Note: This fluency drill reviews the mental math strategy of compensation. By making a multiple of 100

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 420 + 190 = \_\_\_\_\_.) Let’s use a mental math strategy to add. How much more does 190 need

to make the next hundred?

S: 10 more.

T: Where can 190 get 10 more from?

S: From the 420.

T: Take 10 from 420 and give it to 190. Say the new number sentence with the answer.

S: 410 + 200 = 610.

T: 370 + 190.

S: 360 + 200 = 560.

Continue with the following possible sequence: 290 + 230, 380 + 190, 320 + 190, 240 + 180, and 340 + 180.

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

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

Note: During Topic F 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. The process is detailed and Practice Sets are provided in Lesson 1.