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**Lesson 1**

Fluency Practice (12 minutes)

⬛ Name the Value 2.5B, 3.4C (6 minutes)

⬛ Ordering Numbers 3.2D (6 minutes)

**Name the Value (6 minutes)**

Materials: (T) Real or plastic U.S. bills and coins (S) Personal white board

Note: In this fluency activity, students first determine the value of a collection of coins and bills, then write the value using the dollar sign and a decimal point.

T: (Display 3 dimes and 4 pennies.) Say the value of the coins.

S: Thirty-four cents.

T: Write the value of the money. Use the dollar sign and a decimal point.

S: (Write $0.34.)

T: (Display 2 one-dollar bills.) Say the value of the bills.

S: Two dollars.

T: Write the value of the money.

S: (Write $2.00.)

T: (Display the combined bills and coins.) Say the value of the money.

S: Two dollars and thirty-four cents.

T: Write the value of the money.

S: (Write $2.34.)

Repeat the sequence with: 2 quarters, 1 dime; 1 five-dollar bill;

combine the bills and coins ($5.60) 4 dimes, 1 nickel, 1 penny; 1 five-dollar bill, 1 one-dollar bill;

combine the bills and coins ($6.46)

**Ordering Numbers (6 minutes)**

Materials: (S) Personal white board

Note: In this fluency activity, students practice putting large numbers in order from least to greatest and from greatest to least.

T: (Write the following numbers on the board: 77,654; 76,754; 77,554.) Write these numbers in order

from least to greatest.

S: (Write 76,754; 77,554; 77,654.)

T: (Write the following numbers on the board: 67,432: 67,342; 76,243.) Write these numbers in order

from greatest to least.

S: (Write 76,243, 67,432, 67,342.)

Continue the process with the following sets of numbers:

23,457; 23,547; 23,754

90,231; 90,212; 90,241

98,673; 98,670; 98,678

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**Lesson 2**

Fluency Practice (5 minutes)

⬛ Name the Value 2.5B, 3.4C (5 minutes)

**Name the Value (5 minutes)**

Materials: (T) Real or plastic U.S. bills and coins (S) Personal white board

Note: In this fluency students count collections of coins and bills, then write the value using the dollar sign and a decimal point.

Conduct the fluency as in Lesson 1, first displaying coins, then bills, then combining the coins and bills. Use the following amounts: $4.27, $1.14, $6.79

**Lesson 3**

Fluency Practice (5 minutes)

⬛ Name the Value 2.5B, 3.4C (5 minutes)

**Name the Value (5 minutes)**

Materials: (T) Real or plastic U.S. bills and coins (S) Personal white board

Note: In this fluency students count collections of coins and bills, then write the value using the dollar sign and a decimal point.

Conduct the fluency as in Lesson 1, first displaying coins, then bills, then combining the coins and bills. Use the following amounts: $3.07, $8.48, $5.67

**Lesson 4**

Fluency Practice (5 minutes)

⬛ Compare Unit Fractions 3.3H (1 minute)

⬛ Place Fractions on the Number Line 3.3A (4 minutes)

**Compare Unit Fractions (1 minute)**

Note: This activity reviews concepts taught in Module 5.

T: (Write 1/2 and 1/10 .) Both fractions refer to the same whole. Say the largest fraction.

S: 1 half.

Continue with the following possible sequence: 1/2 and 1/3 , 1/3 and 1/4, ¼ and 1/6 , 1/4

and 1/2 , 1/6 and 1/8 , 1/6 and 1/5, and 1/5

and 1/10 .

**Place Fractions on the Number Line (4 minutes)**

Materials: (S) Personal white board

Note: This activity reviews concepts taught in Module 5.

T: (Project a number line marked at 0, 1, 2, 3, and 4.) Draw my number line on your board.

S: (Draw.)

T: Estimate to mark and label 1 fourth in the interval 0 to 1.

S: (Estimate the point between 0 and 1 and write 1/4.)

T: Write 4 fourths on your number line. Label the point as a fraction.

S: (Write 4/4 above 1 on the number line.)

Continue with the following possible sequence: 8/4, 12/4, 5/4, 9/4, 3/4 , and 11/4 .

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**Lesson 5**

Fluency Practice (9 minutes)

⬛ Group Counting on a Vertical Number Line 3.4E (3 minutes)

⬛ Model Division with Strip Diagrams 3.5B (6 minutes)

**Group Counting on a Vertical Number Line (3 minutes)**

Note: Group counting reviews interpreting multiplication as repeated addition.

T: (Project a vertical number line partitioned into intervals of 6, as shown. Cover the number

line so that only the numbers 0 and 12 show.) What is halfway between 0 and 12?

S: 6.

T: (Write 6 on the first hash mark.)

Continue for the remaining hashes so that the number line shows increments of six to 60.

T: Let’s count by sixes to 60.

Direct students to count forward and backward to 60, occasionally changing the direction of the

count. Repeat the process with the following possible suggestions:

⬛ Sevens to 70

⬛ Eights to 80

⬛ Nines to 90



**Model Division with Strip Diagrams (6 minutes)**

Materials: (S) Personal white board

Note: This fluency activity reviews using strip diagrams to model division.

T: (Project strip diagram with 6 as the whole.) What is the value of the whole?

S: 6.

T: (Partition the strip diagram into 2 equal parts.) How many equal parts is 6 broken into?

S: 2 equal parts.

T: Tell me a division equation to solve for the unknown group size.

S: 6 ÷ 2 = 3.



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T: (Beneath the diagram, write 6 ÷ 2 = 3.)

T: On your personal white board, draw a rectangle with 8 as the

whole.

S: (Draw a rectangle with 8 as the whole.)

T: Divide it into 2 equal parts, write a division equation to solve for the unknown, and label the value of

the units.

S: (Partition the rectangle into 2 equal parts, write 8 ÷ 2 = 4, and label each unit with 4.)

Continue with the following possible suggestions, alternating between teacher drawings and student

drawings: 6 ÷ 3, 8 ÷ 4, 10 ÷ 5, 10 ÷ 2, 9 ÷ 3, 12 ÷ 2, 12 ÷ 3, and 12 ÷ 4.

**Lesson 6**

Fluency Practice (9 minutes)

⬛ Group Counting on a Vertical Number Line 3.4E (3 minutes)

⬛ Read Strip Diagrams 3.5B (6 minutes)

**Group Counting on a Vertical Number Line (3 minutes)**

Note: Group counting reviews interpreting multiplication as repeated addition.

T: (Project a vertical number line partitioned into intervals of 8, as shown.

Cover the number line so that only the numbers 0 and 16 show.) What

is halfway between 0 and 16?

S: 8.

T: (Write 8 on the first hash mark.)

Continue for the remaining hashes so that the number line shows increments of

eight to 80.

T: Let’s count by eights to 80.

Direct students to count forward and backward to 80, occasionally changing the

direction of the count. Repeat the process using the following possible

suggestions:

⬛ Sixes to 60

⬛ Sevens to 70

⬛ Nines to 90



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**Read Strip Diagrams (6 minutes)**

Materials: (S) Personal white board

Note: This fluency activity reviews the relationship between the value of each unit in a strip diagram and the

total value of the strip diagram. It also reviews comparing strip diagrams in preparation for today’s lesson.

T: (Project a strip diagram with 7 units.) Each unit in the strip diagram has a value of 4. Write a

multiplication sentence that represents the total value of the strip diagram.

S: (Write 7 x 4 = 28.)

T: What is the total value of the strip diagram?

S: 28.

Use the same strip diagram. Repeat the process with the following suggested values for the units: 6, 3, 9, 7,

and 8.

T: (Project the strip diagrams as shown.)

What is the value of each unit in Strip

Diagrams A and B?

S: 8.

T: Write a multiplication sentence that

represents the total value of Strip

Diagram A.

S: (Write 4 x 8 = 32.)

T: Write a multiplication sentence that represents the total value of Strip Diagram B.

S: (Write 7 x 8 = 56.)



Continue with the following possible questions:

⬛ What is the total value of both strip diagrams?

⬛ How many more units of 8 are in Strip Diagram B than in Strip Diagram A?

⬛ What is the difference in value between the 2 strip diagrams?

**Lesson 7**

Fluency Practice (12 minutes)

⬛ Name the Value 2.5B, 3.4C (3 minutes)

⬛ Sprint: Multiply or Divide by 6 3.5D (9 minutes)

**Name the Value (3 minutes)**

Materials: (T) Real or plastic U.S. bills and coins (S) Personal white board

Note: In this fluency students count collections of coins and bills, then write the value using the dollar sign and a decimal point.

T: (Display 2 dimes, 4 nickels, and 1 penny.) Say the value of the money.

S: Forty-one cents.

T: Write the value of the money. Use the dollar sign and a decimal point.

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S: (Write $0.41.)

T: (Display 1 five-dollar bill and 1 one-dollar bill.) Say the value of the money.

S: Six dollars.

T: Write the value of the money.

S: (Write $6.00.)

T: (Display the combination of coins and bills.) Say the value of the money.

S: Six dollars and forty-one cents.

T: Write the value of the money.

S: (Write $6.41.)

Repeat the sequence with $11.65 (first shown with 1 ten-dollar bill, 1 one-dollar bill, 5 dimes, and 3 nickels, then shown with 2 five-dollar bills, 1 one-dollar bill, 3 dimes, 6 nickels, and 5 pennies).

**Sprint: Multiply or Divide by 6 (9 minutes)**

Materials: (S) Multiply or Divide by 6 Sprint

Note: This Sprint supports multiplication and division using

units of 6.

**Lesson 8**

Fluency Practice (10 minutes)

⬛ Read Dot Plots 3.8A, 3.8B (5 minutes)

⬛ Read Bar Graphs 3.8A, 3.8B (5 minutes)

**Read Dot Plots (5 minutes)**

Materials: (T) Dot plot (Fluency Template 1) pictured to the right

(S) Personal white board

Note: This activity previews concepts about dot plots in

preparation for Topic C.

T: (Project the dot plot.) This dot plot shows how many children

are in the families of students in a third-grade class. How

many students only have one child in their family? Let’s count

to find the answer. (Point to the dots as students count.)

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



Continue the process for 2 children, 3 children, and 4 children.

T: Most students have how many children in their family?

S: 2 children.

T: On your personal white boards, write a number

sentence to show how many more third graders have

2 children in their family than 3 children.

S: (Write 9 – 6 = 3.)

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Continue the process to find how many fewer third graders

have 4 children in their family than 2 children and how many

more third graders have 1 child in their family than 3 children.

T: On your board, write a number sentence to show how many third graders have 3 or 4 children in

their family.

S: (Write 6 + 2 = 8.)

Continue the process to find how many third graders have 1 or 2 children in their family and how many third graders have a sibling.

**Read Bar Graphs (5 minutes)**

Materials: (T) Bar graph (Fluency Template 2) pictured to the right (S) Personal white board

Notes: This activity reviews Lesson 7.

T: (Project the bar graph Template.) This bar graph shows how many minutes 4 children spent

practicing piano.

T: Did Ryan practice for more or less than 30 minutes?

S: More.

T: Did he practice for more or less than 40 minutes?

S: Less.

T: What fraction of the time between 30 and 40

minutes did Ryan practice piano?

S: 1 half of the time.

T: What is halfway between 30 minutes and

40 minutes?

S: 35 minutes.

T: The dotted line is there to help you read 35 since

35 is between two numbers on the graph. How

long did Kari spend practicing piano?

S: 40 minutes.



Continue the process for Brian and Liz.

T: Who practiced the longest?

S: Brian.

T: Who practiced the least amount of time?

S: Liz.

T: On your personal white board, write a number sentence to show how much longer Brian practiced

than Kari.

S: (Write 60 – 40 = 20.)

Continue the process to find how many fewer minutes Ryan practiced than Brian.

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T: On your board, write a number sentence to show how many total minutes Kari and Liz spent

practicing piano.

S: (Write 40 + 20 = 60.)

Continue the process to find how many total minutes Ryan and Brian spent practicing piano and how many total minutes all the children practiced.

**Lesson 9**

Fluency Practice (10 minutes)

⬛ Name the Value 2.5B, 3.4C (6 minutes)

⬛ Factors of 12 3.4F, 3.5D (4 minutes)

**Name the Value (6 minutes)**

Materials: (T) Real or plastic U.S. bills and coins (S) Personal white board

Note: In this fluency students count collections of coins and bills, then write the value using the dollar sign and a decimal point.

Conduct the fluency activity as in Lesson 7 using collections of coins and bills to represent: $7.85; $12.95

(shown two ways); $15.72 (shown two ways)

**Factors of 12 (4 minutes)**

Note: This activity prepares students for today’s lesson.

T: (Write 12 X = 12.) Say the number sentence, completing the unknown factor.

S: 12 x 1 = 12.

Continue with the following possible sequence: 1 x = 12, 6 x = 12, 4 x = 12, 2 x = 12, and

3 x = 12.

T: After I say a factor, you say the factor you need to multiply it by to get 12. The first factor is 1.

S: 12.

T: 6?

S: 2.

T: 4?

S: 3.

T: 12?

S: 1.

T: 3?

S: 4.

**Lesson 10**

Fluency Practice (10 minutes)

⬛ Group Counting 3.4E (5 minutes)

⬛ Factors of 16 3.4F, 3.5D (5 minutes)

**Group Counting (5 minutes)**

Materials: (S) Personal white board

Note: This group counting activity reviews units of 4 and the relationship between multiplication and division.

T: Count by fours to 40. (Write on the board as students count.)

S: 4, 8, 12, 16, 20, 24, 28, 32, 36, 40.

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T: (Beneath 4, write 1 four. Point to the 8.) 8 is the same as how many fours?

S: 2 fours.

T: (Write 2 fours beneath 8. Point to the 12.) 12 is the same as how many fours?

S: 3 fours.

T: (Write 3 fours beneath 12. Point to the 16.) 16 is the same as how many fours?

S: 4 fours.

T: (Write 4 fours beneath 16. Point to 1 four.) Le’ts count units of 4. (Write as students count.)

T: (Point to 40.) How many fours are in 60?

S: 10 fours.

T: (Beneath 10 fours write 40 ÷ 4 = \_\_\_.) What is 40 ÷ 4?

S: 10.

T: (Write 40 ÷ 4 = 40 ÷ 4 = 10. Beneath 1 four, write 4 ÷ 4 =\_\_\_.) On your personal white board, write

the number sentence.

S: (4 ÷ 4 = 1.)

Repeat the process for the rest of the chart.

**Factors of 16 (5 minutes)**

Note: This activity prepares students for today’s lesson.

T: (Write 16 X \_\_\_ = 16.) Say the number sentence, completing the unknown factors.

S: 16 X 1 = 16.

Continue with the following possible sequence: 1 X \_\_\_ = 16, 8 X \_\_\_ = 16, 4 X \_\_\_ = 16, 2 X \_\_\_ = 16.

T: After I say a factor, you say the factor you need to multiply it by to get 16. The first factor is 1.

S: 16.

T: 8?

S: 2.

T: 4?

S: 4.

T: 2?

S: 8.

T: 16?

S: 1.

**Lesson 11**

Fluency Practice (8 minutes)

⬛ Identify the Weight Unit 3.7E (4 minutes)

⬛ Name the Value 2.5B, 3.4C (4 minutes)

**Identify the Weight Unit (4 minutes)**

Note: This activity will review the weight units explored in Lesson

10. There are some objects on this list that might typically be

weighed in more than one unit.

T: I’m going to name an object. You tell whether its weight is

best measured in ounces, pounds or tons. A truck.

S: Tons.

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Continue with this suggested possible sequence: a pencil,

a refrigerator, a deck of cards, a book, a car, a person, a

flower, a plant, a tree.

**Name the Value (4 minutes)**

Materials: (T) Real or plastic U.S. bills and coins (S) Personal white

board

Note: In this fluency students count collections of coins and bills,

then write the value using the dollar sign and a decimal point.

Conduct the fluency activity as in Lesson 10 with various collections

of bills and coins.

**Lesson 12**

Fluency Practice (14 minutes)

⬛ Group Counting 3.4E (3 minutes)

⬛ Multiply by 6 3.4E, 3.4F (7 minutes)

⬛ Read Bar Graphs 3.8A, 3.8B (4 minutes)

**Group Counting (3 minutes)**

Note: Group counting reviews interpreting multiplication as repeated addition.

T: Count by sevens to 70. (Write as students count.)

S: 7, 14, 21, 28, 35, 42, 49, 56, 63, 70.

T: Let’s count again. Try not to look at the board. When I raise my hand, stop.

S: 7, 14, 21.

T: (Raise hand.) 21 is the same as how many sevens?

S: 3 sevens.

T: Say 3 sevens as a multiplication sentence.

S: 3 X 7 = 21.

T: Continue.

S: 28, 35, 42, 49, 56.

T: (Raise hand.) 56 is how many sevens?

S: 8 sevens.

T: Say 8 sevens as a multiplication sentence.

S: 8 × 7 = 56.

T: (Write 14 ÷ 7 = .) Let’s find the answer counting by sevens.

S: 7, 14.

T: How many sevens are in 14?

S: 2 sevens.

T: Say the division number sentence.

S: 14 ÷ 7 = 2.

Continue the process for the following possible sequence: 28 ÷ 7 and 63 ÷ 7.

**Multiply by 6 (7 minutes)**

Materials: (S) Multiply by 6 (1–5) (Pattern Sheet)

Note: This activity builds fluency with multiplication facts using units of 6. It works toward students knowing from memory all products of two one-digit numbers.

T: (Write 5 X 6 = .) Let’s skip-count up by sixes to find the answer. (Raise a finger for each number

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to track the count. Record the skip-count answers on the board.)

S: 6, 12, 18, 24, 30.

T: (Circle 30, and write 5 X 6 = 30 above it. Write 3 X 6 = .) Let’s skip-count up by sixes again.

(Track with fingers as students count.)

S: 6, 12, 18.

T: Let’s see how we can skip-count down to find the answer, too. Start at 30 with 5 fingers, 1 for each

six. (Count down with your fingers as students say numbers.)

S: 30 (5 fingers), 24 (4 fingers), 18 (3 fingers).

Repeat the process for 4 X 6.

T: Let’s practice multiplying by 6. Be sure to work left to right across the page.

**Read Bar Graphs (4 minutes)**

Materials: (T) Number of Miles bar graph (Fluency Template) pictured next page (S) Personal white board

Note: This fluency activity reviews Lesson 8. Students may initially need support beyond what is written

below to find the exact number of miles driven, slightly extending the time this activity takes.

T: (Project the bar graph.) What does this bar graph show?

S: The number of miles a truck driver drove Monday through Friday.

T: On which day did the truck driver drive the most miles?

S: Wednesday.

T: On which day did the truck driver drive the least number of miles?

S: Thursday.

T: What is the scale for number of miles?

S: 50.



T: How many intervals are there between each 50?

S: 5.

T: On your boards, write a number sentence to show the

value of the smaller intervals.

S: (Write 50 ÷ 5 = 10.)

T: How many miles did the truck driver drive on Monday?

S: 340 miles.

T: (Write 340 miles.)

Continue the process for the following: Tuesday, Wednesday,

Thursday, and Friday.

T: Write a number sentence to find how many miles the

truck driver drove from Monday through Wednesday.

S: (Write 340 + 300 + 430 = 1,070.)

T: Write a number sentence to find how many more miles

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the truck driver drove on Friday than on Thursday.

S: (Write 400 – 190 = 210.)

**Lesson 13**

Fluency Practice (15 minutes)

⬛ Group Counting 3.4E (3 minutes)

⬛ Multiply by 6 3.4E, 3.4F (8 minutes)

⬛ Count by Halves and Fourths 3.7A (4 minutes)

**Group Counting (3 minutes)**

Note: This group counting activity reviews the relationship between counting by a unit and multiplying and dividing with that unit.

T: Count by sevens to 70.

S: 7, 14, 21, 28, 35, 42, 49, 56, 63, 70.

T: (Write 4 X 7 = .) What is the value of 4 sevens? Count by sevens if you are unsure.

S: 28.

T: Say the multiplication sentence.

S: 4 × 7 = 28.

Continue this process for 6 × 7 and 8 × 7.

T: (Write 21 ÷ 7 = .) What is 21 ÷ 7? Count by sevens if you are unsure.

S: 3.

Continue this process for 35 ÷ 7, 49 ÷ 7, and 63 ÷ 7.

T: Count by eights to 80.

S: 8, 16, 24, 32, 40, 48, 56, 64, 72, 80.

T: (Write 3 × 8 = .) What is the value of 3 eights?

S: 24.

T: Say the multiplication sentence.

S: 3 × 8 = 24.

Continue this process for 6 × 8 and 8 × 8.

T: (Write 24 ÷ 8 = .) What is 24 ÷ 8? Count by eights if you are unsure.

S: 3.

Continue this process for 32 ÷ 8, 56 ÷ 8, and 72 ÷ 8.

**Multiply by 6 (8 minutes)**

Materials: (S) Multiply by 6 (6–10) (Pattern Sheet)

Note: This activity builds fluency with multiplication facts using units of 6. It works toward students knowing from memory all products of two one-digit numbers. See Lesson 12 for the directions for administration of a Multiply-By Pattern Sheet.

T: (Write 7 X 6 = .) Let’s skip-count up by sixes. I’ll raise a finger for each six. (Raise a finger for each

number to track the count. Record the skip-count answers on the board.)

S: 6, 12, 18, 24, 30, 36, 42.

T: Let’s see how we can skip-count down to find the answer, too. Start at 60 with 10 fingers, 1 for each

six. (Count down with fingers as students say numbers.)

S: 60 (10 fingers), 54 (9 fingers), 48 (8 fingers), 42 (7 fingers).

Continue with the following suggested sequence: 9 × 6, 6 × 6, and 8 × 6.

T: Let’s practice multiplying by 6. Be sure to work left to right across the page.

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**Count by Halves and Fourths (4 minutes)**

Note: This activity reviews Lesson 6.

T: Count by halves to 12 halves as I write. Please do not

count faster than I can write. (Write in fractional form

as students count.)

S: 1 half, 2 halves, 3 halves, ..., 11 halves, 12 halves.

T: (Point to 2/2.) Say 2 halves as a whole number.

S: 1.

T: (Lightly cross out 2/2, and write 1 beneath it.)



Continue the process for the following sequence: 4/2, 6/2, 8/2, 10/2, and 12/2 .

T: Count by halves. Say whole numbers when you arrive at whole numbers. Try not to look at the board.

(Students count forward and backward on the number line. Occasionally change directions.)

Repeat the process for fourths.

**Lesson 14**

Fluency Practice (14 minutes)

⬛ Name the Value 2.5B, 3.4C (3 minutes)

⬛ Multiply by 7 3.4E, 3.4F (7 minutes)

⬛ Count by Halves and Fourths 3.7A (4 minutes)

**Name the Value (3 minutes)**

Materials: (T) Real or plastic U.S. bills and coins (S) Personal white board

Note: In this fluency students count collections of coins and bills, then write the value using the dollar sign and a decimal point.

T: (Display 2 quarters, 3 nickels, and 4 pennies.) Say the value of the money.

S: Sixty-nine cents.

T: Write the value of the money. Use the dollar sign and a decimal point.

S: (Write $0.69.)

T: (Display 1 five-dollar bill and 2 one-dollar bills.) Say the value of the money.

S: Seven dollars.

T: Write the value of the money.

S: (Write $7.00.)

T: (Display the combination of coins and bills.) Say the value of the money.

S: Seven dollars and sixty-nine cents.

T: Write the value of the money.

S: (Write $7.69.)

Repeat the sequence with $10.11 (shown two ways), $11.28, and $12.58.

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**Multiply by 7 (7 minutes)**

Materials: (S) Multiply by 7 (1–5) (Pattern Sheet)

Note: This activity builds fluency with multiplication facts using units of 7. It works toward students knowing from memory all products of two one-digit numbers. See Lesson 12 for the directions for administration of a Multiply-By Pattern Sheet.

T: (Write 5 X 7 = .) Let’s skip-count up by sevens to find the answer. I’ll raise a finger for each seven.

(Raise a finger for each number to track the count. Record the skip-count answers on the board.)

S: 7, 14, 21, 28, 35.

T: (Circle 35 and write 5 X 7 = 35 above it. Write 3 X 7 = .) Let’s skip-count up by sevens again. (Track

with fingers as students count.)

S: 7, 14, 21.

T: Let’s see how we can skip-count down to find the answer, too. Start at 35 with 5 fingers, 1 for each

seven. (Count down with your fingers as students say numbers.)

S: 35 (5 fingers), 28 (4 fingers), 21 (3 fingers).

Repeat the process for 4 X 7.

T: Let’s practice multiplying by 7. Be sure to work left to right across the page.

**Count by Halves and Fourths (4 minutes)**

Note: This fluency activity reviews Lesson 12.

T: Count by halves to 12 halves as I write.

Please do not count faster than I can write.

(Write as students count.)

S: 1 half, 2 halves, 3 halves, 4 halves, 5 halves,

6 halves, 7 halves, 8 halves, 9 halves,

10 halves, 11 halves, 12 halves.

T: (Point to 2/2 .) Say 2 halves as a whole number.

S: 1.

T: (Lightly cross out 2/2 , and write 1 beneath it.)



Continue the process for the following sequence: 4/2, 6/2, 8/2, 10/2, and 12/2.

T: Count by halves, saying whole numbers when you

arrive at whole numbers. Try not to look at the board.

(Direct students to count forward and backward on the

number line, occasionally changing directions.)

Repeat the process for fourths.

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**Lesson 15**

Fluency Practice (14 minutes)

⬛ Group Counting 3.4E (3 minutes)

⬛ Multiply by 7 3.4E, 3.4F (7 minutes)

⬛ Count by Halves and Fourths 3.7A (4 minutes)

**Group Counting (3 minutes)**

Materials: (S) Personal white board

Note: This group counting activity reviews the relationship between counting by a unit and multiplying and

dividing with that unit.

T: Count by sixes to 60.

S: 6, 12, 18, 24, 30, 36, 42, 48, 54, 60.

T: (Write 4 sixes = .) Write the number sentence.

S: (Write 4 sixes = 24.)

T: Write 4 sixes as a multiplication sentence.

S: (Write 4 X 6 = 24.)

T: (Write 48 ÷ 6 = .) Write the number sentence. Count by sixes if you are unsure.

S: (Write 48 ÷ 6 = 8.)

T: Count by eights to 80.

S: 8, 16, 24, 32, 40, 48, 56, 64, 72, 80.

T: (Write 3 eights = .) Write the number sentence.

S: (Write 3 eights = 24.)

T: Write 3 eights as a multiplication sentence.

S: (Write 3 × 8 = 24.)

T: (Write 56 ÷ 8 = .) Write the number sentence. Count by eights if you are unsure.

S: (Write 56 ÷ 8 = 7.)

T: Count by nines to 90.

S: 9, 18, 27, 36, 45, 54, 63, 72, 81, 90.

T: (Write 4 nines = .) Write the number sentence.

S: (Write 4 nines = 36.)

T: Write 4 nines as a multiplication sentence.

S: (Write 4 X 9 = 36.)

T: (Write 54 ÷ 9 = .) Write the number sentence. Count by nines if you are unsure.

S: (Write 54 ÷ 9 = 6.)

**Multiply by 7 (7 minutes)**

Materials: (S) Multiply by 7 (6–10) (Pattern Sheet)

Note: This activity builds fluency with multiplication facts using units of 7. It works toward students knowing from memory all products of two one-digit numbers. See Lesson 12 for the directions for administration of a Multiply-By Pattern Sheet.

T: (Write 6 X 7 = .) Let’s skip-count up by sevens to solve. Watch as I raise a finger for each seven.

(Raise a finger for each number to track the count. Record the skip-count answers on the board.)

S: 7, 14, 21, 28, 35, 42.

T: Let’s skip-count down to find the answer, too. Start at 70. (Count down with fingers as students say

numbers.)

S: 70, 63, 56, 49, 42.

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Continue with the following suggested sequence: 8 × 7, 7 × 7, and 9 × 7.

T: Let’s practice multiplying by 7. Be sure to work left to right across the page.

**Count by Halves and Fourths (4 minutes)**

Note: This activity reviews Lesson 12.

T: Count by halves to 12 halves as

I write. Please do not count faster

than I can write. (Write as

students count.)

S: 1 half, 2 halves, 3 halves, 4 halves,

5 halves, 6 halves, 7 halves, 8

halves, 9 halves, 10 halves, 11

halves, 12 halves.

T: (Point to 2/2.) Say 2 halves as a

whole number.

S: 1.

T: (Lightly cross out 2/2 and write 1 beneath it.)

Continue the process for the following sequence: 4/2, 6/2, 8/2, 10/2, and 12/2.

T: Count by halves, saying whole numbers when you arrive at whole numbers. Try not to look at the

board. (Direct students to count forward and backward on the number line, occasionally changing

directions.)



Repeat the process for fourths.

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