LEAP Test Prep: 3rd Grade Math Practice Workbook and Full-length Online Assessments

lumos learning
Developed by Expert Teachers

Grade 3

LOUISIANA Math

LEAP2025 Practice

Updated for 2021-22

tedBook
ONLINE

2 LEAP2025 Practice Tests
7 Question Types

25+ SKILLS

Louisiana Department of Education does not sponsor or endorse this product.

Important Instruction

Students, Parents, and Teachers can use the URL or QR code provided below to access two full-length Lumos LEAP practice tests. Please note that these assessments are provided in the Online format only.

URL

Visit the URL below and place the book access code

http://www.lumoslearning.com/a/tedbooks

Access Code: xxxxxxxxxxxxxxx

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Developed by Expert Teachers

INTRODUCTION

This book is specifically designed to improve student achievement on the Smarter Balanced Assessment Consortium (LEAP) Test. With over a decade of expertise in developing practice resources for standardized tests, Lumos Learning has designed the most efficient methodology to help students succeed on the state assessments (See Figure 1).

Lumos Smart Test Practice provides students LEAP assessment rehearsal along with an efficient pathway to overcome any standards proficiency gaps. Students perform at their best on standardized tests when they feel comfortable with the test content as well as the test format. Lumos online practice tests are meticulously designed to mirror the LEAP assessment. It adheres to the guidelines provided by the LEAP for the number of questions, standards, difficulty level, sessions, question types, and duration.

The process starts with students taking the online diagnostic assessment. This online diagnostic test will help assess students' proficiency levels in various standards.

After completion of the diagnostic assessment, students can take note of standards where they are not proficient. This step will help parents and educators in developing a targeted remedial study plan based on a student's proficiency gaps.

Once the targeted remedial study plan is in place, students can start practicing the lessons in this workbook that are focused on specific standards.

After the student completes the targeted remedial practice, the student should attempt the second online LEAP practice test. Record the proficiency levels in the second practice test to measure the student progress and identify any additional learning gaps. Further targeted practice can be planned to help students gain comprehensive skills mastery needed to ensure success on the state assessment.

Lumos Smart Test Prep Methodology

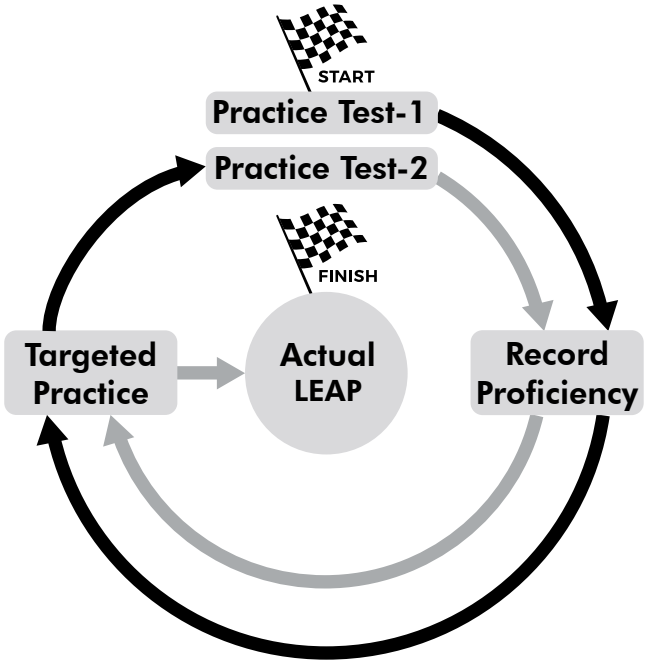


Figure 1

Table of Contents



Introduction			**1**
Chapter 1	**Lumos Smart Test Prep Methodology**		**6**
Chapter 2	**Operations and Algebraic Thinking**		**10**
Lesson 1	3.OA.A.1	Understanding Multiplication	10
Lesson 2	3.OA.A.2	Understanding Division	19
Lesson 3	3.OA.A.3	Applying Multiplication & Division	25
Lesson 4	3.OA.A.4	Finding Unknown Values	31
Lesson 5	3.OA.B.5	Multiplication & Division Properties	37
Lesson 6	3.OA.B.6	Relating Multiplication & Division	43
Lesson 7	3.OA.C.7	Multiplication & Division Facts	49
Lesson 8	3.OA.D.8	Two-Step Problems	57
Lesson 9	3.OA.D.9	Number Patterns	63
		Answer Key & Detailed Explanations	**69**
Chapter 3	**Number & Operations in Base Ten**		**90**
Lesson 1	3.NBT.A.1	Rounding Numbers	90
Lesson 2	3.NBT.A.2	Addition & Subtraction	95
Lesson 3	3.NBT.A.3	Multiplying Multiples of 10	100
		Answer Key & Detailed Explanations	**106**
Chapter 4	**Number & Operations – Fractions**		**115**
Lesson 1	3.NF.A.1	Fractions of a Whole	115
Lesson 2	3.NF.A.2	Fractions on the Number Line	123
Lesson 3	3.NF.A.3	Comparing Fractions	131
		Answer Key & Detailed Explanations	**138**

Chapter 5	**Measurement and Data**		**147**
Lesson 1	3.MD.A.1	Telling Time	147
Lesson 2	3.MD.A.1	Elapsed Time	154
Lesson 3	3.MD.A.2	Liquid Volume & Mass	160
Lesson 4	3.MD.B.3	Graphs	165
Lesson 5	3.MD.B.4	Measuring Length	177
Lesson 6	3.MD.C.6	Area	182
Lesson 7	3.MD.C.7	Relating Area to Addition & Multiplication	188
Lesson 8	3.MD.D.8	Perimeter	193
		Answer Key & Detailed Explanations	**203**
Chapter 6	**Geometry**		**224**
Lesson 1	3.G.A.1	2-Dimensional Shapes	224
Lesson 2	3.G.A.2	Shape Partitions	230
		Answer Key & Detailed Explanations	**239**
Additional Information			**245**
LEAP FAQ			245
What if I buy more than one Lumos Study Program?			248
Lumos StepUp® Mobile App FAQ for Students			249
Lumos StepUp® Mobile App FAQ for Parents and Teachers			250
Progress Chart			251

Chapter 1

Lumos Smart Test Prep Methodology

Step 1: Access Online LEAP Practice Test

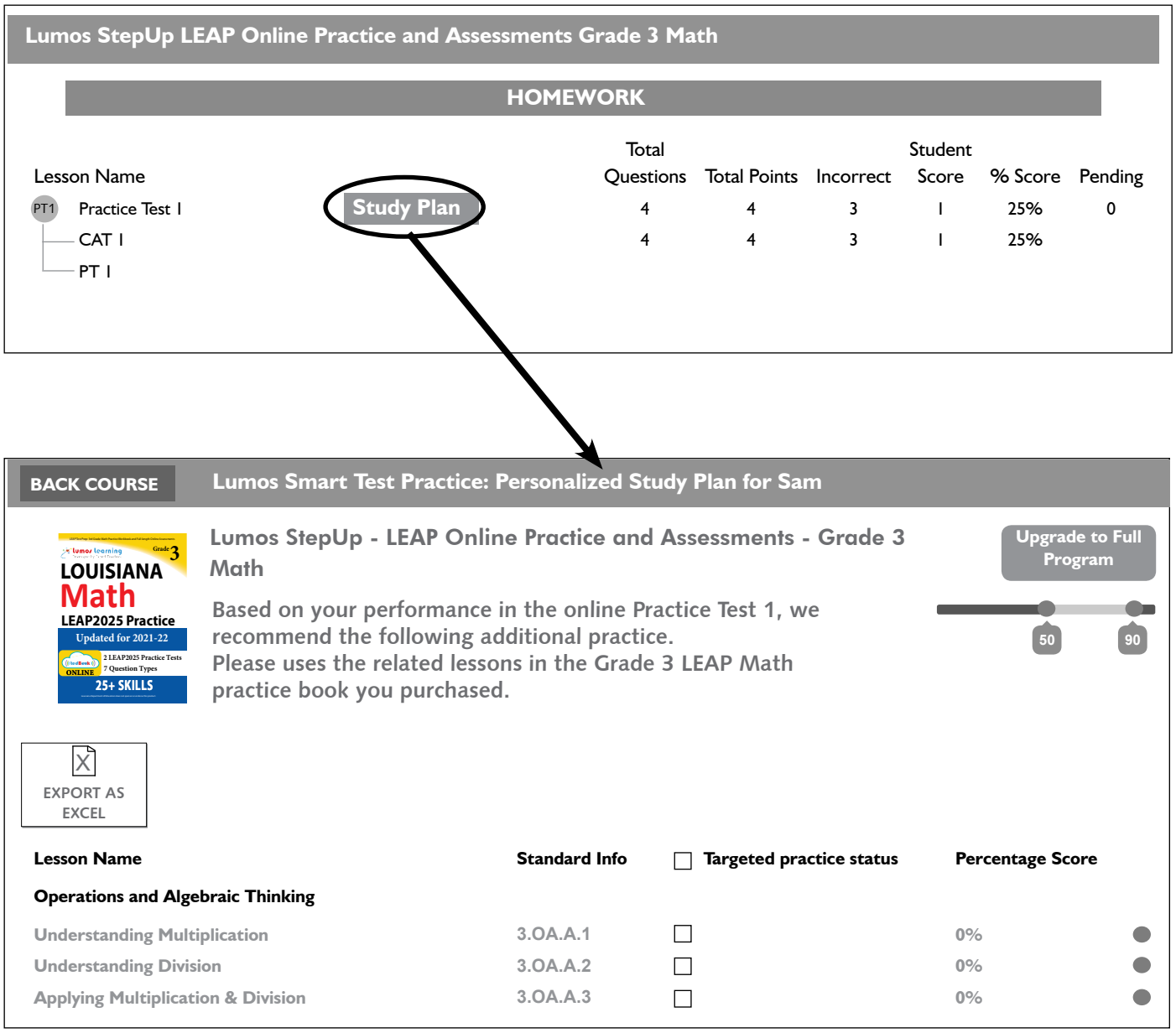
Use the URL and access code provided below or scan the QR code to access the first LEAP practice test to get started. The online LEAP practice test mirrors the actual Smarter Balanced assessments in number of questions, item types, test duration, test tools and more.

After completing the test, your student will receive immediate feedback with detailed reports on standards mastery. With this report, use the next section of the book to design a practice plan for your student.

URL
Visit the URL below and place the book access code **http://www.lumoslearning.com/a/tedbooks** **Access Code: XXXXXXX-XXXXXXX**

Step 2: Review the Personalized Study Plan Online

After student complete the online Practice Test 1, student can access their individualized study plan from the table of contents (Figure 2).
Parents and Teachers can also review the study plan through their Lumos account.



Step 3: Complete Targeted Practice

Using the information provided in the study plan report, complete the targeted practice using the appropriate lessons to overcome proficiency gaps. With lesson names included in the study plan, find the appropriate topics in this workbook and answer the questions provided. Students can refer to the answer key and detailed answers provided for each lesson to gain further understanding of the learning objective. Marking the completed lessons in the study plan after each practice session is recommended.(See Figure 3)

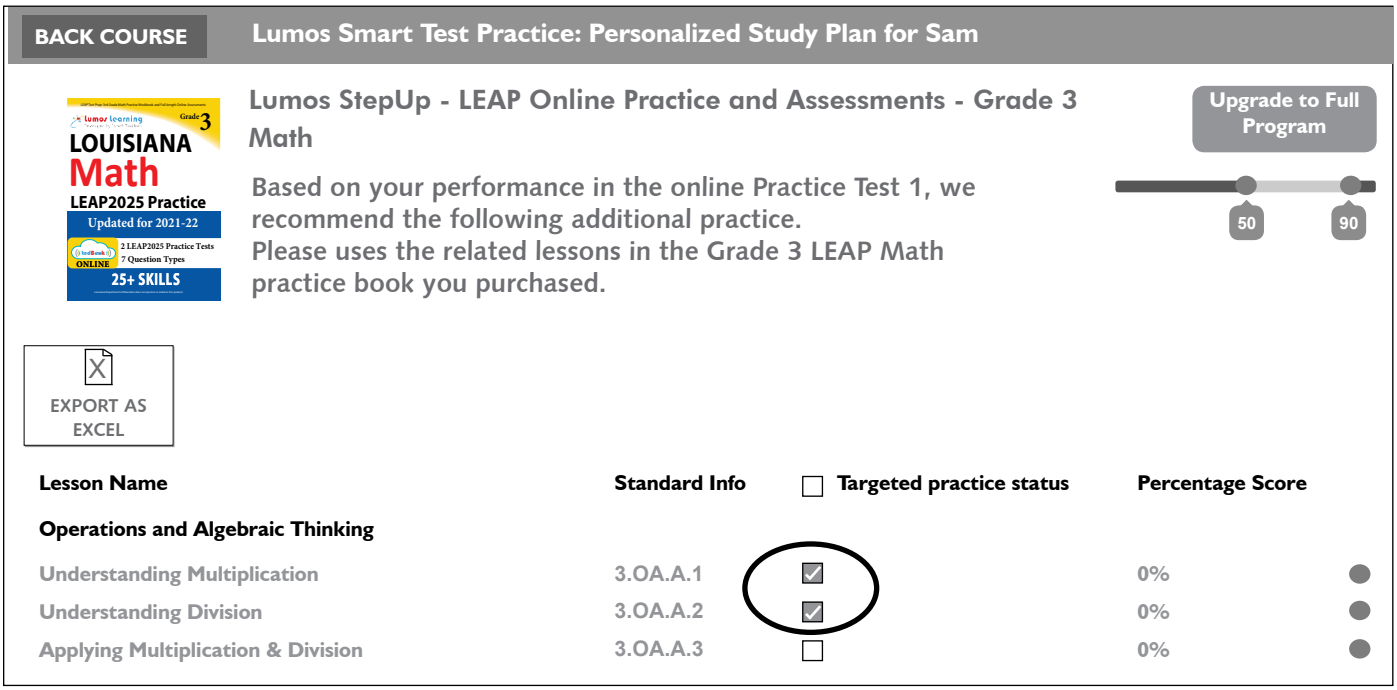


Figure 3

Step 4: Access the Practice Test 2 Online

After completing the targeted practice in this workbook, students should attempt the second LEAP practice test online. Using the student login name and password, login to the Lumos website to complete the second practice test.

Step 5: Repeat Targeted Practice

Repeat the targeted practice as per Step 3 using the second study plan report for Practice test 2 after completion of the second LEAP rehearsal.

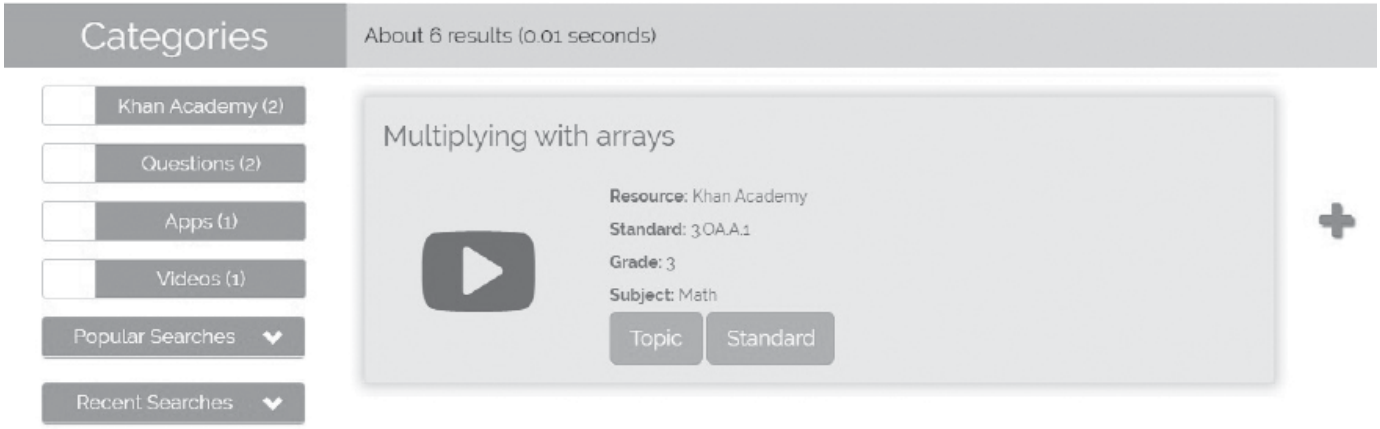
Visit http://www.lumoslearning.com/a/lstp for more information on Lumos Smart Test Prep Methodology or Scan the QR Code	

Name _____ Date _____

Chapter 2:
Operations and Algebraic Thinking

Lesson 1: Understanding Multiplication

You can scan the QR code given below or use the url to access additional EdSearch resources including videos and mobile apps related to *Understanding Multiplication*.



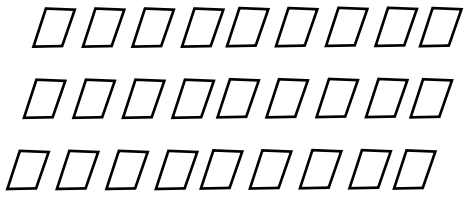
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Understanding Multiplication

URL	QR Code
http://www.lumoslearning.com/a/3oaa1	

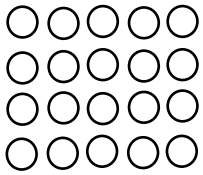
Name _____ Date _____

1. **Which multiplication fact is being modeled below?**



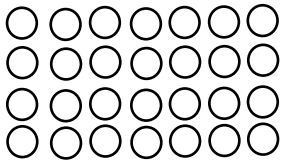
Ⓐ 3 x 10 = 30
Ⓑ 4 x 10 = 40
Ⓒ 4 x 9 = 36
Ⓓ 3 x 9 = 27

2. **Which numerical expression describes this array?**



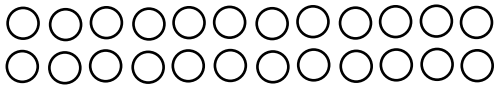
Ⓐ 4 + 5
Ⓑ 5 + 4
Ⓒ 4 x 5
Ⓓ 4 x 4

3. **Which number sentence describes this array?**



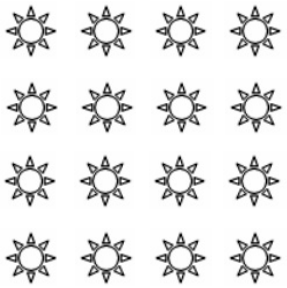
Ⓐ 8 x 4 = 32
Ⓑ 7 + 5 = 12
Ⓒ 5 x 7 = 35
Ⓓ 4 x 7 = 28

4. **Which number sentence describes this array?**



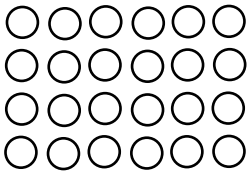
Ⓐ 2 x 12 = 24
Ⓑ 2 + 12 = 14
Ⓒ 12 + 2 = 24
Ⓓ 10 x 2 = 20

5. Identify the multiplication sentence for the picture below:



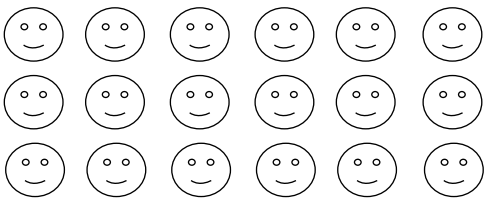
Ⓐ 4 x 4 = 16
Ⓑ 4 x 3 = 12
Ⓒ 3 x 4 = 12
Ⓓ 4 x 2 = 8

6. What multiplication fact does this picture model?



Ⓐ 4 x 6 = 24
Ⓑ 4 x 7 = 28
Ⓒ 6 x 3 = 18
Ⓓ 7 x 4 = 28

7. Identify the multiplication sentence for the picture below:



Ⓐ 7 x 2 = 14
Ⓑ 7 x 3 = 21
Ⓒ 7 x 4 = 28
Ⓓ 6 x 3 = 18

Name _____ Date _____

8. Identify the multiplication sentence for the picture below:



Ⓐ 4 x 4 = 16
Ⓑ 3 x 6 = 18
Ⓒ 3 x 4 = 12
Ⓓ 3 x 5 = 15

9. Identify the multiplication sentence for the picture below:



Ⓐ 3 x 2 = 6
Ⓑ 3 x 3 = 9
Ⓒ 4 x 2 = 8
Ⓓ 3 x 1 = 3

Name _____ Date _____

10. Identify the multiplication sentence for the picture below:



Ⓐ 3 x 5 = 15
Ⓑ 4 x 4 = 16
Ⓒ 5 x 4 = 20
Ⓓ 7 x 4 = 28

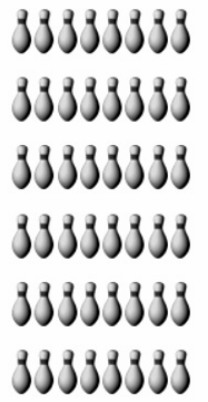
11. Identify the multiplication sentence for the picture below:



Ⓐ 2 x 5 = 10
Ⓑ 4 x 2 = 8
Ⓒ 4 x 1 = 4
Ⓓ 4 + 2 = 6

Name _____ Date _____

12. Identify the multiplication sentence for the picture below:



Ⓐ 6 x 7 = 42
Ⓑ 6 x 8 = 48
Ⓒ 8 x 9 = 72
Ⓓ 8 x 8 = 64

13. Identify the multiplication sentence for the picture below:



Ⓐ 10 x 1 = 10
Ⓑ 9 x 2 = 18
Ⓒ 2 x 10 = 20
Ⓓ 5 x 4 = 20

14. Identify the multiplication sentence for the picture below:



Ⓐ 5 x 5 = 25
Ⓑ 4 x 4 = 16
Ⓒ 4 x 6 = 24
Ⓓ 5 x 4 = 20

15. Identify the multiplication sentence for the picture below



Ⓐ 3 x 1 = 3
Ⓑ 5 x 3 = 15
Ⓒ 3 x 2 = 6
Ⓓ 3 x 3 = 9

16. Represent the below equation as a multiplication expression. Write your answer in the box below.

8 + 8 + 8 + 8?

Name _____ Date _____

17. Match each multiplication statement to the correct addition statement by darkening the corresponding circles.

	Column A: 3+3+3+3+3+3	Column B: 3+3+3+3+3+3+3+3	Column C: 3+3+3
3 x 8	○	○	○
3 x 3	○	○	○
3 x 6	○	○	○

18. For each of the picture, write the correct mathematical expression in the box.







Name _____ Date _____

19. PART A

John finds the solution for 8 x 6 by solving for (8 x 5) + 8. Is John correct? Explain why you think that John's strategy is correct or not? Write your answer in the box below.

PART B

There are Seven boys, and each of them buys 6 pens. How many pens do they buy all together? Write an equation to represent this. Also, Find the total number of pens purchased using the equation.

20. Complete the following table:

Number of lions	5	6	9		
Total number of legs	20			32	16

Name _____ Date _____

Chapter 2:

Operations and Algebraic Thinking

Answer Key
&
Detailed Explanations

Name _____ Date _____

Lesson 1: Understanding Multiplication

Question No.	Answer	Detailed Explanation
1	D	The picture depicts 3 sets of 9 objects which is equivalent to 3 x 9 = 27.
2	C	The picture depicts 4 sets of 5 objects which is equivalent to 4 x 5.
3	D	The picture depicts 4 sets of 7 objects which is equivalent to 4 x 7 = 28.
4	A	The picture depicts 2 sets of 12 objects which is equivalent to 2 x 12 = 24.
5	A	The picture depicts 4 sets of 4 objects which is equivalent to 4 x 4 = 16.
6	A	The picture depicts 4 sets of 6 objects which is equivalent to 4 x 6 = 24.
7	D	The picture depicts 3 sets of 6 objects which is equivalent to 6 x 3 (or 3 x 6) = 18
8	D	The picture depicts 5 sets of 3 objects which is equivalent to 3 x 5 (or 5 x 3) = 15.
9	A	The picture depicts 2 sets of 3 objects which is equivalent to 3 x 2 (or 2 x 3) = 6.
10	C	The picture depicts 4 sets of 5 objects which is equivalent to 5 x 4 (or 4 x 5) = 20.
11	B	The picture depicts 4 sets of 2 objects which is equivalent to 4 x 2 = 8.
12	B	The picture depicts 6 sets of 8 objects which is equivalent to 6 x 8 = 48.
13	C	The picture depicts 2 sets of 10 objects which is equivalent to 2 x 10 = 20.
14	A	The picture depicts 5 sets of 5 objects which is equivalent to 5 x 5 = 25.
15	D	The picture depicts 3 sets of 3 objects which is equivalent to 3 x 3 = 9.
16	4x8	The expression 8 + 8 + 8 + 8 has the same value as 4 x 8. Multiplication problems can be solved using repeated addition. Adding 4 groups of 8 is the same as multiplying 4 groups of 8.
17		

	Column A: 3+3+3+3+3+3	Column B: 3+3+3+3+3+3+3+3	Column C: 3+3+3
3 x 8	○	●	○
3 x 3	○	○	●
3 x 6	●	○	○

Name _____ Date _____

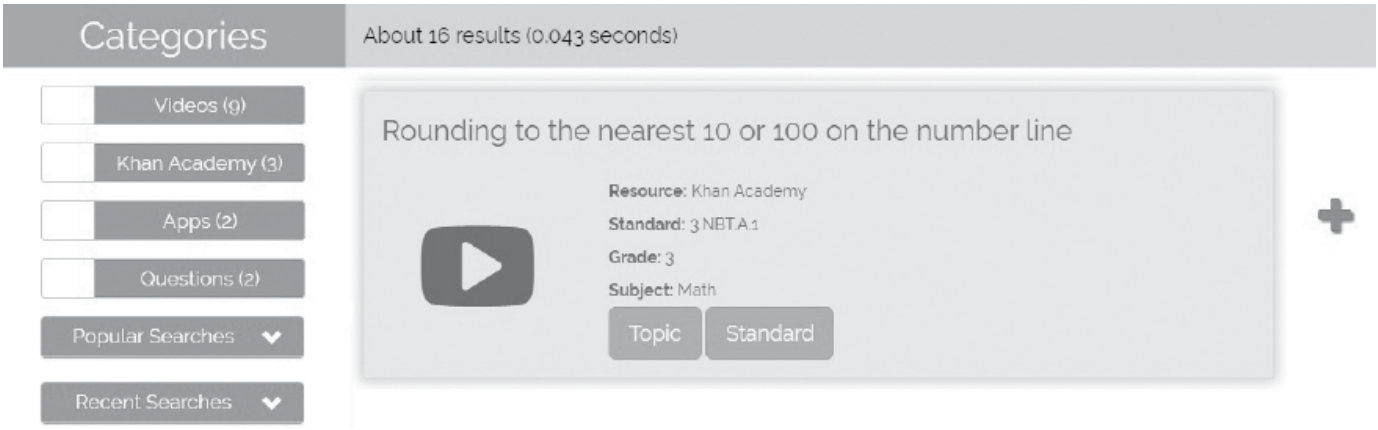
<table>
<tr><th>Question No.</th><th>Answer</th><th>Detailed Explanation</th></tr>
<tr><td>18</td><td>2x5
3x6
2x4</td><td>2 groups of 5 objects represents the expression 2 x 5.
3 groups of 6 objects represents the expression 3 x 6.
2 groups of 4 objects represents the expression 2 x 4.</td></tr>
<tr><td>19 A</td><td></td><td>Yes, John is correct. 8 x 6 = 8 x (5 + 1). Then John used the distributive property.
8 x (5 + 1) = 8 x 5 + 8 x 1 = 8 x 5 + 8.</td></tr>
<tr><td>19 B</td><td></td><td>Let n be the total number of pens the boys buy all together.
n = (number of pens each boy buys) x (number of boys) = 6 x 7 = 42 pens</td></tr>
<tr><td>20</td><td colspan="2"><table>
<tr><td>Number of lions</td><td>5</td><td>6</td><td>9</td><td>8</td><td>4</td></tr>
<tr><td>Total number of legs</td><td>20</td><td>24</td><td>36</td><td>32</td><td>16</td></tr>
</table></td></tr>
</table>

Name _____ Date _____

Chapter 3:
Number & Operations in Base Ten

Lesson 1: Rounding Numbers

You can scan the QR code given below or use the url to access additional EdSearch resources including videos and mobile apps related to *Rounding Numbers*.



edSearch

Rounding Numbers

URL	QR Code
http://www.lumoslearning.com/a/3nbta1	

Name _____ Date _____

1. What is the value of the 9 in 11,291?

   Ⓐ 9 ones
   Ⓑ 9 hundreds
   Ⓒ 9 thousands
   Ⓓ 9 tens

2. What is the value of the digit 6 in 36,801?

   Ⓐ Six thousand
   Ⓑ Sixty
   Ⓒ Sixty thousand
   Ⓓ Six hundred

3. Which of these numbers has a 9 in the thousands place?

   Ⓐ 690,099
   Ⓑ 900
   Ⓒ 209,866
   Ⓓ 90,786

4. Round 2,564 to the nearest hundred.

   Ⓐ 2,000
   Ⓑ 2,500
   Ⓒ 2,600
   Ⓓ 2,700

5. Round 1,043 to the nearest hundred.

   Ⓐ 1,000
   Ⓑ 1,100
   Ⓒ 1,040
   Ⓓ 1,200

6. Round 537 to the nearest ten.

   Ⓐ 500
   Ⓑ 540
   Ⓒ 550
   Ⓓ 530

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7. Round 957 to the nearest ten.

   Ⓐ 960
   Ⓑ 950
   Ⓒ 900
   Ⓓ 1,000

8. Maya is buying pencils for the school. Maya needs to buy enough pencils for 388 students. What is this number rounded to the nearest hundred?

   Ⓐ 390
   Ⓑ 380
   Ⓒ 400
   Ⓓ 500

9. Ninety-seven chairs are needed for an audience. What is this number rounded to the nearest ten?

   Ⓐ 90
   Ⓑ 100
   Ⓒ 80
   Ⓓ 110

10. Which of the following numbers does not round to 1,000 when rounding to the nearest hundred?

    Ⓐ 955
    Ⓑ 1,005
    Ⓒ 1,051
    Ⓓ 951

11. How many whole numbers, when rounded to the nearest ten give 100 as the result?

    Ⓐ 8
    Ⓑ 9
    Ⓒ 10
    Ⓓ 11

12. Fill in the blank.
    795 rounds to 800 when rounded to the nearest _____.

    Ⓐ ten
    Ⓑ hundred
    Ⓒ ten or hundred
    Ⓓ thousand

Name _____ Date _____

13. Fill in the blank.
1,090 rounds to 1,100 when rounded to the nearest _____.

Ⓐ ten
Ⓑ hundred
Ⓒ ten or hundred
Ⓓ thousand

14. The attendance at a local baseball game is announced to be 4,328. What is this number rounded to the nearest ten?

Ⓐ 4,300
Ⓑ 4,330
Ⓒ 4,320
Ⓓ 4,400

15. The number of plants in a garden, when rounded to the nearest hundred, rounds to 800. Which of the following could not be the number of plants in the garden?

Ⓐ 850
Ⓑ 800
Ⓒ 750
Ⓓ 849

16. Which numbers represent the number 617 when rounded to the nearest ten or hundred? Circle all correct answers.

Ⓐ 620
Ⓑ 600
Ⓒ 700
Ⓓ 630

17. Round 489 to the nearest hundred. Write the correct answer into the box.

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Name _____ Date _____

18. Complete the table in the format given in the example.

Number	Number when rounded to the nearest ten	Number when rounded to the nearest hundred
2,349	2,350	2,300
4,092		
8,396		

Name _____ Date _____

Chapter 3:

Number & Operations in Base Ten

Answer Key
&
Detailed Explanations

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Name _____ Date _____

Lesson 1: Rounding Numbers

Question No.	Answer	Detailed Explanation
1	D	Moving from right to left, the positions are as follows: ones, tens, hundreds, thousands, ten thousands. 9 - 10's is the same as 9 x 10 = 90.
2	A	Moving from right to left, the positions are as follows: ones, tens, hundreds, thousands, ten thousands.
3	C	Moving from right to left, the positions are as follows: ones, tens, hundreds, thousands, ten thousands.
4	C	Moving from right to left, the positions are as follows: ones, tens, hundreds, thousands. In order to round to the nearest hundred, you must look at the number in the tens place. If this number is less than 5, you must round the hundreds number down. If this number is 5 or more, you must round the hundreds number up.
5	A	Moving from right to left, the positions are as follows: ones, tens, hundreds, thousands. In order to round to the nearest hundred, you must look at the number in the tens place. If this number is less than 5, you must round the hundreds number down. If this number is 5 or more, you must round the hundreds number up.
6	B	Moving from right to left, the positions are as follows: ones, tens, hundreds. In order to round to the nearest ten, you must look at the number in the ones place. If this number is less than 5, you must round the tens number down. If this number is 5 or more, you must round the tens number up.
7	A	Moving from right to left, the positions are as follows: ones, tens, hundreds. In order to round to the nearest ten, you must look at the number in the ones place. If this number is less than 5, you must round the tens number down. If this number is 5 or more, you must round the tens number up.
8	C	Moving from right to left, the positions are as follows: ones, tens, hundreds. In order to round to the nearest hundred, you must look at the number in the tens place. If this number is less than 5, you must round the hundreds number down. If this number is 5 or more, you must round the hundreds number up.
9	B	Moving from right to left, the positions are as follows: ones, tens. In order to round to the nearest ten, you must look at the number in the ones place. If this number is less than 5, you must round the tens number down. If this number is 5 or more, you must round the tens number up.

Name _____ Date _____

Question No.	Answer	Detailed Explanation
10	C	Moving from right to left, the positions are as follows: ones, tens, hundreds, thousands. In order to round to the nearest hundred, you must look at the number in the tens place. If this number is less than 5, you must round the hundreds number down. If this number is 5 or more, you must round the hundreds number up. Option C is the only choice that would not round to 1,000. It would round to 1,100.
11	C	Moving from right to left, the positions are as follows: ones, tens, hundreds. In order to round to the nearest ten, you must look at the number in the ones place. If this number is less than 5, you must round the tens number down. If this number is 5 or more, you must round the tens number up. With these rules, there are 5 numbers that would round up to 100 (95, 96, 97, 98, and 99), there are 4 numbers that would round down to 100 (101,102, 103, and 104), and 100 rounds to itself. This is 10 numbers in all.
12	C	Moving from right to left, the positions are as follows: ones, tens, hundreds. In order to round to the nearest ten, you must look at the number in the ones place. If this number is less than 5, you must round the tens number down. If this number is 5 or more, you must round the tens number up. 795 has 5 in ones place. So, 795 round to 800, when rounded to nearest ten. In order to round to the nearest hundred, you must look at the number in the tens place. If this number is less than 5, you must round the hundreds number down. If this number is 5 or more, you must round the hundreds number up. 795 has a 9 in its hundreds place. So, 795 would round to 800, when rounded to nearest hundred. So, in both the cases, rounded to nearest ten or hundred, 795 would round to 800.
13	B	Moving from right to left, the positions are as follows: ones, tens, hundreds, thousands. In order to round to the nearest hundred, you must look at the number in the tens place. If this number is less than 5, you must round the hundreds number down. If this number is 5 or more, you must round the hundreds number up. 1,090 has a 9 in its tens place, so when rounding to the nearest hundred, it would round to 1,100. If 1,090 is rounded to nearest ten, it would have been the same. So, option (A) and (C) are wrong. If 1,090 is rounded to nearest thousand, it would have been 1,000. So, option (D) is also wrong.

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Name _____ Date _____

<table>
<tr><th>Question No.</th><th>Answer</th><th>Detailed Explanation</th></tr>
<tr><td>14</td><td>B</td><td>Moving from right to left, the positions are as follows: ones, tens, hundreds, thousands. In order to round to the nearest ten, you must look at the number in the ones place. If this number is less than 5, you must round the tens number down. If this number is 5 or more, you must round the tens number up.</td></tr>
<tr><td>15</td><td>A.</td><td>Moving from right to left, the positions are as follows: ones, tens, hundreds. In order to round to the nearest hundred, you must look at the number in the tens place. If this number is less than 5, you must round the hundreds number down. If this number is 5 or more, you must round the hundreds number up. Option A is the only choice that would not fit this criteria to round to 800.</td></tr>
<tr><td>16</td><td>A & B</td><td>When rounding to the nearest hundred look at the number in the tens place. If the number is less than 5 round down to the nearest hundred. If the number is 5 or more, round up to the nearest hundred. 617 has 1 in tens place. So, 617 rounds down to 600, the nearest hundred.

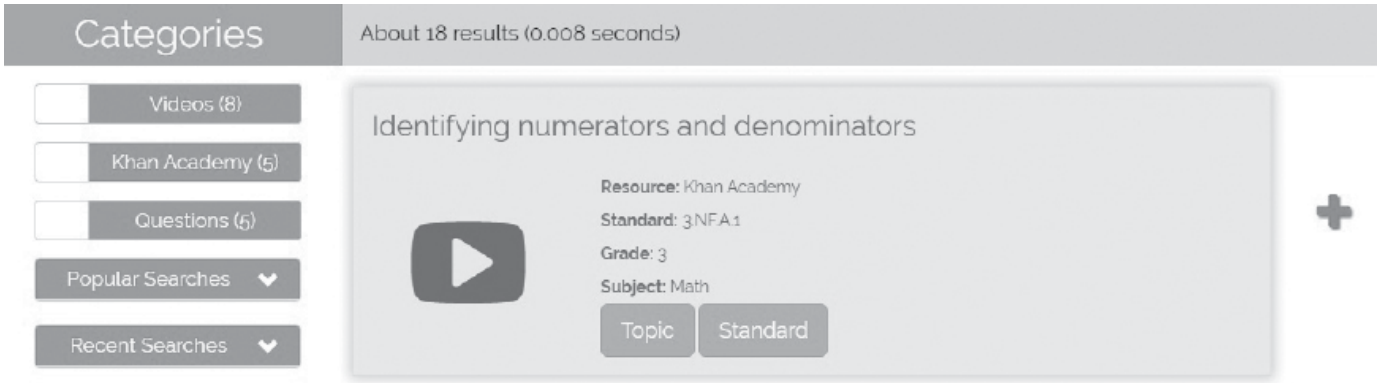
When rounding to the nearest ten look at the number in the ones place. If the number is less than 5 round down to the nearest ten. If the number is 5 or more, round up to the nearest ten. So, 617 rounds up to 620, the nearest ten.</td></tr>
<tr><td>17</td><td>500</td><td>When rounding to the nearest hundred look at the number in the tens place. If the number is less than 5 round down to the nearest hundred. If the number is 5 or more, round up to the nearest hundred. 489 is nearest to 500 on the number line.</td></tr>
<tr><td>18</td><td></td><td>
<table>
<tr><th>Number</th><th>Number when rounded to the nearest ten</th><th>Number when rounded to the nearest hundred</th></tr>
<tr><td>2,349</td><td>2,350</td><td>2,300</td></tr>
<tr><td>4,092</td><td>4,090</td><td>4,100</td></tr>
<tr><td>8,396</td><td>8,400</td><td>8,400</td></tr>
</table>
</td></tr>
</table>

Name _____ Date _____

Chapter 4:
Number & Operations - Fractions

Lesson 1: Fractions of a Whole

You can scan the QR code given below or use the url to access additional EdSearch resources including videos and mobile apps related to *Fractions of a Whole*.



edSearch

Fractions of a Whole

URL	QR Code
http://www.lumoslearning.com/a/3nfa1	

Name _____ Date _____

1. What fraction of the letters in the word "READING" are vowels?

   Ⓐ $\frac{4}{7}$

   Ⓑ $\frac{3}{4}$

   Ⓒ $\frac{3}{7}$

   Ⓓ $\frac{1}{3}$

2. A bag contains 3 red, 2 yellow, and 5 blue tiles. What fraction of the tiles are yellow?

   Ⓐ $\frac{2}{5}$

   Ⓑ $\frac{2}{10}$

   Ⓒ $\frac{3}{7}$

   Ⓓ $\frac{1}{3}$

3. A rectangle is cut into four equal pieces. Each piece represents what fraction of the rectangle?

   Ⓐ one half
   Ⓑ one third
   Ⓒ one fourth
   Ⓓ one fifth

4. What fraction of the square is shaded?

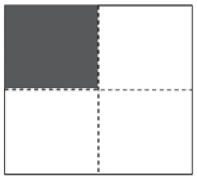


   Ⓐ $\frac{1}{2}$ Ⓒ $\frac{2}{1}$

   Ⓑ $\frac{1}{3}$ Ⓓ $\frac{1}{1}$

Name _____ Date _____

5. What fraction of the square is shaded?



Ⓐ $\frac{1}{2}$

Ⓑ $\frac{1}{4}$

Ⓒ $\frac{1}{3}$

Ⓓ $\frac{3}{1}$

6. What fraction of the square is NOT shaded?



Ⓐ $\frac{1}{2}$

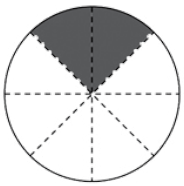
Ⓑ $\frac{1}{4}$

Ⓒ $\frac{3}{1}$

Ⓓ $\frac{3}{4}$

Name _____ Date _____

7. What fraction of the circle is shaded?



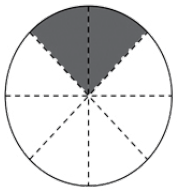
Ⓐ $\frac{1}{8}$

Ⓑ $\frac{2}{8}$

Ⓒ $\frac{2}{6}$

Ⓓ $\frac{6}{2}$

8. What fraction of the circle is not shaded?



Ⓐ $\frac{6}{8}$

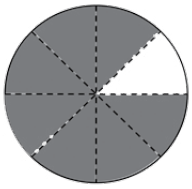
Ⓑ $\frac{7}{8}$

Ⓒ $\frac{2}{6}$

Ⓓ $\frac{6}{2}$

Name _____ Date _____

9. What fraction of the circle is shaded?



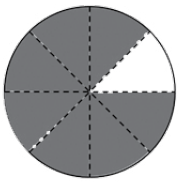
Ⓐ $\frac{1}{8}$

Ⓑ $\frac{1}{7}$

Ⓒ $\frac{7}{1}$

Ⓓ $\frac{7}{8}$

10. What fraction of the circle is not shaded?



Ⓐ $\frac{1}{8}$

Ⓑ $\frac{1}{7}$

Ⓒ $\frac{7}{1}$

Ⓓ $\frac{8}{1}$

Name _____ Date _____

11. What fraction of the rectangle is shaded?



Ⓐ $\frac{1}{2}$

Ⓑ $\frac{1}{3}$

Ⓒ $\frac{2}{3}$

Ⓓ $\frac{2}{1}$

12. What fraction of the rectangle is not shaded?



Ⓐ $\frac{1}{3}$

Ⓑ $\frac{1}{2}$

Ⓒ $\frac{2}{3}$

Ⓓ $\frac{2}{1}$

Name _____ Date _____

13. A pizza is cut into 12 equal slices. Eight slices are eaten. What fraction of the pizza is left?

Ⓐ $\frac{8}{12}$

Ⓑ $\frac{4}{8}$

Ⓒ $\frac{4}{12}$

Ⓓ $\frac{8}{4}$

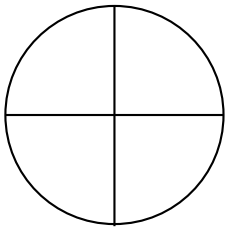
14. The class has 20 children. Only half of the students brought their homework. How many students have their homework?

Ⓐ 20 students
Ⓑ 15 students
Ⓒ 10 students
Ⓓ 12 students

15. Meagan has 24 cupcakes. She gives a third of them to Micah. How many cupcakes does Micah have?

Ⓐ 8 cupcakes
Ⓑ 12 cupcakes
Ⓒ 3 cupcakes
Ⓓ 4 cupcakes

16. Which of the following fractions could apply to this figure? Complete the table by selecting yes or no.



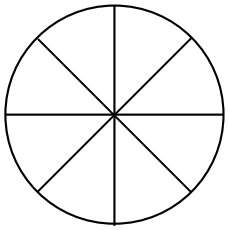
	Yes	No
1/8	○	○
1/4	○	○
1/3	○	○

Name _____ Date _____

17. What fraction does each figure show? Write your answers in the blank boxes.

Figure	Fraction
A 	
B 	
C 	

18. Which of the following fractions could apply to this figure? Select all correct answers.



Ⓐ $\frac{1}{3}$

Ⓑ $\frac{1}{8}$

Ⓒ $\frac{1}{5}$

Ⓓ $\frac{8}{8}$

Chapter 4:

Number & Operations - Fractions

Answer Key
&
Detailed Explanations

Name _____ Date _____

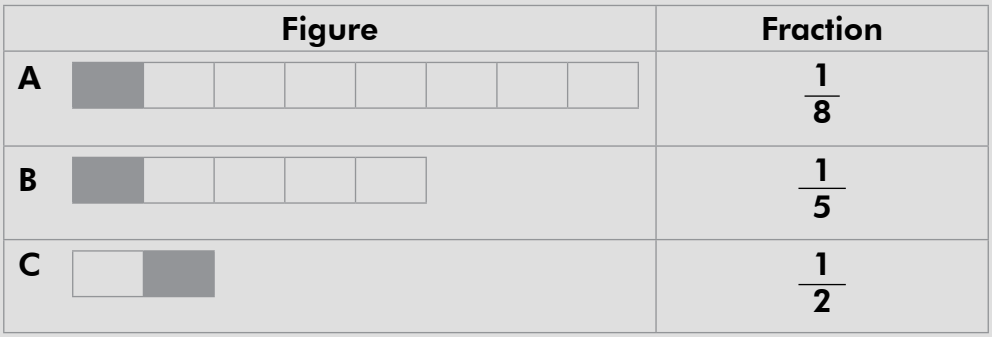
Lesson 1: Fractions of a Whole

Question No.	Answer	Detailed Explanation
1	C	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, there are 3 vowels (the part) and there are 7 total letters (the whole). The fraction should be $\frac{3}{7}$.
2	B	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, there are 2 yellow tiles (the part) and there are 10 total tiles (the whole). The fraction should be $\frac{2}{10}$.
3	C	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, there is 1 piece (the part) and there are 4 pieces (the whole). The fraction should be $\frac{1}{4}$.
4	A	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, there is 1 shaded part (the part) and there are 2 total parts (the whole). The fraction should be $\frac{1}{2}$.
5	B	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, there is 1 shaded part (the part) and there are 4 total parts (the whole). The fraction should be $\frac{1}{4}$.
6	D	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, there are 3 NOT shaded parts (the part) and there are 4 total parts (the whole). The fraction should be $\frac{3}{4}$.
7	B	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, there are 2 shaded parts (the part) and there are 8 total parts (the whole). The fraction should be $\frac{2}{8}$.
8	A	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, there are 6 NOT shaded parts (the part) and there are 8 total parts (the whole). The fraction should be $\frac{6}{8}$.

Name _____ Date _____

Question No.	Answer	Detailed Explanation
9	D	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, there are 7 shaded parts (the part) and there are 8 total parts (the whole). The fraction should be $\frac{7}{8}$.
10	A	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, there is 1 NOT shaded part (the part) and there are 8 total parts (the whole). The fraction should be $\frac{1}{8}$.
11	B	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, there is 1 shaded part (the part) and there are 3 total parts (the whole). The fraction should be $\frac{1}{3}$.
12	C	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, there are 2 NOT shaded parts (the part) and there are 3 total parts (the whole). The fraction should be $\frac{2}{3}$.
13	C	When forming a fraction, the numerator will be the part of the whole and the denominator will be the whole or all parts together. In this case, you subtract the slices eaten from the total number of slices (12-8) to find that there are 4 slices left (the part). Since there were 12 total slices (the whole), the fraction should be $\frac{4}{12}$.
14	C	Half is equivalent to dividing a number by 2 and 20 ÷ 2 = 10.
15	A	A third is equivalent to dividing a number by 3 and 24 ÷ 3 = 8.
16		<table><tr><td></td><td>Yes</td><td>No</td></tr><tr><td>1/8</td><td>○</td><td>●</td></tr><tr><td>1/4</td><td>●</td><td>○</td></tr><tr><td>1/3</td><td>○</td><td>●</td></tr></table> The circle is divided into 4 equal parts. 1 of the 4 parts represents ¼ of the whole circle.

Name _____ Date _____

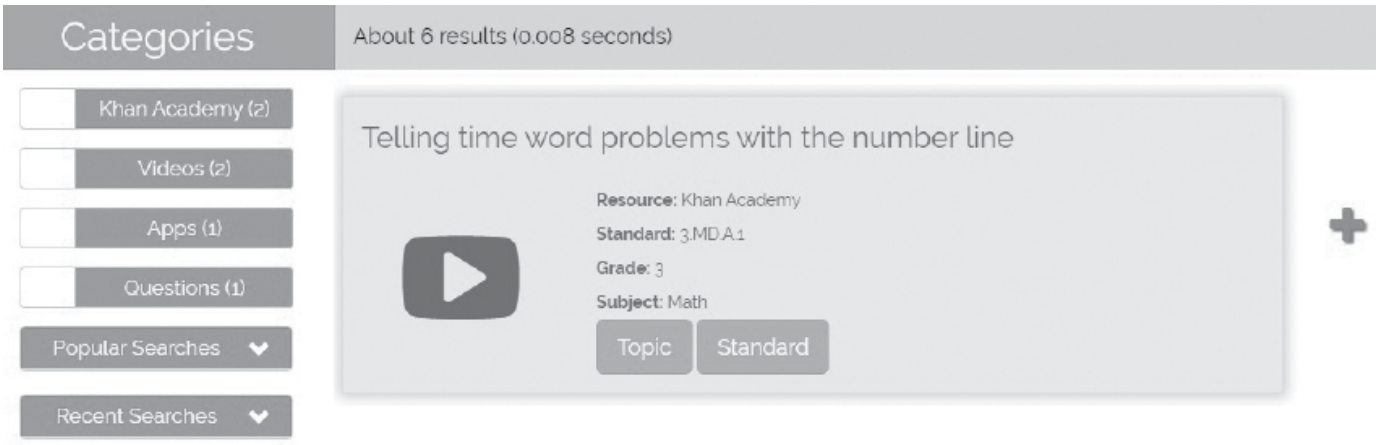
Question No.	Answer	Detailed Explanation
17		 The correct answers are $\frac{1}{8}$, $\frac{1}{5}$, and $\frac{1}{2}$. Figure A is divided into 8 equal parts. 1 of the 8 parts represents $\frac{1}{8}$ of the whole figure. Figure B is divided into 5 equal parts. 1 of the 5 parts represents $\frac{1}{5}$ of the whole figure. Figure C is divided into 2 equal parts. 1 of the 2 parts represents $\frac{1}{2}$ of the whole figure.
18	B & D	The circle is divided into 8 equal parts. 1 of the 8 parts represents $\frac{1}{8}$ of the whole circle. The fraction $\frac{8}{8}$ represents the whole circle. $\frac{8}{8} = 1$.

Name _____ Date _____

Chapter 5: Measurement and Data

Lesson 1: Telling Time

You can scan the QR code given below or use the url to access additional EdSearch resources including videos and mobile apps related to *Telling Time*.

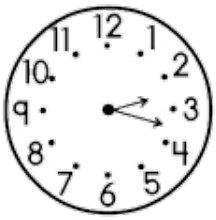


Telling Time

URL	QR Code
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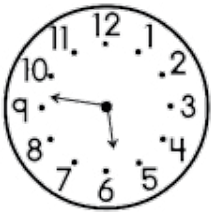
Name _____ Date _____

1. **What time does this clock show?**



Ⓐ **3:12**
Ⓑ **2:17**
Ⓒ **2:22**
Ⓓ **2:03**

2. **What time does this clock show?**



Ⓐ **5:42**
Ⓑ **9:28**
Ⓒ **6:47**
Ⓓ **5:47**

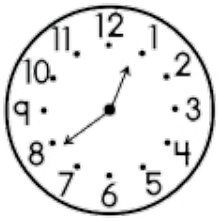
3. **What time does this clock show?**



Ⓐ **10:00**
Ⓑ **12:50**
Ⓒ **10:02**
Ⓓ **9:41**

Name _____ Date _____

4. What time does this clock show?



Ⓐ 12:39
Ⓑ 8:04
Ⓒ 1:38
Ⓓ 12:42

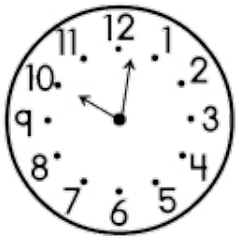
5. On an analog clock, the shorter hand shows the _____ .

Ⓐ minutes
Ⓑ hours
Ⓒ seconds
Ⓓ days

6. On an analog clock, the longer hand shows the _____ .

Ⓐ minutes
Ⓑ hours
Ⓒ days
Ⓓ seconds

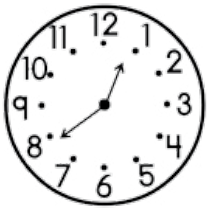
7. The clock currently shows:



What time will it be in 8 minutes?

Ⓐ 1:38
Ⓑ 10:15
Ⓒ 10:10
Ⓓ 12:58

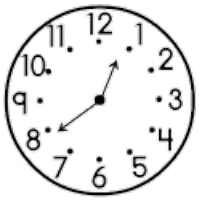
8. The clock currently shows:



What time will it be in 20 minutes?

Ⓐ 12:59
Ⓑ 1:09
Ⓒ 2:00
Ⓓ 8:24

9. The clock says:



What time was it 10 minutes ago?

Ⓐ 1:29
Ⓑ 12:29
Ⓒ 12:49
Ⓓ 1:09

10. Lucy started her test at 12:09 PM and finished at 12:58 PM. David started at 12:15 PM and ended at 1:03 PM. Who finished in a shorter amount of time?

Ⓐ Lucy
Ⓑ David
Ⓒ They both took the same amount of time.
Ⓓ There is not enough information given.

11. The Jamisons are on a road trip that will take 5 hours and 25 minutes. They have been driving for 3 hours and 41 minutes. How much longer do they need to travel before they reach their destination?

Ⓐ 1 hour, 13 minutes
Ⓑ 2 hours, 19 minutes
Ⓒ 1 hour, 44 minutes
Ⓓ 2 hours, 7 minutes

Name _____ Date _____

12. Rachel usually gets around 9 hours of sleep per night. She went to bed at 9:30 PM. About what time will she wake up?

Ⓐ 8:30 AM
Ⓑ 10:30 AM
Ⓒ 6:30 AM
Ⓓ 5:30 AM

13. A 45 minute long show ends at 12:20 PM. When did the show begin?

Ⓐ 1:05 PM
Ⓑ 11:35 AM
Ⓒ 11:35 PM
Ⓓ 11:45 AM

14. Mrs. James is giving her class a math test. She is allowing the students 40 minutes to finish the test. The test began at 10:22 AM. By what time must the test be finished?

Ⓐ 10:42 AM
Ⓑ 10:57 AM
Ⓒ 11:02 AM
Ⓓ 12:02 PM

15. The directions on a frozen pizza say to cook it for 25 minutes. Mr. Adams puts the frozen pizza in the oven at 5:43 PM. When will the pizza be done?

Ⓐ 6:08 PM
Ⓑ 6:18 PM
Ⓒ 6:13 PM
Ⓓ 5:58 PM

16. Which statements are true? Select all the correct answers.



Ⓐ The minute hand points to 4
Ⓑ The minute hand points to 6
Ⓒ The hour hand points to 6
Ⓓ The clock shows the time as 5:30

Name _____ Date _____

17. What time does this clock show? Write your answer in the box below.



18. Circle the clock that shows the time as 12:15



A



B



C

19. John starts working in the garden at 5:30 PM and finishes 40 minutes later. What time does the clock show when John finishes his work? Represent this on a number line.

Name _____ Date _____

20. The clocks in the first column show different times. For each clock in the first column, select the correct answer.

	9:42	11:58	2:03
	○	○	○
	○	○	○
	○	○	○

Chapter 5:

Measurement & Data

Answer Key
&
Detailed Explanations

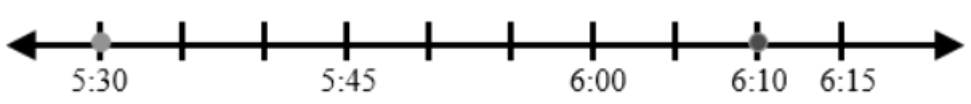
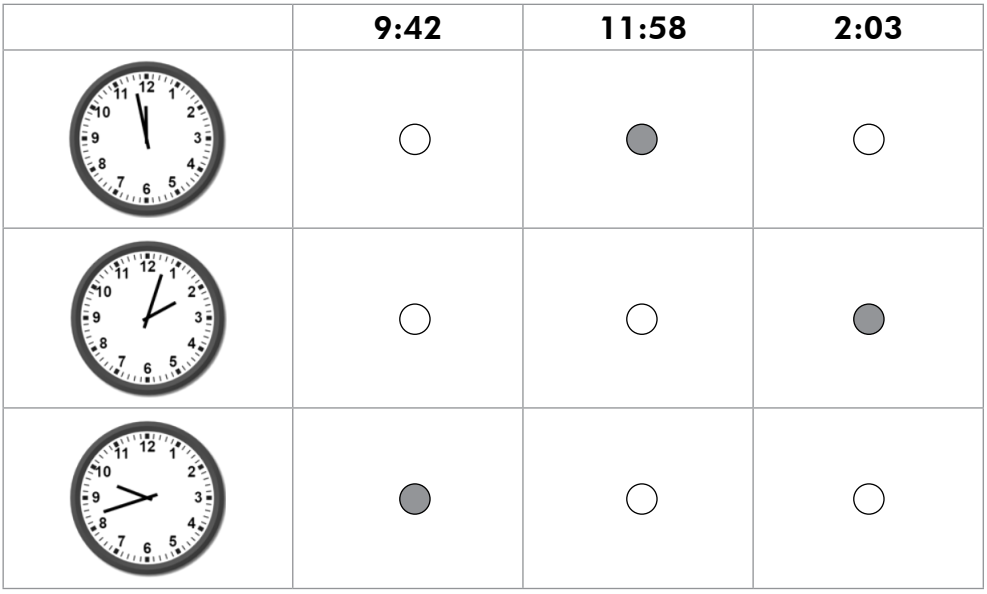
Name _____ Date _____

Lesson 1: Telling Time

Question No.	Answer	Detailed Explanation
1	B	The hour hand (the shorter hand) is past the 2nd hour but has not reached the 3rd hour, and the minute hand (the longer hand) is past 15 minutes but has not yet reached 20 minutes.
2	D	The hour hand (the shorter hand) is past the 5th hour but has not reached the 6th hour, and the minute hand (the longer hand) is past 45 minutes but has not yet reached 50 minutes.
3	C	The hour hand (the shorter hand) is pointing to the 10th hour, and the minute hand (the longer hand) is past 0 minutes but has not yet reached 5 minutes.
4	A	The hour hand (the shorter hand) is past the 12th hour but has not reached the 1st hour, and the minute hand (the longer hand) is past 35 minutes but has not yet quite reached 40 minutes.
5	B	On a clock, the shorter hand points toward the hour and the longer hand points toward the minutes. For example, if it was 2:00, the shorter hand would point to the "2."
6	A	On a clock, the shorter hand points toward the hour and the longer hand points toward the minutes. For example, if it was 2:30, the longer hand would point to the "6," which represents the 30th minutes.
7	C	The hour hand (the shorter hand) is pointed at the 10th hour, and the minute hand (the longer hand) is at 2 minutes. The clock shows 10:02. Eight minutes after 10:02 would be 10:10.
8	A	The hour hand (the shorter hand) is past the 12th hour but not yet at the 1st hour, and the minute hand (the longer hand) is at 39 minutes. The clock shows 12:39. Twenty minutes after 12:39 would be 12:59.
9	B	The hour hand (the shorter hand) is past the 12th hour but not yet at the 1st hour, and the minute hand (the longer hand) is at 39 minutes. The clock shows 12:39. Ten minutes before 12:39 would be 12:29.
10	B.	Lucy's time:12:58 - 12:09 = 49 minutes. David's time: 1:03 - 12:15 = 48 minutes. David has the shorter time.

Question No.	Answer	Detailed Explanation
11	C	You can solve this problem by converting the hours to minutes and then subtracting the two times. 5 hours and 25 minutes is equivalent to (5 x 60) + 25 = 325 minutes. You multiply 5 hours by 60 because there are 60 minutes in an hour. 3 hours and 41 minutes is equivalent to (3 x 60) + 41 = 221 minutes. 325 - 221 = 104. Now convert 104 minutes back into hours and minutes by dividing by 60 and the answer is 1 hour and 44 minutes.
12	C	To calculate how many hours of sleep Rachel will receive, add the amount of time she sleeps to the time she goes to bed. 9 hours after 9:30 PM would be 6:30 AM.
13	B	To calculate when the show began, subtract the length of the show from the ending time. Counting back 45 minutes from 12:20 PM, you would arrive at 11:35 AM. The PM changes to AM, since you are now before noon.
14	C	To calculate when the students have to be finished with their test, add the amount of time given for the test to the start time. 40 minutes after 10:22 AM would be 11:02 AM.
15	A	To calculate when the pizza will be done, add the cooking time to the time Mr. Adams began cooking. 25 minutes after 5:43 PM would be 6:08 PM.
16	B & D	On an analog clock, the long hand shows the minutes while the short hand shows the hour. The minute hand on this clock points to 6 which represents 30 minutes. The hour hand is in between the numbers 5 and 6 which shows that the time is 5:30.
17	1:00	On an analog clock, the long hand shows the minutes while the short hand shows the hour. The minute hand on this clock points to 12 which represents an exact hour. The hour hand points to the number 1 shows that the time is exactly 1:00.
18	Clock A	Clock A is the correct answer. On an analog clock, the long hand shows the minutes while the short hand shows the hour. The minute hand on this clock points to 3 which represents 15 minutes. The hour hand is nearest to the number 12 which shows that the time is 12:15.

Name _____ Date _____

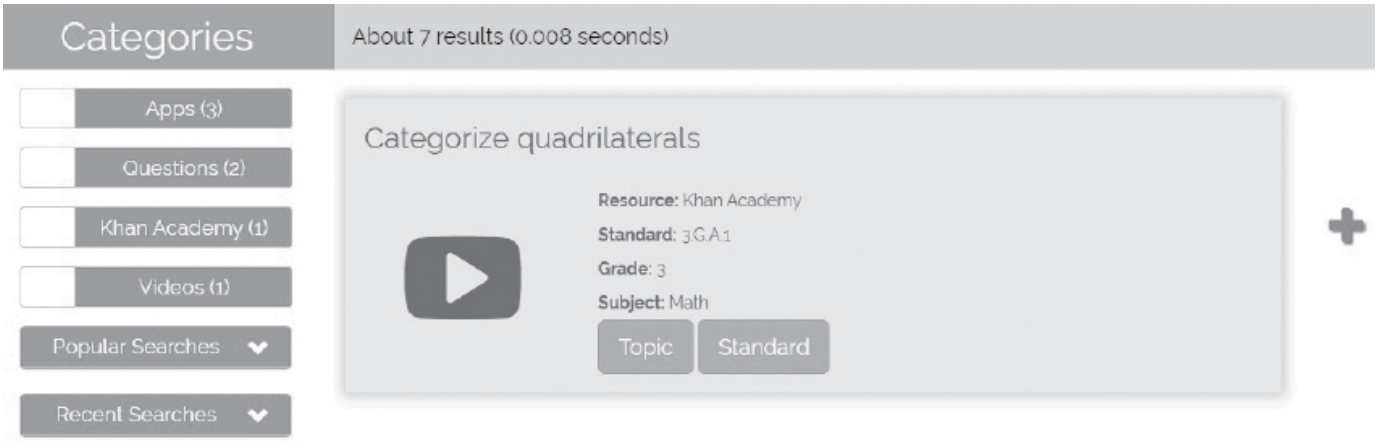
Question No.	Answer	Detailed Explanation
19		To determine what time John finishes his work, add 40 minutes to 5:30 PM; 5:30 PM + 40 minutes = 6:10 PM. This is represented on the number line below.  In the figure, green dot shows the time when John started the work, and the red dot shows the time when John finished his work.
20		 (1) In the first clock, the hour hand (the shorter hand) has passed the 11th hour but not yet at the 12th hour. At the start of the hour, the minute hand (the longer hand) points directly to 12, and it takes 5 minutes to move from one number to the next number and one minute to move from one tick to the next tick. So, the minute hand is at 58 minutes (5 x 11 + 3 = 58). Therefore, the clock shows 11:58. (2) In the second clock, the hour hand (the shorter hand) has passed the 2nd hour but not yet at the 3rd hour. The minute hand is at 3 minutes (1 x 3 = 3). Therefore, the clock shows 2:03. (3) In the third clock, the hour hand (the shorter hand) has passed the 9th hour but not yet at the 10th hour. The minute hand is at 42 minutes (5 x 8 + 2 = 42). Therefore, the clock shows 9:42.

Name _____ Date _____

Chapter 6: Geometry

Lesson 1: 2-Dimensional Shapes

You can scan the QR code given below or use the url to access additional EdSearch resources including videos and mobile apps related to *2-Dimensional Shapes*.



2-Dimensional Shapes

URL	QR Code
http://www.lumoslearning.com/a/3ga1	

Name _____ Date _____

1. Fill in the blank with the correct term.
   Closed, plane figures that have straight sides are called _____ .

   Ⓐ parallelograms
   Ⓑ line segments
   Ⓒ polygons
   Ⓓ squares

2. Which of the following shapes is not a polygon?

   Ⓐ Square
   Ⓑ Hexagon
   Ⓒ Circle
   Ⓓ Pentagon

3. Complete this statement.
   A rectangle must have _____ .

   Ⓐ four right angles
   Ⓑ four straight angles
   Ⓒ four obtuse angles
   Ⓓ four acute angles

4. How many sides does a trapezoid have?

   Ⓐ 4
   Ⓑ 8
   Ⓒ 6
   Ⓓ 10

5. Complete the following statement.
   A square is always a _____ .

   Ⓐ rhombus
   Ⓑ parallelogram
   Ⓒ rectangle
   Ⓓ All of the above

6. Which of these statements is true?

   Ⓐ A square and a triangle have the same number of angles.
   Ⓑ A triangle has more angles than a square.
   Ⓒ A square has more angles than a triangle.
   Ⓓ A square and a triangle each have no angles.

7. Which of these statements is true?

Ⓐ A rectangle has more sides than a trapezoid.
Ⓑ A parallelogram and a trapezoid have the same number of sides.
Ⓒ A triangle has more sides than a trapezoid.
Ⓓ A triangle has more sides than a square.

8. Complete this statement.
A trapezoid must have _____.

Ⓐ two acute angles
Ⓑ two right angles
Ⓒ one pair of parallel sides
Ⓓ two pairs of parallel sides

9. Complete the following statement.
Squares, rectangles, rhombi and trapezoids are all _____.

Ⓐ triangles
Ⓑ quadrilaterals
Ⓒ angles
Ⓓ round

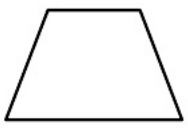
10. Which of these shapes is a quadrilateral?

Ⓐ circle
Ⓑ triangle
Ⓒ rectangle
Ⓓ pentagon

11. Which of these shapes is NOT a quadrilateral?

Ⓐ square
Ⓑ trapezoid
Ⓒ rectangle
Ⓓ triangle

12. Name the figure shown below.



Ⓐ Trapezoid
Ⓑ Square
Ⓒ Pentagon
Ⓓ Rhombus

Name _____ Date _____

13. Name the object shown below.



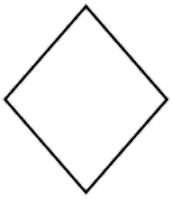
Ⓐ **Rectangle**
Ⓑ **Parallelogram**
Ⓒ **Trapezoid**
Ⓓ **Rhombus**

14. The figure shown below is a _____ .



Ⓐ **parallelogram**
Ⓑ **rectangle**
Ⓒ **quadrilateral**
Ⓓ **All of the above**

15. The figure below is a _____ .



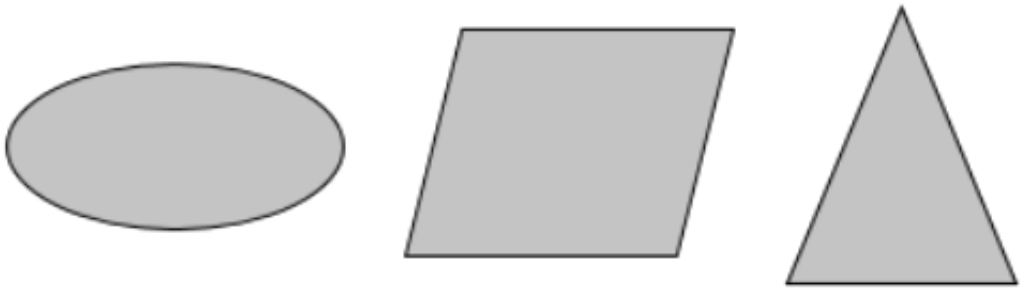
Ⓐ **triangle**
Ⓑ **square**
Ⓒ **rhombus**
Ⓓ **trapezoid**

16. Are these figures quadrilaterals? Select yes or no.

	Yes	No
Circle		
Star		
Square		
Rectangle		

Name _____ Date _____

17. Circle the parallelogram.



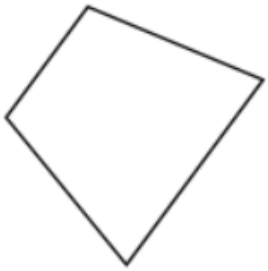
18. For each polygon in the first column, an attribute is defined in the second column. Write true, if the polygon has the mentioned attribute or write false if the polygon does not have the mentioned attribute.

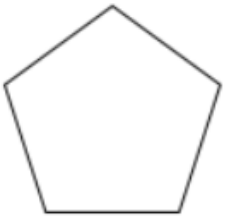
Polygon	Attribute	True or False
Rhombus	It has two sets of parallel sides	True
Parallelogram	All the angles are equal	
Rectangle	Opposite sides are equal	

19. Draw a quadrilateral which has three obtuse angles.
Instruction : An obtuse angle is an angle which measures more than 90° but less than 180°.

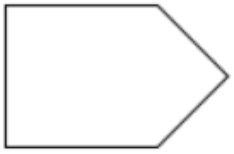
Name _____ Date _____

20. Which of the following figures have at least one set parallel sides? Note that more than one option may be correct.

Ⓐ 

Ⓑ 

Ⓒ 

Ⓓ 

Chapter 6: Geometry

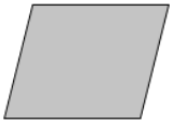
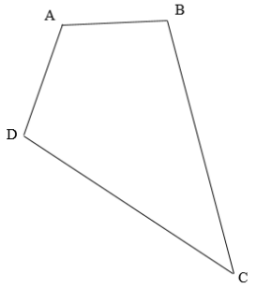
Answer Key
&
Detailed Explanations

Name _____ Date _____

Lesson 1: 2-Dimensional Shapes

Question No.	Answer	Detailed Explanation
1	C	By definition, a polygon is a plane (flat), closed figure with only straight sides.
2	C	A polygon must have only straight sides. A circle is the only option that does not fit this criteria. Since it is curved.
3	A	A rectangle is a quadrilateral (4-sided polygon) with 4 right angles.
4	A	A trapezoid is a quadrilateral which means it has 4 sides.
5	D	A square is a rhombus parallelogram, and rectangle because all of these figures are four-sided and contain two sets of parallel sides.
6	C.	Option C is true because a square has 4 angles and a triangle has 3 angles.
7	B	Option B is true because a parallelogram and a trapezoid both have 4 sides.
8	C	A trapezoid is a quadrilateral with one pair of parallel sides.
9	B	A quadrilateral is a figure with four straight sides and four angles. Squares, rectangles, rhombi, and trapezoids all have 4 sides.
10	C	A quadrilateral is a figure with four straight sides and four angles. A rectangle fits this description, whereas a triangle has 3 sides, a circle is round, and a pentagon has 5 sides.
11	D	A quadrilateral is a figure with four straight sides and four angles. A triangle is the only choice that does not fit this description. Since it has only 3 sides.
12.	A	A trapezoid is a quadrilateral that contains only one pair of parallel sides.
13	B	A parallelogram is a quadrilateral with two pairs of opposite parallel sides. The figure is not a rectangle because it does not have right angles. It is not a rhombus because the sides are not all equal in length. It is not a trapezoid because a trapezoid only has one set of parallel sides.
14	D	The shape is a parallelogram because it has two pairs of parallel sides. It is a quadrilateral because it has 4 sides. It is a rectangle because it is a parallelogram with all right angles.
15	C	A rhombus is a quadrilateral with 4 equal sides. This figure is not a square because it does not have right angles. Triangles are three-sided, while trapezoids do not have four equal sides.

Name _____ Date _____

Question No.	Answer	Detailed Explanation
16		<table><tr><th></th><th>Yes</th><th>No</th></tr><tr><td>Circle</td><td></td><td>✓</td></tr><tr><td>Star</td><td></td><td>✓</td></tr><tr><td>Square</td><td>✓</td><td></td></tr><tr><td>Rectangle</td><td>✓</td><td></td></tr></table> A quadrilateral is a four-sided polygon with four angles. Squares and rectangles belong in this category. Circles and stars are not quadrilaterals.
17		 A parallelogram is a (non-self-intersecting) quadrilateral with two pairs of parallel sides. Ovals and triangles are not parallelograms.
18		<table><tr><th>Polygon</th><th>Attribute</th><th>True or False</th></tr><tr><td>Rhombus</td><td>It has two sets of parallel sides</td><td>True</td></tr><tr><td>Parallelogram</td><td>All the angles are equal</td><td>False</td></tr><tr><td>Rectangle</td><td>Opposite sides are equal</td><td>True</td></tr></table> In a parallelogram, opposite angles are equal. Adjacent angles need not be equal. A rectangle is a special type of parallelogram, whose angles measure 90° each. Since a rectangle is a type of parallelogram, it has the attribute: opposite sides are equal.
19		 In the above quadrilateral, angles ADC, DAB and ABC are obtuse angles.
20	C & D	The first figure is a trapezoid. It has one pair of parallel sides. The second figure is a pentagon. It has no parallel sides. The third figure is a regular hexagon. It has 3 sets of parallel sides. The fourth figure has one set of parallel sides.

Progress Chart

Standard	Lesson	Page No.	Practice		Mastered	Re-practice /Reteach
CCSS			Date	Score		
3.OA.A.1	Understanding Multiplication	10				
3.OA.A.2	Understanding Division	19				
3.OA.A.3	Applying Multiplication & Division	25				
3.OA.A.4	Finding Unknown Values	31				
3.OA.B.5	Multiplication & Division Properties	37				
3.OA.B.6	Relating Multiplication & Division	43				
3.OA.C.7	Multiplication & Division Facts	49				
3.OA.D.8	Two-Step Problems	57				
3.OA.D.9	Number Patterns	63				
3.NBT.A.1	Rounding Numbers	90				
3.NBT.A.2	Addition & Subtraction	95				
3.NBT.A.3	Multiplying Multiples of 10	100				
3.NF.A.1	Fractions of a Whole	115				
3.NF.A.2	Fractions on the Number Line	123				
3.NF.A.3	Comparing Fractions	131				
3.MD.A.1	Telling Time	147				
3.MD.A.1	Elapsed Time	154				
3.MD.A.2	Liquid Volume & Mass	160				
3.MD.B.3	Graphs	165				
3.MD.B.4	Measuring Length	177				
3.MD.C.6	Area	182				
3.MD.C.7	Relating Area to Addition & Multiplication	188				
3.MD.D.8	Perimeter	193				
3.G.A.1	2-Dimensional Shapes	224				
3.G.A.2	Shape Partitions	230				

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