## Contents

### Unit 8  Probability and Data Management: Graphs

<table>
<thead>
<tr>
<th>Name</th>
<th>Lessons</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz</td>
<td>Lessons PDM4-1, 4, 5</td>
<td>1</td>
</tr>
<tr>
<td>Quiz</td>
<td>Lessons PDM4-6 to 9</td>
<td>4</td>
</tr>
<tr>
<td>Test</td>
<td>Lessons PDM4-1, 6 to 9</td>
<td>7</td>
</tr>
</tbody>
</table>

### Unit 9  Number Sense: Fractions

<table>
<thead>
<tr>
<th>Name</th>
<th>Lessons</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz</td>
<td>Lessons NS4-45 to 47</td>
<td>10</td>
</tr>
<tr>
<td>Quiz</td>
<td>Lessons NS4-48 to 50</td>
<td>12</td>
</tr>
<tr>
<td>Test</td>
<td>Lessons NS4-45 to 49</td>
<td>15</td>
</tr>
</tbody>
</table>

### Unit 10  Number Sense: Decimals

<table>
<thead>
<tr>
<th>Name</th>
<th>Lessons</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz</td>
<td>Lessons NS4-52 to 55</td>
<td>18</td>
</tr>
<tr>
<td>Quiz</td>
<td>Lessons NS4-56, 57, 59</td>
<td>21</td>
</tr>
<tr>
<td>Quiz</td>
<td>Lessons NS4-60 to 63</td>
<td>23</td>
</tr>
<tr>
<td>Test</td>
<td>Lessons NS4-52 to 57, 62, 63</td>
<td>26</td>
</tr>
</tbody>
</table>

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## Unit 11 Patterns and Algebra: Equations

<table>
<thead>
<tr>
<th>Name</th>
<th>Lessons</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz</td>
<td>Lessons PA4-12 to 15</td>
<td>29</td>
</tr>
<tr>
<td>Quiz</td>
<td>Lessons PA4-16 to 18</td>
<td>31</td>
</tr>
<tr>
<td>Test</td>
<td>Lessons PA4-13 to 18</td>
<td>33</td>
</tr>
</tbody>
</table>

## Unit 12 Measurement: 2-D Shapes

<table>
<thead>
<tr>
<th>Name</th>
<th>Lessons</th>
<th>Page</th>
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<tbody>
<tr>
<td>Quiz</td>
<td>Lessons ME4-9 to 12</td>
<td>36</td>
</tr>
<tr>
<td>Quiz</td>
<td>Lessons ME4-13 to 16</td>
<td>38</td>
</tr>
<tr>
<td>Quiz</td>
<td>Lessons ME4-17 to 20</td>
<td>40</td>
</tr>
<tr>
<td>Test</td>
<td>Lessons ME4-9 to 20</td>
<td>42</td>
</tr>
</tbody>
</table>

## Unit 13 Measurement: Time

<table>
<thead>
<tr>
<th>Name</th>
<th>Lessons</th>
<th>Page</th>
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</thead>
<tbody>
<tr>
<td>Quiz</td>
<td>Lessons ME4-21, 22, 24, 25</td>
<td>46</td>
</tr>
<tr>
<td>Quiz</td>
<td>Lessons ME4-26, 27, 29</td>
<td>48</td>
</tr>
<tr>
<td>Test</td>
<td>Lessons ME4-25 to 27, 29</td>
<td>51</td>
</tr>
</tbody>
</table>

## Unit 14 Geometry: 3-D Shapes

<table>
<thead>
<tr>
<th>Name</th>
<th>Lessons</th>
<th>Page</th>
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<tbody>
<tr>
<td>Quiz</td>
<td>Lessons G4-10 to 12</td>
<td>54</td>
</tr>
<tr>
<td>Quiz</td>
<td>Lessons G4-13 to 15</td>
<td>56</td>
</tr>
<tr>
<td>Quiz</td>
<td>Lessons G4-16 to 18</td>
<td>58</td>
</tr>
<tr>
<td>Test</td>
<td>Lessons G4-11 to 18</td>
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## Unit 15 Probability and Data Management: Probability

<table>
<thead>
<tr>
<th>Name</th>
<th>Lessons</th>
<th>Page</th>
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</thead>
<tbody>
<tr>
<td>Quiz</td>
<td>Lessons PDM4-10 to 13</td>
<td>63</td>
</tr>
<tr>
<td>Test</td>
<td>Lessons PDM4-11 to 13</td>
<td>65</td>
</tr>
</tbody>
</table>
Introduction to Quizzes and Tests

We provide a quiz for, on average, every four lessons and a test covering the material of two to three quizzes, with one or two tests per unit. Students should need no more than 10 minutes to complete a quiz and no more than 45 minutes to complete a test.

Quizzes cover material both from lessons that are required to cover the curriculum and lessons labelled as recommended, while tests only cover material from lessons that are required to cover the curriculum.

Quizzes can be used as confidence builders and as formative assessment tools. A quiz should be administered after the last lesson that it covers has been taught. Tests are intended to be used as summative assessment tools. We recommend allowing students time to receive and internalize the feedback from all relevant quizzes before administering the test. The introduction to each unit in the Teacher Resource identifies which lessons are covered by each quiz and test.
1. Are all possible responses given? If not, add an “other” category.
   a) What is your favourite colour?
      ☐ red    ☐ yellow    ☐ blue
   b) Which of these flavours do you like best?
      ☐ vanilla ☐ chocolate ☐ strawberry

2. a) Use the bar graph to fill in the table.

<table>
<thead>
<tr>
<th>Type of Bird</th>
<th>Number Seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jays</td>
<td></td>
</tr>
<tr>
<td>Robins</td>
<td></td>
</tr>
<tr>
<td>Finches</td>
<td></td>
</tr>
<tr>
<td>Sparrows</td>
<td></td>
</tr>
</tbody>
</table>

   b) How many birds were seen in total? ________

   c) How many times as many jays as finches were seen? ________

   **BONUS** ▶ Make up your own question from the bar graph. Write the answer.

   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________
3. Tasha surveyed her grade about their favourite type of movie and gave four choices.
   a) Here are the results of Tasha's survey. Tally the data.

   Action: 
   Drama: 
   Comedy: 
   Romance: 

   b) Fill in the title and axis labels on the bar graph.
   c) Count by 4s to fill in the numbers on the axis.
   d) Complete the bar graph.

   Title: ________________________________________________________

<table>
<thead>
<tr>
<th>Action</th>
<th>Drama</th>
<th>Comedy</th>
<th>Romance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

   0 __ __ __ __ __ __ __
1. a) Add "other."
   b) Do not add "other."
2. a) 12
     8
     4
     24
   b) 48
   c) 3
   **BONUS**
   Answers will vary.
   Teacher to check.
3. a) 22
     8
     24
     6
   b) Teacher to check.
   c) 4, 8, 12, 16, 20,
      24, 28
   d) Teacher to check.
1. The double graph compares the number of pages Sam read in the first week of a reading contest to the number of pages he read in the second week.

**Sam’s Reading**

<table>
<thead>
<tr>
<th>Day of the Week</th>
<th>Number of Pages Read</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunday</td>
<td>Week 1: 6</td>
</tr>
<tr>
<td>Monday</td>
<td>Week 1: 4 Week 2: 3</td>
</tr>
<tr>
<td>Tuesday</td>
<td>Week 1: 2 Week 2: 2</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Week 1: 5 Week 2: 4</td>
</tr>
<tr>
<td>Thursday</td>
<td>Week 1: 3 Week 2: 3</td>
</tr>
<tr>
<td>Friday</td>
<td>Week 1: 1 Week 2: 1</td>
</tr>
<tr>
<td>Saturday</td>
<td>Week 1: 5 Week 2: 5</td>
</tr>
</tbody>
</table>

a) How many pages did Sam read in the first week in total?

b) How many more pages did he read in the second week than in the first?

c) On which days of the week did Sam read more in the first week than in the second?

d) What was the mode of the number of pages Sam read in the two weeks?

**BONUS** Create a data set that has mode, median, and range all equal to 5.
Unit 8: Probability and Data Management

2. a) Create a stem and leaf plot from the data.
   i) 26, 16, 31, 27, 17, 29, 17, 33, 26  
   ii) 127, 145, 139, 129, 141, 136, 125, 130, 129, 141

<table>
<thead>
<tr>
<th>Stem</th>
<th>Leaf</th>
<th>Stem</th>
<th>Leaf</th>
<th>Stem</th>
<th>Leaf</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b) List the data in order from smallest to largest.
   i) 
   ii) 

c) Find the range of the data.
   i) 
   ii) 

d) Find the mode or modes of the data.
   i) 
   ii) 

e) Find the median of the data.
   i) 
   ii) 

### Unit 8: Probability and Data Management

#### Quiz (Lessons 6–9) — ON

1. a) 23  
   b) $26 - 23 = 3$  
   c) Wednesday, Friday  
   d) 3

**BONUS**

Sample answer: 1, 5, 5, 6

2. a) i) 

<table>
<thead>
<tr>
<th>Stem</th>
<th>Leaf</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6 7 7</td>
</tr>
<tr>
<td>2</td>
<td>6 7 9 6</td>
</tr>
<tr>
<td>3</td>
<td>1 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stem</th>
<th>Leaf</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6 7 7</td>
</tr>
<tr>
<td>2</td>
<td>6 6 7 9</td>
</tr>
<tr>
<td>3</td>
<td>1 3</td>
</tr>
</tbody>
</table>

ii) 

<table>
<thead>
<tr>
<th>Stem</th>
<th>Leaf</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>7 9 5 9</td>
</tr>
<tr>
<td>13</td>
<td>9 6 0</td>
</tr>
<tr>
<td>14</td>
<td>5 1 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stem</th>
<th>Leaf</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>5 7 9 9</td>
</tr>
<tr>
<td>13</td>
<td>0 6 9</td>
</tr>
<tr>
<td>14</td>
<td>1 1 5</td>
</tr>
</tbody>
</table>

b) i) 16, 17, 17, 26, 26, 27, 29, 31, 33  
ii) 125, 127, 129, 129, 130, 136, 139, 141, 141, 145

c) i) $33 - 16 = 17$  
ii) $145 - 125 = 20$

d) i) 17  
ii) 141

e) i) 26  
ii) 133
1. a) Create a stem and leaf plot from the data.
   
   i) 46, 56, 61, 47, 57, 69, 57, 63, 46
   ii) 277, 284, 299, 279, 291, 286, 275, 280, 279, 291

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stem</th>
<th>Leaf</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   b) Find the range of the data.
   
   i) ii)

c) Find the mode or modes of the data.
   
   i) ii)

d) Find the median of the data.
   
   ii) ii)
2. The double bar graph compares the number of cans of food collected for charity by two Grade 4 classes.

Cans Collected for Charity

<table>
<thead>
<tr>
<th>Day</th>
<th>Class 1</th>
<th>Class 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Tuesday</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Wednesday</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>Thursday</td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td>Friday</td>
<td>20</td>
<td>16</td>
</tr>
</tbody>
</table>

a) Which class collected more cans of food?

b) Which class increased the number of cans collected each day as the week went on?

c) On which day did Class 1 collect twice as many cans of food as it collected on Monday?

**BONUS** ▶ Create a data set in which the mode and lowest value are the same.
1. a) i)  
<table>
<thead>
<tr>
<th>Stem</th>
<th>Leaf</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>6 7 6</td>
</tr>
<tr>
<td>5</td>
<td>6 7 7</td>
</tr>
<tr>
<td>6</td>
<td>1 9 3</td>
</tr>
</tbody>
</table>

   ii)  
<table>
<thead>
<tr>
<th>Stem</th>
<th>Leaf</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>6 6 7</td>
</tr>
<tr>
<td>5</td>
<td>6 7 7</td>
</tr>
<tr>
<td>6</td>
<td>1 3 9</td>
</tr>
</tbody>
</table>

   b) i) $69 - 46 = 23$
   ii) $299 - 275 = 24$

c) i) 46, 57
   ii) 279, 291

d) i) 57
   ii) 282

2. a) Neither, both classes brought in 63 cans.

   b) Class 1
   c) Friday

BONUS
   Sample answer: 1, 1, 2, 3, 4
1. Write the fraction shown by the shaded part of the image.

   a) 
   
   b) 

2. Shade half of the figure. Write two fractions to describe the shaded part.

   a) 
   
   b) 

3. How many shaded parts does the fraction show? How many parts are not shaded?

   a) _______ shaded
      _______ not shaded

   b) _______ shaded
      _______ not shaded

4. A fraction is equal to 0 if its numerator is _____.

5. Shade two different fractions between 0 and 1/2, and then write the fractions.

   This fraction is _______.

   This fraction is _______.

6. Draw lines to cut the pies into more equal pieces. Then fill in the numerators of the equivalent fractions.

   \[
   \frac{1}{3} = \frac{6}{9} = \frac{9}{12}
   \]

   6 pieces
   9 pieces
   12 pieces
1. a) $\frac{3}{4}$
   b) $\frac{6}{10}$
2. Teacher to check shading.
   a) $\frac{1}{2} = \frac{2}{4}$
   b) $\frac{1}{2} = \frac{3}{6}$
3. a) $\frac{7}{5}$
   b) $\frac{3}{5}$
4. 0
5. Teacher to check shading.
   Fractions could be
   $\frac{1}{8}$ or $\frac{1}{4}$
6. Teacher to check pictures.
   2, 3, 4
Unit 9: Number Sense

Quiz (Lessons 48–50) — ON

1. Circle the greater fraction.
   
   a) \( \frac{4}{7} \) or \( \frac{6}{7} \)  
   
   b) \( \frac{3}{10} \) or \( \frac{1}{10} \)  
   
   c) \( \frac{4}{5} \) or \( \frac{4}{10} \)  
   
   d) \( \frac{22}{35} \) or \( \frac{22}{23} \)

2. Two fractions have the same denominator but different numerators. How can you tell which fraction is greater?

3. Order the fractions from least to greatest by considering the numerators and denominators.

   a) \[ \frac{8}{10} \quad \frac{3}{10} \quad \frac{1}{10} \quad \frac{5}{10} \quad \frac{2}{10} \]  

   b) \[ \frac{6}{17} \quad \frac{6}{8} \quad \frac{6}{25} \quad \frac{6}{6} \quad \frac{6}{138} \]

4. a) Write the fractions in the correct category.

   \[ \frac{7}{8} \quad \frac{1}{6} \quad \frac{2}{5} \quad \frac{2}{3} \]

   \[\begin{array}{|c|c|}
   \hline
   0 \text{ to } \frac{1}{2} & \frac{1}{2} \text{ to } 1 \\
   \hline
   \end{array} \]

   b) Use the results from part a) to write < or > in the box between the pair of fractions.

   i) \( \frac{2}{3} \) \quad \frac{2}{5} \quad ii) \( \frac{1}{6} \) \quad \frac{7}{8} \quad iii) \( \frac{2}{3} \) \quad \frac{1}{6} \quad iv) \( \frac{2}{5} \) \quad \frac{7}{8} \]
5. Draw a picture that fits all the clues.

   a) There are 6 circles and squares.
      \[
      \frac{2}{6} \text{ of the figures have four sides.}
      \]  
      \[
      \frac{4}{6} \text{ of the figures are shaded.}
      \]

   b) There are 5 squares and triangles.
      \[
      \frac{3}{5} \text{ of the figures have four sides.}
      \]  
      \[
      \frac{2}{5} \text{ of the figures are shaded.}
      \]

6. Draw a picture to find \( \frac{2}{3} \) of 9 boxes.
Unit 9: Number Sense
Quiz (Lessons 48–50) — ON

1. Circle the following:
   a) \( \frac{6}{7} \)
   b) \( \frac{3}{10} \)
   c) \( \frac{4}{5} \)
   d) \( \frac{22}{23} \)

2. If two fractions have the same denominator, the fraction with the larger numerator is greater.

3. a) \( \frac{1}{10} \), \( \frac{2}{10} \), \( \frac{3}{10} \), \( \frac{5}{10} \)
   b) \( \frac{6}{138} \), \( \frac{6}{25} \), \( \frac{6}{17} \), \( \frac{6}{8} \), \( \frac{6}{6} \)

4. a) 

<table>
<thead>
<tr>
<th>0 to 1</th>
<th>1/2 to 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \frac{1}{6} )</td>
<td>( \frac{7}{8} )</td>
</tr>
<tr>
<td>( \frac{2}{5} )</td>
<td>( \frac{2}{3} )</td>
</tr>
</tbody>
</table>

b) i) >
   ii) <
   iii) >
   iv) <

5. Sample answers:
   a) □□□□□□□□□
   b) △△□□□

6.
1. Shade the fraction.
   a) \(\frac{4}{6}\)  
   b) \(\frac{3}{9}\)  
   c) \(\frac{5}{8}\)

2. Write > or <.
   a) \(\frac{3}{7}\) \(\quad\) \(\frac{1}{2}\)  
   b) \(\frac{1}{2}\) \(\quad\) \(\frac{5}{9}\)  
   c) \(\frac{9}{16}\) \(\quad\) \(\frac{1}{2}\)

3. Circle the greater fraction.
   a) \(\frac{3}{5}\) \(\quad\) \(\frac{5}{5}\)  
   b) \(\frac{4}{16}\) \(\quad\) \(\frac{4}{17}\)  
   c) \(\frac{9}{11}\) \(\quad\) \(\frac{1}{3}\)

4. Order the fractions from greatest to least by considering the numerators and denominators.
   a) \(\frac{34}{117}\) \(\quad\) \(\frac{101}{117}\) \(\quad\) \(\frac{17}{117}\) \(\quad\) \(\frac{2}{117}\) \(\quad\) \(\frac{60}{117}\)  
   b) \(\frac{9}{26}\) \(\quad\) \(\frac{9}{12}\) \(\quad\) \(\frac{9}{14}\) \(\quad\) \(\frac{9}{65}\) \(\quad\) \(\frac{9}{31}\)

5. A jar contains 7 red marbles, 3 yellow marbles, and 5 blue marbles. What fraction of the marbles are not blue? You can make a picture to help.
6. Write four fraction statements for the picture: ○ △ ▽ ○ △ ▼ ▼

7. Use multiplication to find the equivalent fraction.

a) \( \frac{4}{6} = \frac{18}{?} \)

b) \( \frac{6}{10} = \frac{40}{?} \)

c) \( \frac{2}{5} = \frac{35}{?} \)
Unit 9: Number Sense
Test (Lessons 45–49) — ON

1. Teacher to check that the following number of parts is shaded:
   a) four
   b) three
   c) five

2. a) <
   b) <
   c) >

3. Circle the following:
   a) \[
   \frac{5}{5}
   \]
   b) \[
   \frac{4}{16}
   \]
   c) \[
   \frac{9}{11}
   \]

4. a) \[
\frac{101}{117} \quad \frac{60}{117} \quad \frac{34}{117} \quad \frac{17}{117} \quad \frac{2}{117}
\]
   b) \[
\frac{9}{12} \quad \frac{9}{14} \quad \frac{9}{26} \quad \frac{9}{31} \quad \frac{9}{65}
\]

5. \[
\frac{10}{15}
\]

6. Answers will vary.
   Sample answers:
   \[
   \frac{3}{7} \text{ are triangles}, \quad \frac{3}{7} \text{ are circles}, \quad \frac{1}{7} \text{ is a rectangle}, \quad \frac{4}{7} \text{ are shaded}.
   \]

7. a) \[
\times 3, 12
\]
   b) \[
\times 4, 24
\]
   c) \[
\times 7, 14
\]
1. Write a fraction and a decimal for the shaded part in the boxes.
   a) b) c)

2. Show the decimal on the number line with an X.
   a) 0.7 of the distance from 0.0 to 1.0  b) 0.3 of the distance from 0.0 to 1.0

3. Write the number into the place value chart.

<table>
<thead>
<tr>
<th>Thousands</th>
<th>Hundreds</th>
<th>Tens</th>
<th>Ones</th>
<th>Tenths</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) 2033.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) 0.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) 6.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) 892.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. a) Write a fraction in each blank above the number line.
    b) Write a decimal in each blank below the number line.

   \[
   \begin{array}{c}
   0 \\
   10 \\
   \end{array}
   \]

   \[
   \begin{array}{c}
   0.0 \\
   1.0 \\
   \end{array}
   \]

   c) Which decimal is equal to the fraction?
      i) \( \frac{6}{10} = \) ii) \( \frac{2}{10} = \) iii) \( \frac{10}{10} = \) iv) \( \frac{5}{10} = \)

5. Write the equivalent words.
   a) 8.3 = __________________________
   b) 11.9 = __________________________
6. Count the shaded tenths. Write the amount two ways.
   a) \[
   \begin{array}{c}
   \text{ten} \\
   \text{tenths}
   \end{array}
   \]
   ______ tenths = ______
   b) \[
   \begin{array}{c}
   \text{twenty} \\
   \text{tenths}
   \end{array}
   \]
   ______ tenths = ______

7. Write the second number below the first number with the decimal points lined up. Then circle the greater number.
   a) 3045.2 304.5   b) 261.7 2116.7  c) 989.8 1000.1   d) 750.1 740.1
   ______    ______    ______  ______

8. Write a number in each blank so the three numbers are arranged in ascending order.
   a) 404.6, ______, 405.2  
   b) 29.1, 30.1, ______  
   c) ______, 71.4, 74.1
   404.6, ______, 405.2  
   29.1, ______, 30.1  
   ______, 71.4, 74.1
   404.6, 405.2, ______  
   ______, 29.1, 30.1  
   71.4, ______, 74.1
1. a) \( \frac{6}{10}, 0.6 \)
b) \( \frac{5}{10}, 0.5 \)
c) \( \frac{7}{10}, 0.7 \)

2. a) 

b) 

c) 

d) 

3. 

4. a) 

b) 

c) 

5. a) eight and three tenths
b) eleven and nine tenths

6. a) 26, 2.6
b) 74, 7.4

7. Circle the following:
   a) 3045.2
   b) 2116.7
   c) 1000.1
   d) 750.1

8. Answers will vary.
   Teacher to check.
   Sample answers:
   a) 405.1
   400.1
   450.8
   b) 35.5
   29.5
   20.3
Unit 10: Number Sense
Quiz (Lessons 56, 57, 59) — ON

1. Add the decimals by lining up the decimal points. You will need to regroup.
   a) 62.8 + 9.3
   b) 70.8 + 19.4
   c) 7.4 + 36.5 + 28.6

2. Subtract the decimals by lining up the decimal points. You will need to regroup.
   a) 53.7 − 8.9
   b) 18.2 − 12.8
   c) 70.4 − 15.6

3. Circle the correct answer.
   a) 17.3 is closer to: 17.0 or 18.0
   b) 9.6 is closer to: 9.0 or 10.0
   c) 57.1 is closer to: 57.0 or 58.0
   d) 0.7 is closer to: 0.0 or 1.0

4. Subtract by crossing out ones and tenths blocks.
   a) 3.8 − 1.6 = _____
   b) 7.7 − 4.3 = _____
Unit 10: Number Sense
Quiz (Lessons 56, 57, 59) — ON

1. a) 
   \[
   \begin{array}{c}
   \phantom{+}1 1 \\
   6 2 8 \\
   + \quad 9 3 \\
   \phantom{+}7 2 1 \\
   \end{array}
   \]

   b) 
   \[
   \begin{array}{c}
   \phantom{+}1 1 \\
   7 0 8 \\
   + \quad 1 9 4 \\
   \phantom{+}9 0 2 \\
   \end{array}
   \]

   c) 
   \[
   \begin{array}{c}
   \phantom{+}2 1 \\
   7 4 \\
   + \quad 3 6 5 \\
   \phantom{+}2 8 6 \\
   \end{array}
   \]

   2. a) 
   \[
   \begin{array}{c}
   \phantom{-}4 12 1 \\
   5 3 7 \\
   - \quad 8 9 \\
   \phantom{-}4 4 8 \\
   \end{array}
   \]

   b) 
   \[
   \begin{array}{c}
   \phantom{-}7 1 \\
   1 8 2 \\
   - \quad 1 2 8 \\
   \phantom{-}5 4 \\
   \end{array}
   \]

   c) 
   \[
   \begin{array}{c}
   \phantom{-}6 9 1 \\
   7 0 4 \\
   - \quad 1 5 6 \\
   \phantom{-}5 4 8 \\
   \end{array}
   \]

3. Circle the following:
   a) 17.0
   b) 10.0
   c) 57.0
   d) 1.0

4. Teacher to check drawings.
   a) Cross out
      1 ones block and
      6 tenths blocks.
      2.2
   b) Cross out 3 ones blocks and
      4 tenths blocks.
      3.4
1. Describe the shaded parts in two ways.
   a) \[
   \boxed{oxed{\boxed{\boxed{\boxed{}}}}}
   \]
   ______ = _____ ones _____ tenths _____ hundredths
   b) \[
   \boxed{\boxed{\boxed{\boxed{\boxed{}}}}} \boxed{\boxed{\boxed{\boxed{\boxed{}}}}} \boxed{\boxed{\boxed{\boxed{\boxed{}}}}} \boxed{\boxed{\boxed{\boxed{\boxed{}}}}}
   \]
   ______ = _____ ones _____ tenths _____ hundredths

2. Write the number in expanded form.
   a) 4.67 = _____ + _____ + _____
   b) 35.29 = _____ + _____ + _____ + _____

3. Regroup so that each place value has a single digit.
   a) 4 ones + 16 tenths + 14 hundredths = _____ ones + _____ tenths + _____ hundredths
   b) 15 tenths + 37 hundredths = _____ one + _____ tenths + _____ hundredths

4. Add by lining up the decimal points. You may need to regroup more than once.
   a) 16.82 + 34.09
   b) 28.97 + 5.35

5. Subtract by lining up the decimal points. You may need to regroup more than once.
   a) 62.37 − 3.28
   b) 25.03 − 16.44
Unit 10: Number Sense

Quiz (Lessons 60–63) — ON

6. Complete the table.

<table>
<thead>
<tr>
<th>Amount in ¢</th>
<th>Dollars</th>
<th>Dimes</th>
<th>Cents</th>
<th>Amount in $</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) 328¢</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) 7¢</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) 68¢</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. You need to pay the given amount. You have a 10-dollar bill. Find the difference owed.

$1.70 \rightarrow \boxed{} \rightarrow \boxed{} \rightarrow \boxed{10.00}$

Difference owed = _____________
Unit 10: Number Sense

Quiz (Lessons 60–63) — ON

1. a) 2.46, 2, 4, 6  
   b) 4.36, 4, 3, 6
2. a) 4, 0.6, 0.07  
   b) 30, 5, 0.2, 0.09
3. a) 5, 7, 4  
   b) 1, 8, 7
4. a) 
   \[
   \begin{array}{c}
   1682 \\
   +3409 \\
   \hline
   5091 \\
   \end{array}
   \]
   b) 
   \[
   \begin{array}{c}
   111 \\
   +2897 \\
   \hline
   3432 \\
   \end{array}
   \]
5. a) 
   \[
   \begin{array}{c}
   5121 \\
   -227 \\
   \hline
   5909 \\
   \end{array}
   \]
   b) 
   \[
   \begin{array}{c}
   1141 \\
   -1644 \\
   \hline
   859 \\
   \end{array}
   \]
6. a) 3, 2, 8, $3.28  
   b) 0, 0, 7, $0.07  
   c) 0, 6, 8, $0.68
7. 30¢, $2.00, $8.00, $8.30
1. What value does the digit 6 have in the number?
   a) 7625.1  
   b) 0.6  
   c) 960.5

2. a) Write a decimal in each blank below the number line.
   
   \[
   \begin{array}{ccccccc}
   0 & 1 & 2 & 3 & 4 & 5 \\
   \frac{5}{5} & \frac{5}{5} & \frac{5}{5} & \frac{5}{5} & \frac{5}{5} & \frac{5}{5}
   \end{array}
   \]
   
   0.0  ____  ____  ____  ____  ____  ____  ____  ____  ____  ____

   b) Write the decimal that the fraction is equal to.
   i) \( \frac{5}{5} = \) ____
   ii) \( \frac{2}{5} = \) ____
   iii) \( \frac{4}{5} = \) ____
   iv) \( \frac{0}{5} = \) ____

3. Write a decimal in each blank below the number line.
   
   \[
   \begin{array}{c}
   29.3 \ 29.4 \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ \_ \ 30.3
   \end{array}
   \]

4. Write the number for each base ten model using numerals (in the box).
   Then circle the greater number.

5. Arrange the numbers in descending order.
   a) 684.1  6840.1  840.6
   b) 930.6  936.0  960.3

6. Arrange the numbers in ascending order.
   a) 1854.3  854.3  1458.3
   b) 6342.5  989.8  9000.5
7. Subtract the decimals by lining up the decimal points.

a) $67.1 - 8.23$

b) $10.41 - 9.5$
1. a) 600
   b) \( 6 \)
   c) \( 60 \)
2. a) 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.0
   b) i) 1.0
   ii) 0.4
   iii) 0.8
   iv) 0.0
3. 29.5, 29.6, 29.7, 29.8, 29.9, 30.0, 30.1, 30.2
4. 5.7, 4.9
   Circle 5.7.
5. a) 6840.1, 840.6, 684.1
   b) 960.3, 936.0, 930.6
6. a) 854.3, 1458.3, 1854.3
   b) 989.8, 6342.5, 9000.5
7. a) 
   \[
   \begin{array}{c}
   5 \ 6 \ 10 \ 1 \\
   \hline
   8 \ 2 \ 3 \\
   5 \ 8 \ 8 \ 7
   \end{array}
   \]
   b) 
   \[
   \begin{array}{c}
   0 \ 9 \ 1 \\
   \hline
   9 \ 5 \ 0 \\
   0 \ 9 \ 1
   \end{array}
   \]
Unit 11: Patterns and Algebra

Quiz (Lessons 12–15) — ON

1. Draw the missing marbles in the box. Then write the missing number in the smaller box.

   a) \[ \begin{array}{cc}
   \bullet & \bullet \\
   \bullet & \bullet \\
   \end{array} + \begin{array}{c}
   \square \\
   \end{array} = \begin{array}{c}
   \bullet & \bullet & \bullet & \bullet & \bullet \\
   \bullet & \bullet \\
   \end{array} \]

   b) \[ \begin{array}{c}
   \bullet & \bullet \\
   \bullet & \bullet \\
   \bullet & \bullet \\
   \square \\
   \end{array} = \begin{array}{c}
   \square \\
   \square \\
   \square \\
   \bullet \\
   \end{array} - \begin{array}{c}
   \bullet \\
   \bullet \\
   \end{array} \]

   \[ 5 + \begin{array}{c}
   \square \\
   \end{array} = 8 \]

   \[ 4 = \begin{array}{c}
   \square \\
   \square \\
   \end{array} - 3 \]

2. Rewrite the multiplication as division, then solve the equation.

   a) \[ \square \times 3 = 15 \]

   b) \[ 50 = 2 \times \square \]

   c) \[ \square \times 21 = 84 \]

3. Write three equations for the table.

   a) \[
   \begin{array}{c|c}
   m & 18 \\
   \hline
   11 & \end{array}
   \]

   b) \[
   \begin{array}{c|c|c}
   v & 6 & 23 \\
   \hline
   \end{array}
   \]

   c) \[
   \begin{array}{c|c|c}
   37 & 10 & k \\
   \hline
   \end{array}
   \]

4. Fill in the table. Write \( x \) for the number you are not given. Circle the part that is larger. Write an equation where the unknown is by itself.

<table>
<thead>
<tr>
<th>Parts</th>
<th>Difference</th>
<th>Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cats</td>
<td>Dogs</td>
<td></td>
</tr>
<tr>
<td>a) 5 dogs; 3 more cats than dogs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) 6 cats; 2 fewer cats than dogs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) 14 dogs; 11 more dogs than cats</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**BONUS**

<table>
<thead>
<tr>
<th>Parts</th>
<th>Difference</th>
<th>Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cats</td>
<td>Dogs</td>
<td></td>
</tr>
<tr>
<td>17 cats; 8 fewer dogs than cats</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Unit 11: Patterns and Algebra

Quiz (Lessons 12–15) — ON

1. a) 3
   b) 7

2. a) 5
   15 ÷ 3 = □
   b) 25
   50 ÷ 2 = □
   c) 4
   84 ÷ 21 = □

3. a) 18 = m + 11
   m = 18 − 11
   11 = 18 − m
   b) v = 6 + 23
   23 = v − 6
   6 = v − 23
   c) 37 = 10 + k
   k = 37 − 10
   10 = 37 − k

4. a) √5, 3, x = 5 + 3
   b) 6, 2, x = 6 + 2
   c) √11, x = 14 − 11

BONUS
   17, x, 8, x = 17 − 8
1. Fill in the table. Write \( x \) for the number you need to find. Cross out the information you do not use.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Parts</th>
<th>How Many?</th>
<th>Difference</th>
<th>Total</th>
<th>Equation and Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Sean has 5 kg of apples and 6 kg of pears. How much fruit does he have?</td>
<td></td>
<td></td>
<td>Difference: ____</td>
<td>Total: ____</td>
<td></td>
</tr>
<tr>
<td>b) Sandy Beach Camp has 27 red canoes. It has 15 fewer green canoes than red canoes. How many green canoes does the camp have?</td>
<td></td>
<td></td>
<td>Difference: ____</td>
<td>Total: ____</td>
<td></td>
</tr>
</tbody>
</table>

2. Mick can play four times as many songs on the piano as Sara. Mick can play 18 more songs than Sara. How many songs can each person play? Draw the model. Find the size of one block in the model. Then solve the problem.

Mick can play _____ songs and Sara can play _____ songs.

3. Complete the table.

<table>
<thead>
<tr>
<th>Total Number of Things</th>
<th>Number of Sets</th>
<th>Number in Each Set</th>
<th>Multiplication or Division Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) ( x )</td>
<td>5</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>b) 88</td>
<td>4</td>
<td>( x )</td>
<td></td>
</tr>
<tr>
<td>c) 21</td>
<td>( x )</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**BONUS**

<table>
<thead>
<tr>
<th>Total Number of Things</th>
<th>Number of Sets</th>
<th>Number in Each Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>2</td>
<td>( x )</td>
</tr>
</tbody>
</table>
Unit 11: Patterns and Algebra

Quiz (Lessons 16–18) — ON

1. a) apples, 5 kg
   pears, 6 kg
   total: \[ x \]
   \[ 5 + 6 = x, \quad x = 11 \]
b) red canoes, 27
   green canoes, \[ x \]
   difference: 15
   \[ 27 - 15 = x, \quad x = 12 \]

2. Mick: [ ] [ ] [ ]
   Sara: [ ] [ ] [ ] [ ] [ ] [ ] [ ]
   24, 6

3. a) \[ 5 \times 8 = 40 \]
b) \[ 88 \div 4 = 22 \]
c) \[ 21 \div 3 = 7 \]

BONUS
\[ 1000 \div 2 = 500 \]
1. Rewrite the multiplication as division, then solve the equation.

a) $\square \times 4 = 20$  

b) $64 = 2 \times \square$

BONUS $\square \times 8 = 800$

2. Circle the total in the story. Then write an equation and solve it.

a) 12 green grapes  
16 grapes altogether  
x purple grapes

b) $x$ green grapes  
14 purple grapes  
22 grapes altogether

c) 17 green grapes  
19 grapes altogether  
x purple grapes

3. Write an equation where the unknown is by itself. Then solve the equation.

a) Ella hikes 12 km in the morning. She hikes 3 km less in the afternoon. How many kilometres did she hike in the afternoon?

b) Simon counted 27 sparrows at the bird feeder on Wednesday and 19 sparrows on Thursday. How many more sparrows did he see on Wednesday than on Thursday?
Unit 11: Patterns and Algebra

Test (Lessons 13–18) — ON

4. Draw the model. Find the size of one block in the model. Then solve the problem.

a) A jacket costs twice as much as a hat. Kim paid $36 for a jacket and a hat. How much did each item cost?

b) A set of guitar strings costs $7. How much do 4 sets of guitar strings cost?

c) Arthur is 15 years old. Arthur is 5 times as old as Mary. How old is Mary?
1. a) 5
   \[20 \div 4 = \square\]
   b) 32
   \[64 \div 2 = \square\]

   **BONUS**
   \[100 \div 8 = \square\]

2. a) Circle 16 grapes altogether
   \[16 \div 12 = x\]
   \[x = 4\]
   b) Circle 22 grapes altogether
   \[22 \div 14 = x\]
   \[x = 8\]
   c) Circle 19 grapes altogether
   \[19 \div 17 = x\]
   \[x = 2\]

3. a) \[12 - x = 3\]
   \[12 - 3 = x\]
   \[x = 9\]
   b) \[27 - x = 19\]
   \[x = 27 - 19\]
   \[x = 8\]

4. a) Selected solution:
   Jacket: $38
   Hat: $38
   The jacket cost $24 and the hat cost $12.
   b) Four sets of guitar strings cost $28.
   c) Mary is 3 years old.
1. Add to find the perimeter of the figure.

   a) \[\text{Perimeter} = \text{__________}\]

   b) \[\text{Perimeter} = \text{__________}\]

2. Find the missing sides.

   a) \[\text{Perimeter} = 16 \text{ cm}\]

   \[\begin{array}{ccc}
   _\text{cm} & _\text{cm} & 6 \text{ cm} \\
   \end{array}\]

   b) \[\text{Perimeter} = 20 \text{ dm}\]

   \[\begin{array}{ccc}
   _\text{dm} & _\text{dm} & 3 \text{ dm} \\
   \end{array}\]

3. The dashed line is the reflecting line. Draw the mirror image.

   a) \[\text{b)}\]

4. Connect the corresponding vertices to find the line of reflection.

   a) \[\text{b)}\]

   BONUS ►
Unit 12: Measurement

Quiz (Lessons 9–12) — ON

1. a) 11 m  
   b) 12 km
2. a) 2, 2  
   b) 7, 7
3. a) 
   b) [Diagram of a shape]
4. a) 
   b) [Diagram of a shape]

BONUS

[Diagram of a shape]
Unit 12: Measurement
Quiz (Lessons 13–16) — ON

1. Find the area of the figure in square centimetres.
   a) ![Figure 1a]
   b) ![Figure 1b]

   Area = ____ cm²            Area = ____ cm²

2. Ella measured the areas of objects at school, but she forgot to write down the units. Fill in the blanks with “m²” or “cm².”
   a) The board measures 2 ____.   b) A book cover measures 375 ____.  
   c) A hundreds block measures 100 ____.        d) The field measures 63 ____.  

3. Find the area of the rectangle using the length and width. Include the units.
   a) Length = 7 m       b) Length = 9 m  
      Width = 6 m                      Width = 3 m 
      Area = _______                   Area = _______ 
   c) Length = 4 cm 
      Width = 8 cm 
      Area = _______ 

4. Draw a line to divide the figure into two rectangles. Use the areas of the rectangles to find the total area of the figure.
   a) ![Figure 4a]
   b) ![Figure 4b]

   Area of rectangle 1 = _______                               Area of rectangle 1 = _______ 
   Area of rectangle 2 = _______                               Area of rectangle 2 = _______ 
   Total area = _______                                          Total area = _______

BONUS► Find a different way to calculate the area of the shape in Question 4.a). Did you get the same answer? Why or why not?
1. a) 12
   b) 8
2. a) m\(^2\)
   b) cm\(^2\)
   c) cm\(^2\)
   d) m\(^2\)
3. a) 42 m\(^2\)
   b) 27 m\(^2\)
   c) 32 cm\(^2\)
4. a) 6 cm\(^2\)
    24 cm\(^2\)
    30 cm\(^2\)
   b) 10 m\(^2\)
    18 m\(^2\)
    28 m\(^2\)

**BONUS**

The area should be the same no matter how it is calculated.
1. A rectangle has an area of 24 cm\(^2\) and a width of 4 cm.
   a) Write an equation for the area of the rectangle. Then find the unknown length.

   b) Find the perimeter of the rectangle.

2. Measure to find the actual dimensions of the room according to the scale.
Then find the perimeter and area.
   a) Scale: 1 cm : 3 m
   b) Scale: 1 cm : 5 m

   Perimeter = ______
   Perimeter = ______

   Area = ______
   Area = ______

3. Use the grid to answer the question.

   a) Find the hidden message by writing the letter that appears at the grid location.

   b) Create a code for the word by writing the location of the letters in the grid.

   CIRCLE: _____ _____ _____ _____ _____
1. a) \[ 24 = \ell \times 4 \]
   \[ 24 ÷ 4 = \ell \]
   \[ 6 \text{ cm} = \ell \]
   b) \[ 6 + 6 + 4 + 4 = 20 \text{ cm} \]
2. a) \[ 9 \]
   \[ 12 \]
   \[ 42 \text{ m} \]
   \[ 108 \text{ m}^2 \]
   b) \[ 10 \]
   \[ 15 \]
   \[ 50 \text{ m} \]
   \[ 150 \text{ m}^2 \]
3. a) good luck
   b) C1 C2 C3 C1 D2 D1
1. Estimate the perimeter of the figure in centimetres. Then measure the actual perimeter with a ruler.

   a) 
   
   Estimated perimeter = _______
   Actual perimeter = _______

   b) 
   
   Estimated perimeter = _______
   Actual perimeter = _______

2. The dashed line is the reflecting line. Draw the mirror image.

   a) 
   
   b) 
   

3. Circle the pairs that can be created by a reflection.

   a) 
   b) 
   c) 
   d) 
   e) 
   f) 
   g) 
   h)
4. Draw a line to divide the figure into two rectangles. Use the areas of the rectangles to find the total area of the figure.

a) 3 cm
   2 cm
   6 cm
   4 cm
   4 cm
   7 cm

   Area of rectangle 1 = _______
   Area of rectangle 2 = _______
   Total area = _______

b) 2 m
   3 m
   1 m
   6 m
   4 m
   8 m

   Area of rectangle 1 = _______
   Area of rectangle 2 = _______
   Total area = _______

BONUS► Find the area of the shaded shape using the two rectangles.

3 m
1 m
2 m
8 m

   Area of rectangle 1 = _______
   Area of rectangle 2 = _______
   Shaded area = _______

5. Write an equation for the area of the rectangle. Then find the unknown length or width.

a) Area = 30 cm²
   Length = 6 cm
   Width = w cm

   _________________________

b) Area = 42 m²
   Length = ℓ m
   Width = 6 m

   _________________________

6. Can rectangles have the same area but different perimeters? Explain.
7. Measure to find the actual dimensions of the room according to the scale. Then find the perimeter.

a) Scale: 1 cm : 5 m

\[ \text{___ m} \]

\[ \text{____ m} \]

Perimeter = _______

b) Scale: 1 cm : 6 m

\[ \text{___ m} \]

\[ \text{____ m} \]

Perimeter = _______

8. Use the grid to answer the question.

\[
\begin{array}{cccccc}
A & B & C & D & E & F \\
1 & e & t & a & i & c & w \\
2 & n & o & s & h & m & y \\
3 & r & d & l & u & f & v \\
\end{array}
\]

a) Find the hidden message by writing the letter that appears at the grid location.

\[ \text{D1 C3 B2 F3 A1 E2 C1 B1 D2 !} \]

b) Create a code for the word by writing the location of the letters in the grid.

MUSHROOM: ____ ____ ____ ____ ____ ____ ____ ____
1. Estimates will vary. Actual measurement:
   a) 10 cm
   b) 14 cm

2. a) 
   b) 

3. Circle parts b) and g).

4. a) 6 cm²
   28 cm²
   34 cm²
   b) 6 cm²
   8 cm²
   14 cm²

BONUS
   24 cm²
   2 cm²
   22 cm²

5. a) 6 \times w = 30
   w = \frac{30}{6}
   w = 5 cm
   b) \ell \times 6 = 42
   \ell = \frac{42}{6}
   \ell = 7 m

6. yes
   Sample explanation:
   For example, a 1 by 4 cm rectangle and a 2 by 2 cm rectangle both have area 4 cm². But the 1 by 4 cm rectangle has perimeter 10 cm and the 2 by 2 cm rectangle has perimeter 8 cm.

7. a) 15
   25
   80 m
   b) 12
   18
   60 m

8. a) I love math
   b) E2 D3 C2 D2 A3 B2
   B2 E2
Unit 13: Measurement

Quiz (Lessons 21, 22, 24, 25) — ON

Name: ______________________

Date: ________________

1. Write the time the way it looks on a digital clock.
   a) 17 minutes after 5  
      
   b) 10 minutes before 9  
      
   c) 7 o’clock  
      

2. Write “a.m.” or “p.m.”
   a) Bedtime is 8:30 _____
   b) Breakfast is at 8:30 _____

3. The time is from a 24-hour clock. Write it the way you would for a 12-hour clock.
   a) 15:00  
      b) 3:25  
      c) 12:01  
      d) 20:40  

4. Write the time as it would look on a 24-hour clock.
   a) 1:20 p.m.  
      b) 7:19 a.m.  
      c) 10:45 p.m.  
      
      BONUS  ➤  12:15 a.m.

5. Draw hands on the clock to show the time.
   a)  
      b)  
      c)  

6. Write the exact time.
   a)  
   b)  
   c)  

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Unit 13: Measurement

Quiz (Lessons 21, 22, 24, 25) — ON

1. a) 05:17
   b) 08:50
   c) 07:00

2. a) p.m.
   b) a.m.

3. a) 3:00 p.m.
   b) 3:25 a.m.
   c) 12:01 p.m.
   d) 8:40 p.m.

4. a) 13:20
   b) 07:19
   c) 22:45

   BONUS
   00:15

5. Teacher to check.

6. a) 7:48
   b) 4:29
   c) 10:11
Unit 13: Measurement
Quiz (Lessons 26, 27, 29) — ON

1. Count by 5s to find the time interval.
   a) 3:40 to 4:05  
   b) 7:49 to 8:09  
   c) 6:18 to 6:43

2. Count by 5s and then by 1s to find the time interval.
   a) 6:20 to 7:17  
   b) 1:15 to 1:31  
   c) 11:36 to 11:54

3. Josh wakes up 7:20 a.m. He takes 15 minutes to eat breakfast. Then he reads for 1 hour. He takes 20 minutes to shower, dress, and brush his teeth. It takes another 25 minutes to get to school. Draw a timeline to find when Josh gets to school.
4. Change the time expressed in weeks and days to days only.

   a) 3 weeks, 2 days
   b) 4 weeks, 1 day
   c) 6 weeks, 6 days

   = _____ days + _____ days  = _____ days + _____ day  = _____ days + _____ days

   = _____ days  = _____ days  = _____ days

BONUS ► Clara sleeps 8 hours a night.

   a) How many nights of her sleep make up the same number of hours in a day? _____

   b) How many full days does she sleep most months? _____
Unit 13: Measurement

Quiz (Lessons 26, 27, 29) — ON

1. a) 25 minutes  
b) 20 minutes  
c) 25 minutes
2. a) 57 minutes  
b) 16 minutes  
c) 18 minutes
3. 9:20 a.m.
4. a) 21, 23  
b) 28, 1  
c) 42, 6  
   48
BONUS  
a) 3  
b) 10
Unit 13: Measurement
Test (Lessons 25–27, 29) — ON

Name: ____________________________
Date: ____________________________

1. Write the time two ways.
   a) ____________________________
   b) ____________________________
   c) ____________________________

   _______ : _______  _______ : _______  _______ : _______

2. a) What time is it now? __________
    b) Is it a.m. or p.m.? __________

3. Count by 5s and then by 1s to find the time interval.
   a) 8:35 to 8:57  
   b) 5:40 to 6:19  
   c) 4:48 to 5:12

   ____________________________  ____________________________  ____________________________

4. Add and regroup to find the end time.
   a) 5 : 23
      + 3 : 40
      ______
   b) 8 : 44
      + 0 : 51
      ______
   c) 9 : 38
      + 1 : 40
      ______
5. Marla is going to a movie that starts at 7:00 p.m. She eats dinner at 6:20 p.m. It takes 15 minutes. Then she brushes her teeth for 5 minutes. She walks 5 minutes to the bus stop. She waits 5 minutes for the bus. The bus ride takes 15 minutes. Will Marla be on time? Use a timeline or add the times to check.

6. Change the time expressed in years and months to months only.
   a) 1 year, 11 months
   b) 3 years, 5 months
      = _____ months + _____ months
      = _____ months

   BONUS ▶ How old are you to the nearest ...
   a) decade? _____
   b) year? _______
   c) month? __________
Unit 13: Measurement

Test (Lessons 25–27, 29) — ON

1. a) 33 after 9
   9:33
   b) 4 after 5
   5:04
   c) 4 minutes to 1
   12:56

2. Answers will vary.
   Teacher to check.

3. a) 22 minutes
   b) 39 minutes
   c) 24 minutes

4. a) 9:03
   b) 9:35
   c) 11:18

5. No, she will arrive at 7:05 p.m.

6. a) 12, 11
   23
   b) 36, 6
   42

BONUS

a) 1
b) 9 or 10
c) Answers will vary.
   Teacher to check.
Unit 14: Geometry
Quiz (Lessons 10–12) — ON

1. Shade the base of the prism. Then name the prism.
   a) ___________  b) ___________  c) ___________  d) ___________

2. Trace and count the edges.
   a) ____ edges  b) ____ edges  c) ____ edges  d) ____ edges

3. Match the net to the 3-D object.
   A.  B.  C.  D.  E.
   a) ____  b) ____  c) ____  d) ____  e) ____

BONUS ▶ A net has 2 square faces and 4 rectangular faces. What shape does it make? Explain.
Unit 14: Geometry
Quiz (Lessons 10–12) — ON

1. a) cube
   b) triangular prism
   c) square-based prism
   d) rectangular prism

2. a) 8
   b) 9
   c) 12
   d) 6

3. a) E
   b) A
   c) B
   d) D
   e) C

BONUS
It makes a square-based prism because the square faces must be the bases.
Unit 14: Geometry

Quiz (Lessons 13–15) — ON

1. Shade a base of the prism. Then name the prism.

   a) 
   b) 
   c) 

   _________-based prism  __________-based prism  __________-based prism

2. How many vertices does the pyramid have?
   a) triangular pyramid _____
   b) square-based pyramid _____
   c) pentagon-based pyramid _____

3. Draw the missing face for the net. Name the object the net makes.

   a) 
   b) 
   c) 

   __________  __________  __________

BONUS ➤ Draw a net for a prism. Name the prism your net makes.
Unit 14: Geometry

Quiz (Lessons 13–15) — ON

1. a) hexagon  
   b) trapezoid  
   c) pentagon

2. a) 4  
   b) 5  
   c) 6

3. a) cube  
    Sample drawing:

   b) square-based pyramid  
    Sample drawing:

   c) hexagon-based pyramid  
    Sample drawing:

BONUS

Answers will vary,  
Teacher to check.
1. Find the volume.

   a) 
   
   Volume = ____ cubes

   b) 
   
   Volume = ____ cubes

   c) 
   
   Volume = ____ × ____
   = ____ cubes

2. Circle the best unit to measure the capacity of the object.

   a) a can of soup
      mL    L

   b) a bathtub
      mL    L

   c) a teaspoon
      mL    L

3. Sort the containers in order of increasing capacity.

   A.                      B.                       C.            D.                     E.
   _____                        _____                  _____                  _____                   _____
   smallest                                          largest

BONUS ▶ A litre of juice contains 80 grams of sugar. How much sugar is in a 250 mL cup?
1. a) 5  
b) 11  
c) 16, 3  
   48

2. a) mL  
b) L  
c) mL

3. C, E, A, D, B

**BONUS**

1 L = 1000 mL  
1000 mL + 4 = 250 mL  
80 g + 4 = 20 g  
There are 20 grams of sugar in a 250 mL cup of juice.
1. Shade the base of the prism. Then name the prism.

a)  
   b)  
   c)  
   d)  

2. Match the net to the 3-D object.

A.  
   B.  
   C.  
   D.  
   E.  

a)  
   b)  
   c)  
   d)  
   e)  

3. Sketch a net for a square-based pyramid.
4. Find the volume.

a) 

Volume = ____ cubes  

b) 

Volume = ____ cubes  

c) 

Volume = ____ × ____  

= ____ cubes

5. Find the capacity of the container and the volume of the liquid.

a) 

Capacity = ____ L  

Volume = ____ L  

b) 

Capacity = ____ mL  

Volume = ____ mL  

c) 

Capacity = ____ L  

Volume = ____ L

**BONUS**

An object has 7 vertices and 12 edges.

a) Is it a pyramid or a prism? How do you know?

b) What shape is its base?
1. a) square-based prism  
   b) rectangular prism  
   c) triangular prism  
   d) cube  
2. a) C  
   b) D  
   c) A  
   d) E  
   e) B  
3. Answers will vary.  
   Teacher to check.  
4. a) 6  
   b) 10  
   c) 12, 4  
5. a) 5  
   b) 40  
   c) 4  
   BONUS  
   a) The object is a pyramid because prisms always have an even number of vertices.  
   b) The shape is a hexagon.
1. a) How many times do you expect to get a number greater than 4 when you roll a die …
   i) 6 times? _____  ii) 12 times? _____  iii) 18 times? _____
   b) How many times do you expect to get a number less than 5 when you roll a die …
   i) 6 times? _____  ii) 12 times? _____  iii) 18 times? _____

2. a) Find all the expected outcomes of flipping two dimes. Draw the missing arrows and fill in the blanks.

<table>
<thead>
<tr>
<th>Outcome of First Dime</th>
<th>Outcomes of Second Dime</th>
<th>Outcomes of Two Flips</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>H</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b) How many ways are there of getting the result?
   i) two heads _____  ii) two tails _____  iii) one head and one tail _____
1. a) i) 2  
   ii) 4  
   iii) 6  
   b) i) 4  
   ii) 8  
   iii) 12  

2. a)  

   H → HH  
   T → HT  
   H → TH  
   T → TT  

b) i) 1  
   ii) 1  
   iii) 2
Unit 15: Probability and Data Management

Test (Lessons 11–13) — ON

Name: ______________________
Date: ______________________

1. a) How many times do you expect grey when you spin the spinner …
   
   i) 4 times? ____  ii) 8 times? ____  iii) 12 times? ____
   
   b) How many times do you expect white when you spin the spinner …
   
   i) 4 times? ____  ii) 8 times? ____  iii) 12 times? ____
   
   c) Are the chances of landing on white or grey the same? ______

2. Rani and Tom play a game in which they take turns spinning a spinner twice and add the results. The spinner is divided into two equal parts labelled “1” and “2.”

   a) Draw the missing arrows and write the addition statements in the table.

<table>
<thead>
<tr>
<th>Outcome of First Spin</th>
<th>Outcomes of Second Spin</th>
<th>Outcomes of Sums</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1 + 1 = 2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1 + 2 = 3</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2 + 2 = 4</td>
</tr>
</tbody>
</table>

   b) How many ways are there of getting the result?
   
   i) 2 ____  ii) 3 ____  iii) 4 ____

   c) What fraction of the time will they get the result?
   
   i) 2  ii) 3  iii) 4  

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1. a) i) 1
   ii) 2
   iii) 3
b) i) 3
   ii) 6
   iii) 9
c) no
2. a)  
   \[ \begin{align*}
   1 & \rightarrow 1 + 1 = 2 \\
   1 & \rightarrow 1 + 2 = 3 \\
   2 & \rightarrow 2 + 1 = 3 \\
   2 & \rightarrow 2 + 2 = 4
   \end{align*} \]

b) i) 1
   ii) 2
   iii) 1
c) i) \[ \frac{1}{4} \]
   ii) \[ \frac{2}{4} \text{ or } \frac{1}{2} \]
   iii) \[ \frac{1}{4} \]