This is a resource for LBS Facilitators who have learners using the CLO resource "Masonry Math 2: The Next Step in Numbers." It may be helpful for learners to complete "Masonry Math 1: Measurements and Calculations" prior to attempting this resource.

Note: For several activities in this resource, learners are told they can use a calculator if they wish. **Before assigning this activity to a learner**, facilitators should confirm that calculators or digital devices with calculator functionality are available.

Answer Key

On Pages 5 and 6, learners are asked to use multiplication to find out the actual size of the objects based on their scale measurements below. Then they are asked to use division to convert millimetres to centimetres or meters. The correct answers are in bold below.

1. What is the actual width of a walkway that is 25 mm wide on a 1:50 drawing? **1 250 mm**

2. What is the width in metres? **1.25 m**

3. What is the actual height of an exterior wall that is 32 mm high on a 1:75 drawing? **2 400 mm**

4. What is the height in centimetres? **240 cm**

5. What is the actual length of a driveway that is 36 mm long on a 1:200 drawing? **7 200 mm**

6. What is the length in metres? **7.2 m**

7. What is the actual height of a picture window that is 18 mm high on a 1:100 drawing? **1 800 mm**

8. What is that height in metres? **1.8 m**

9. What is the actual height of a stair step that is 6 mm high on a 1:25 drawing? **150 mm**

10. What is the height in centimetres? **15 cm**

On Page 9, learners are asked to use what they learned to round the following numbers up or down. The correct answers are in bold below.

1. Round 47.9 to a whole number.

   Look at the number on the right side of the decimal point. What is it? **9**

   Does that number tell you to round up or to round down? **Round up**

   If you round off, what whole number will you get? **48**

2. Round 12.724 to one decimal place.

   Look at the number to the right of the decimal place. What is it? **2**

   Does that number tell you to round up or to round down? **Round down**

   If you round off, what number will you get? **12.7**

3. Round 147.49 to a whole number.

   Look at the number to the right of the decimal point. What is it? **4**

   Does that number tell you to round up or to round down? **Round down**

   If you round off, what whole number will you get? **147**

4. Round 9.648 to the two decimal places.

   Look at the number to the right of the second decimal place. What is it? **8**

   Does that number tell you to round up or to round down? **Round up**

   If you round off, what number will you get? **9.65**

On Page 11, learners are asked to complete the following chart to convert fractions to decimals. The correct answers are in bold below.

Fraction	What equation will you use?	Decimal
$\dfrac{1}{2}$	**1 ÷ 2**	**0.5**
$\dfrac{3}{8}$	**3 ÷ 8**	**0.375**
$\dfrac{4}{5}$	**4 ÷ 5**	**0.8**
$\dfrac{7}{10}$	**7 ÷ 10**	**0.7**
$\dfrac{5}{8}$	**5 ÷ 8**	**0.625**

On Page 15, learners are asked to complete the following estimates. The correct answers are in bold below.

1. A mason looks at the scale drawing of a wall and sees that it requires 3,000 bricks to be laid. The mason is able to lay an average of 60 bricks in an hour. How many hours of labour are needed to build this wall?

3,000	÷	60	=	**50**
Total number of bricks to be laid		The number of bricks one mason can lay in an hour		The number of hours the job will take

2. How would the equation change if there were four masons working together on this wall instead of one?

3,000	÷	**240**	=	**12.5**
Total number of bricks to be laid		The number of bricks four masons can lay in an hour (60 x 4)		The number of hours the job will take

3. The hourly salary for brick and stone masons can change based on how experienced they are and where they work. If the brick and stone masons hired for this job were paid $25 an hour for their work, how much would labour cost?

12.5	x	$25	=	**$312.50**
The number of hours the job will take		The hourly salary for these brick and stone masons		The labour cost for this job