

Question**	Question** Learning Outcome*** Reference		) in the Student Book		
1	Display measurement data as fractions of a unit and equivalent fractions on a line plot	Example/Exercise 2-5	Page VTo		

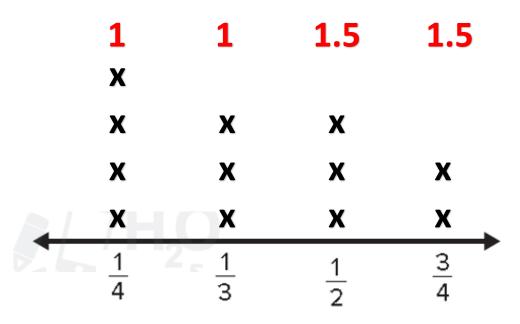
Make a line plot of the measurements in each table. Then find the fair share.

2.

	Yarn	Len	gths	(m)	
1	1	<u>1</u>	1	<u>1</u>	1
4	2	3	3	4	3
1	3	1	1	3	01
4	4	2	2	4	4

fair share: \_\_

12

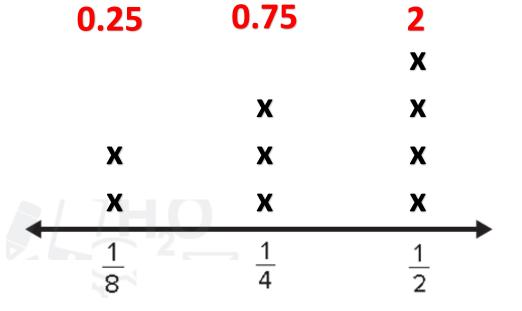


Question** Learning Outcome***		Reference(s) in the Student Book			
1	Display measurement data as fractions of a unit and equivalent fractions on a line plot	Example/Exercise 2-5	Page V۳0		

# Make a line plot of the measurements in each table. Then find the fair share.

3.

			lced	Tea	(L)	CX	10	<b>\( </b>
1	1	1	1	1	1	1	1	1
2	 4	8	4	2	4	2	8	2



Question**	Question** Learning Outcome*** Reference(s) in		he Student Book	
1	Display measurement data as fractions of a unit and equivalent fractions on a line plot	Example/Exercise 2-5	Page V۳0	

Make a line plot of the measurements in each table. Then find the fair share.

4.

Į.	Amou	ınt o	f Slic	ed 1	Turke	y (ko	g) 📗
1	1	1	1	1	1	1	1
8	4	8	4	2	2	8	8
7	1	3	3	1	3	1	5
8	4	4	8	4	8	2	8

fair share: 6 \_ 3 \_ 16 \_ 8

0.5 1 6/8 1.5 5/8 6/8 7/8

X X X

X X X

X X X

$$\frac{1}{8}$$
  $\frac{1}{4}$   $\frac{3}{8}$   $\frac{1}{2}$   $\frac{5}{8}$   $\frac{3}{4}$   $\frac{7}{8}$ 

Question** Learning Outcome***		Reference(s) in the Student Book		
	1	Display measurement data as fractions of a unit and equivalent fractions on a line plot	Example/Exercise 2-5	Page V۳0

Make a line plot of the measurements in each table. Then find the

fair share.

5.

Dis	tance	e Swa	am (k	cm)
1	1	1	1	1
2	2	3	3	4
1	1	1	1	1
3	4	2	2	2

fair share: 
$$\frac{4}{10} = \frac{2}{5}$$



Question**	Learning Outcome***	Reference(s) in tl	ne Student Book
2	Convert measurements of length within the metric system	Example/Exercise 1-2	Page 746

$$5 \times 100 = 500$$

So, 5 m equals 500 cm.

$$9,000 \div 1,000 = __9$$

So, 9,000 m equals

**9**\_\_\_ km.

Question**	Learning Outcome***	Reference(s) in tl	ne Student Book
3	Convert measurements of length within the metric system	Example/Exercise (9,10,14)	Page 750

**9.** When completed, a tunnel will be 1,500 m long. What is this length in kilometers?

Mathematical
10. Practices

Use Number Sense The depth of a swimming pool is 8.5 m. What is half of the depth in millimeters?

The depth = $8.5 \times 1000 = 8500 \text{ mm}$ 

Half of the depth =8500 ÷ 2 = 4250 mm

Question**	Learning Outcome***	Reference(s) in the Student Book	
3	Convert measurements of length within the metric system	Example/Exercise (9,10,14)	Page 750

# Test Practice Mohammed Bin Ras

**14.** Noura is reading a book. The book's thickness is 31 mm. Which is the correct thickness in centimeters?

- A 3.001 cm
- B 3.01 cm
- 3.1 cm
- ① 3.11 cm

$$31 \div 10 = 3.1 \text{ cm}$$

Question**	Learning Outcome***	Reference(s) in tl	ne Student Book
4	Convert measurements of mass within the metric system	Example/Exercise (5-12)	Page 761

#### Complete.

**7.** 
$$0.75 \text{ kg} =$$
 **750,000** mg

**9.** 3,100 g = 
$$\frac{3.1}{}$$
 kg

**11.** 
$$4.07 g =$$
 **0.00407** mg

**6.** 80 g = 
$$\frac{80,000}{mg}$$
 mg

**8.** 
$$6 \text{ kg} = 6,000 \text{ g}$$

**10.** 
$$0.05 \text{ kg} = 50,000 \text{ mg}$$

**12.** 9 kg = 
$$\frac{9,000}{g}$$

Question**	Learning Outcome***	Reference(s) in the Student Book	
5	Convert measurements of capacity within the metric system	Example/Exercise (5-12)	Page 767

### Complete.

**11.** 
$$6.21 L = _{}$$
 mL

**8.** 
$$3,500 \text{ mL} =$$

Question**	Learning Outcome***	Reference(s) in the Student Book	
6	Solve problems of metric and imperial measures by using logical reasoning	Example/Exercise (1-5)	Page 773

1. An after-school club is building a clubhouse that has a rectangular floor that is 8 m by 6 m. What is the total floor area, in square centimeters, of the clubhouse?

$$L = 8m \times 100 = 800 \text{ cm}$$
  
 $w = 6m \times 100 = 600 \text{ cm}$ 

Area = L x w Area =  $800 \times 600 = 480,000 \text{ cm}^2$ 

Question*	Learning Outcome***	Reference(s) in the Student Book	
6	Solve problems of metric and imperial measures by using logical reasoning	Example/Exercise (1-5)	Page 773

hanging in the hallway. All of the bulletin boards are 6 rectangular with a height of 4 m. Their lengths are 6 m, 5 m, and 3 m. The red bulletin board has the largest area and the yellow one has the smallest area. What is the area of the green bulletin board?

Area of the green bulletin =  $4 \times 5 = 20 \text{ m}^2$ 

Question**	Learning Outcome***	Reference(s) in the Student Book	
6	Solve problems of metric and imperial measures by using logical reasoning	Example/Exercise (1-5)	Page 773

3. Practices



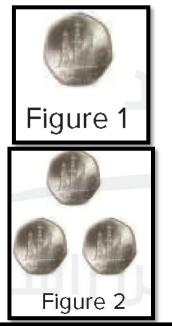
Mathematical Practices

Look for a Pattern If the pattern

below continues, how many coins will be in the fifth figure?

figure1, figure2, figure3, figure4, figure5 1 , 3 , 6 , 10 ,

The fifth figure has 15 coins





Question**	Learning Outcome***	Reference(s) in the Student Book	
6	Solve problems of metric and imperial measures by using logical reasoning	Example/Exercise (1-5)	Page 773

**4.** A cafeteria table has an area of 21 m<sup>2</sup>. If three tables are pushed together, what is the combined area of the tables?

The total area =  $21 \times 3 = 63 \text{ m}^2$ 

Question**	Learning Outcome***	Reference(s) in the Student Book	
6	Solve problems of metric and imperial measures by using logical reasoning	Example/Exercise (1-5)	Page 773

**5.** Ali has AED 1.25 in 10-fils coins, 5-fils coins, and 1-fils coins. He has twice as many 10-fils coins as 1-fils coins, and the number of 5-fils coins is one less than the

number of 1-fils coins. How many 10-fils coins,

5-fils coins, and 1-fils coins does he have?

For every two 10-fils coins he has one 1-fils coin

The number of one 1-fils coins= The number of one 5-fils coin + 1

10-fils	1-fils	5-fils	total
2	1	0	21-fils
4	2	1	47-fils
6	3	2	73-fils
8	4	3	99-fils
10	5	4	1.25 AED

Question**	Learning Outcome***	Reference(s) in the Student Book	
7	Collect and organize data	Example/Exercise (6-9)	Page 794

# The frequency table shows items sold at a school store.

- 6. Which item was the top seller? How many were sold? Pencil 8
- 7. Which item sold once? Scissors
- 8. How many items were sold altogether? 14
- 9. Which item was the least popular? Bottle of glue

Items Sold at School Store				
Item	Tally	Frequency		
Eraser	Ш	5		
Bottle of glue		0		
Pencil	##111	8		
Scissors	1	1		

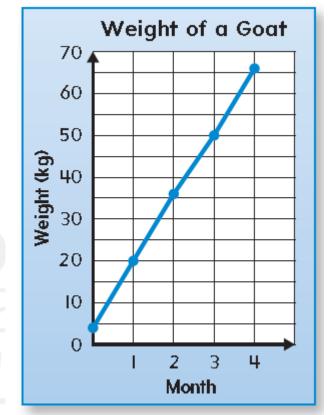
	Question**	Learning Outcome***	Reference(s) in the Student Book	
	8	Construct and describe line graphs and double line graphs	Example/Exercise (1-3)	Page 805

#### The line graph shows the weight of a goat.

- 1. On the vertical axis, the scale (or weight range) starts at kg and goes up to \_\_\_\_\_ kg.
- Horizontal

  2. On the vertical axis, each interval is month.

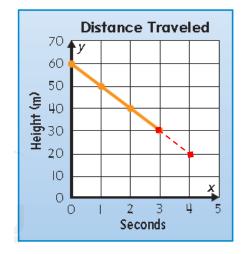
3. The goat's weight started at
4 kg. At the end of the fourth
month, the goat weighed 66 kg.
So, the goat gained about 15 kg per month



Question**	Learning Outcome***	Reference(s) in the Student Book	
9	Make predictions from data	Example/Exercise (1,2)	Page 813

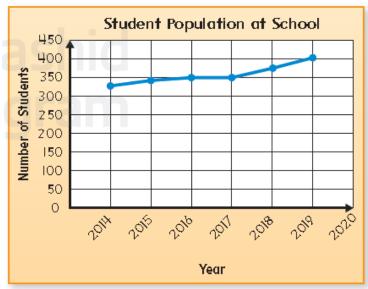
#### Use the graphs to answer the questions.

The graph shows the distance traveled by a ball dropped from 60 m. Predict how far the ball has traveled after 4 seconds.



2. Will the number of students at the school be higher or lower than 400?

**Higher than 400** 



Question**	Learning Outcome***	Reference(s) in the Student Book	
10	Analyze and interpret data in a line graph	Example/Exercise (6-9)	Page 817

6. How many words were read in 2 minutes?

The graph shows the number of words read.

7. How many words were read in 5 minutes?

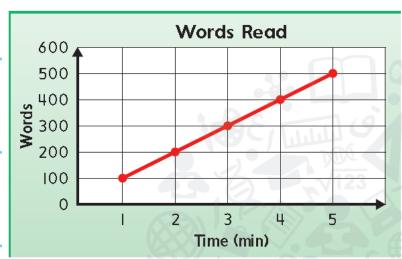
500

200

8. At this rate, how many words will be read in 6 minutes? 600



700 words read at 7 minutes. Fewer than 800



Question <sup>3</sup>	* Learning Outcome***	Reference(s) in the Student Book	
11	Solve problems by making a line graph	Example/Exercise (1,2)	Page 823

**1.** The table lists the number of wins by the teams in Team 1 and Team 2.

Number of Wins			
Team 1	12, 10, 7, 6, 13, 8, 8, 4, 12, 8, 8, 6, 14, 9, 9, 2		
Team 2	10, 9, 8, 5, 13, 8, 6, 3, 10, 8, 7, 4, 9, 8, 7, 5		

Display the data in a frequency table. Which team seemed to have the better record? Explain your reasoning.

Team 1 have better record, both teams have similar wins up to 9 wins. But team 1 have more wins from 10 to 14

Wins	Team 1	Team 2	
2	1	0	
3	0	1	
4	1	1	
5	0	2	7
6	2	1	26
7	1	2	
8	4	4	4
9	2	2	
10	1	2	
12	2	0	
13	1	1	
14	1	0	

Question**	Learning Outcome***	Reference(s) in the Student Book	
11	Solve problems by making a line graph	Example/Exercise (1,2)	Page 823

2. The table shows the number of wins the football team had in five seasons. Construct a bar graph of the data.

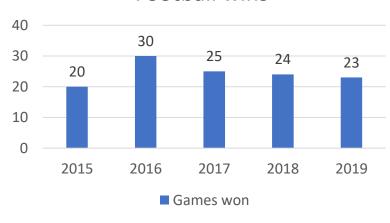
In what year did the team have the greatest increase in the number of games won? The greatest decrease? Explain.

Greatest increase in year 2016 from 20 to 30 wins, 10 more wins in one year

Greatest decrease in year 2017 from 30 to 25 wins, 5 less wins in one year

Football Wins				
Year	Games Won			
2015	20			
2016	30			
2017	25			
2018	24			
2019	23			

#### Football wins



Question**	Learning Outcome***	Reference(s) in the Student Book	
12	Find the mean of a set of data	Example/Exercise (3-8)	Page 837

#### Find the mean of each set of data.

3. Bowling scores: 85, 106, 106, 74, 94 
$$_{-}$$
 85+106+106+74+94  $_{-}$  93

**4.** Height of trees in meters: 35, 62, 60, 53, 20 
$$\frac{35+62+60+53+20}{5}$$

5. Number of goals in a football game: 5, 5, 7, 3, 2, 8, 5 
$$\frac{5+5+7+3+2+8+5}{7}$$
 = 5

**6.** Kilograms of concrete: 47, 52, 38, 67, 61 
$$\frac{47+52+38+67+61}{5} = 53$$

Question**	Learning Outcome***	Reference(s) in the Student Book	
12	Find the mean of a set of data	Example/Exercise (3-8)	Page 837

#### Find the mean of each set of data.

Mean = 
$$\frac{93+88+85+98+90+96+78+85+92+85+88+90}{12}$$

Question**	Learning Outcome***	Reference(s) in the Student Book	
13	Find the median and mode of a set of data	Example/Exercise Example 1	Page 841

### Example 1

The fifth grade football team had five wins this past year. The table shows the number of wins in the last 10 years. Find the median of the data. Then describe the data.

1. Order the numbers from least to greatest.

4,5,5,5,6,8,8,8,9,10

Number of Games Won					
10	5	9	6	5	
8	8	5	4	8	

2. The middle two numbers are 6 and 8. The median is the number halfway between them. So, the median is

So, half of these years had fewer than \_\_\_\_\_ wins per year. Half had more than \_\_\_\_\_ wins per year.

Question**	Learning Outcome***	Reference(s) in the Student Book	
14	Find the median and mode of a set of data	Example/Exercise Example 2	Page 842

### Example 2

The cost of a movie popcorn in different theaters is shown below. Find the mode of the data. Then describe the data.

AED 6.00, AED 7.50, AED 7.50, AED 8.00, AED 8.00, AED 8.50, AED 9.75, AED 10.50

Question**	Learning Outcome***	Reference(s) in tl	ne Student Book
15	Interpret line plots	Example/Exercise Math in my world	Page 848
Math in M The line pl	ly World ot shows the prices of hats.	Price	s of Hats
	edian and the mode of the data. hem to describe the data.	× × × × ×	X X
There are	e16 numbers represented in the line plot.	30 35 40 45 50	) 55 60 65 70 75
The medi	ian is between the <b>8<sup>th</sup></b> and <b>9<sup>th</sup></b> pieces of	data. <b>Pri</b>	ce (AED)
50	middle numbers, shown on the line plot, are 40. So, the median is 45. This means that half o		
hats cost	tewer AED 45 and half cost more	AED 45.	

is an outlier.

The number that appears most often is \_\_\_\_\_\_. So, the mode of the data is \_\_\_\_\_. This means that more hats cost \_\_\_ other price. The range of the prices is \_\_\_\_\_\_. The price AED 75 is much higher than the rest of the prices. So, \_\_

Question**	Learning Outcome***	Reference(s) in the Student Book	
16	Classify two-dimensional figures based on properties	Example/Exercise Example3 – GP1	Page 878

**1.** Name the polygon. Determine if it appears to be *regular* or *not regular*.

SmartL

The polygon has \_\_\_\_\_8 sides.

The sides appear to be **Equal/congruent** 

It is a Regular octagon

Example 3 Compl

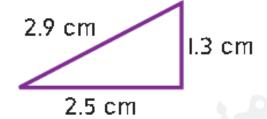
Complete the table below.

Polygon	Regular	Not Regular	Number of Sides	Draw another polygon that is not regular.
Triangle			3	Sample answer:
Quadrilateral	H Company		4	Sample answer:
<mark>Pentagon</mark>			<b>5</b>	Sample answer:
Hexagon <b>Section</b>			6	Sample answer:
Octagon			8	Sample answer:

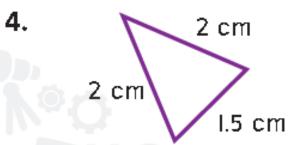
Question** Learning Outcome***		Reference(s) in the Student Book	
17	Classify triangles based on attributes such as side measures and angle measures	Example/Exercise (3,4)	Page 891

Determine the number of congruent sides for each triangle. Then classify the triangle based on its sides.

3,



No congruent sides - Scalene

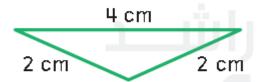


2 congruent sides - Isosceles

Question**	Learning Outcome***	Reference(s) in th	ne Student Book
18	Classify triangles based on attributes such as side measures and angle measures	Example/Exercise (1-2)	890

### **Guided Practice**

1. Classify the triangle based on its sides.



How many sides of the triangle are congruent?

2

The triangle is a(n)

Isosceles

2. Classify the triangle based on its angles.



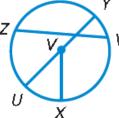
The triangle is a(n)

acute

Question**	Learning Outcome***	Reference(s) in tl	ne Student Book
19	Identify and describe parts of a circle (center, radius, diameter, chord)	Example/Exercise (1-3)	899

For each circle, identify the radii, diameter, chords, and center.

1.



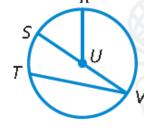
radii: VY and and

W diameter:

chord: \_\_\_\_\_ or \_\_\_\_.

center:

2.



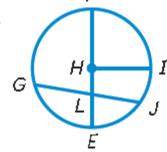
adii: \_\_\_\_\_ or \_\_\_\_\_

diameter:

chord: \_\_\_\_\_ or \_\_\_\_.

center:

3.



radii: \_\_\_\_\_\_ or \_\_\_\_\_

diameter:

chord: \_\_\_\_\_ or \_\_\_\_.

center:

Question**	Learning Outcome***	Reference(s) in the Student Book	
20	Identify and describe parts of a circle (center, radius, diameter, chord)	Example/Exercise (10,11)	900

#### **Problem Solving**

**10.** The diameter of a tree is 24 cm. What is the radius of the tree?

11. One of the largest mining dump trucks has tires with a radius of 2 m. What is the diameter of each tire?



Question** Learning Outcome***  Reference(s) in the Students		ne Student Book		
	21	Classify quadrilaterals based on attributes such as congruent sides, parallel sides, and right angles	Example/Exercise (3-6)	Page 911

Describe the attributes of each quadrilateral. Then classify the quadrilateral.





5. Circle the quadrilateral(s) that have all the attributes of a parallelogram.

rectangle rhombus square trapezoid

6. Circle the quadrilateral(s) that have all the attributes of a rhombus.

rectangle square trapezoid parallelogram

Question**	Learning Outcome***	Reference(s) in the Student Book	
22	Classify quadrilaterals based on attributes such as congruent sides, parallel sides, and right angles	Example/Exercise 11	Page 914

### Test Practice

11. Which statement about the figures shown below is true?



- $oxed{\mathbb{A}}$  Figures K and N are rectangles.
- B Figures L and N are quadrilaterals.
- $\bigcirc$  Figures K and N are parallelograms.
- D Figures M and N are parallelograms.

Question**	Learning Outcome***	Reference(s) in the Student Book	
23	Describe the properties of three-dimensional shapes	Example/Exercise (2-7)	Page 923

Describe the faces, edges, and vertices of each three-dimensional figure. Then identify it.

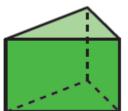




3



4.



5.



6



7.

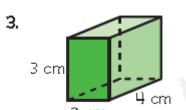


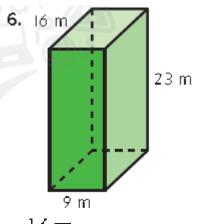
Question**	Learning Outcome***	Reference(s) in the Student Book	
24	Use volume formulas to find the volume of rectangular prisms	Example/Exercise (3-8)	Page 937

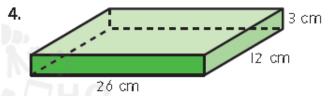


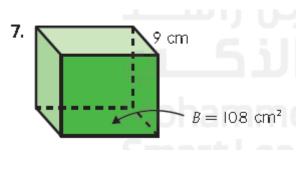
Mathematical Practices Use Symbols Find the volume of each prism. Use the

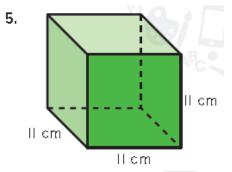
Practices formula  $V = \ell \times w \times h$  or  $V = B \times h$ .

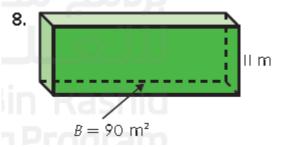








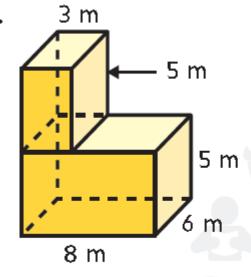


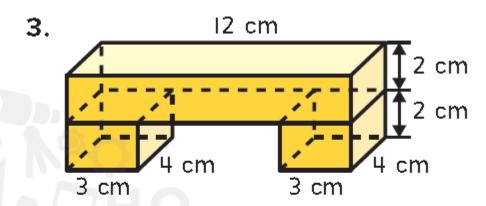


Question**	Learning Outcome***	Reference(s) in the Student Book	
25	Find the volume of composite figures by relating volume to the operations of multiplication and addition	Example/Exercise (2-7)	Page 949

Find the volume of each composite figure.





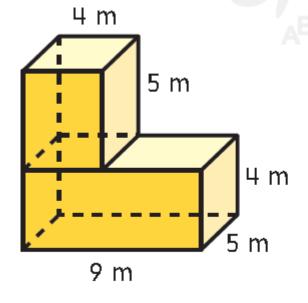


$$V =$$

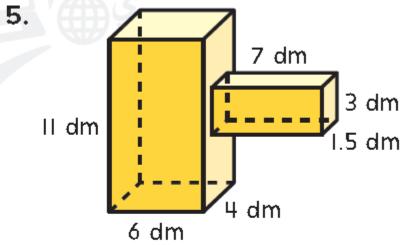
Question**	Learning Outcome***	Reference(s) in tl	ne Student Book
25	Find the volume of composite figures by relating volume to the operations of multiplication and addition	Example/Exercise (2-7)	Page 949

Find the volume of each composite figure.

4.



$$V =$$



Question**	Learning Outcome***	Reference(s) in tl	ne Student Book
25	Find the volume of composite figures by relating volume to the operations of multiplication and addition	Example/Exercise (2-7)	Page 949

Find the volume of each composite figure.

6.

