

MATHEMATICS
Grade 4
English
Learner
Activity
Book

2020 TERM 4



Introduction

This Learner Activity Book has numbered daily activities for classwork and homework for all the lessons in Term 4. The activities correspond to the activities in the Lesson Plans.

Answers to the activities can be written in this book.

If learners work systematically through these mathematics activities, they will cover the whole curriculum. These activities are planned as a fun way to help learners to acquire the prescribed mathematics knowledge and skills.



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Lesson 1: Division

Mental maths

		Answer			Answer
1	$14 \div 7 =$		6	$28 \div 7 =$	
2	$35 \div 7 =$		7	$70 \div 7 =$	
3	$49 \div 7 =$		8	$42 \div 7 =$	
4	$7 \div 7 =$		9	$63 \div 7 =$	
5	$21 \div 7 =$		10	$56 \div 7 =$	

Link to Term 3

There are 32 apples.

Each person gets 5 apples.

How many people can get apples?

- Underline the numbers and draw a wavy line under the question.
- Write the number sentence: _____
- Do the calculation: _____
- Which times table do you use to do this division? _____
- How do you know that there will be a remainder? _____

- What is the remainder? _____
- What is the answer? _____ people can get 5 apples with _____ left over.

Activity 2

Work with your partner.

1 Calculate the following using expanded notation.

a $636 \div 6 = \square$

Write 636 in expanded notation: _____

Do the division:

$636 \div 6 =$ _____

$=$ _____

$=$ _____

b $340 \div 5 = \square$

Write 340 in expanded notation: _____

Do the division:

$340 \div 5 =$ _____

$=$ _____

$=$ _____

c $408 \div 4 = \square$

Write 408 in expanded notation: $408 =$ _____

Do the division:

$408 \div 4 =$ _____

$=$ _____

$=$ _____

2 Calculate the following using expanded notation.

a $819 \div 4 = \square$

We can write 819 in expanded notation as follows: $819 = 800 + 19$

Do the division:

$$819 = \underline{\hspace{15em}}$$

$$= \underline{\hspace{15em}}$$

$$= \underline{\hspace{15em}}$$

b $734 \div 7 = \square$

Write 734 in expanded notation as follows: $734 = 700 + \underline{\hspace{3em}}$

Do the division:

$$734 \div 7 = \underline{\hspace{15em}}$$

$$= \underline{\hspace{15em}}$$

$$= \underline{\hspace{15em}}$$

Activity 3

Work on your own.

1 Calculate $426 \div 4 = \square$ using expanded notation

$$426 = \underline{\hspace{15em}}$$

$$408 \div 4 = \underline{\hspace{15em}}$$

$$= \underline{\hspace{15em}}$$

$$= \underline{\hspace{15em}}$$

Lesson 1: Division

2 Calculate $255 \div 5 = \square$ using expanded notation

$$255 = \underline{\hspace{10cm}}$$

$$255 \div 5 = \underline{\hspace{10cm}}$$

$$= \underline{\hspace{10cm}}$$

$$= \underline{\hspace{10cm}}$$

3. Calculate $632 \div 3 = \square$ using long division and then using expanded notation.

a. Using long division

	H	T	O

b Using expanded notation

$$632 = \underline{\hspace{10cm}}$$

$$632 \div 3 = \underline{\hspace{10cm}}$$

$$= \underline{\hspace{10cm}}$$

$$= \underline{\hspace{10cm}}$$

HOMEWORK

Write in expanded notation and then calculate.

1 $939 \div 3 = \square$

$939 =$ _____

$939 \div 3 =$ _____

$=$ _____

$=$ _____

2 $612 \div 3 = \square$

$612 =$ _____

$612 \div 3 =$ _____

$=$ _____

$=$ _____

Lesson 2: Divide and solve problems

Mental maths

		Answer			Answer
1	$42 \div 7 =$		6	$56 \div 7 =$	
2	$63 \div 7 =$		7	$14 \div 7 =$	
3	$0 \div 7 =$		8	$28 \div 7 =$	
4	$70 \div 7 =$		9	$35 \div 7 =$	
5	$49 \div 7 =$		10	$21 \div 7 =$	

Link to previous lesson

Calculate $464 \div 8 = \square$ using expanded notation

$$464 = \underline{\hspace{10cm}}$$

$$464 \div 8 = \underline{\hspace{10cm}}$$

$$= \underline{\hspace{10cm}}$$

$$= \underline{\hspace{10cm}}$$

Activity 2

Work with a partner. Solve the following problems:

- 1** A car can transport 6 people.
How many cars are needed to transport 117 people?

a Underline the numbers and draw a wavy line under the question.

b Write the number sentence: _____

c Use a clue board to help you work out the answer.

Clue board	
$10 \times 6 =$	_____

d Use multiplication to check your answer:

e Write the answer, giving a reason for your answer.

We need _____ because _____

Lesson 2: Divide and solve problems

2 There are 8 apples in one packet.
How many packets can be made if there are 166 apples?

a Underline the numbers and draw a wavy line under the question.

b Write the number sentence: _____

c Use a clue board to help you work out the answer.

Clue board	
$10 \times 8 =$	_____

d Use multiplication to check your answer:

e Write the final answer.

3. There are 122 sweets.
If 7 children got sweets, how many sweets did each child get?

- a Underline the numbers and draw a wavy line under the question.
- b Write the number sentence: _____
- c Use a clue board to help you work out the answer.

Clue board	
_____	$10 \times 7 = 70$
_____	_____
_____	$6 \times 7 =$ _____
_____	_____
_____	_____

- d Use multiplication to check your answer:

- e Write the final answer.

Activity 3

Work on your own. Solve the following problems.

1 Nine tablespoons of sugar have a mass of 117 g.
What is the mass of one tablespoon of sugar?

a Underline the numbers and draw a wavy line under the question.



b Write the number sentence: _____

c Use a clue board to help you find the answer.

<p style="text-align: center;">Clue board</p> <p>$10 \times 9 =$ _____</p> <p>_____</p>

d Use multiplication to check your answer: _____

e Write the answer: _____

2 Sizwe ran 84 km in one week.
He ran the same distance each day.
How far did he run each day?

a Underline the numbers and draw a wavy line under the question.

b Write the number sentence: _____

c Use a clue board to help you find the answer.

Clue board

d Use multiplication to check your answer: _____

e Write the answer: _____

HOMEWORK

Solve the word problem.

Azwindini is selling bags of marbles.
He packs 6 marbles in each bag.
He has 156 marbles.
How many bags will he have?

- 1 Underline the numbers and draw a wavy line under the question.
- 2 Write the number sentence: _____

- 3 Use a clue board to help you find the answer.

Clue board

- 4 Use multiplication to check your answer: _____

- 5 Write the answer: Azwindini will have _____

Lesson 3: Long division (1)

Mental maths

		Answer			Answer
1	$16 \div 8 =$		6	$32 \div 8 =$	
2	$40 \div 8 =$		7	$8 \div 8 =$	
3	$24 \div 8 =$		8	$80 \div 8 =$	
4	$48 \div 8 =$		9	$64 \div 8 =$	
5	$72 \div 8 =$		10	$56 \div 8 =$	

Lesson 3: Long division (1)

Link to previous lesson

Solve the word problem.

178 apples are packed into bags

If there are 8 bags, how many apples in each bag?

1 Underline the numbers and draw a wavy line under the question.

2 Write the number sentence: _____

3 Use a clue board to help you find the answer.

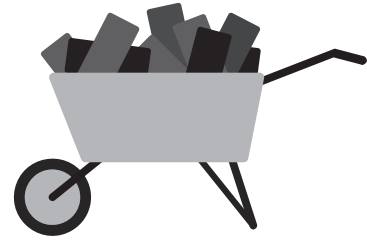
Clue board	
$10 \times 8 =$	_____
_____	_____
_____	_____
$2 \times 8 =$	_____
_____	_____
_____	_____

4 Use multiplication to check your answer: _____

5 Give the answer: _____

Activity 1

834 bricks are shared equally between 3 workers.
How many bricks will each worker get?



- 1 Underline the number and the question.
- 2 Write the number sentence here:

- 3 Use long division to find the answer.

	H	T	O
3	8	3	4

- 4 What is the answer? _____

Activity 2

Work on your own.

- 1** Use long division to find the answer to $384 \div 6 = \square$.

Which times table must you use for this division calculation? _____

	H	T	O

Answer: _____

- 2** Use long division to find the answer to $436 \div 4 = \square$.

Which times table must you use for this division calculation? _____

	H	T	O

Answer: _____

HOMEWORK

Use long division to find the answer to $512 \div 4 = \square$.

Which times table must you use for this division calculation? _____

	H	T	O

Answer: _____

Activity 1

255 marbles are shared equally between 6 children.

How many marbles will each child get?

1 Underline the numbers and the question.

2 Write the number sentence for this problem: _____

3 When we do the division, do you think there will be a remainder or no remainder? Give a reason for your answer.

4 Use long division to find the answer to $255 \div 6 = \square$

	H	T	O

5. Write down the answer: _____

Lesson 4: Long division (2)

- 3** Use long division to find the answer to $460 \div 5 = \square$.

Which times table must you use for this division calculation? _____

	H	T	O

Answer: _____

- 4** Use long division to find the answer to $623 \div 7 = \square$.

Which times table must you use for this division calculation? _____

	H	T	O

Answer: _____

Activity 3

Work with your partner.

- 1** Use long division to find the answer to $510 \div 6 = \square$.

- 2** Use long division to find the answer to $300 \div 4 = \square$.

Which times table must you use for this division calculation? _____

Which times table must you use for this division calculation? _____

	H	T	O

	H	T	O

Answer: _____

Answer: _____

Lesson 4: Long division (2)

- 3** Use long division to find the answer to $700 \div 8 = \square$.

Which times table must you use for this division calculation? _____

	H	T	O

Answer: _____

- 4** Use long division to find the answer to $630 \div 9 = \square$.

Which times table must you use for this division calculation? _____

	H	T	O

Answer: _____

HOMEWORK

Use long division to find the answer to $335 \div 9 = \square$.

Which times table must you use for this division calculation? _____

	H	T	O

Answer: _____

Lesson 5: Division and word problems

Mental maths

		Answer			Answer
1	$18 \div 9 =$		6	$90 \div 9 =$	
2	$54 \div 9 =$		7	$36 \div 9 =$	
3	$72 \div 9 =$		8	$63 \div 9 =$	
4	$9 \div 9 =$		9	$45 \div 9 =$	
5	$81 \div 9 =$		10	$27 \div 9 =$	

Link to previous lesson

Bono was asked to calculate $346 \div 8 = \square$.

His answer was $346 \div 8 = 42$ remainder 10

This is his calculation:

	H	T	O
	0	4	2
8	3	4	6
-	3	2	
		2	6
-		1	6
		1	0

Answer: _____

- 1 Explain what is wrong with the calculation.

2 Do the correct calculation here:

	H	T	O

3 What should the answer have been?

Activity 1

Work on your own.

Find the answers and then check your answers.

1 Mother bought 4 m of dress material for R500.
How much did 1 metre cost?

a Underline the numbers and the question.

b Write the number sentence: _____

c Do the calculation:

	H	T	O

d Write down the answer:

e Check your answer

	H	T	O

2 The water truck carries 720 litres of water.
If each household gets 8 litres water, how many households can be supplied with water?

a Underline the numbers and the question.

b Write the number sentence: _____

c Do the calculation:

d Write down the answer: _____

e Check your answer: _____

Activity 2

- 1** You have R80.
How many bags of chocolate bars can you buy if one bag costs R8?

Work with your partner. Discuss an operation you can use to answer the question.

- 2** You have R80.
How many bags of apples can you buy if one bag costs R10?

Work with your partner. Discuss an operation you can use to answer the question.

- 3** You have R80.
How many packets of sugar can you buy if one bag costs R20?

Work with your partner. Discuss an operation you can use to answer the question.

Draw a diagram to show the problem.

- 4 You buy apples which cost R20 per bag
How many bags of apples can you buy if you have R120?

a Write the number sentence: _____

b Do the calculation:

120	÷	20
-----	---	----



12	÷	2
----	---	---

We know that $12 \div 2 =$ _____

Then, $120 \div 20 =$ _____

c What is the answer? I would be able to buy _____

d Check your answer: _____

- 5 A school skirt costs R80.
How many skirts can you buy if you have R240?

a Write the number sentence: _____

b Do the calculation:

240	÷	80
-----	---	----



24	÷	8
----	---	---

We know that $24 \div 8 =$ _____

Then, $240 \div 80 =$ _____

c What is the answer? _____

d Check your answer: _____

Lesson 6: Consolidation

1 Calculate. Use expanded notation.

a $816 \div 4 =$ _____
= _____
= _____

b $749 \div 7 =$ _____
= _____
= _____

2 I have 39 mangoes.

I want to put 6 mangoes in a packet.

How many packets do I need?

a. Which times table will you use to do this division? _____

b. Write the number sentence: _____

c Do the calculation: _____

d Write the answer: _____

e How do you know that there will be a remainder? _____

f What is the remainder? _____

3 Use a clue board to solve the following problem:

A taxi can transport 9 people.

How many taxis are needed to transport 207 people?

a Write the number sentence for the problem: _____

b Use the clue board to help you do the calculation.

Clue board

c Give the answer: _____

d Check your answer: _____

Lesson 6: Consolidation

4 Use long division to solve $627 \div 8 = \square$

a Which times table must you use for this long division calculation? _____

b Do the calculation:

c What is the answer?

5 A printing machine prints the same number of booklets every hour.

It takes 9 hours to print 720 booklets.

How many booklets are printed in an hour?

a Write the number sentence for the problem here: _____

b. Do your working out here:

c What is the answer? _____

6 Calculate:

a $120 \div 40 = \square$

Because $12 \div 4 = \underline{\hspace{2cm}}$, we know that $120 \div 40 = \underline{\hspace{2cm}}$

b $490 \div 70 = \square$

Because $49 \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$, we know that $490 \div 70 = \underline{\hspace{2cm}}$

Lesson 7: Telling time (1)

Mental maths

	Question	Answer
1	How many months in a year?	
2	Name the months that have 30 days	
3	Name the months that have more than 30 days	
4	How many days does February have?	
5	Which month is before June?	
6	Which month is after February?	
7	Which month is after December?	
8	Which month is between August and October?	
9	Which months are between March and June?	
10	What do we call a year that has an extra day in February?	


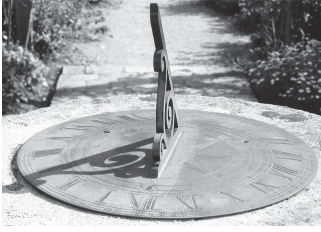
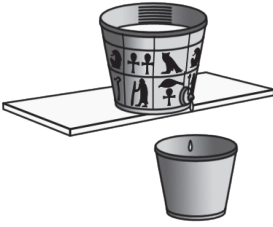
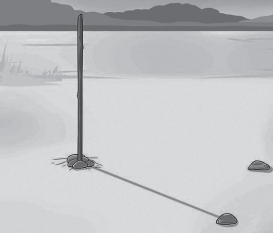
Link to Grade 3

Complete the sentences

- There are _____ minutes in an hour
- There are _____ hours in a day and _____ days in a week.
- There are approximately _____ weeks in a month.
- There are approximately _____ weeks in a year.
- There are _____ months in a year.
- There are _____ days in a year.
- There are _____ days in a leap year.

Activity 1

- 1 Look at the pictures of early clocks. Draw a line to match the picture of the clock to the description.

	<p>Shadow stick clock</p> <p>A stick is placed in the ground. The length of the shadow changes as the Sun moves across the sky. Time is measured by the shadow as it moves on the ground.</p>
	<p>Water clock</p> <p>Water drips at a constant rate from one container to another through a small hole. The water level shows how many hours have passed since the bucket was filled. Time is measured in hours.</p>
	<p>Sundial</p> <p>The clock has a flat, round plate with a pointer that makes a shadow. As the Sun moves across the sky, the shadow moves across the numbers, showing the time.</p>
	<p>Sand clock or hourglass</p> <p>Sand runs from the top through a narrow opening into the bottom. It is like an egg timer which some people still use today.</p>

- 2 Why can't a shadow clock be used at night?

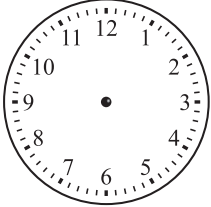
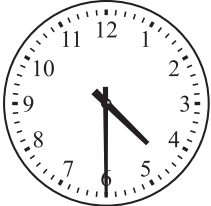

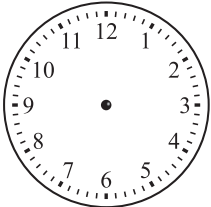
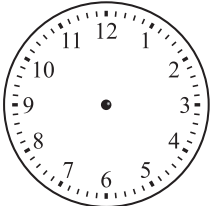
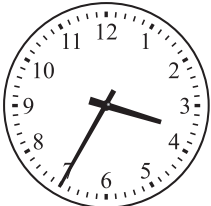
- 3 Predict what will happen if a water clock is used outside in the rain.

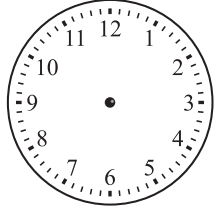

Lesson 7: Telling time (1)

Activity 2

Work on your own.

Fill in either the missing hands on the clock or the missing time in words.

	Analogue clock	Words
1		Quarter past eleven
2		
3		
4		Twenty to nine
5		Five past 11
6		

	Analogue clock	Words
7		Quarter to 7
8		

HOMEWORK

1 How many minutes and seconds are there?

a 80 seconds = ____ minute/s and ____ seconds.

b 95 seconds = ____ minute/s and ____ seconds.

c 120 seconds = ____ minute/s and ____ seconds.

2 How many seconds are there?

a 1 minute 10 seconds = ____ seconds + 10 seconds = ____ seconds

b 1 minute 50 seconds = ____ seconds + ____ seconds = ____ seconds

c 3 minutes 25 seconds = ____ seconds + 25 seconds = ____ seconds

Lesson 8: Telling Time (2)

Mental maths

	Question	Answer
1	How many days in a week?	
2	Which days make up the weekend?	
3	On which days of the week do you go to school?	
4	How many hours in a day?	
5	How many minutes in an hour?	
6	How many minutes in quarter of an hour?	
7	Which day is the day before Monday?	
8	Which day is 2 days after Monday?	
9	Which day is 3 days after Thursday?	
10	Which day is 3 days before Thursday?	

Link to previous lesson

Convert to seconds

1 1 minute = _____ seconds

2 2 minutes = _____ seconds

3 4 minutes = _____ seconds

4 1 minute 7 seconds = _____ seconds





5 5 minutes 9 seconds = _____ seconds + 9 seconds = _____ seconds

6 6 minutes 25 seconds = _____ seconds + 25 seconds = _____ seconds

Activity 1

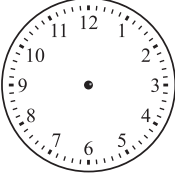
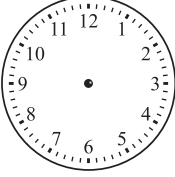
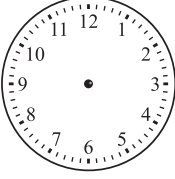
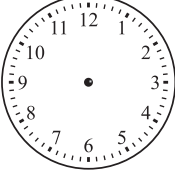
Work with your partner

- 1 Write the time shown on each analogue clock as a 24-hour digital time.

	Analogue clock	24-hour digital time
a	 <p>In the morning</p>	
b	 <p>In the evening</p>	
c	 <p>In the morning</p>	
d	 <p>In the evening</p>	

Lesson 8: Telling Time (2)

2 Draw hands on the analogue clock to show the given 24-hour digital time.

	24-hour digital time	Analogue clock
a	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; display: inline-block;">11:10</div>	
b	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; display: inline-block;">19:00</div>	
c	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; display: inline-block;">13:30</div>	
d	<div style="border: 1px solid black; border-radius: 10px; padding: 5px; display: inline-block;">07:45</div>	

Activity 2

Work with your partner.

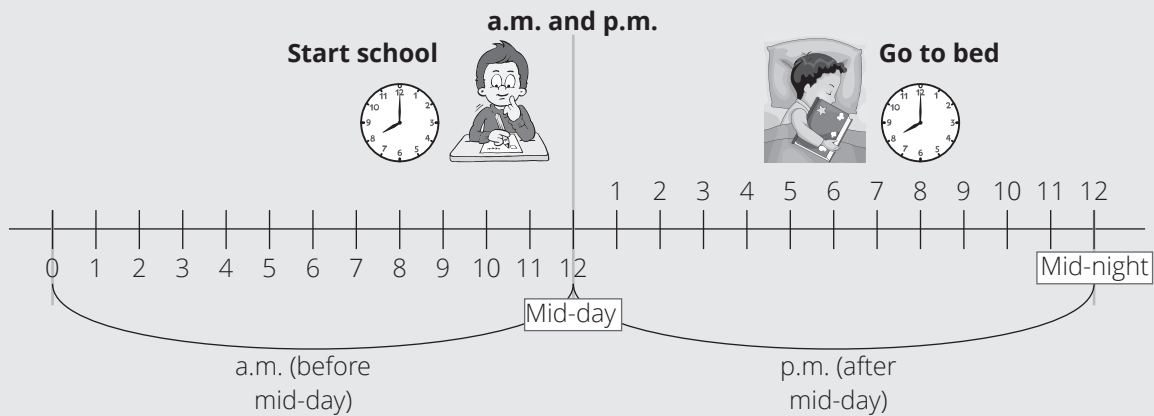
Fill in the missing times.

	Time in words	a.m./ p.m. format	24-hour digital time
	Nine o'clock in the morning	9 a.m.	09:00
1	Seven o'clock in the evening		
2	Quarter to ten in the morning		
3			14:20
4			22:15
5		11.10 a.m.	
6		1.50 p.m.	
7	Midday		
8	Midnight		

HOMEWORK

Work with your partner

Look at the diagram showing a.m. and p.m. periods of the day and answer the questions.













- 1 How many hours are there in a day? _____
- 2 In a day, how many hours are there before mid-day (the a.m. hours)? _____
- 3 In a day, how many hours are there after mid-day (the p.m. hours)? _____
- 4 What time does school start? Use a.m. or p.m. in your answer. _____
- 5 What time is bedtime? Use a.m. or p.m. in your answer. _____

Lesson 9: Time passed

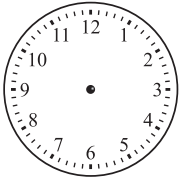
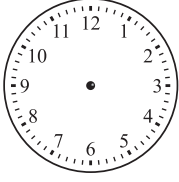
Mental maths

Read the time on the analogue clock. Write the time on a 24-hour digital clock

		Answer			Answer
1	 Morning		6	 a.m.	
2	 Night		7	 a.m.	
3	 Evening		8	 p.m.	
4	 Morning		9	 midnight	
5	 p.m.		10	 midday	

Link to previous lesson

Show each 24-hour digital time on an analogue clock and in a.m./p.m. format.

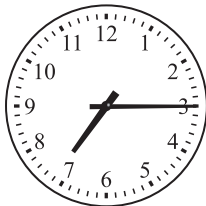
	24-hour digital time	Analogue clock	Write the time using a.m. or p.m.
1	03:26		
2	15:04		

Activity 1

Work with your partner.

- School starts at 7.15 a.m.
School ends at 1.45 p.m.
How long are you at school?

Use the clock you made to find the answer.

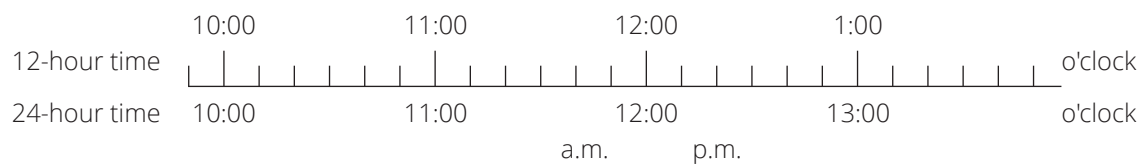


- 2** Siphso takes $2\frac{1}{2}$ hours to clean the windows.
Siphso takes half that time to clean his car.
How long does it take Siphso to clean his car?

Break down the numbers to find the answer.

- 3** Azwi is taking driving lessons. The lesson started at 10:30 in the morning.
The lesson is $1\frac{3}{4}$ hours long.
At what time will the lesson end?

Use the given number line to find the answer.



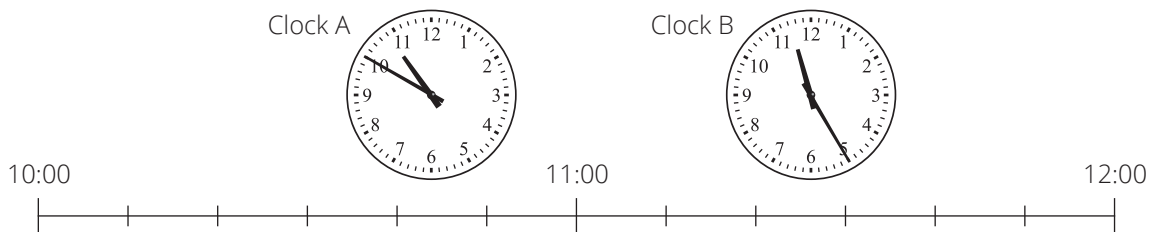
- a** How many minutes does a small interval show? _____
- b** Mark 10:30 on the number line and count on to find the answer to the question.
- c** What time does the driving lesson end? It ends at _____

Activity 2

Work with your class to answer this question.

Look at the poster on the board and the clocks and number line in your LAB.

- 1** The mathematics lesson started at the time on Clock A and ended at the time on Clock B.
How long was the mathematics lesson?



- a** What is the 24-hour digital time on Clock A? _____
- b** What is the 24-hour digital time on Clock B? _____
- c** What is the interval on the number line below the clocks? _____
- d** Mark the times shown on Clock A and on Clock B on the number line below the clocks.
- e** Use the number line to count the number of minutes from the time on Clock A to the time on Clock B.
- f** Write the answer: The lesson was _____

Activity 3

Work on your own.

1 A shop is open for the following times.

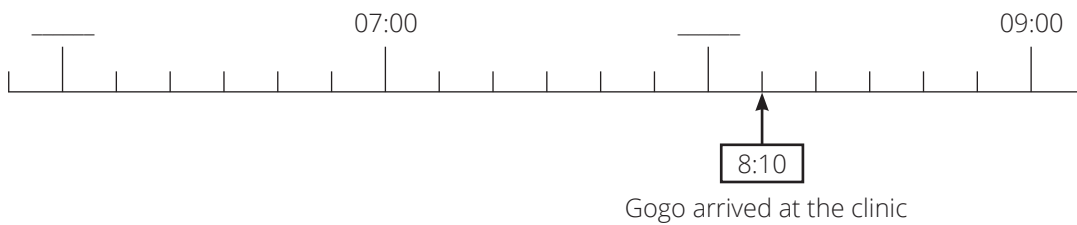
Shop Opening Times	
<u>Monday to Friday</u>	<u>Saturday and Sunday</u>
Opens: 9:00 a.m.	Opens: 9:30 a.m.
Closes: 6:00 p.m.	Closes: 12:30 p.m.



a How long is the shop open on a Tuesday? _____

b How long is the shop open on a Sunday? _____

2 It takes Gogo 50 minutes to walk to the clinic. She arrived at the clinic at 08:10.



a How many minutes are there in each small interval? _____

b Use the number line to work out what time Gogo leaves home.

c Write your answer as 24-hour digital time: Gogo left home at _____

HOMEWORK

Sindi is training for a marathon.

She left home at 07:45 and arrived back home at 10:15.

How long did Sindi run for?



- 1 How many minutes are there in each interval? _____
- 2 Use the number line to work out the answer.
- 3 Write your answer: Sindi ran for _____

Lesson 10: How long?

Mental maths

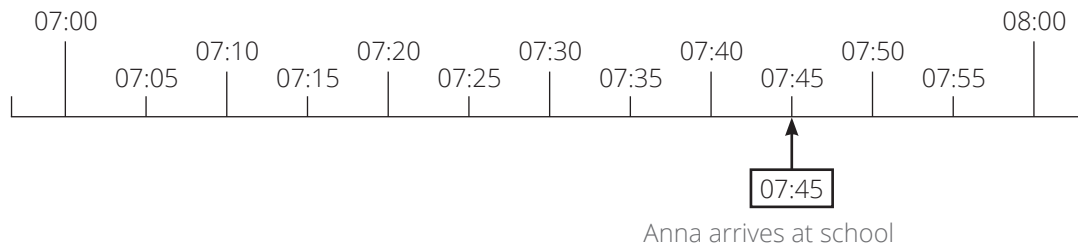
Read the time given in 24-hour digital time. Write the time in words and as a.m. or p.m. time.

	24-hour digital time	In words	a.m. or p.m. time
1	09:23		
2	16:40		
3	12:00		
4	01:15		
5	20:59		
6	00:00		
7	13:35		
8	22:15		
9	08:15		
10	14:45		

Link to previous lesson

It takes 20 minutes for Anna to walk from home to school.

What time should Anna leave home if she needs to be at school by quarter to eight in the morning?



1 Write quarter to eight as 24-hour digital time. _____

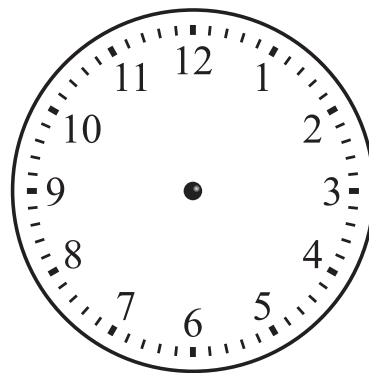
2 What time Anna should leave home? _____

3 Write the answer using a.m. or p.m. time. _____

- 4 What is the length of the two breaks altogether?

- 5 How long is the school day?
Give the answer in hours and minutes.

- 6 Show the start time of the Life Skills lesson on this analogue clock.



Activity 2

Work with a partner.

Use the calendar to help you answer the questions.

<h1>2021</h1>																												
January							February							March							April							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
					1	2	1	2	3	4	5	6	1	2	3	4	5	6					1	2	3			
3	4	5	6	7	8	9	7	8	9	10	11	12	13	7	8	9	10	11	12	13	4	5	6	7	8	9	10	
10	11	12	13	14	15	16	14	15	16	17	18	19	20	14	15	16	17	18	19	20	11	12	13	14	15	16	17	
17	18	19	20	21	22	23	21	22	23	24	25	26	27	21	22	23	24	25	26	27	18	19	20	21	22	23	24	
24	25	26	27	28	29	30	28	28	29	30	31	25	26	27	28	29	30	25	26	27	28	29	30					
31																												
May							June							July							August							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
						1			1	2	3	4	5					1	2	3	1	2	3	4	5	6	7	
2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14	
9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21	
16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28	
23	24	25	26	27	28	29	27	28	29	30	25	26	27	28	29	30	31	29	30	31								
30	31																											
September							October							November							December							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
			1	2	3	4						1	2			1	2	3	4	5	6				1	2	3	4
5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11	
12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18	
19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	
26	27	28	29	30	24	25	26	27	28	29	30	28	29	30	26	27	28	29	30	31	26	27	28	29	30	31		

- 1 How many days are there between 5th February to 12th February?

- 2 School opens on 13th January and Thato's birthday is on 17th January.
How many days of school are there in the week of Thato's birthday?

- 3 How many days are there between 24th January and 5th March?

- 4 How many days are there between 1st September and 7th November?

HOMEWORK

Prudie's birthday party is on 17th July.

On Thursday 1st July she sent out invitations to her party

July 2021						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

- 1 How many days there are between Thursday 1st July and Prudie's birthday party.
- 2 Prudie's school went on holiday on 2nd July, and the school started again on 20th July. How long was the holiday?
- 3 How many school days are there between 12th July and 1st August?

Lesson 16: Consolidation

1 Change each time to 24-hour digital format.



a. 2:05 p.m. _____

b. 9:18 p.m. _____

c. 8:40 p.m. _____

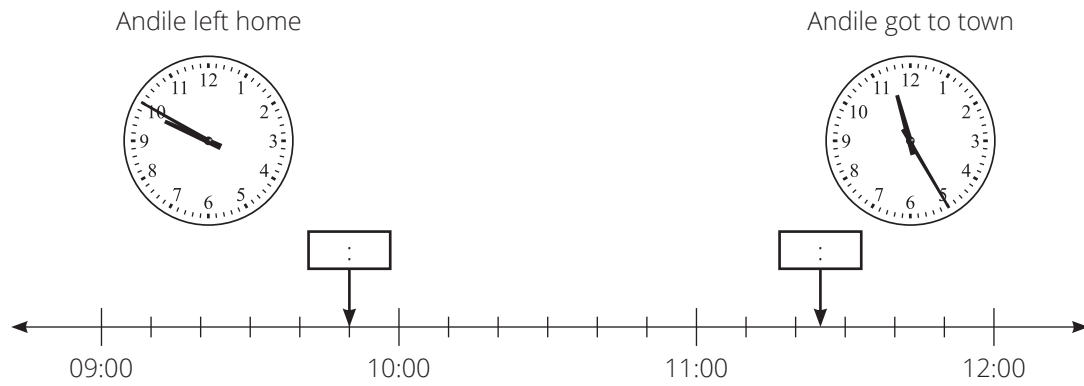
d. 11:45 a.m. _____

2 a Write the time shown on these analogue clocks in two different ways on a 24-hour digital clock.

	<input type="text"/>
	<input type="text"/> <input type="text"/>

b. Look at your answers. Why it is better to show time in 24-hour format rather than in 12-hour format?

- 3** The analogue clocks show the time Andile left home and the time he got to town.
How long did it take Andile to get to town?
Write your answer in hours and minutes.



Work out your answer

It took Andile _____ to get to town.

- 4** How much time has passed between the following times?

a 8:52 a.m. and 10:40 p.m.

b 12:00 and 23:45

Lesson 16: Consolidation

- 5 It takes Mavis 45 minutes to get ready for school.
It takes 10 minutes to walk to the bus stop.
The bus she must catch leaves at 07:30.
What time must Mavis get up in the morning?

Write your answer: _____

- 6 Look at the calendar for December 2021.
- a On the calendar, shade in the Day of Reconciliation (16th December) and Christmas Day (25th December).


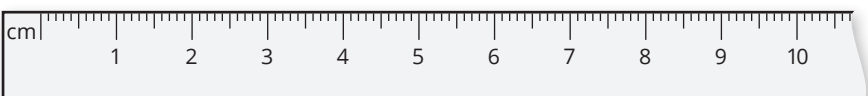


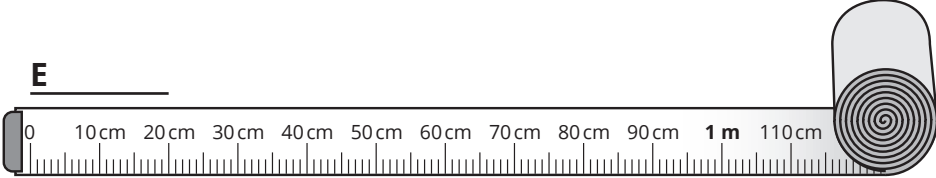
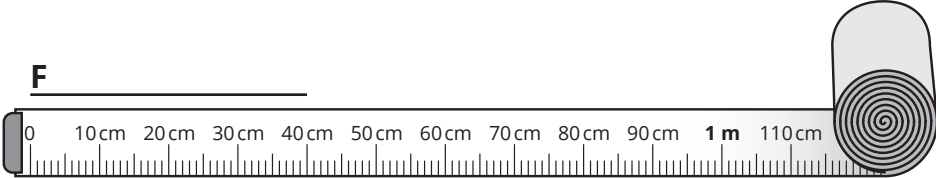
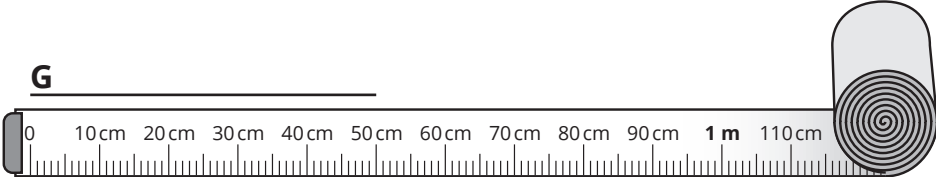
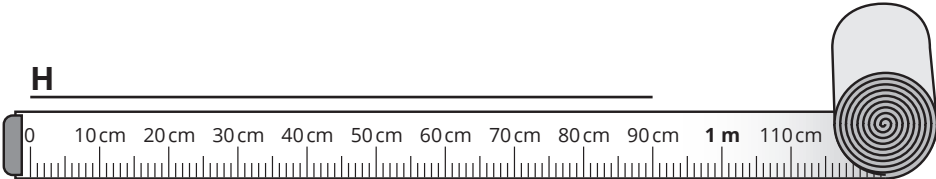
December 2021						
SUN	MON	TUES	WED	THURS	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16 Day of Reconciliation	17	18
19	20	21	22	23	24	25 Christmas Day
26	27	28	29	30	31	

- b How many days are there between the Day of Reconciliation and Christmas Day?

Write your answer: _____

Lesson 12: Units of length

Mental maths

What is the length of each line?		Answer
1	<p>A</p> 	
2	<p>B</p> 	
3	<p>C</p> 	
4	<p>D</p> 	
5	<p>E</p> 	
6	<p>F</p> 	
7	<p>G</p> 	
8	<p>H</p> 	

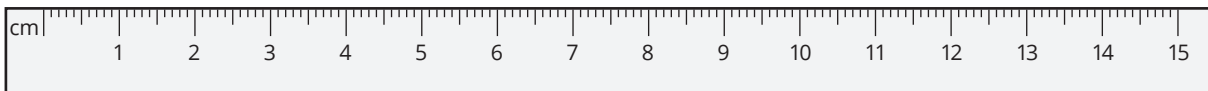
Link to Grade 3

1 What unit of measurement would you use to measure the length of your LAB?	
2 What unit of measurement would you use to measure the length of your classroom?	
3 How many millimetres are there in a centimetre?	

Activity 1

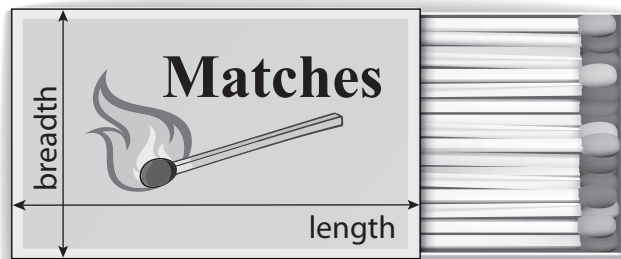
Work with your partner

1. Study the ruler.



- a What unit of measurement do the long marks show? _____
- b What is the short way of writing this unit? _____
- c How long is the distance between two long marks? _____
- d Count on your ruler. How many small parts is 1 cm divided into? _____
- e What unit of measurement do the short marks show? _____
- f What is the short way of writing this unit? _____
- g Show your partner one thing that measures a millimetre.
- h Show your partner one thing that measures a centimetre.

2. This is the actual size of a matchbox.



- a** Use your ruler to measure the length of the matchbox in centimetres and millimetres.

Write this measurement in centimetres only using decimals. _____

Write this measurement in millimetres only. _____

- b** Use your ruler to measure the breadth of the matchbox in centimetres and millimetres.

Write this measurement in centimetres only using decimals. _____

Write this measurement in millimetres only. _____

Activity 2

Work with your partner.

1 a Write all the measurements in millimetres.

$$18 \text{ mm} = \underline{\hspace{2cm}} \text{ mm}$$

$$1\frac{1}{2} \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$$

$$1 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$$

$$\frac{1}{2} \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$$

$$11 \text{ mm} = \underline{\hspace{2cm}} \text{ mm}$$

b Write the measurements from shortest to longest.

2 Complete the following

a $9 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$

b $100 \text{ mm} = \underline{\hspace{2cm}} \text{ cm}$

c $300 \text{ mm} = \underline{\hspace{2cm}} \text{ cm}$

d $125 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$

e $618 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$

f $4\,750 \text{ mm} = \underline{\hspace{2cm}} \text{ cm}$

g $8 \text{ mm} = \underline{\hspace{2cm}} \text{ cm}$

h $6,5 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$

Remember:

$$1 \text{ cm} = 10 \text{ mm}$$

$$1 \text{ mm} = 0,1 \text{ cm}$$

Activity 3

Work with your partner.

1 Do the following conversions

a 400 cm = _____ m

b 3 m = _____ cm

c 146 cm = _____ m

d 10 cm = _____ m

e 7 cm = _____ m

f 0,8 m = _____ cm

g 2,9 m = _____ cm

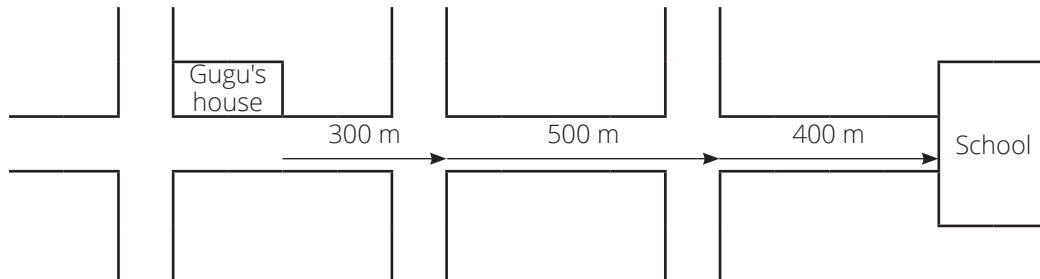
h $\frac{1}{2}$ m = _____ cm

Remember:

$$1 \text{ m} = 100 \text{ cm}$$

$$1 \text{ cm} = \frac{1}{100} \text{ m} = 0,01 \text{ m}$$

2 This map shows Gugu's house and the school.



a What is the distance, in metres, from Gugu's house to school?

Remember:

1 000 m = 1 km

Distance = _____ m + _____ m + _____ m = _____ m

b Write the distance from Gugu's house to school in km and m.

Distance = _____

c Write the distance from Gugu's house to school in km.

d The distance between Gugu's house and the village is 3,5 km.

How many metres is this? _____

3 Complete:

a 4 km = _____ m

b 5 000 m = _____ km

c 7 300 m = _____ km _____ m

d 3 km 600 m = _____ m

e 8 km 200 m = _____ km

f 1,9 km = _____ km _____ m = _____ m

HOMEWORK

Complete:

1 10 mm = _____ cm

2 13 cm = _____ mm

3 100 cm = _____ m

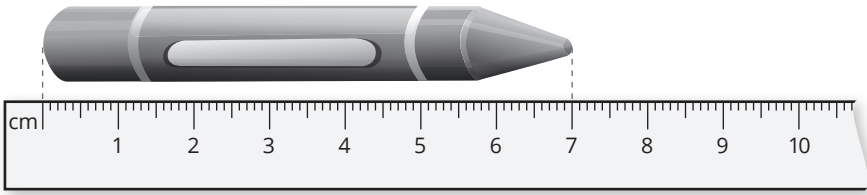
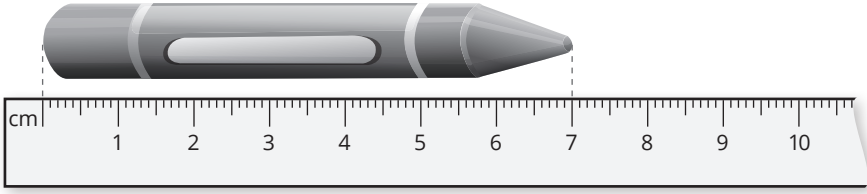
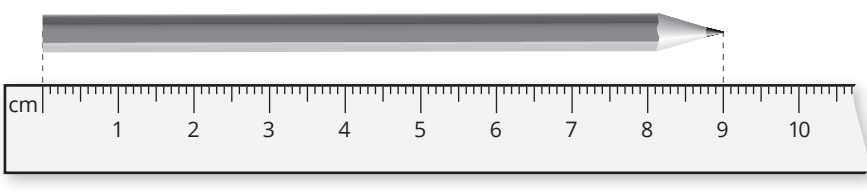
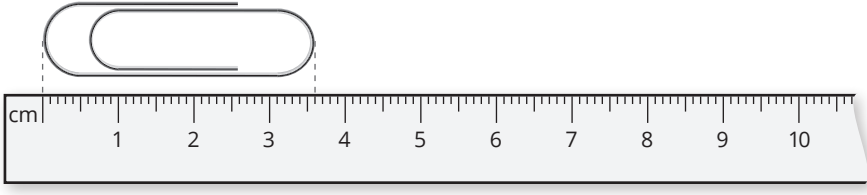
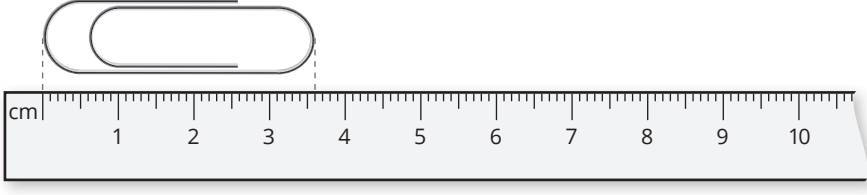
4 1,6 m = _____ cm

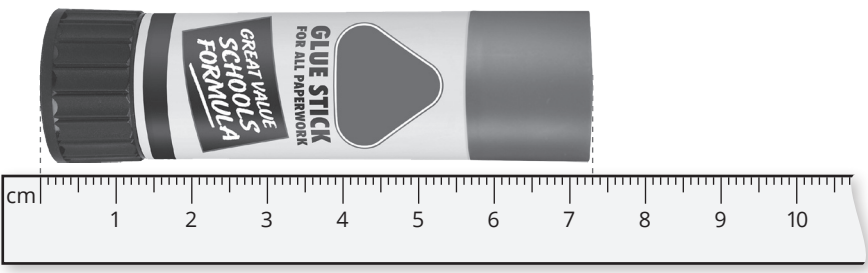
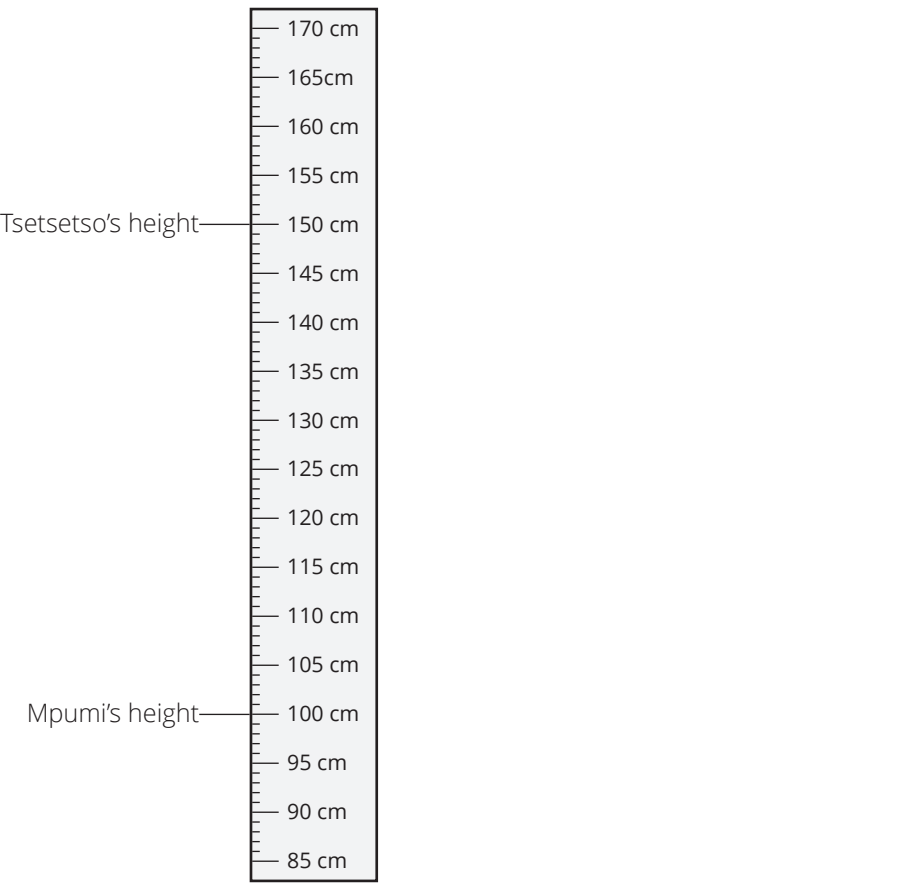
5 1 000 m = _____ km

6 2,4 km = _____ m

Lesson 13: Measuring and drawing line segments

Mental maths

Write down the measurements		Answer
1		_____ cm
2		_____ mm
3		_____ cm
4		_____ cm
5		_____ mm

6		_____ cm
7		
	a Mpumi's height	_____ m
	b Tsetsetso's height	_____ m

Link to previous lesson

Do the following conversions:

1 130 mm = _____ cm

2 20 cm = _____ mm

3 500 cm = _____ m

4 2 m 30 cm = _____ cm

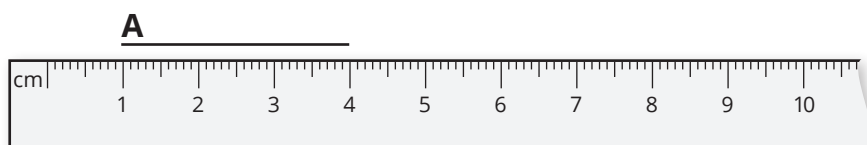
5 2 000 m = _____ km

6 4,8 km = _____ m

Activity 1

Work with your partner.

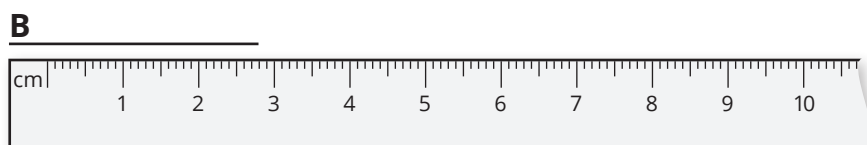
1 Sibü measured the length of Line A:



a Sibü says Line A is 4 cm long. Is Sibü correct? _____

b If 4 cm is wrong, give the correct answer and explain to Sibü what he did wrong.

2 Lungile measured the length of Line B like this:

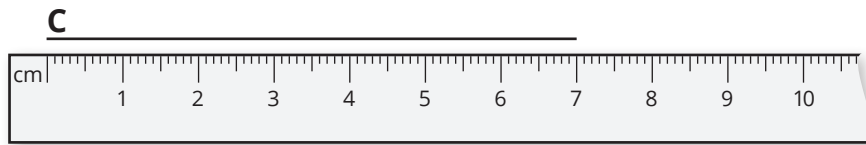


a Lungile says Line B is 2,8 cm long. Is she correct? _____

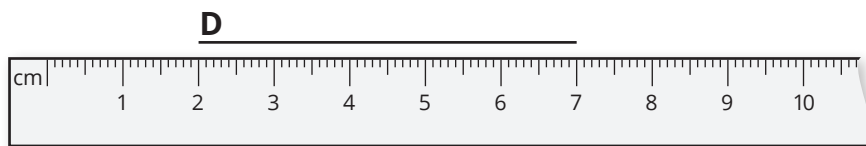
b Explain your answer.

c Describe how you would measure the length of Line B accurately.

3 What is the length of line C? _____

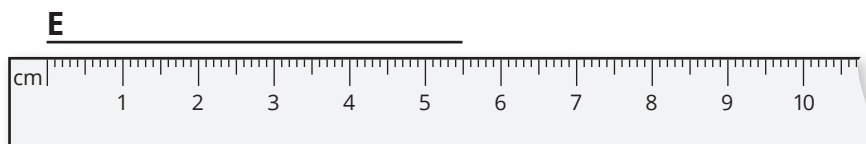


4 What is the length of Line D in centimetres? _____



Explain how you found the answer.

5 What is the length of Line E in centimetres? _____



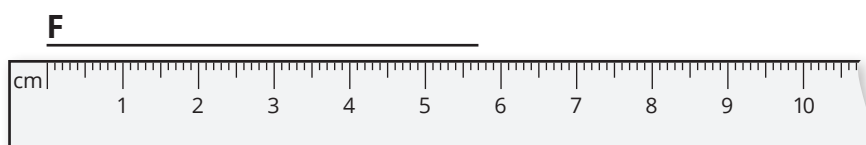
What is the length of Line E in millimetres? _____

6 What is the length of Line F

a in centimetres and millimetres? _____

b in millimetres? _____

c in centimetres? _____



Activity 2

1 Use your ruler.

Measure and draw each of the following straight lines.

Label each line with its length.

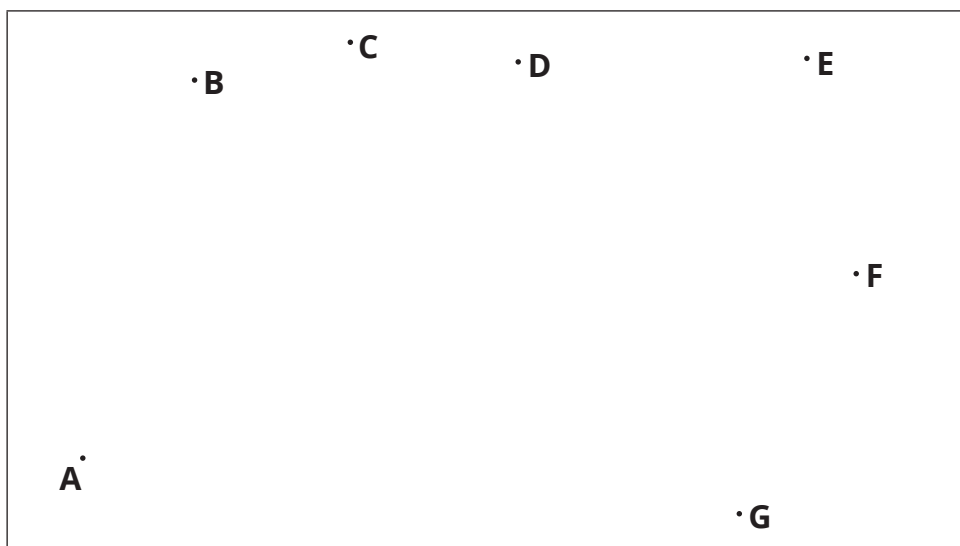
a Line A: 10 cm.

b Line B: 13 cm and 6 mm long.

2 a Use your ruler.

Draw a straight line from dot A to each other dot.

This means that you should draw 6 straight lines altogether.



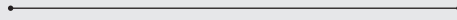
b Which line is the longest? _____

How long is it? _____

HOMEWORK

- 1** Use your ruler. Measure the length of Line A.

Line A



Line A is _____ cm long

Line A is _____ mm long





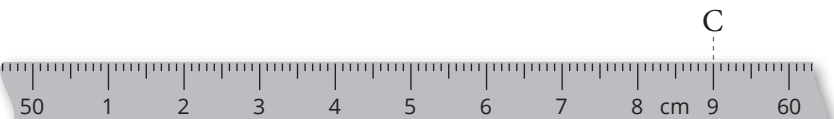

- 2** Use your ruler.



Draw a straight line that is 9 cm long.

Label it Line B.

Lesson 14: Solving problems involving length (1)

Mental maths

What length is measured on each ruler?	Answer
<p>1</p> 	<p>_____ cm</p>
<p>2</p> 	<p>_____ mm</p>
<p>3</p> 	<p>_____ cm</p>
<p>4</p> 	<p>_____ mm</p>
<p>5</p> 	<p>_____ cm</p>
<p>6</p> 	<p>_____ mm</p>

7		_____ m
8		_____ m

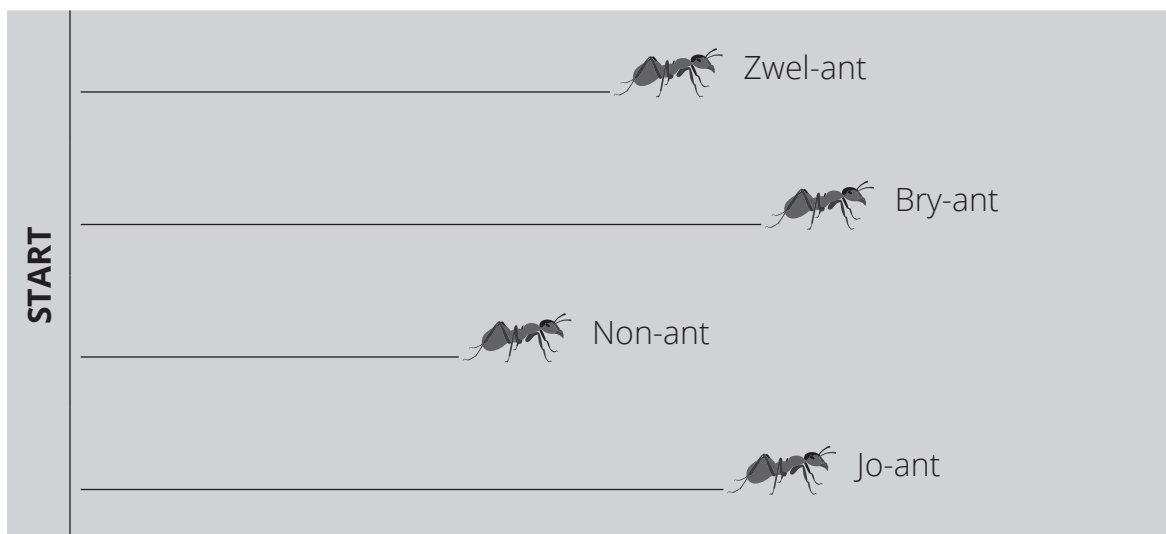
Link to previous lesson

Use your ruler. Draw a straight line that is 8 cm and 4 mm long.

Activity 1

Four ants are running in a 100 mm race.

So far, they have reached the place you see in the diagram.



1 Measure the distance that each runner reached and give the answer in mm.

a How far has Zwe-lant run? Give your answer in cm. _____

b How far has Bry-ant run? Give your answer in mm. _____

c How far has Non-ant run? Give your answer in cm. _____

d How far has Jo-ant run? Give your answer in mm. _____

2 Complete the table:

Name of the ant	Distance run in cm	Distance run in mm
Zwel-ant		
Bry-ant		
Non-ant		
Jo-ant		

3 How much further does Bry-ant need to run to finish the race?

4 How much further has Bry-ant run than Non-ant?

5 How far have Zwe-lant and Non-ant run altogether?

6 How much further must Jo-ant run to finish the race?

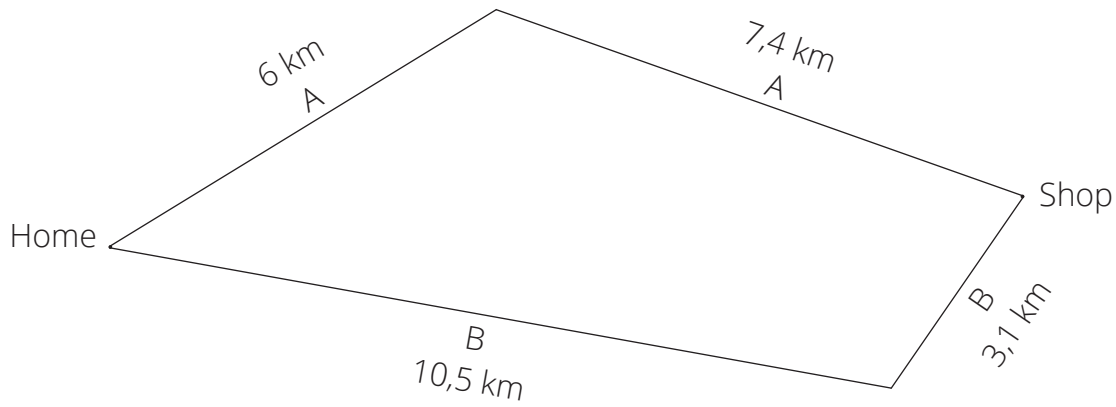
Give your answer in both mm and in cm.

7 How much further has Jo-ant run than Non-ant?

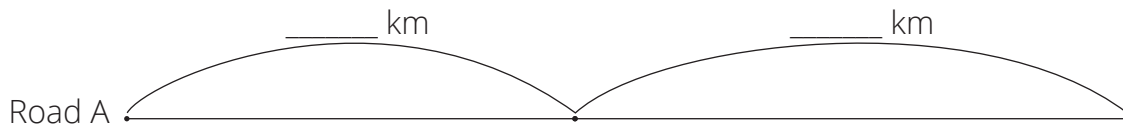
Give your answer in both mm and cm.

Activity 2

1 Sindi could go to the shops in two different ways, Road A and Road B.

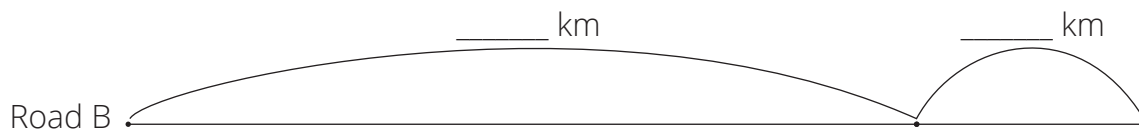


a Calculate the distance in kilometres between home and the shop using Road A.



Distance using Road A = _____ km + _____ km = _____ km.

b Calculate the distance in kilometres between home and the shop using Road B.



Distance using Road B = _____ km + _____ km = _____ km.

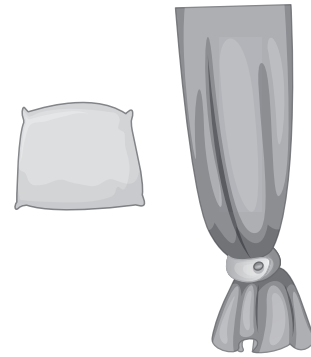
c What is the difference in distance between Road A and Road B?

Give your answer in km: _____

Give your answer in m: _____

- d** Which road do you recommend Sindi to choose? Give a reason for your answer.

- 2** Mother is making curtains and cushions.
She needs 13,8 m of material for the curtains.
She needs 6,7 m for the cushions.



- a** How much material does mother need to make one curtain and one cushion?

- b** At the shop, material is sold by the metre.
How many metres of material must mother buy?

HOMEWORK

Calculate: write the answer in three ways as mm, cm and mm and mm.

	Answer is mm	Answer in mm only	Answer in cm and mm	Answer in cm only
1	$4\text{ cm } 5\text{ mm} + 7\text{ mm} =$			
2	$3\text{ cm } 8\text{ mm} + 49\text{ mm} =$			
3	$5,1\text{ cm} - 5\text{ mm} =$			
4	$6\text{ cm } 2\text{ mm} - 2\text{ cm } 1\text{ mm} =$			

Lesson 15: Solving problems involving length (2)

Mental maths

Remember that 1 cm = 10 mm

Write in mm		Answer	Write in cm		Answer
1	3 cm =		6	10 mm =	
2	10 cm =		7	60 mm =	
3	40 cm =		8	500 mm =	
4	0,6 cm =		9	5 mm =	
5	35 cm =		10	18 mm =	

Link to previous lesson

Draw a circle around the correct word in each sentence:

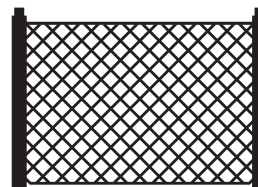
- If 1 m = 100 cm, it means that 1 m is 100 times shorter/ longer than 1 cm.
- If 1 cm = 10 mm, it means that 1 mm is 10 times shorter/ longer than 1 cm.

Activity 1

Mulalo wants to build a fence along the front of her stand.

She buys:

- 6 pieces of fence that are 5 m long.
- 2 pieces of fence that are 4 m 50 cm long
- 10 pieces of fence that are 2,1 m long.



1 What will the total length of the fence be if she joins all the pieces together?
Write the answer in metres.

a Convert all the measurements to metres.

b Complete the table which can help you find the answer.

Number of pieces of fence	Length of the fence	Total length of fence for each
6	5 m	
2	4,5 m	
10	2,1 m	

c Work out the total length of fence that Mulalo has.

Total length = _____

d Write your answer _____

2 Mulalo needs 62,3 m of fence. Does she have enough fence?

If she needs more fence, how much will she need?

Write a number sentence: _____

Do the calculation:

Write your answer. _____

Activity 2

1 A skyscraper has 90 floors.
Each floor is 350 cm high.
How high is the building?
Give your answer in metres.



A skyscraper is a very tall building

a Underline the numbers and the question.

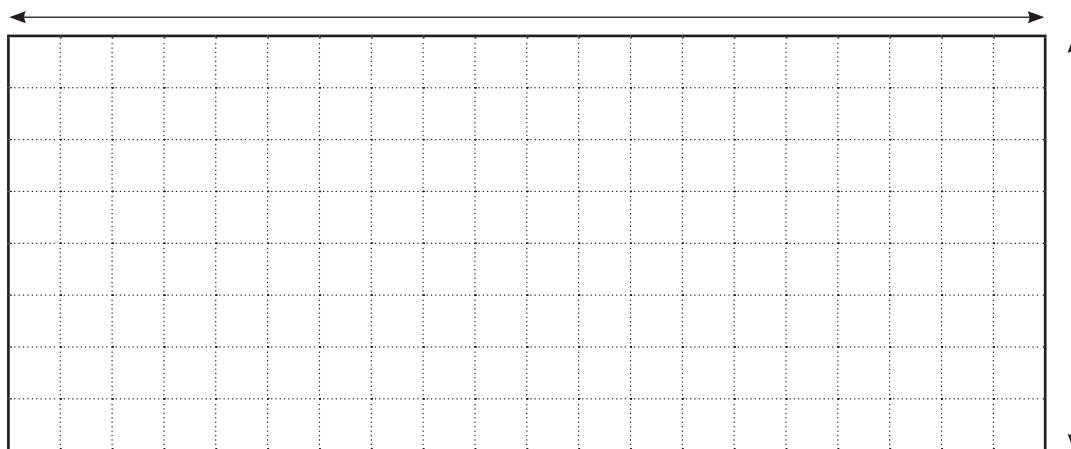
b Write a number sentence for the problem and work out the answer.

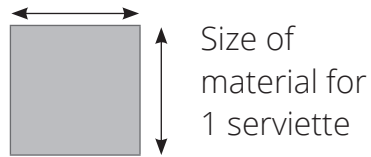
c Write your answer: _____

2 Mama Phatu bought 5 m of material with a width of 2 m.
She wants to make square serviettes with side length of 25 cm.
How many serviettes will she be able to make from that material?

a Underline the numbers and the question.

b Write the measurements on the material and the serviette on the sketches provided.





c Write all the measurements in centimetres.

d Mama Phatu first works out how many serviettes can fit along the 5 m length of the material.
Show how she can do this calculation.

e Mama Phatu then measures how many serviettes can fit along the 2 m breadth of the material.
Show how she can do this calculation.

f Mama Phatu then multiplies the two numbers together to work out how many serviettes can be cut from the material.
Show how she can do this.

g Write your answer:
Mama Phatu can make _____ serviettes out of the material.

HOMEWORK

How many 30 cm pieces of rope can Ephraim cut from a 1,5 m piece of rope?
Answer each question to find the answer.

1 Convert 1,5 m to cm: 1,5 m = _____

2 Write a number sentence for the problem: _____

3 Do the working out:

4 Write the answer: _____

Lesson 16: Solving problems involving length (3)

Mental maths

		Answer			Answer
1	500 cm = m		6	$2\frac{1}{2}$ m = cm	
2	6 300 cm = m		7	4 cm = m	
3	63 cm = mm		8	19 m = cm	
4	4 500 cm = m		9	6,4 m = cm	
5	13 cm = m		10	2,1 cm = mm	

Link to previous lesson

Four girls took part in a relay race at an athletics meeting.

The total length of the race was 816 m, and each girl ran the same distance.

How far did each girl run?



- Write the number sentence for the problem?

- Calculate the answer

- Write your answer:

Activity 1

Ben has four different ways (routes) that he can take to school:

Distances for each route
Route A: 1,25 km
Route B: 1,5 km
Route C: 900 m
Route D: 1 150 m

- 1** Write all distances in the same unit. Think carefully about which unit is the most suitable.

- 2** What is the difference in length between Route A and Route B? Give your answer in metres.

- 3** What is the difference in length between Route C and Route D?

- 4** On Wednesday Ben took Route A when he walked to school. He took Route D when he walked home from school. How far did Ben walk altogether on Wednesday? Give your answer in kilometres.

- 5** How far did Ben walk if he took Route C to and from school every day for a week?

Give your answer in kilometres.

Write a number sentence: _____

Calculate the answer:

Why do you think Ben chose Route C rather than any of the other routes?

Activity 3

Sasah uses ribbon to decorate presents of exactly the same size.

She uses 80 cm of ribbon per present.



- 1** Write the length of ribbon in metres.

- 2** How many metres of ribbon will Sasah need to wrap 3 presents?

Write the number sentence and then answer the question in metres and centimetres.

- 3** How many presents can Sasah decorate if she has 6 m of ribbon?

Write the number sentence and answer the question.

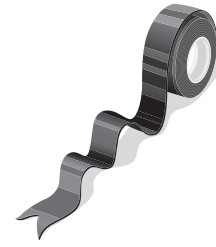
Write 6 m in cm: $6\text{ m} =$ _____

Write the number sentence: _____

Find the answer:

Sasah can decorate _____ presents

- 4** Sasah needs to decorate 12 presents with ribbon.
The ribbon is sold in 5 m rolls.



- a** How much ribbon will she need? Give the answer in metres.

- b** How many rolls of ribbon must Sasah buy?

Sasah needs to buy _____ rolls of ribbon

- c** The ribbon costs R36 per roll.

Sasah will have to pay _____

- d** How much change would Sasah get if she pays with a R100 note?



Sasah should get _____ change

HOMEWORK

Mr Jabu needs to put a new fence around his vegetable garden.

The perimeter of the vegetable garden is 7,85 m.

He has a roll of fence that is $4\frac{1}{2}$ m long.

How much more fence does Mr Jabu need to buy?

The shop sells fence by the metre.




- 1** Write each measurement in centimetres.

- 2** Do the calculation:



- 3.** Give the answer in metres: Mr. Jabu needs to buy _____ of fence.

Lesson 17: Consolidation

4 Use a ruler. Measure the length of each line.

		Answer
A		_____ mm _____ cm
B		_____ mm _____ cm
C		_____ mm _____ cm

5 Read and write the measurements shown on these two rulers:

		Answer
a		
b		

6 Eddie has a 1 m piece of wire. He cuts 73 cm off the piece of wire. How much wire is left?

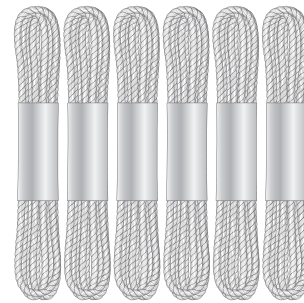


Do your working out here:

Write the answer: Eddie has _____ wire left

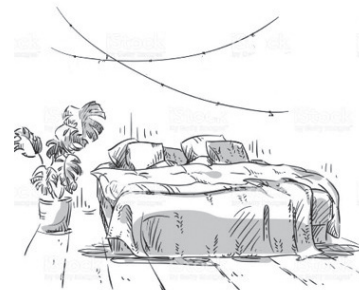
- 7** Jethro bought 6 pieces of rope.
Each piece of rope was 15 m long.
How much rope did Jethro buy altogether?

Do your working out here:



Jethro bought _____ of rope.

- 8** Hloni used two pieces of ribbon to decorate a room.
One piece of ribbon is 1 524 mm long.
The other piece of ribbon is 123,4 cm long.



- a** Write the two measurements using the same units.

The two pieces of ribbon are _____ and _____ long.

- b** How long are the two pieces together?

Do your working out here:

The two pieces are _____ long.

- c** What is the difference in length of the 2 pieces of the ribbon?

Do your working out here:

The longer piece of ribbon is _____ longer than the shorter piece.

Lesson 17: Consolidation

- 9** Zami makes bracelets.
Each bracelet has 12 beads and each bead is 15 mm wide.



- a** What is the length of the bracelet?
Give your answer in cm.

The bracelet is _____ long

- b** Zami wants to make a bracelet that is 27 cm long.

How much longer is the second bracelet than the first bracelet?






How many more beads will Zami need for the longer bracelet?

So Zami will need _____ more beads for this longer bracelet.

Lesson 18: Measuring mass in grams


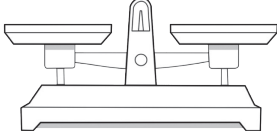
Mental maths

Draw a line to match the item with the estimate of its mass

Item		Estimated mass
1	 R2	35 g
2	 Packet of biscuits	500 g
3	 Small packet of chips	1 000 g
4	 Butter	6g
5	 Big Bag of mealie meal	200 g

Link to Grade 3

Match the name of the scale with the drawing.

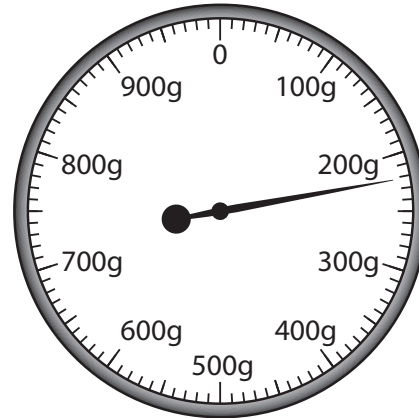
Analogue kitchen scale	
Digital kitchen scale	
Balance scale	
Digital bathroom scale	
Analogue bathroom scale	

Activity 1

Work with your partner.

Look at the analogue kitchen scale.

The kitchen scale has a circular number line.

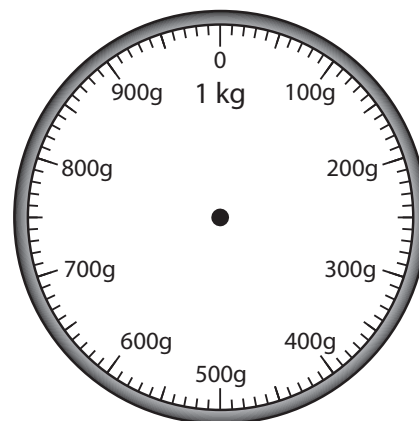


- 1 Discuss how you would work out how many grams are represented by each small line between 0 and 100 g. Write down how you worked this out.

Answer: Each line represents _____

- 2 What is the mass shown on the kitchen scale? _____

- 3 Use an arrow to show a mass of 670 g on the kitchen scale.

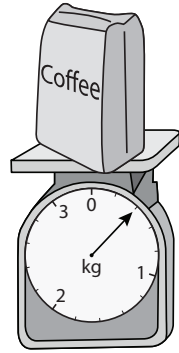


Activity 2

Work with your partner.

Read the mass of each object off the kitchen scales.

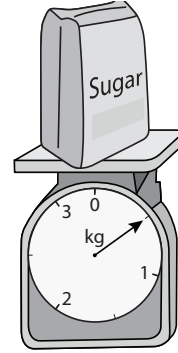
1



a. How many grams are represented by each interval?

b. What is the mass of the coffee?

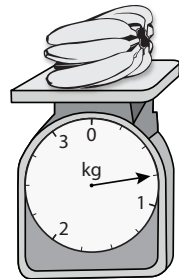
2



a. How many grams are represented by each interval?

b. What is the mass of the sugar?

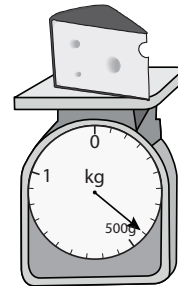
3



a. How many grams are represented by each interval?

b. What is the mass of the bananas?

4



a. How many grams are represented by each interval?

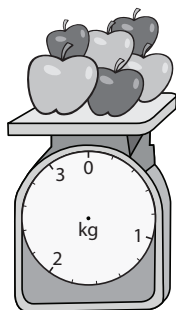
b. What is the mass of the cheese?

Activity 3

Work on your own.

Draw an arrow to show the mass on each kitchen scale

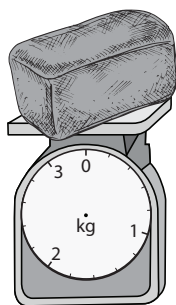
1 The apples have a mass of 600 g



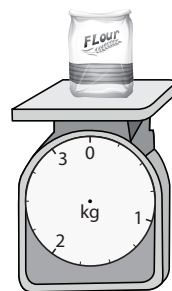
2 The rice has a mass of 1 000 g



3 The bread has a mass of 200 g



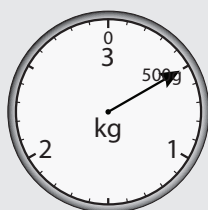
4 The flour has a mass of 250 g



HOMEWORK

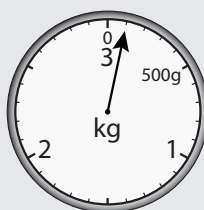
Give the mass shown on each kitchen scale.

Scale 1



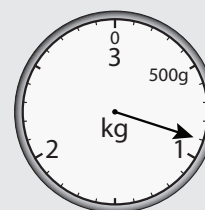
Answer: _____

Scale 2



Answer: _____

Scale 3



Answer: _____

Lesson 19: Grams and kilograms

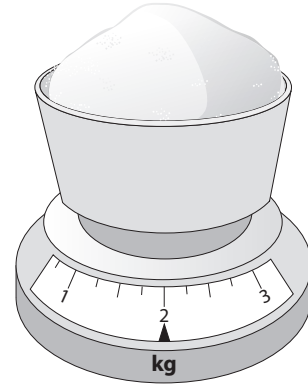
Mental maths

Draw a line to match the object with the closest estimate of its mass.

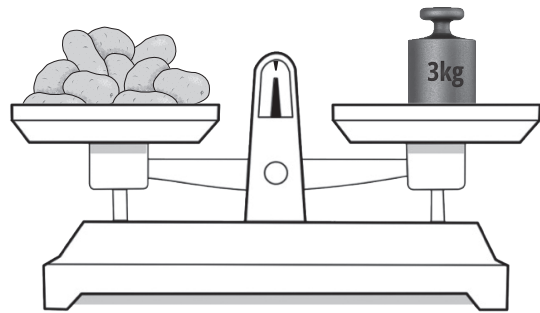
	Question	Answer
1	The mass of a small dog	3 grams
		3 kilograms
		30 grams
		30 kilograms
2	The mass of a pencil	6 grams
		6 kilograms
		60 grams
		60 kilograms
3	The mass of a fridge	14 grams
		14 kilograms
		140 grams
		140 kilograms
4	The mass of a teacher's table	15 grams
		15 kilograms
		150 grams
		150 kilograms
5	The mass of a cow	700 kilograms
		7 grams
		70 kilograms
		700 grams

Link to previous lesson

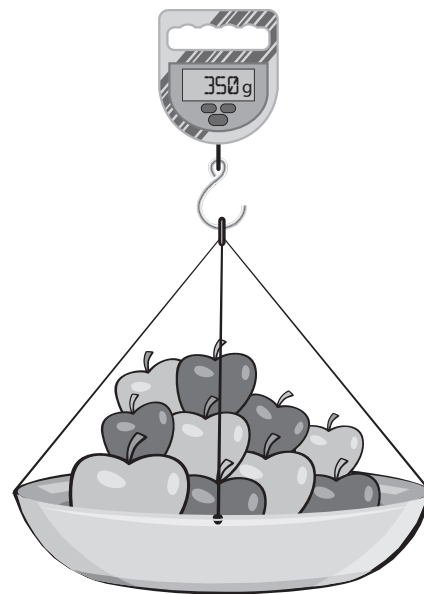
- 1 What is the mass of the sugar being measured?



- 2 What is the mass of the potatoes being measured?



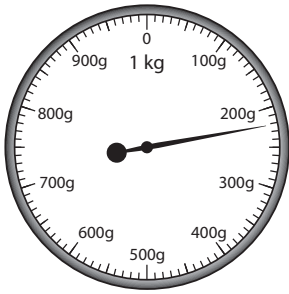
- 3 What is the mass of the apples being measured?



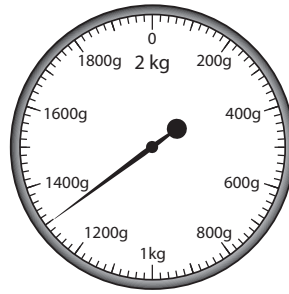
Activity 1

Work with your partner.

Look at the two scales below. Discuss how you can use the information on the scales to work out how many grams there are in a kilogram.



A



B

1 Write down how you worked out how many grams there are in a kilogram.

2 Complete this clue card:

$1 \text{ kg} = \underline{\hspace{2cm}} \text{ g}$

Activity 2

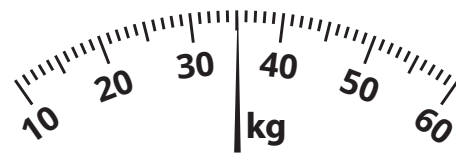
Work on your own.

1 Bongi measured her mass.

a What measuring instrument did she use?



b How many intervals are there between 10 kg and 20 kg?

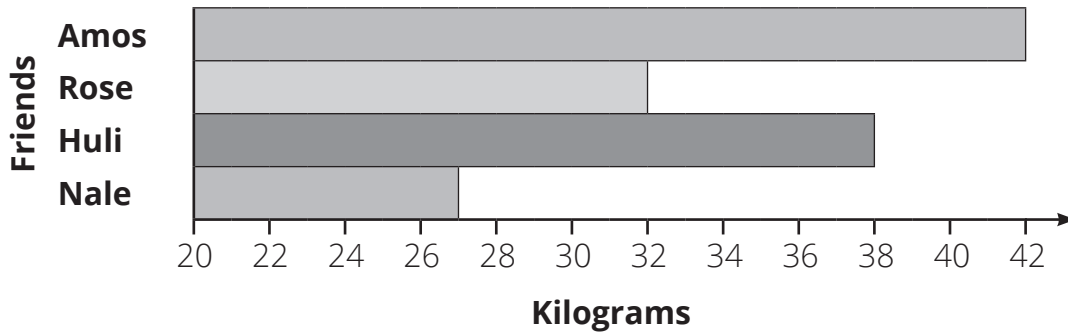


c What does each interval represent? _____

d What is Bongi's mass? _____

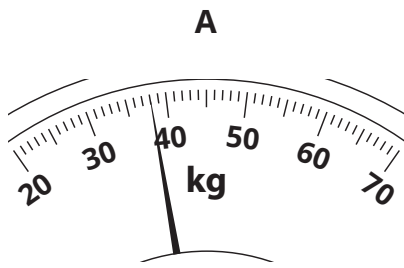
Lesson 19: Grams and kilograms

2 Four friends draw a bar graph of their masses:



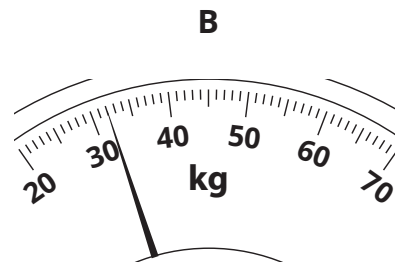
Read the masses shown on the graph.

Write the mass next of the scale showing the measurement and the name of the person who has that mass.



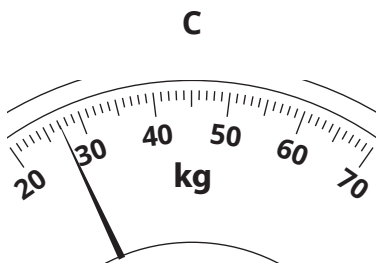
Person: _____

Mass: _____



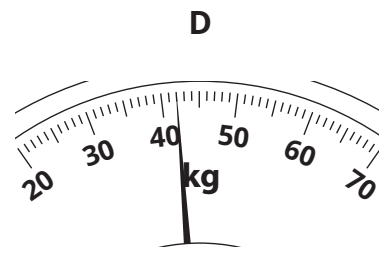
Person: _____

Mass: _____



Person: _____

Mass: _____



Person: _____

Mass: _____

Activity 3

Work on your own

You may use the conversion table to help you.
The thick line shows the position of the decimal comma.

- 1 Write each mass in grams only.

Example: 1 kg and 300 g = 1 300 g

	kg	g
a 3 kg =		
b 6 kg and 500 g =		
c 2 kg and 50 g =		
d 1 kg and 5 g =		
e 11 kg and 327 g =		

- 2 Write each mass in kilograms and grams.

Example: 5 200 g = 5 kg and 200 g

	kg	g
a 2 000 g =		
b 1 500 g =		
c 8 200 g =		
d 15 000 g =		
e 470 000 g =		

- 3 Convert each mass.

Example: 3 300 g = 3,3 kg

	kg	g
a 2 500 g =		
b 7 200 g =		
c 1,6 kg =		
d 0,4 kg =		
e 10 kg =		
f 900 g =		

HOMEWORK

Write each mass in kilograms.

1 4 000 g = _____

2 2 000 g = _____

3 6 000 g = _____

4 10 000 g = _____

Lesson 20: Solving mass problems (1)

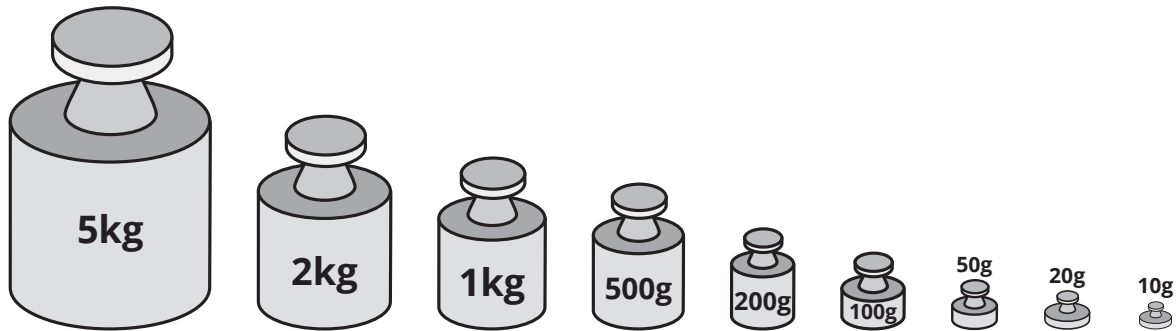
Mental maths

	Question	Answer
1	Convert 1,5 kg to g	
2	Convert 2,8 kg to g	
3	Convert 10 kg to g	
4	Convert 3,2 kg to g	
5	Convert 0,6 kg to g	
6	Convert 1000 g to kg	
7	Convert 800 g to kg	
8	Convert 1 200 g to kg	
9	Convert 2 500 g to kg	
10	Convert 400 g to kg	

Link to previous lesson

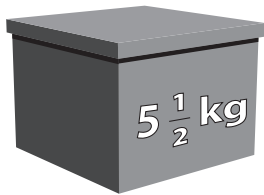
Tshidi wants to find out how many of the smaller mass pieces would add up to the mass of the box, the packet and the book.

She wants to use as few smaller mass pieces as possible.



a Box

Mass pieces with the same mass as the box



=

b Packet

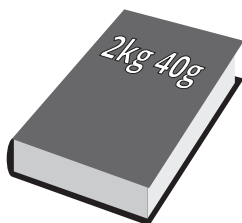
Mass pieces with the same mass as the packet



=

c Book

Mass pieces with the same mass as the book



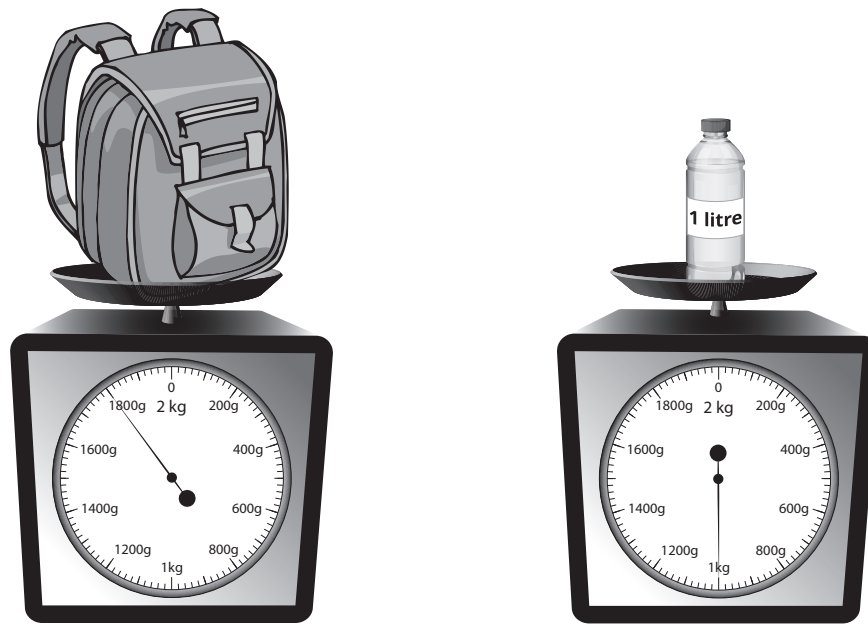
=

Activity 1

Work with your partner

1 Look at the two scales.

Calculate the mass of the backpack with the bottle of water inside.



a What is the mass of the backpack? _____

b What is the mass of the bottle of water? _____

c What is the mass of the backpack with the bottle of water inside?

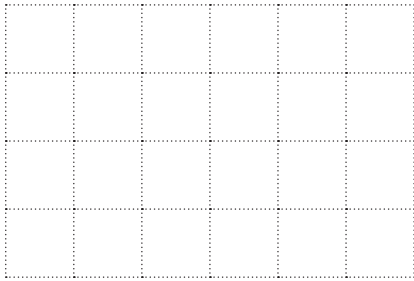
d Write the answer in kilograms: The mass of the bag and the water is

Lesson 20: Solving mass problems (1)

- 2** An empty bowl is put on a kitchen scale. Its mass is recorded and then fruit was put in the bowl. The mass of the bowl when it is empty is 175 g. What is the mass of the fruit in the bowl?

a Write the number sentence:

b Do the calculation.



c Write the answer: _____

Activity 2

Work with your partner.

- 1 a** Gogo needs 2,8 kg of flour to bake bread.
She has 1,2 kg of white flour and 500 g brown flour.
How much more flour does Gogo need?



Write 500 g in kg: _____

Amount of flour that Gogo has = _____

Amount of flour that Gogo still needs = _____

Answer: _____

- b** The flour is sold in 500 g packets.
How many packets of flour must Gogo buy?

Write the answer to **a** in grams: _____

Answer: _____

Lesson 20: Solving mass problems (1)

2 Kedimo has a mass of 38 kg 600 g.

He is going to travel on an aeroplane.

His hand luggage (the luggage he can take on the aeroplane) must have a mass of 7 kg or less.

He held his hand luggage in his hand and stood on a bathroom scale.

The reading on the scale was 46 kg 200 g.



a Find the mass of the hand luggage.

Convert the measurements to grams:

Number sentence that describes the problem: _____

Do the calculation:

Give the answer: The mass of the hand luggage was _____

b Should Kedimo take some things out of his hand luggage? Give a reason for your answer.

- c** If you answered yes to question **b** what mass should he take out of his hand luggage?

Mass he must take out _____

Give the answer: _____

Activity 3

Work on your own

Calculate the following and write your answers in kilograms.

1 $3 \text{ kg } 250 \text{ g} + 18,5 \text{ kg}$

Write the two masses in grams:

Answer: _____

2 $232 \text{ kg } 350 \text{ g} + 214 \text{ kg } 900 \text{ g}$

Write the two masses in grams:

Answer: _____

Lesson 20: Solving mass problems (1)

3 $45\text{ kg } 360\text{ g} - 7,5\text{ kg}$

Write the two masses in grams:

Answer: _____

4 $16,5\text{ kg} - 9\text{ kg } 200\text{ g} =$

Write the two masses in grams:

Answer: _____

HOMEWORK

- 1** Calculate $2\text{ kg } 250\text{ g} + 1,75\text{ kg}$ and write the answer in kilograms

Write the two masses in grams:

Answer: _____

- 2** Calculate $6\text{ kg } 350\text{ g} - 2,6\text{ kg}$ and write the answer in kilograms.

Write the two masses in grams:

Answer: _____

Lesson 21: Solving mass problems (2)

Mental maths

Question		Answer	Question		Answer
Convert to grams			Convert to kilograms and grams		
1	2 kg		6	3 500 g	
2	4,2 kg		7	9 999 g	
3	10 kg		8	28 700 g	
4	1½ kg		9	6,2 kg	
5	51,3 kg		10	74,1 kg	

Link to previous lesson

- 1 Calculate $4\text{ kg } 6\text{ g} + 6,5\text{ kg}$
Write the answer in kg and g.

Convert both amounts to grams:

Answer: _____

- 2 Calculate $14\text{ kg } 350\text{ g} - 11\text{ kg } 800\text{ g}$
Write the answer in kg and g.

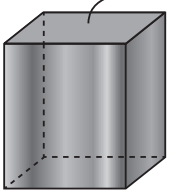
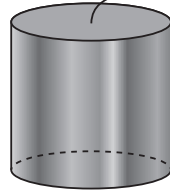
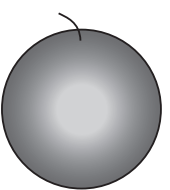
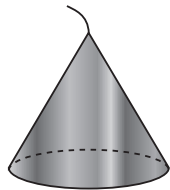
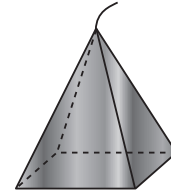
Convert both amounts to grams:

Answer: _____

Activity 1

Work with your partner

Fathima makes and sells these candles:

Candle A	Candle B	Candle C	Candle D	Candle E
				
Mass: 600 g	Mass: 500 g	Mass: 350 g	Mass: 250 g	Mass: 200 g

- 1 Which candle has half the mass of Candle B?

The mass of Candle _____ is half the mass of Candle B.

- 2 How many Candle Bs can Fathima make from 3 kg of wax?

Answer: Fathima can make _____ of Candle B.

- 3 The wax is sold in 1 kg packets.
Fathima has an order for 20 of Candle C.
How many kilograms of wax must she buy?

Write the number sentence: _____

Answer: _____

Activity 2

Work with your partner

250 g flour is needed to make 20 biscuits

- 1** How much flour will Hendrik need to make 100 biscuits?

Flour needed _____



- 2** Flour is sold in 1 kg packets.
How many packets of will Hendrik need to buy to make 100 biscuits?

Hendrik needs to buy: _____

- 3** How much flour will Hendrik need to make 50 biscuits?

Hendrik needs _____ to make 50 biscuits

- 4** Hendrik has 1,5 kg of flour. How many biscuits can he make?

Hendrik can make _____

Activity 3

Work on your own

- 1** The mass of one large building brick is 4 kg.
What is the mass of 25 bricks?

The mass of 25 bricks =



- 2** A box of matches has a mass of 8 g.
A packet of matches is made from 10 boxes of matches.

- a** What is the mass of one packet of 10 boxes of matches?

Mass of a packet of matches =

- b** How many packets of matches have a mass of 1,6 kg?

Write 1,6 kg in grams: _____

Number of packets of matches

= _____

= _____

= _____



Box of matches



Packet of matches

HOMEWORK

- 1** The mass of a bar of soap is 227 g.
What is the mass of 6 bars of soap?
Give the answer in kilograms and grams.



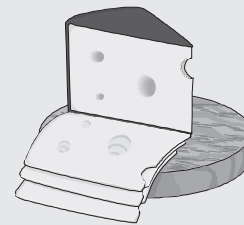
Write the number sentence: _____

Do the calculation:

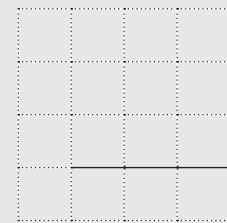


Answer: The mass of 6 bars of soap is _____

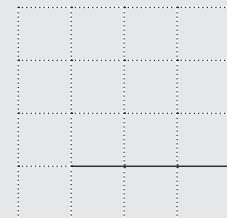
- 2** The local shop sells 200 g cheese for R15.



- a** What is the cost of 1 kg cheese?



- b** What is the cost of 3 kg cheese?



Lesson 22: Consolidation

1 Fill in the missing units:

a The mass of an egg is 55 _____

b The mass of a child is 32 _____

2 a How many grams in 1 kg? _____

b How many grams in 4,5 kg? _____

3 Draw a circle around the correct answer.

a The mass of a drawing pin is about:

2 kg

2 g

200 g

b The mass of the man is about:

75 kg

75 g

750 g



4 Mpho bought the following items:

- 2 kg potatoes
- 1 000 g mince
- $1\frac{1}{2}$ kg sugar
- 2 litre bottle of water

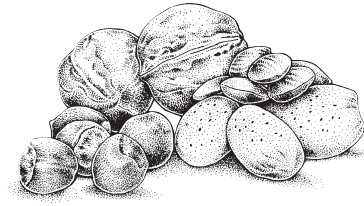
1 litre bottle of water has a mass of about 1 kg.

What is the total mass of the items she has to carry?

Answer: _____

Lesson 22: Consolidation

- 5 Azwi needs 1 kg of nuts.
She has 250 g cashew nuts, 0,5 kg peanuts and
100 g walnuts.
How many grams of almond nuts must she buy?



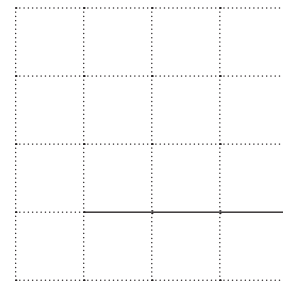
Answer:

Mass of the nuts that Azwi has

= _____

= _____

= _____

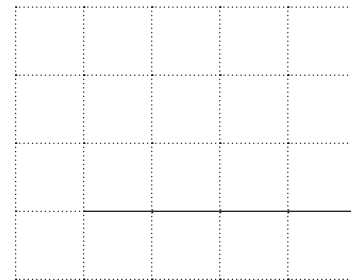


Mass of almond nuts that Azwi must buy

= _____

= _____

= _____



Answer: Azwi must buy _____ almond nuts

- 6 A tin of coffee has a mass of 375 g.
 A box of tea has a mass of 250 g.
 How many boxes of tea will have the same mass as 8 tins of coffee?



Answer:



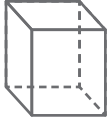

_____ boxes of tea will have the same mass as 8 tins of coffee.

Lesson 23: Rectangular prisms and cubes

Mental maths

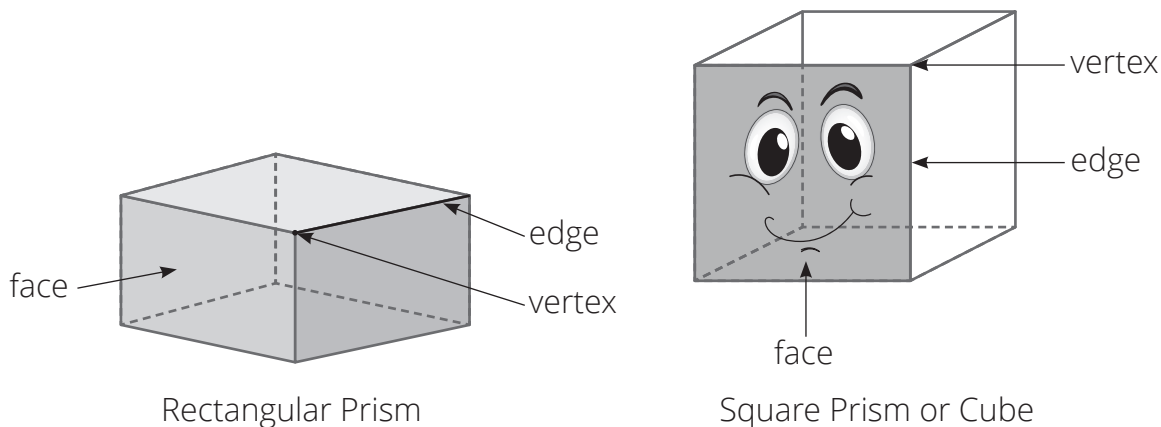
Round off to the nearest cm		Answer
1	9,4 cm	
2	4,8 cm	
3	6,2 cm	
4	5,5 cm	
Round off to the nearest litre		
5	16,9 ℓ	
6	198,6 ℓ	
7	23,1 ℓ	
Round off to the nearest kg		
8	132,4 kg	
9	19,3 kg	
10	19,7 kg	

Link to Grade 3

3-D object	Name of 3-D object	Can it roll?	Can it slide?
			
			
			
			

Activity 1

Work with your partner to answer the following questions.



- 1 How many vertices do each of these 3-D shapes have? _____
- 2 How many faces do each of these 3-D shapes have? _____
- 3 How many edges do each of these 3-D shapes have? _____

Activity 2

Work with your partner

- 1
 - Use the first box your teacher has given you.
 - Work on the scrap paper your teacher has given you.
 - Trace each face of the box on a piece of paper to find out how many faces of the same shape your box has.
- 2
 - Swap boxes with the other pair in your group.
 - Work on the scrap paper your teacher gave you.
 - Trace each face of the box on a piece of paper to find out how many faces of the same shape your new box has.


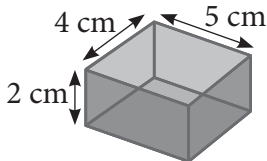
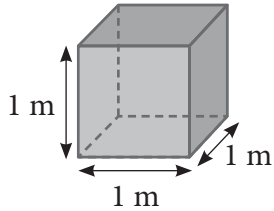


Activity 3

Work in a group of 4

Look carefully at the poster and the 2 boxes your teacher gave you.

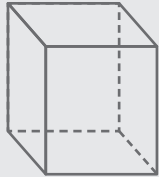
Complete the table by drawing a line to match the prism with the description.

Prism	Description
	<p>Rectangular prism with 3 pairs of different rectangular faces. Each pair of rectangular faces is the same size and shape.</p>
	<p>Cube with 6 faces that are identical squares</p>
	<p>Rectangular prism with two square faces that are the same size and 4 rectangular faces that are the same size.</p>

HOMEWORK

Draw a rectangle around each rectangular prism and a circle around each cube.

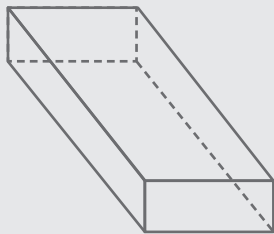
1



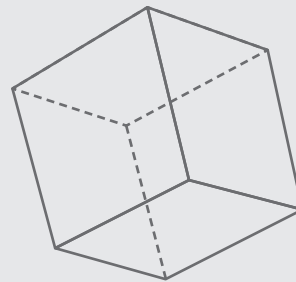
2



3



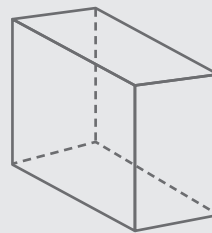
4



5



6



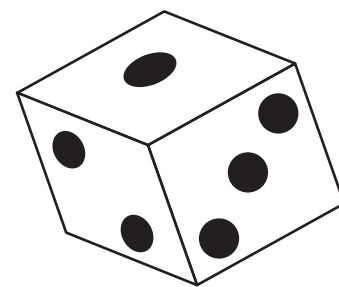
Lesson 24: Make rectangular prisms and cubes (1)

Mental maths

Convert to litres		Answer
1	1 000 mL	
2	500 mL	
3	250 mL	
4	15 L and 600 mL	
5	13 L and 40 mL	
Convert to millilitres		
6	3 L	
7	$\frac{1}{4}$ L	
8	2 L 110 mL	
9	6 L 500 mL	
10	6 L 60 mL	

Link to previous lesson

A dice is a special rectangular prism because all the faces are squares of exactly the same size.



1. Give another name for a special rectangular prism which has faces that are squares of exactly the same size. _____
2. What is the shape of each face of a dice? _____
3. How many faces does a dice have? _____
4. How many edges does a dice have? _____
5. How many vertices does a dice have? _____

Activity 1

Work with your partner

Build a rectangular prism by following the following steps:

- 1 Use the faces of a rectangular prism you traced in Lesson 23.



- 2 Carefully cut out each face.

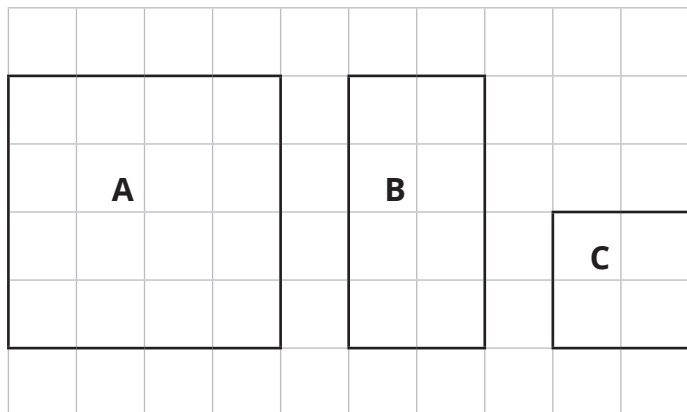


- 3 Make the box by taping the faces together.

Activity 2

Work on your own.

Look at the three 2-D shapes shown:



Name the 3-D object that you would build if you used:

- 1 two of shape A and four of shape B _____
- 2 four of shape B and two of shape C _____
- 3 six of shape C _____

HOMEWORK

Build the cube and the rectangular prism from the two nets given at Lesson 24 at the back of your LAB.

Lesson 25: Make rectangular prisms and cubes (2)

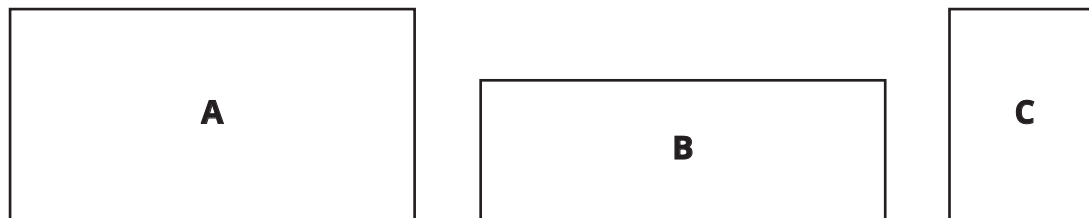
Mental maths

Convert		Answer
1	5 cm = _____ mm	
2	20 cm = _____ mm	
3	460 mm = _____ cm	
4	500 cm = _____ m	
5	9 m = _____ cm	
6	2,5 m = _____ cm	
7	31 m = _____ cm	
8	650 cm = _____ m	
9	68 mm = _____ cm	
10	1,4 cm = _____ mm	

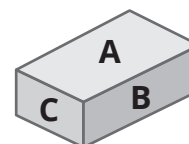
Link to previous lesson

Work with your partner

Thloriso has two cut-outs of each rectangle:



He sticks the cut-outs together and ends up with rectangular prism 1.

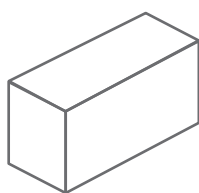


Rectangular prism 1

He then used the cut-outs to make two more rectangular prisms.

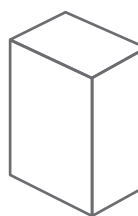
On each of these rectangular prisms, write down which cut-out was used for each of the faces shown.

a



Rectangular prism 2

b



Rectangular prism 3

Activity 1

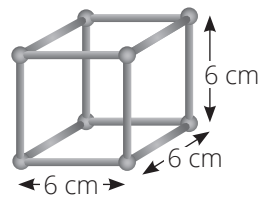
Work with your partner.

You need 6 pieces of plastic straw that are 6 cm long and some balls of putty.

You also need the cube you made in the last lesson.

- 1 Use the straws and Bostik Prestik to build a cube with pieces of straw.

The completed cube should look like this:



- 2 Summarise what you used to build your cube by completing this table:

	Answer
Length of each piece of straw	
Number of pieces of straw needed	
Number of balls of Bostik Prestik needed	

- 3 Use the model of this cube and the cube you made in the last lesson to complete the table.

Properties of a cube			
Number of edges	Number of vertices	Number of faces	Shape of faces

- 4 Complete each sentence by circling the correct word:
 - a In my model, the straws represent the edges / faces / vertices of the cube.
 - b In my model, the balls of Bostik Prestik represent the edges / faces / vertices of the cube.

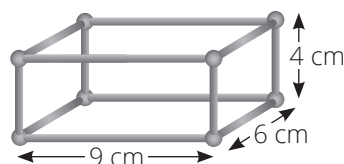
Activity 2

Work with your partner.

You need 12 pieces of plastic straw (four that are 9 cm long; four that are 6 cm long and four that are 4 cm long) and some balls of putty.

You also need the rectangular prism that you made in the last lesson.

- Use the straws and Bostik Prestik to build a rectangular prism that looks like this:



- Summarise what you used to build your rectangular prism by completing this table:

	Answer
Number of pieces of straw needed	4 × ___ cm; 4 × ___ cm; 4 × ___ cm
Number of balls of Bostik Prestik needed	_____

- Use the model of this rectangular prism and the rectangular prism you made in the last lesson to complete the table.

Properties of this rectangular prism			
Number of edges	Number of vertices	Number of faces	Shape of faces

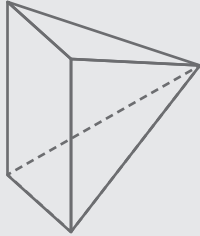
- Compare the properties of a cube and a rectangular prism.

Properties				
	Number of edges	Number of vertices	Number of faces	Shape of faces
A cube				
A rectangular prism				

HOMEWORK

Which drawings below show a rectangular prism?

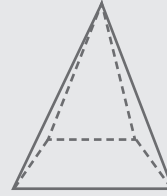
1



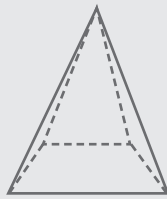
2



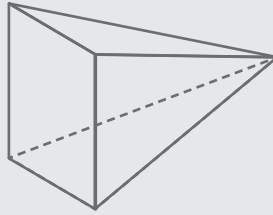
3



4



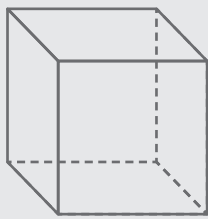
5



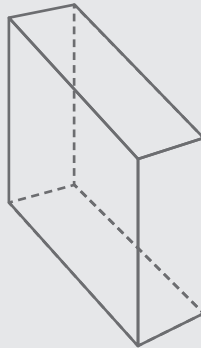
6



7



8



9



Lesson 26: Draw a rectangular prism and a cube

Mental maths

Convert		Answer
1	3 kg = _____ g	
2	20 kg = _____ g	
3	4,5kg = _____ g	
4	0,8 kg = _____ g	
5	2 3/4 kg = _____ kg and _____ g	
6	1 000 g = _____ kg	
7	16 000 g = _____ kg	
8	4 700 g = _____ kg and _____ g	
9	8 500 g = _____ kg	
10	250 g = _____ kg	

Link to previous lesson

Work on your own

State whether the following are true or false.

If false, re-write the sentence to make it true.

1 A cube is a special type of rectangular prism. _____

2 All rectangular prisms have 12 flat faces. _____

3 Rectangular prisms have more edges than cubes have.

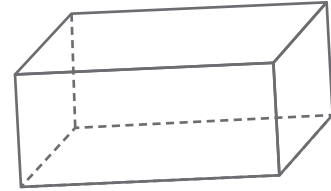
Activity 1

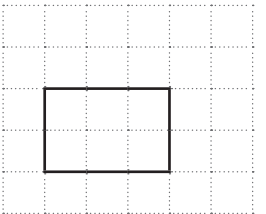
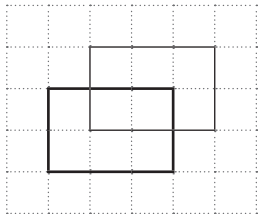
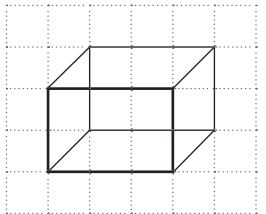
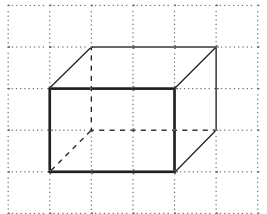
Work on your own

Put your own rectangular prism in front of you to look at.

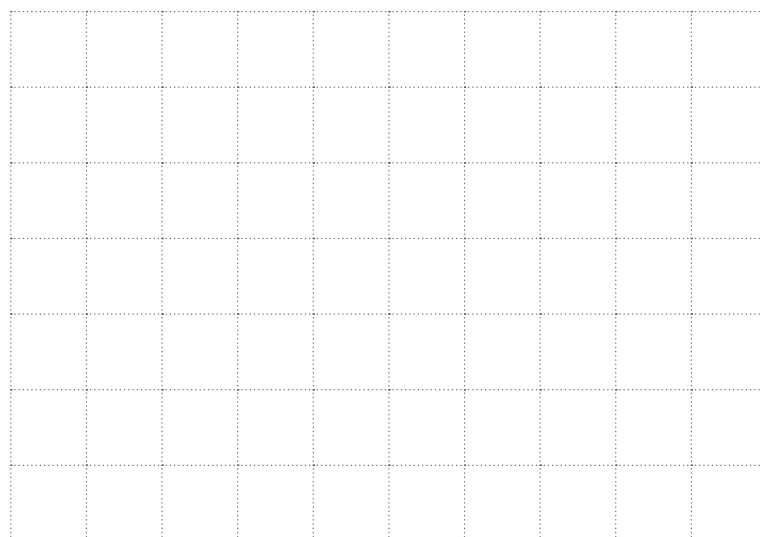
Follow the steps to draw a sketch of a rectangular prism on the grid below. The front face is 3 cm by 2 cm.

Work with a sharp pencil. Draw light lines because you need to change some of them to dotted lines later.



Step 1	Step 2	Step 3	Step 4
Draw the front face	Draw the back face the same size as the front face. Place it slightly to the right (or left) of the front face	Join the matching vertices of the two faces	Use dotted lines to show the faces that can't be seen
			

Draw your rectangular prism here:



Lesson 26: Draw a rectangular prism and a cube

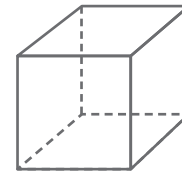
Activity 2

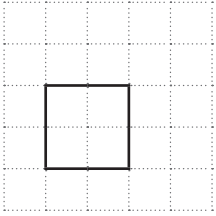
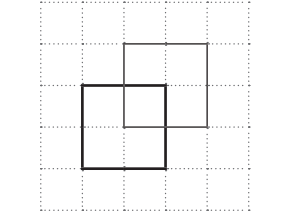
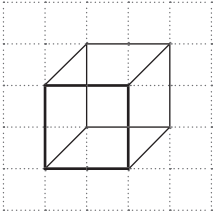
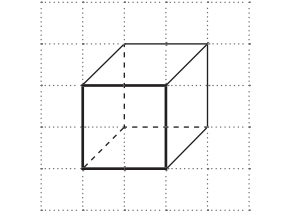
Work on your own

Put your own cube in front of you to look at.

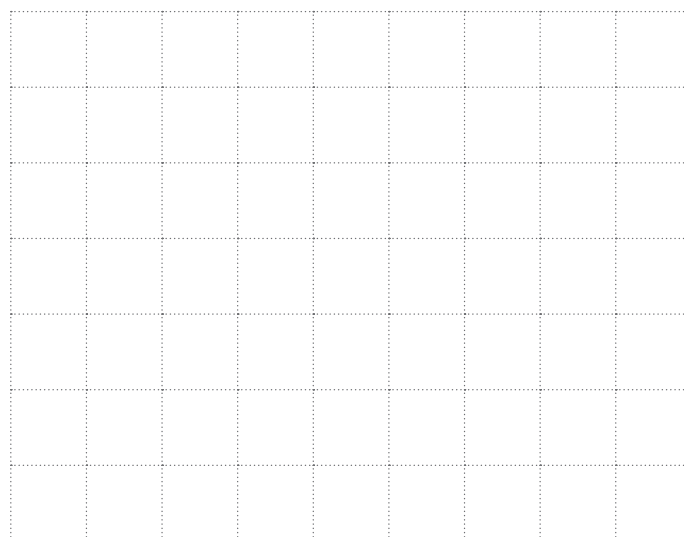
Follow the steps to draw a sketch of a cube on the grid paper below. The front face is 2 cm by 2 cm.

Work with a sharp pencil. Draw light lines because you need to change some of them to dotted lines later.



Step 1	Step 2	Step 3	Step 4
Draw the front face	Draw the back face the same size as the front face. Place it slightly to the right (or left) of the front face	Join the matching vertices of the two faces	Use dotted lines to show the faces that can't be seen
			

Draw your rectangular prism here:

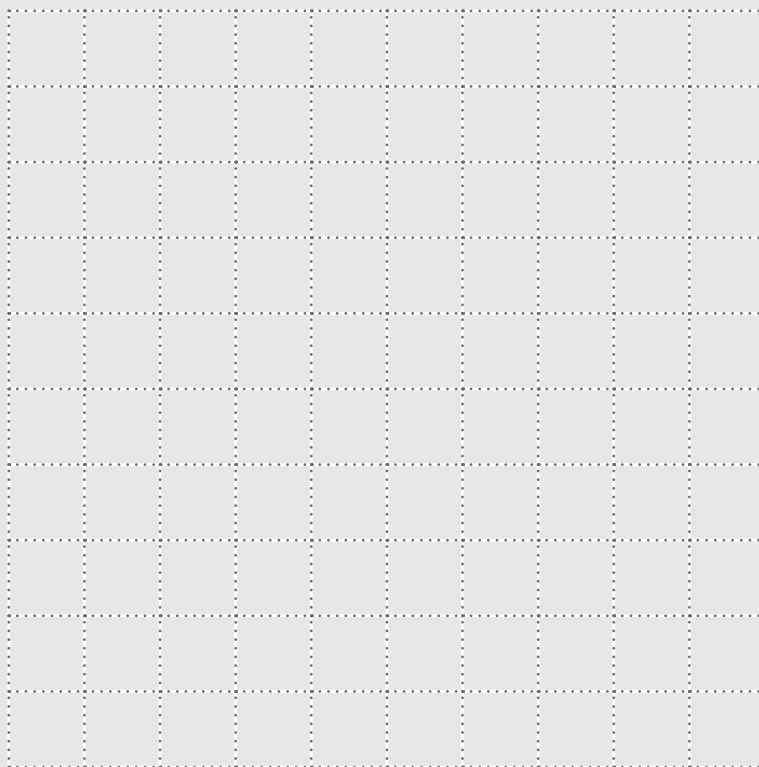


HOMEWORK

Work on the grid paper.

Draw a cube that is $4\text{ cm} \times 4\text{ cm} \times 4\text{ cm}$.

Write the measurement on the diagram.



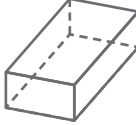


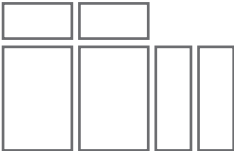
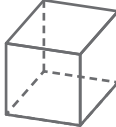
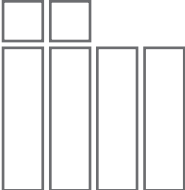
Lesson 27: Consolidation

1 Complete these two sentences:

a A 3-D object with faces that are rectangles or rectangles and squares is called a _____.

b A 3-D object with faces that are all squares is called a _____.

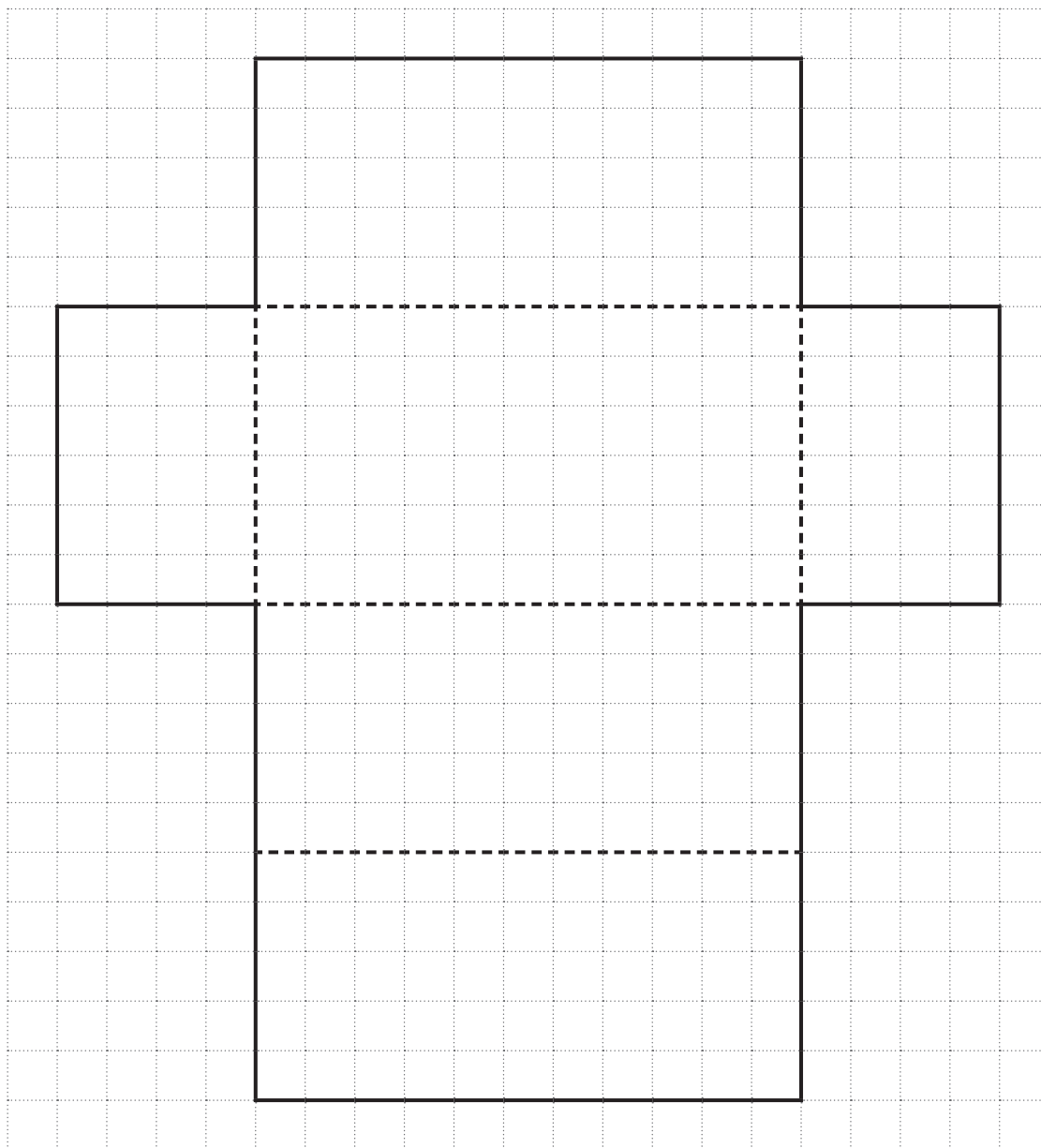
2 Match the 3-D object with the correct name and the correct drawing of the polygons which can be used to make the 3-D object.

3-D object	Name	Polygons which make the 3-D object
	rectangular prism	
	cube	
		

3 Complete the table:

	Number of faces	Number of edges	Number of vertices
Rectangular prism			
Cube			

4 Name the 3-D object that can be made from this net.



5 Finish this sketch of a cube that is 6 cm by 6 cm by 6 cm..

Write the measurements on the sketch of the cube.



Lesson 28: Prisms, cylinders and spheres

Mental maths

What am I?		Answer
1	I am a polygon with three straight sides	
2	I am a quadrilateral with sides of the same length and four right angles	
3	I am a closed 2-D shape with five straight sides	
4	I am a polygon with six straight sides	
5	I am a polygon with five straight sides of equal length and five equal angles	

Link to previous lesson

Norlan says that a cube is a special type of rectangular prism.

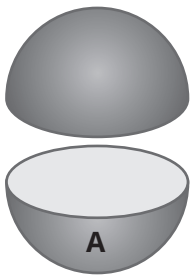
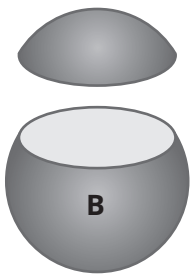
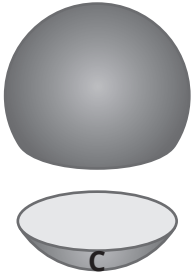
1 Do you agree? _____

2 Give a reason for your answer. _____

Activity 1

Work with your partner

- 1 Tshepo cut through a sphere in different positions. He then dipped the flat faces of the part of the sphere marked by a letter and then stamped on paper with them. Draw the shape of Tshepo's stamp each time.

	Draw the shape you would see:
<p>Cutting the sphere in half:</p> 	
<p>Cutting the sphere a quarter of the way down:</p> 	
<p>Cutting the sphere an eighth of the way up:</p> 	

2 Which stamp made the largest circle? _____

3 Is the following statement true or false?

The circle on the cut face of a sphere is largest when you cut the sphere in half. _____

4 Complete the sentences:

A sphere is a 3-D object which looks like a ball when viewed from any angle.

When cut straight across you always see a _____

5 Draw a circle around the correct answer.

A sphere is a 3-D object which can slide / roll.

Activity 2

Work on your own.





- 1 a Separate the 3-D objects in question 2 into two groups.

Group 1: _____

Group 2: _____

- b Explain why you grouped, or classified, the 3-D objects as you did.

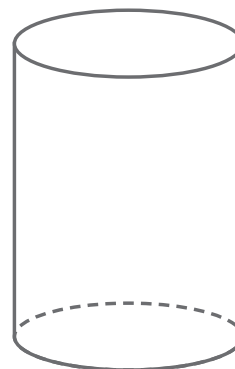
- 2 Match the 3-D object with its name.

3-D object	Name of 3-D object
<p>a </p>	hexagonal prism
<p>b </p>	triangular prism
<p>c </p>	rectangular prism
<p>d </p>	cylinder

Activity 3

Work with your partner

1 a Label the base, the top face and the curved surface of this cylinder.

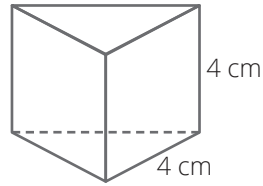
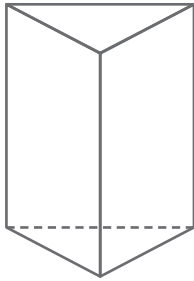


b Look at the base and top face of the cylinder.
Write down two correct statements about these two faces.

c How many **curved surfaces** does this cylinder have? _____

d What is the shape of the polygon that makes the surface of this cylinder?

2 a Label the base, top face and side face of these two prisms.



b. Look at the base and the top face of the prisms.

Write down two correct statements about the two faces of these prisms.

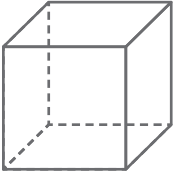
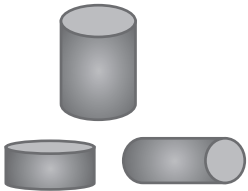
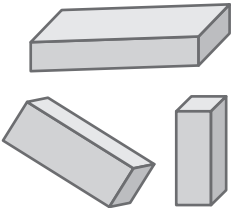
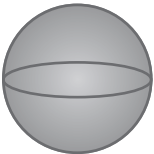
c How many side faces does each prism have? _____

d What is the shape of the side faces of these prisms?

e Remember that prisms are named according to the shape of the base.
Name these two prisms.

HOMEWORK

Complete the table:

3-D object	Number of curved surfaces	Number of flat surfaces	Shape of flat faces
cube 			
cylinders 			
rectangular prisms 			
sphere 			

Lesson 29: Making prisms from polygons

Mental maths

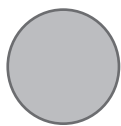
What am I?		Answer
1	I am a 2-D shape with one curved side.	
2	I am a polygon with 6 sides of equal length and six equal angles.	
3	I am a 2-D shape with 5 sides of different lengths.	
4	I am a polygon with 4 sides.	
5	I am a 2-D shape with 2 pairs of opposite sides equal in length and 4 right angles.	

Link to previous lesson

Francina cut straight through the following 3-D objects: a square-based rectangular prism, a cube, a cylinder and a sphere.

She then used each cut surface as a stamp. The stamps made these shapes.

Which cut 3-D object made the stamps?



This stamp could have been made using the cut surface of the _____ or the _____



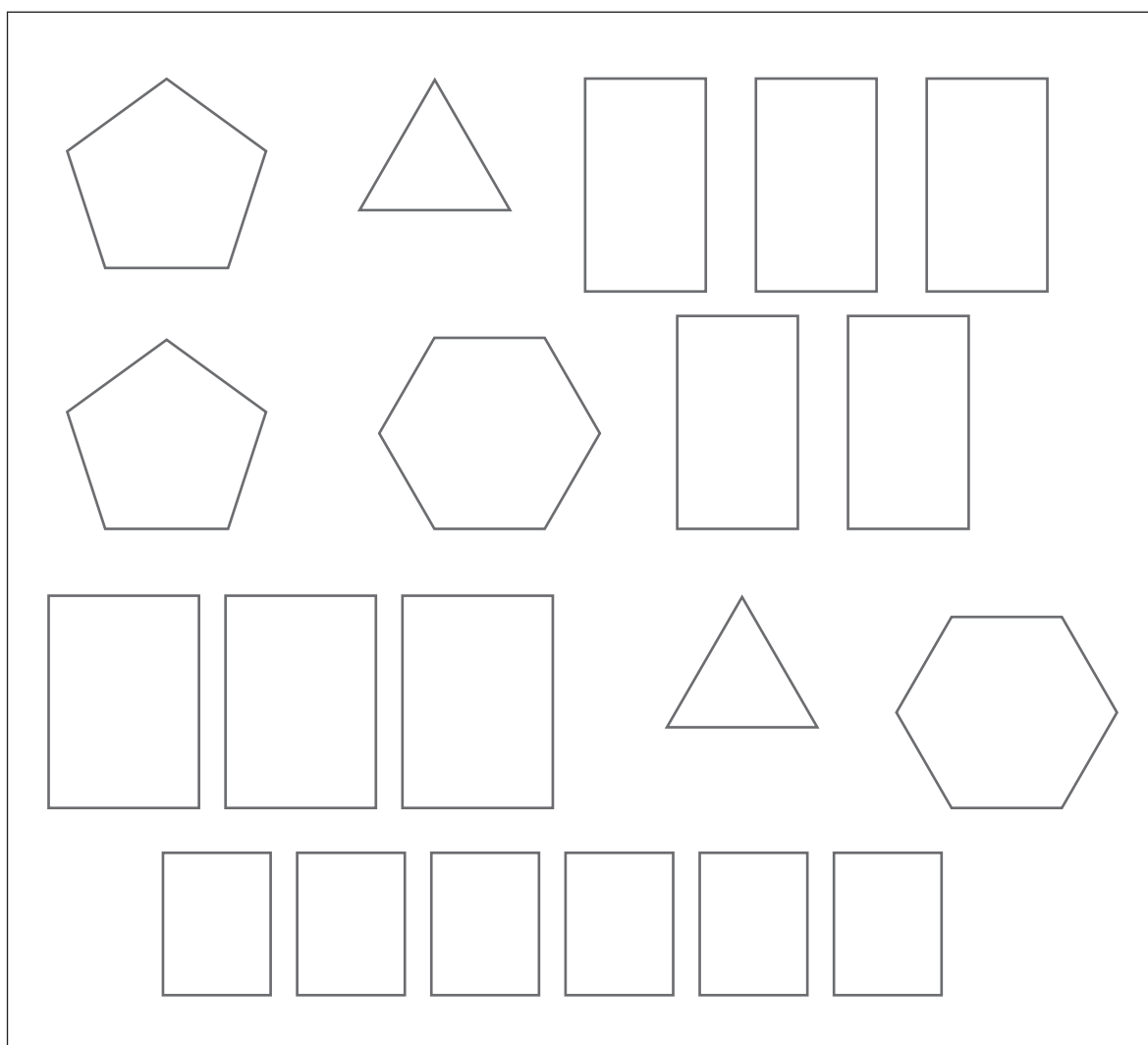
This stamp could have been made using the cut surface of the _____ or the _____

Activity 1

Work with your partner

Look at the 2-D shapes below.

- 1 Colour all the 2-D shapes you will need to make a *triangular prism* (a prism with a base that is a triangle) **in red**
- 2 Colour all the 2-D shapes you will need to make a *prism with a base that is a regular pentagon* **in blue**
- 3 Colour all the 2-D shapes you will need to make a *prism with a base that is a regular hexagon* **in green**.



Activity 2

Work on your own.

Cut out the 2-D shapes given in Lesson 29 at the back of the LAB and use them to make 3-D objects. If you need to, refer to your answers in Activity 1.

- 1** Name the 2-D shapes that you need to make a triangular prism:

Cut out the 2-D shapes and stick them together to make a triangular prism.

- 2** Name the 2-D shapes that you need to make a prism with a base that is a regular pentagon:

Cut out the 2-D shapes and stick them together.


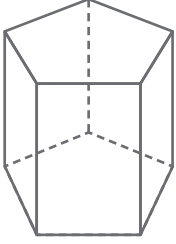
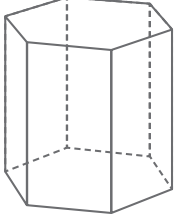
- 3** Name the 2-D shapes that you need to make a prism with a base that is a regular hexagon:

Cut out the 2-D shapes and stick them together.

- 4** Display the 3-D objects you have made in your classroom.

HOMEWORK

Draw the 2-D shapes that make up each prism.




Prism	2-D shapes that make up the prism
	
	
	

Lesson 30: Make prisms and cylinders

Mental maths

What 3-D object am I?		Answer
1	I have two flat faces which are circles and one curved surface	
2	I have six square faces	
3	I have two faces which are triangles and three faces which are rectangles	
4	I have a base which is a hexagon, a top face which is a hexagon and six side faces which are rectangles	

Link to previous lesson

3-D object	Name of 3-D object	Draw the shapes that make up the object
		
		
		

Activity 1

Use the polygons and circles given in Lesson 30 at the back of the LAB.

- 1** Work with your partner.
Discuss how you find the necessary cut outs to make each 3-D object.
- 2** Work on your own.
 - a** Use the cut outs to make each 3-D object.
Make Prism A (a prism with a rectangle as a base)
Make Prism B (a rectangle with a trapezium as a base)
Make the cylinder.
 - b** Label each 3-D object and display it in the classroom.

HOMEWORK

Use the 3-D models you have made as you answer the questions.

- 1** How many flat faces in a rectangular prism? _____
- 2** What is the shape of the base in a rectangular prism? _____
- 3** What is the shape of the side faces in a prism? _____
- 4** How many flat faces in a cylinder? _____
- 5** How many curved surfaces in a cylinder? _____

Lesson 31: Pyramids and cones

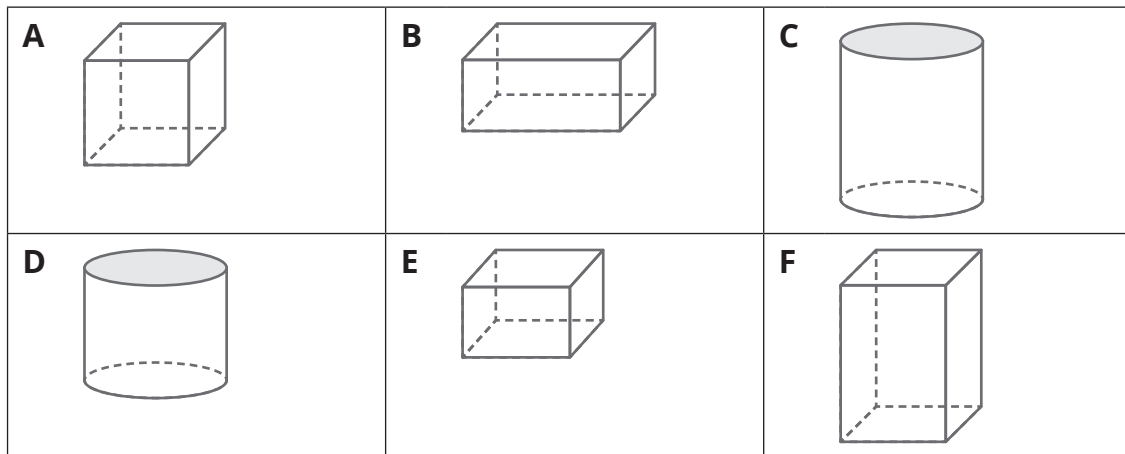
Mental maths

What 3-D object am I?		Answer
1	I have six rectangular faces.	
2	I have a base and a top face which are hexagons and all my side faces are rectangles.	
3	I have a base which is a circle and a top face which is a circle. I have one curved surface.	
4	I have two flat faces which are triangles. My side faces are rectangles.	

Link to previous lesson

Work with your partner

Look at the 3-D objects and then answer the questions.



- 1 Give two reasons why 3-D objects A, B, E and F can be sorted into one group.

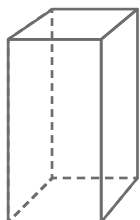
- 2 Give two reasons why 3-D objects C and D can be sorted into one group.

- 3 Give one reason why 3-D objects C and F *cannot* be sorted into one group.

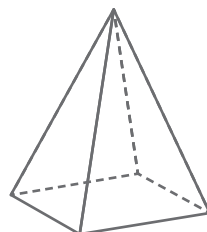
Activity 1

Work with your partner.

1 This prism and this pyramid both have square bases.



Square-based prism



Square-based pyramid

a Give two differences between a square-based prism and a square-based pyramid.

b Give one way in which a square-based prism and a square-based pyramid are the same.

2 Draw the polygons you will need to make a square-based pyramid.

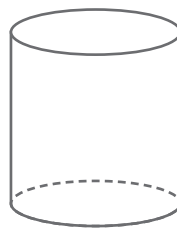
	
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- 3** Turn to the polygons given for Lesson 31 Activity 1 at the back of the LAB.
Choose the polygons you need to make a square-based pyramid.
Hint: Use the answer to Question 2 as a guide.

Activity 2

Work with your partner.

- 1** This cylinder and this cone both have bases which are circles.



Cylinder



Cone

- a** Give one difference between a cylinder and a cone.

- b** Give one way in which a cylinder and a cone are the same.

- 2** Cut a cone into the base and the slanting surface. Then cut the slanting surface and lie it flat. Draw the shapes that make a cone.



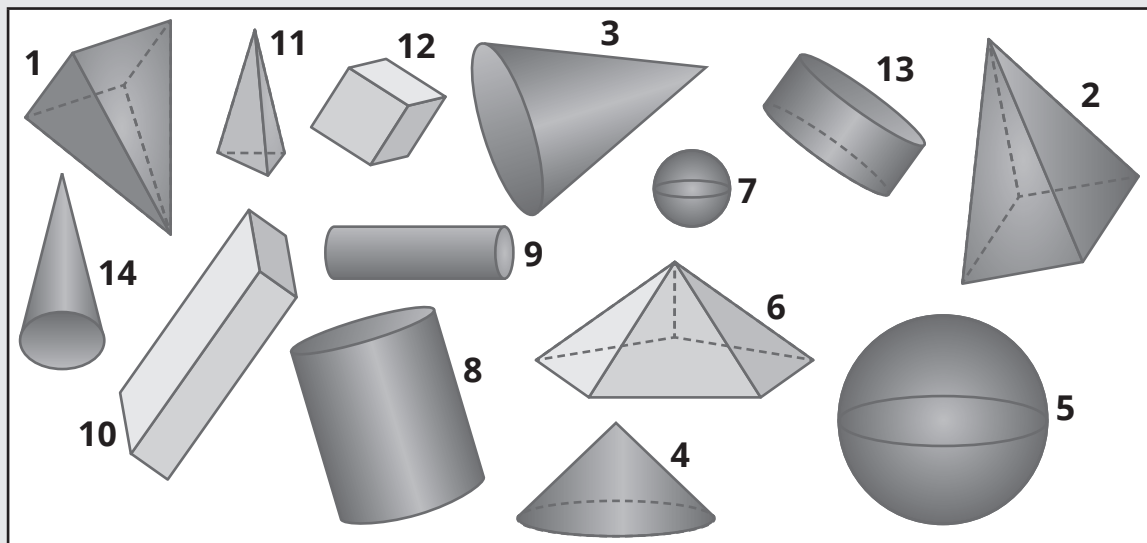
Lesson 31: Pyramids and cones

- 3** Turn to the shapes given for Lesson 31 Activity 2 at the back of the LAB.
Choose the shapes you need to make a cone.
Hint: Use the answer to Question 2 as a guide.

HOMEWORK

Decide whether these 3-D object are prisms, pyramids, cones, spheres or cylinders.









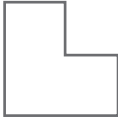

Write the number of the object under the correct heading.



Prisms	Pyramids	Cones	Spheres	Cylinders

Lesson 32: Viewing objects

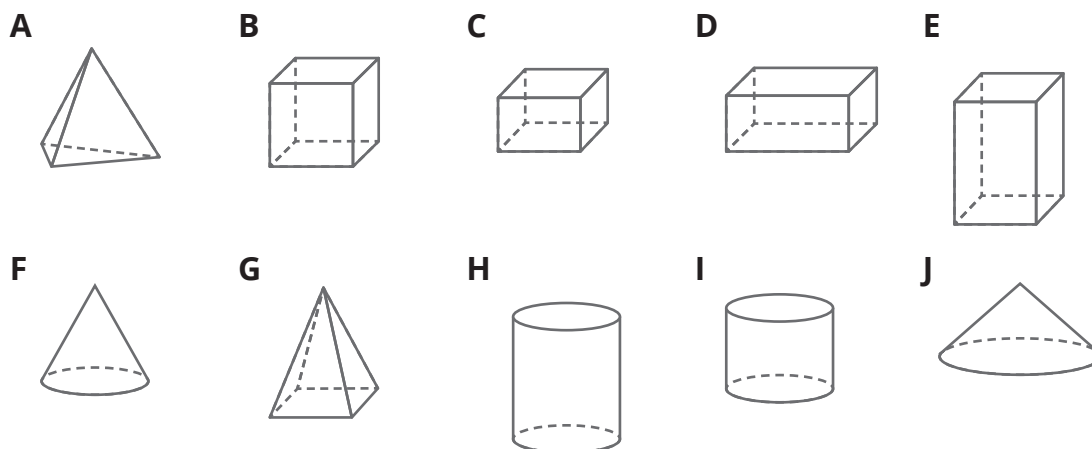
Mental maths

Name the 2-D shape		Answer	Name the 3-D object		Answer
1			6		
2			7		
3			8		
4			9		
5			10		

Link to previous lesson

Work with your partner

Look at the 3-D objects and then answer the questions.



Lesson 32: Viewing objects

1 What is the same about 3-D objects B, C, D and E?

2 What is the same about the 3-D objects A and G?

3 What is the same about the 3-D objects F, H, I and J?

4 What is the difference between the 3-D objects F and H?

Activity 1

Work with your partner

Mpho and Sam each drew a teacup that was on the table between them.
This is what their drawings looked like:

Mpho's drawing



Sam's drawing



1 Why do you think the drawings look different?

2 Sam's little sister saw a different view of the teacup.

Where do you think the sister was when she looked at the teacup?

Give a reason for your answer.



Sam's little sister's drawing

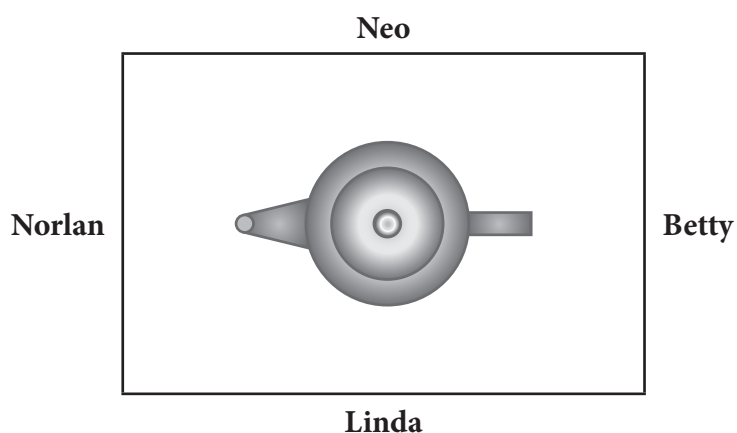
Activity 2

Work on your own.

- 1 Neo, Norlan, Betty and Linda sat around a table. There was a teapot on the table.

This is what the table and the teapot looked like from above.

We say that this is the **top view** or **plan** of the teapot and the table:

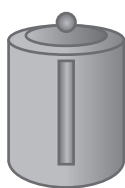


- a Why are the legs of the table not shown in the plan view?
(You can't see the legs from above the table. The legs are hidden under the table.)

- b Write the name of the person who drew each drawing:



_____ drew
this picture



_____ drew
this picture

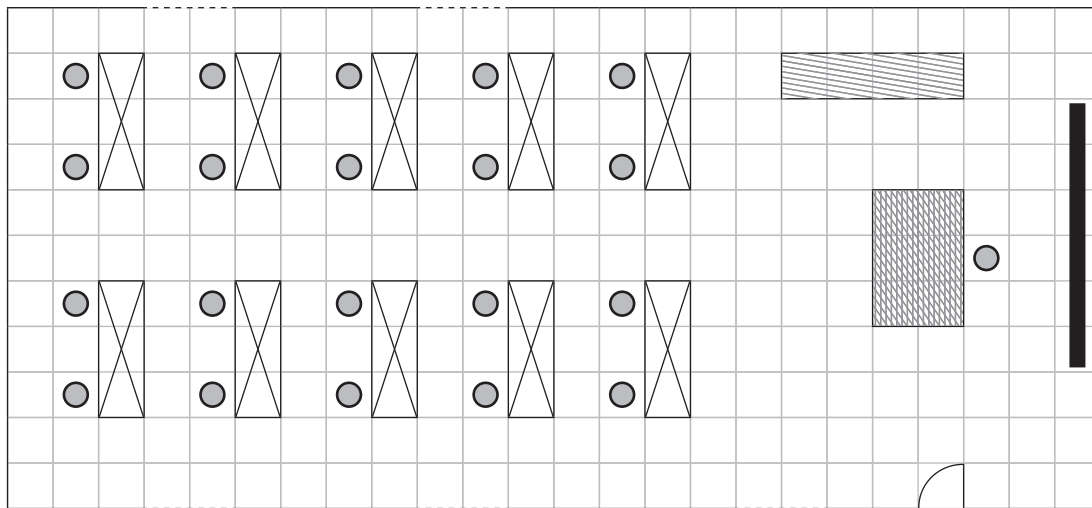


_____ drew
this picture



_____ drew
this picture

2 Look at the plan (or top view) of the classroom.



KEY			
cupboard		stool	
table		door	
desk		window	
		chalkboard	

- a How many windows are there in the classroom? _____
- b How many stools are there in the classroom? _____
- c How many learners sit at each desk? _____
- d If you enter the classroom through the door, what object will you see directly in front of you? _____

HOMEWORK

For each of the given objects, three views are given.

Say which view is the top view, which is the front view and which is the side view.

1



A car

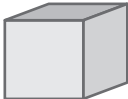

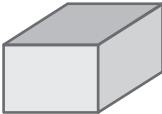

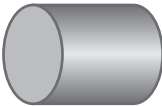
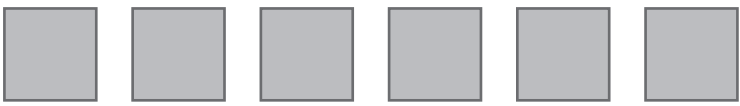
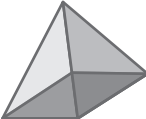

2



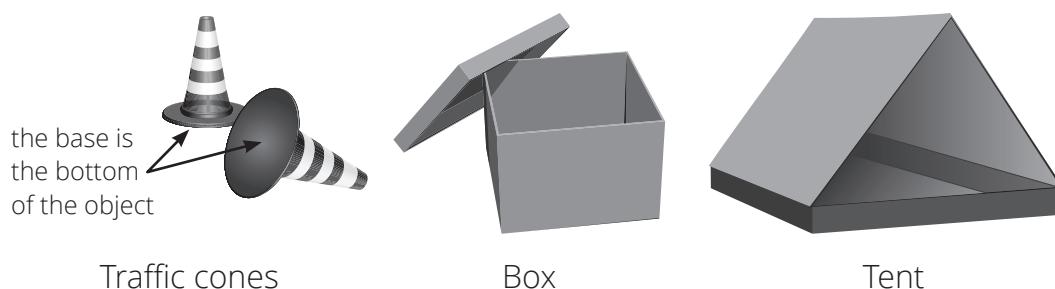
A hut

Lesson 33: Consolidation

- 1 Draw a line to match the 3-D object with the group of polygons and circles needed to make the 3-D object.

2 Look at the pictures.



Use the words from the word box to fill in the names of the 3-D objects.

WORD BOX:

four five six cylinder rectangular prism
circle pyramid triangle triangular prism cone

- a** The shape of the base of the traffic cone is a _____.
- b** The traffic cone is made up of two 3-D objects – a _____ and a _____.
- c** The lid of the box has _____ faces.
- d** The open box has _____ faces.
- e** The box is a _____.
- f** The tent is a _____.

3 Look at the views of the house.



- a Which picture shows the floor plan of the house? ____ (A) ____
- b Use the floor plan of the house to identify the view of the front, back, left side and right side of the house.
The left side has been done for you.

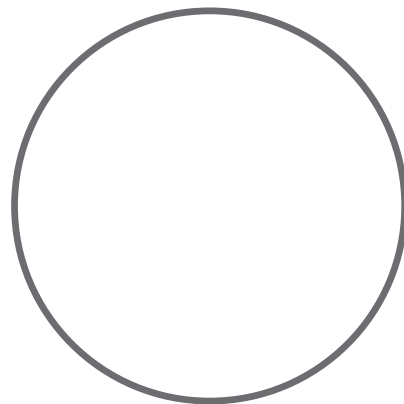
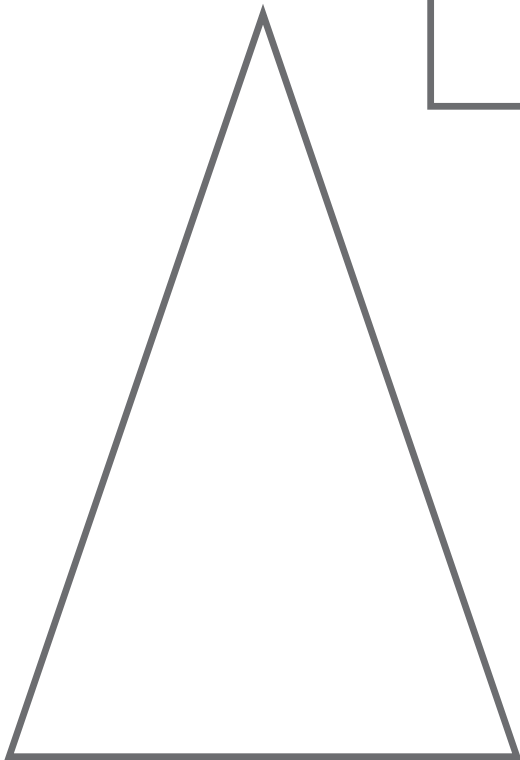
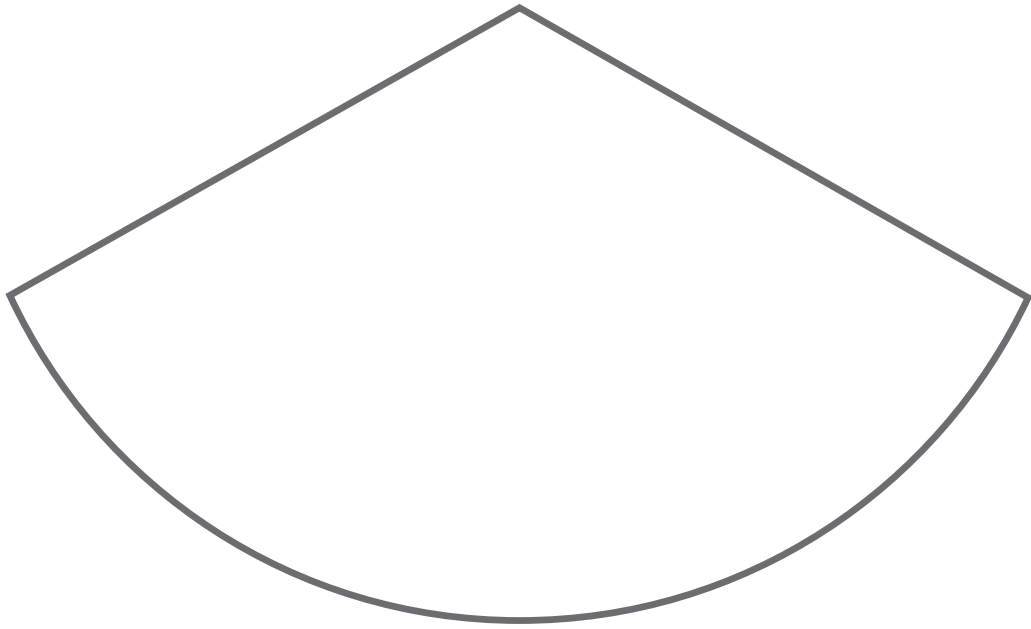
Side	Drawing
Front View	
Back View	C
Right View	
Left View	

RESOURCES

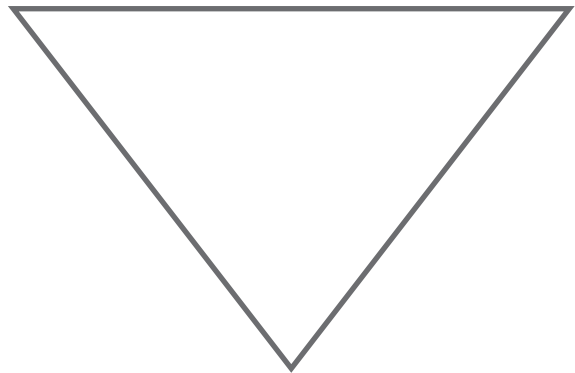
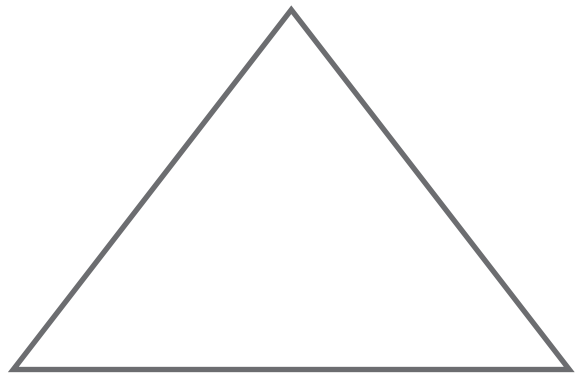
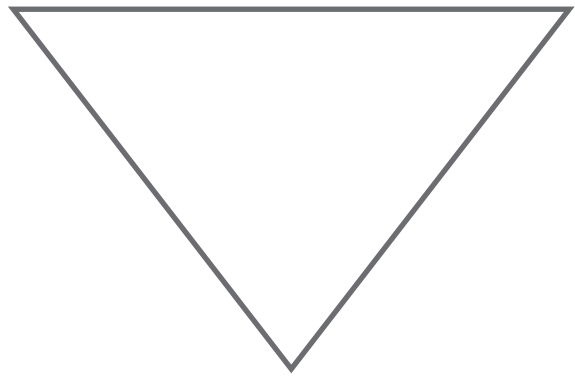
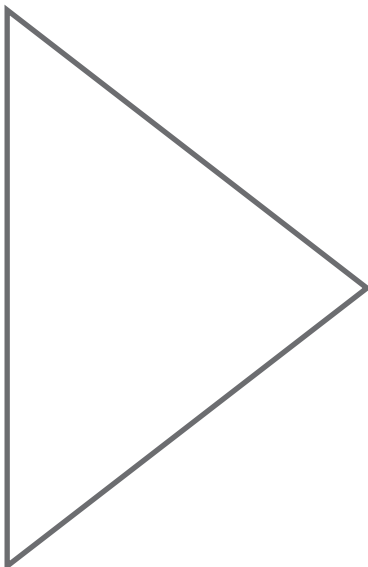
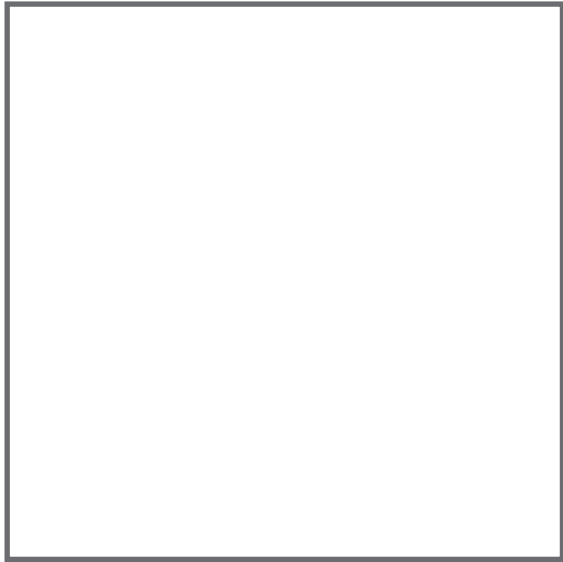
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Lesson 31: Pyramids and Cones

Activity 2 Question 3

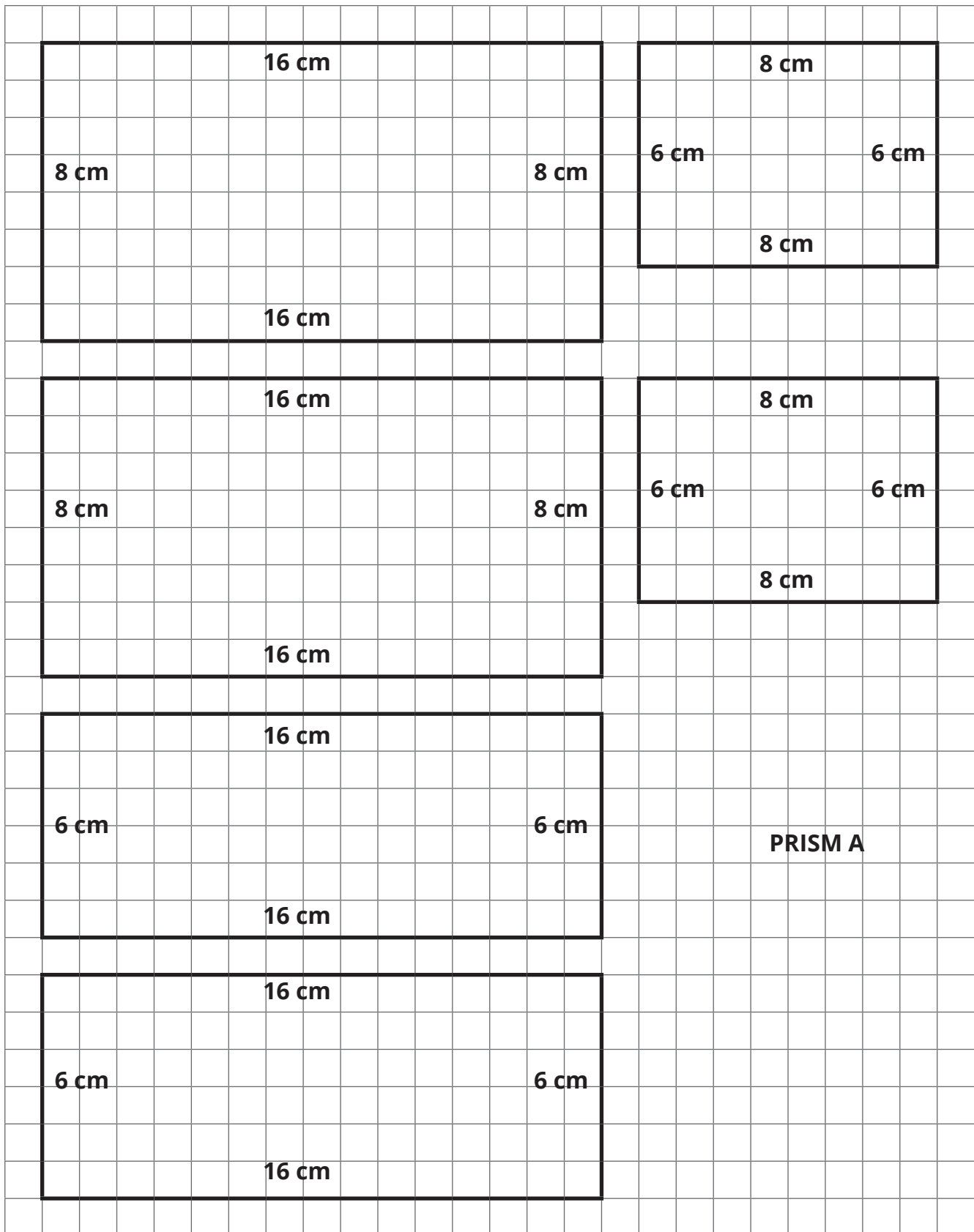


Activity 1 Question 3



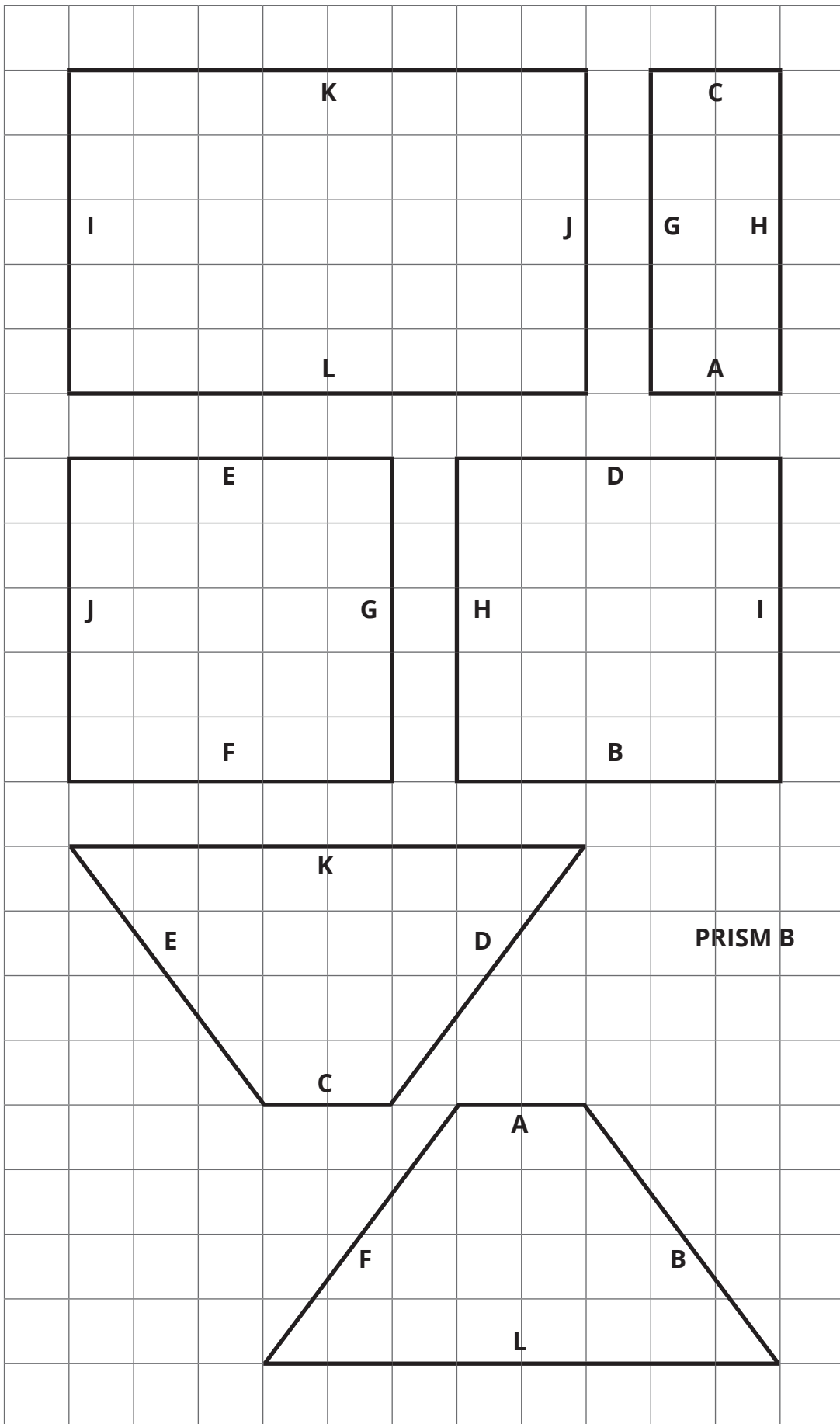
Lesson 30: Making prisms and cylinders

Activity 2 Question 3



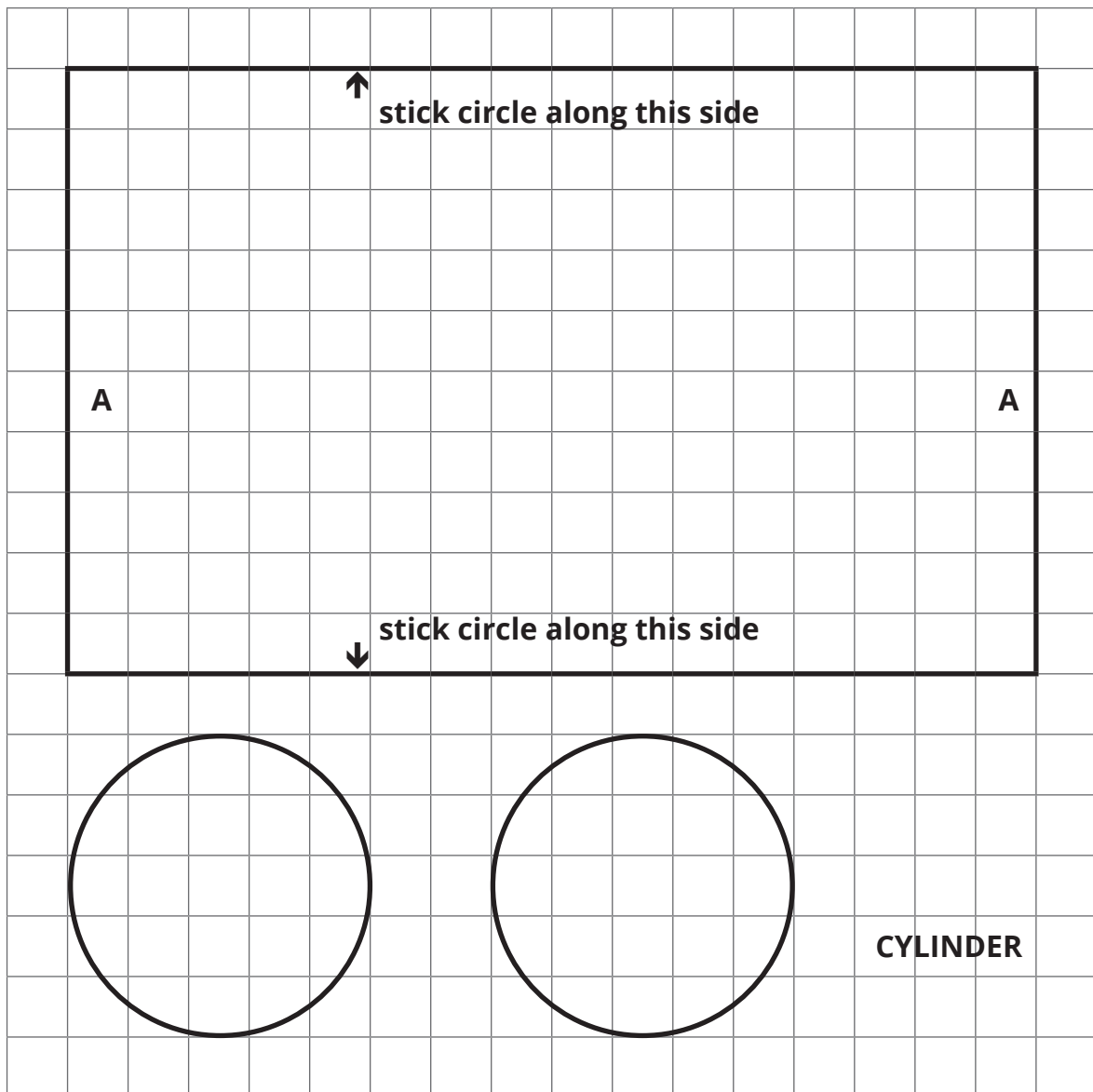
Lesson 30: Making prisms and cylinders

Activity 2 Question 3

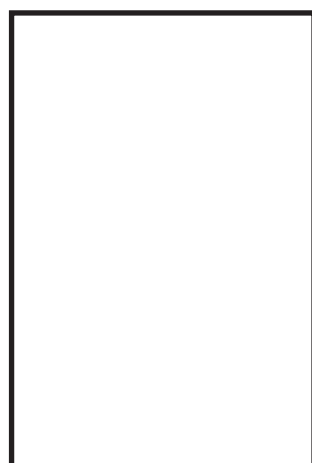
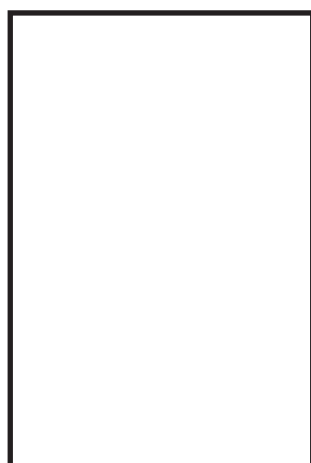
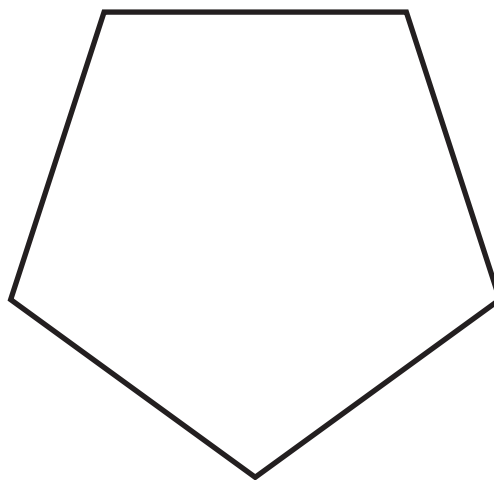
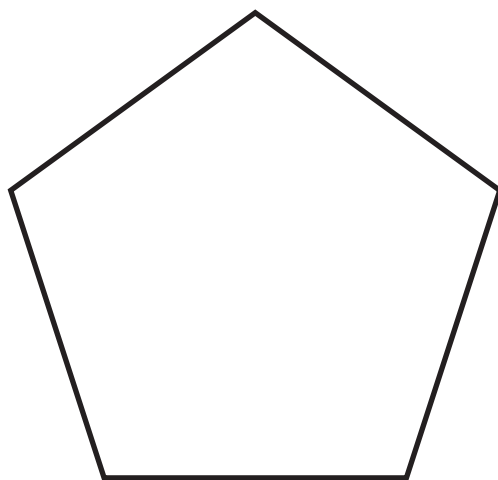
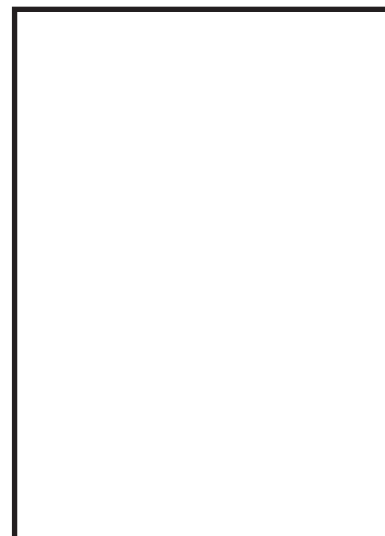
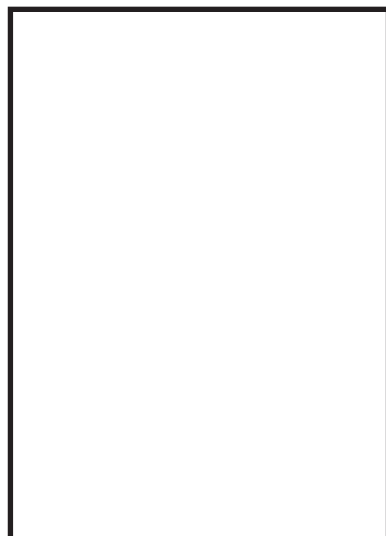
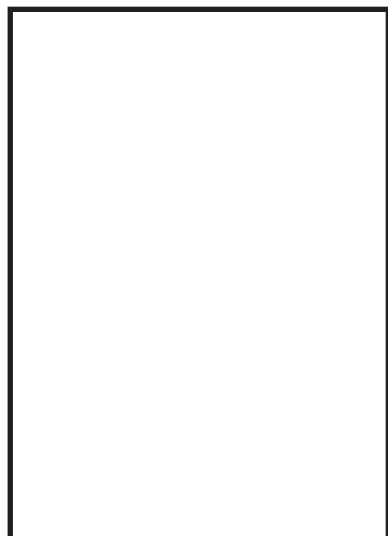
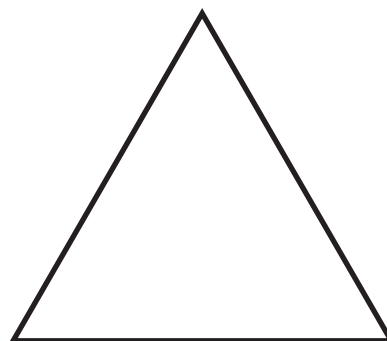
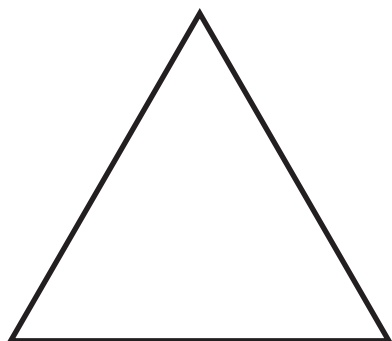


Lesson 30: Making prisms and cylinders

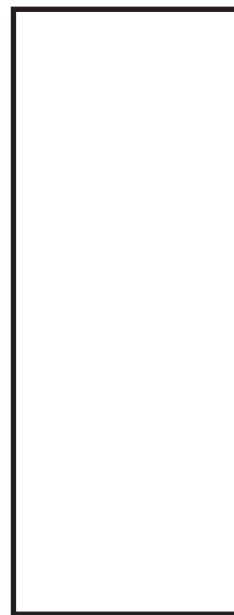
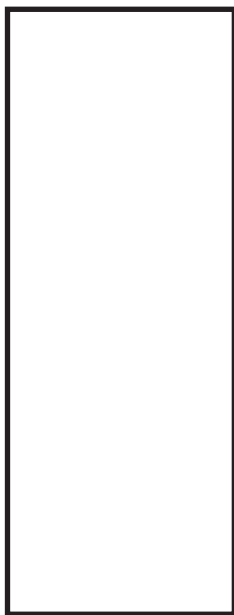
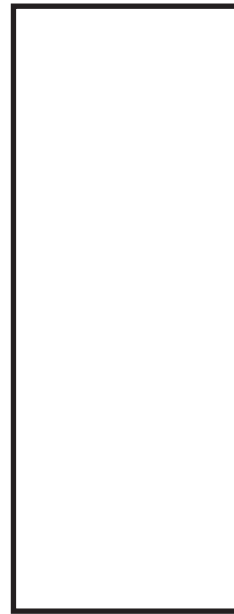
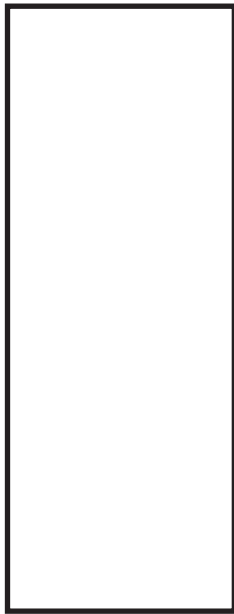
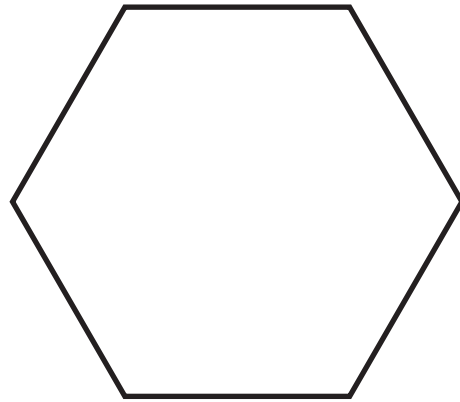
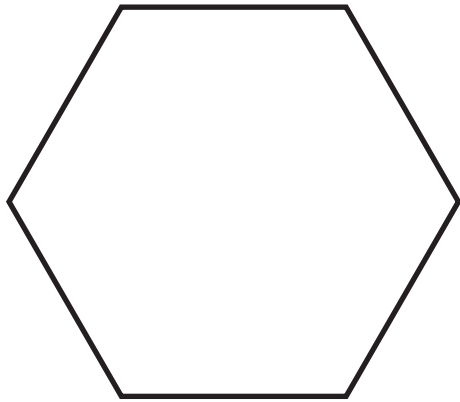
Activity 2 Question 3



Lesson 29: Making prisms from polygons

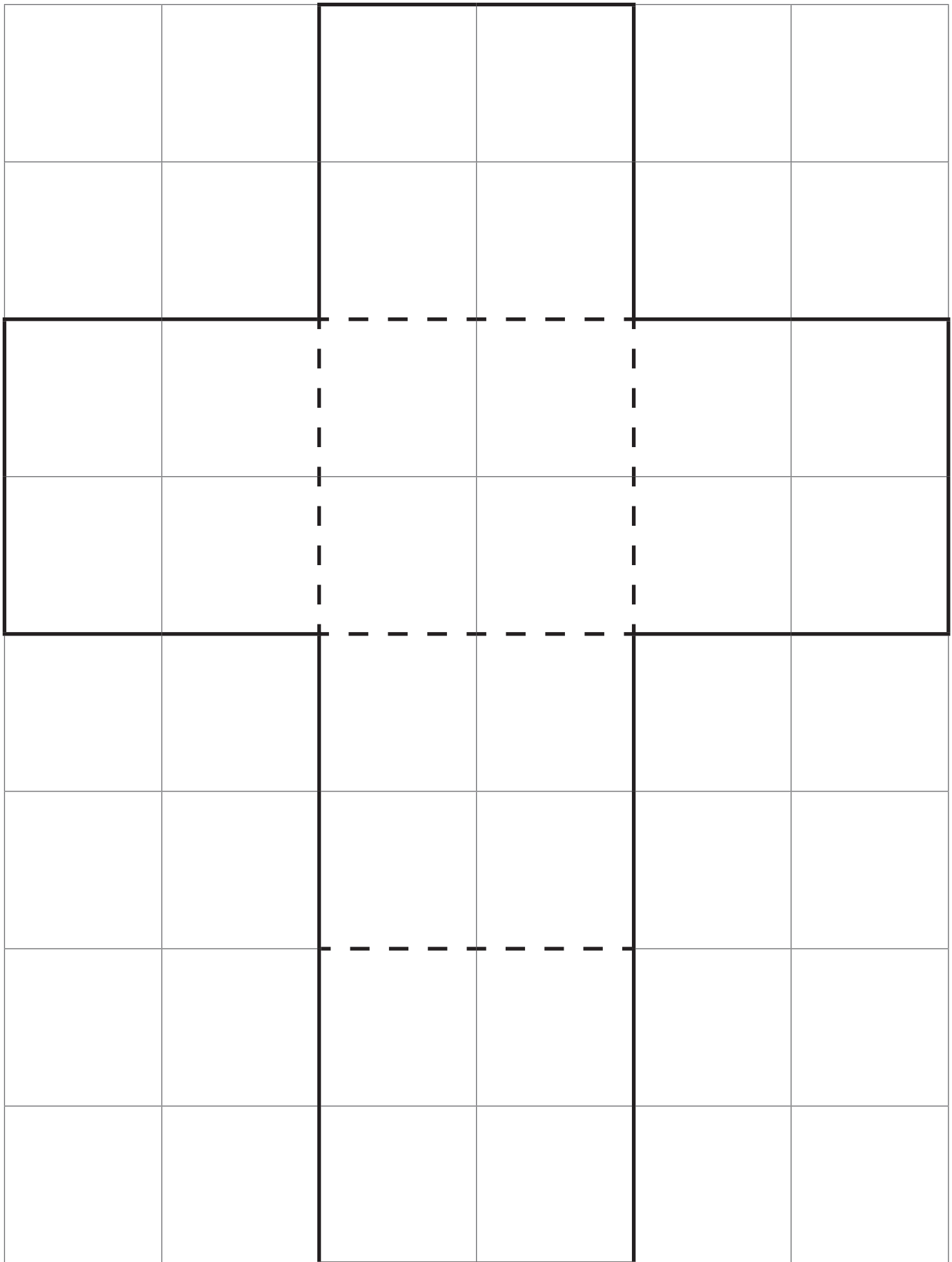


Lesson 29: Making prisms from polygons



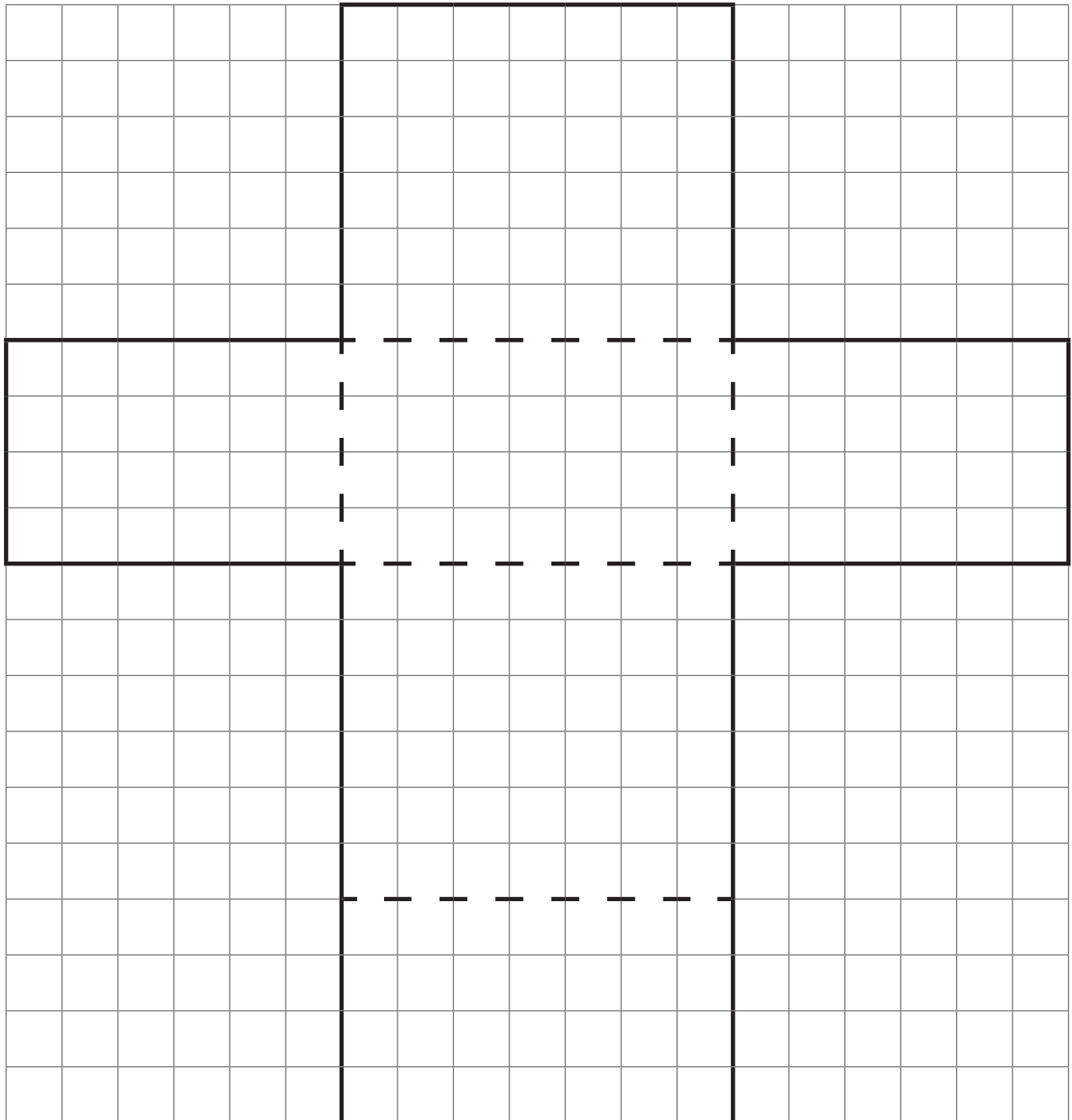
Lesson 24: Make rectangular prisms and cubes (1)

Net of a cube



Lesson 24: Make rectangular prisms and cubes (1)

Net of a rectangular prism



quarter

past

past

o'clock

half

to

to

quarter

Analogue clock



Cut out the arrows representing the long hand and the short hand.
Use a split pin or paper clip and matchstick to attach the hands to the clock face.

