GRADE 6   MATHS   STUDY PACK

2 WEEKS

WEEK   ENDING   19-06-2020

Grade 6

Topic: Capacity/Volume   Exercise 1   13 Marks

Student Name:

Capacity is the amount of space inside a container.

We measure capacity in kilolitres, litres and millilitres

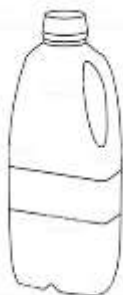1ℓ cool drink   5 mℓ teaspoon   250 mℓ cup

1. Using mℓ, ℓ and kℓ what would you use to measure the following?

a. The amount of water you use in a month

b. The amount of water used to mix baby milk formula for one feed

c. The amount of water in a full bath tub

d. The amount of water in a swimming pool

2. Look at the pictures and the measurements on them.

    340 mℓ   2 ℓ milk   100 mℓ   5 kℓ

200 mℓ   teaspoon 5 mℓ   Orange juice $\frac{1}{2}$ ℓ

a. Write the measurements in ascending order.

b. How many litres would the JoJo tank hold?

c. How many millilitres would the JoJo tank hold?

d. How many cups would make 1ℓ?

e. How many tea spoons of Panado syrup could you get from one such bottle?

f. How many millilitres would be in the orange juice?

g. If I drank $\frac{1}{2}$ℓ of orange juice, how many millilitres would be left?

h. How many panado bottles would fill the milk bottle?
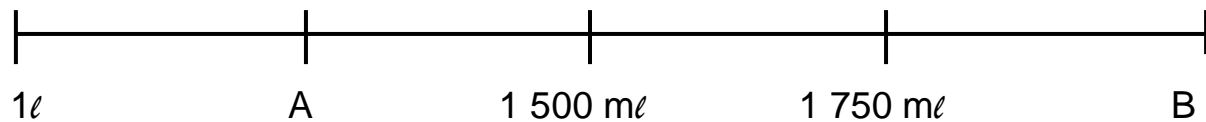
Grade 6

Topic: Capacity/Volume   9 Marks

Student Name:

Exercise 2

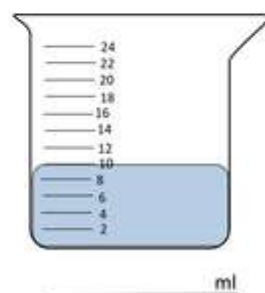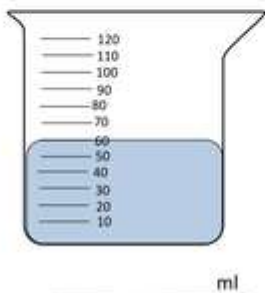1. Look at the number line. What is the value of A and B?

1ℓ	A	1 500 mℓ	1 750 mℓ	B

2.   A   B   C

ml   ml   ml

ml   ml   ml
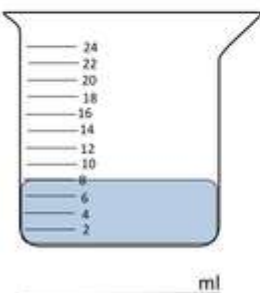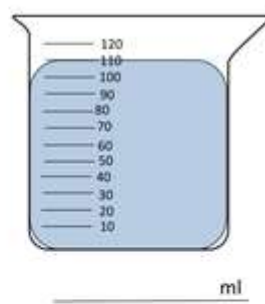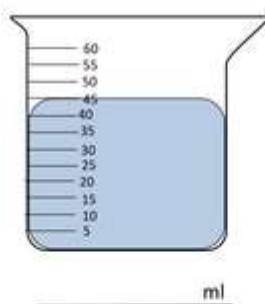
          E   F   G
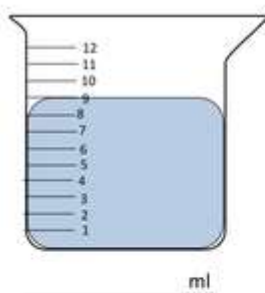
a.Write down how many millilitres of water in each of the six jugs.

b. Write the amount of liquid that is in each of these jugs in descending order.

c. Write down the maximum capacity of each of the six jugs.

d. If I pour 40 ml of liquid out of jug F, how much liquid will be left?

e. How much water will I need to fill jug G?

f. If I pour $\dfrac{1}{100}$ l into jug E how much liquid will be in it?

g. Write down how many litres of water is in each of the six jars.

Exercise 3   6 Marks

Name :_____   Score :_____

Measuring Jug

1) If you add 200 mL of water in each jug, what would be the new reading?

a)

mL
1000
750
500
250

_____mL

b)

mL
2000
1500
1000
500
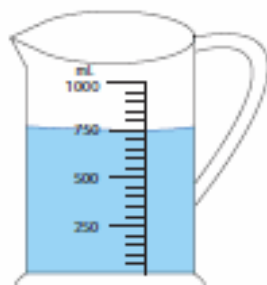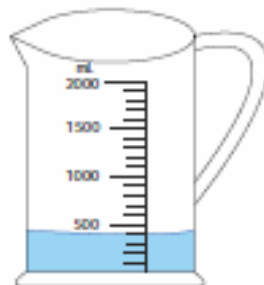
_____mL

2) How much water required to fill each jug up to 800 mL?

a)

mL
1000
750
500
250

_____mL

b)

mL
2000
1500
1000
500
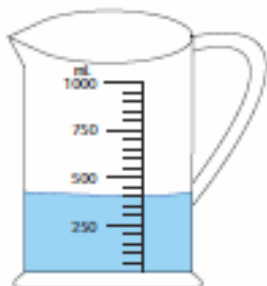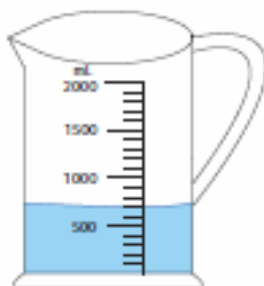
_____mL

3) How much water should you pour out from each jug to drop down the water level to 300 mL?

a)

mL
1000
750
500
250

_____mL

b)

mL
2000
1500
1000
500

_____mL
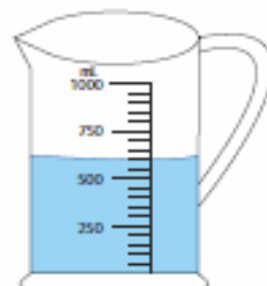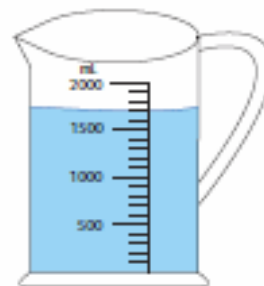
Grade 6

Topic: Capacity/Volume   6 Marks

Student Name:

Exercise 4

Spar sell the following items in 1 week.

Use this table to answer the questions.

	Milk	Cool drink	Ice cream
Monday	77 000 ℓ	32 468 l	6 844 l
Tuesday	45 674 l	28 346 l	10 543 l
Wednesday	39 566 l	25 672 l	8 895 l
Thursday	40 723 l	22 377 l	6 340 l
Friday	42 497 l	34 845 l	11 755 l

1.Estimate how many litres of cool drink were sold on Thursday and Friday?

2. How many litres of cool drink were sold during the week?

3. Calculate the number of ice cream bought in a week.

4. What is the difference in litres between milk and ice cream sold in a
   Week?

5. On which day was the most ice cream bought?

6. Which was the most sold product of the week?

Grade 6

Topic: Capacity/Volume   12 Marks

Student Name:

Exercise 5

Converting millilitres to litres

To go from ml to litres take the number that you get given and divide by 1000

Example: 1000ml ÷ 1000 = 1litre.

2 860 ml ÷ 1 000 = 2, 86 l

Convert the following capacities to litres:

1. 4 960 ml =   2. 9 260 ml =

3. 3 000ml =   4. 1 280ml =

5. 1l 450ml =   6. 5l 280ml =

7. 6l 500ml =   8. 6l 60ml =

9. 300ml   =   10. 700ml =

11. 450ml =   12. 44ml =

Grade 6

Topic: Capacity/Volume   week 11   12 Marks

Student Name:

Exercise 6

Converting from litres to millilitres

2,5l x 1000 = 2 500ml

Converting from kilolitres to millilitres multiply by 1 000 000

3kl x1000 000 = 3 000 000ml

1. 3l =   ml   2. 7l =   ml

3. 2l 450ml =   ml   4. 4,05l =   ml

5. 2.14l =   ml   6. 0,14l =   ml

7. 14l =   ml   8. 20kl 430l =   ml

9. $\frac{1}{2}$ kl =   ml   10. 30kl   =   ml

11. 6$\frac{1}{2}$ kl =   ml   12. 2,4kl   =   ml

Grade 6

Topic: Capacity/Volume   10 Marks

Student Name:

Exercise 7

Converting kilolitres to litres multiply by 1 000

Example: 12kl x 1000 = 12 000litres

            19kl 127l   = 19 x 1000 + (127l) = 19 127litres

            16,3kl   = 16 x 1000l +(300l) = 16 300litres

Convert the following to litres

1. 5kl =   l   2. 17kl 235l =   l

3. 8kl 9l =   l   4. 55kl   =   l

5. $\frac{1}{2}$ kl =   l   6. $\frac{3}{5}$ kl   =   l

7. 0,8 kl =   l   8.   6.3kl   =   l

9. 3$\frac{1}{2}$ kl =   l   10. 40kl =   l

Grade 6

Topic: Capacity/Volume   17½   Marks

Student Name:

Exercise 8

Copy and complete the table.

Capacity in litres and millilitres	Litres in fractions	Litres in decimal	Conversions to millilitres
	$1\frac{1}{2}\,\ell$	$1,5\,\ell$	
	$1\frac{1}{4}\,\ell$		$1\,250\,m\ell$
	$1\frac{3}{4}\,\ell$		
$3\,\ell\ 500\,m\ell$			
$3\,\ell\ 750\,m\ell$			
	$5\frac{1}{2}\,\ell$		
	$6\frac{1}{4}\,\ell$		
		$10,75\,\ell$	
	$2\frac{1}{2}\,\ell$		
	$7\frac{1}{5}\,\ell$		
	$12\frac{2}{5}\,\ell$		
	$10\frac{3}{5}\,\ell$		

Grade 6

Topic: Capacity/Volume   7 Marks

Student Name: Exercise 9

Comparing

Write the set of measurements in order from the smallest to the greatest.

1. 2 960 mℓ 3,4 ℓ $1\frac{1}{2}\ell$ 2 560 mℓ

2. 3,560 ℓ 3,490 ℓ $3\frac{1}{2}\ell$ 3 400 mℓ

3. 550 mℓ 0,5 ℓ 0,56 ℓ 99 mℓ

4. 67,8 ℓ 6 780 mℓ $6\frac{3}{4}\ell$ 6.09 ℓ

5. $2\frac{1}{4}\ell$ 2,3 ℓ 2,28 ℓ 2 200 mℓ

6. $7\frac{3}{4}\ell$ 7 800 mℓ 7 ℓ 90 mℓ 78,9 ℓ

7. 3,04 ℓ $3\frac{1}{2}\ell$ 3 390 mℓ 3,45 ℓ

Grade 6

Topic: Capacity/Volume   12 Marks

Student Name: Exercise 10

Problem Solving

1. One container holds 1.6 ℓ, a second holds 1 400 mℓ and a third holds

   2 ℓ 350 mℓ. What is their total capacity?

2. Mavis drank 1 600 mℓ of water today and Peter drank 1, 35 ℓ. How

   much more did Mavis drink than Peter?

3. Dad's car uses 18 ℓ of petrol a day. How many litres of petrol will he

   use in 8 weeks?

4. A farmer uses 1 260 ℓ of liquid fertiliser on his plants in a week. How

   much fertiliser does he use in 367 days?

5. Sam has 4 000 mℓ of shampoo. If he uses a quarter litre of shampoo

   to wash his dog, how much is left over?

6. Mercy makes 3 ℓ of fruit punch with lemonade, pineapple juice and

   Apple juice. She uses 450 mℓ of pineapple juice and 1.8 ℓ of

   lemonade. How many litres of apple juice are there in 3 of fruit punch?

Grade 6

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a. 9ml = 0,009l   b. 56ml = 0,056 l

c.185ml = 0,185 l   d. 4 075 ml = 4,075 l

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1. Write in litres

a. 7 ml   b. 69 ml   c. 875ml   d. 5 625 ml

2. Write in millilitres

a. 0,005l   b. 7,2 ml   c. 37,5l   d. 7,475l

3. To a half litre of painter added first 375ml of water then another 125ml
   How many litres was the mixture now?

4. A bucket contained 20l of water. 4,625l evaporated. How many litres
   of water were left in the bucket?

5. George carried 9l of water from the river to his home every day in
   August. How many litres of water is this?

6. 30 milk cans held 375,000litres of milk. How many litres did each
   can hold?

Exercise 12   **36 Marks**

1. Which kind of measure (litre or millilitre) would you use to measure the following things (liquids)?

(i) Milk in a glass

(ii) Medicine in a tea-spoon

(iii) Ink in your pen

(iv) Cough syrup in a bottle

(v) Petrol in a car tank

(vi) Water in a can

(vii) Kerosene oil in a jar

(viii) Paint in a drum

2. What measures will you use to measure the following quantities of given liquid? Write the answer in front of each liquid:

Quantity of liquid to measure	1 litre	500 ml	200 ml	100 ml	50 ml
(i) 950 ml of milk		1	2		1
(ii) 650 ml of water					
(iii) 5 litres of petrol					
(iv) 80 litres of petrol					
(v) 10 litres of diesel					
(vi) 5 l 100 ml of varnish					

3. How many 200 ml measures of water will fill a:

(i) 1 litre can?

(ii) 4 litre drum?

(iii) 2 litre can?

(iv) 1 litre 400 ml vessel?

4. A jar contains 1200 ml of milk. How many litres and ml of milk is in the jar?

5. How many 100 ml measures of oil will fill the following vessels?

(i) 200 ml of capacity

(ii) 500 ml of capacity

(iii) 700 ml of capacity

(iv) 1 l of capacity

6. Change the following into ml:

(i) 3 l

(ii) 2 l 75 ml

(iii) 5 l 390 ml

7. Change the following into litres and ml:

(i) 4000 ml

(ii) 65035 ml

(iii) 32570 ml

8. There was 5 l 500 ml of milk in my house. In the evening there was only 2 l 750 ml of milk left. How much milk was consumed during the day?

9. A petrol pump had 15900 litres of petrol in stock. During the day 5,950 litres were sold. How much petrol was left?

10. There is the following quantity of water in three vessels:

(i) 54 l 80 ml

(ii) 67 l 384 ml and

(iii) 56 l 156 ml

Find the total quantity of water.

11. A bucket holds 25 litre of water. 17 litres 250 ml of it was taken out and then 3 litre 780 ml was poured in it. How much water is there in the bucket now?

12. A bottle has the capacity to contain 250 ml. How much oil can be filled in 20 such bottles?

13. Among 40 students, 20 litres of juice was distributed. How much juice did each student get?

14. The capacity of a drum is 200 litres. It contains 123 litres of water. How much more water is required to fill it?

15. Out of 350 litres of kerosene oil, 125 l 50 ml was sold. How much is left now?

Capacity/volume   Exercise 13   12 Marks

1.

January	February	March	April	May	☐
Oil 75,25 ℓ	Oil 56,5 ℓ	Oil 49,25 ℓ	Oil 68,5 ℓ	Oil 71,75 ℓ	Oil ☐ ℓ

Tom's Take away

a. How many litres of oil did Tom's Take away use from January to May?

b. Tom's take away used 400ℓ of oil in the first 6 months of the year.
How much oil was used in the month of June?

c. Oil costs R18,50 per litre. How much did Tom pay for the 400ℓ ?

2. Every day, Miss Feni uses:
60ℓ of water to bath
6ℓ of water to wash dishes
2,5ℓ of water for cooking
1,5ℓ of water for drinking.

How much water does Miss Feni use in the month of June?

3. The ladies at the soup kitchen make 9ℓ of soup. 1 cup holds 250mℓ of soup. How many people can have a cup of soup?
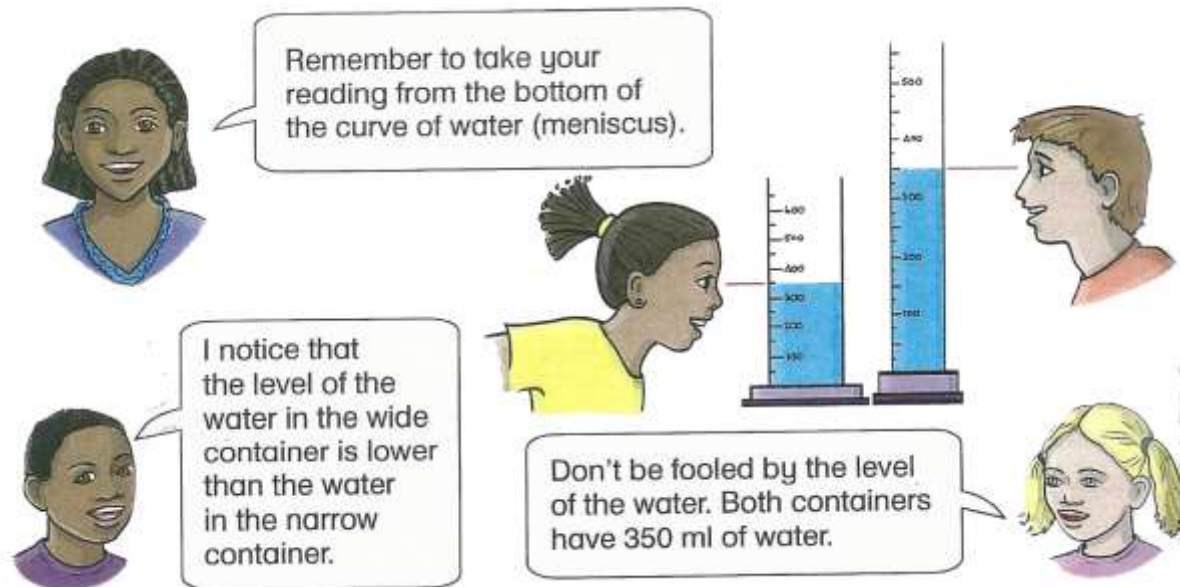
4. Pancake recipe for 10 pancakes:
250mℓ flour
125mℓ milk
150mℓ warm water
1 egg
10mℓ oil
5mℓ baking powder
Write the ingredients you would need to make 60 pancakes for the class party.

Reading capacity   **Exercise 14   21 Marks**

Remember to take your reading from the bottom of the curve of water (meniscus).

I notice that the level of the water in the wide container is lower than the water in the narrow container.

Don't be fooled by the level of the water. Both containers have 350 ml of water.

1. Write the correct capacity for each container.
Secondly, round off each reading to the nearest 100mℓ

1   mℓ   c   200   b   100   a   50 mℓ = 100 mℓ   0

2   mℓ   c   200   b   100   a   0

3   mℓ   200   c   b   100   a   0

4   mℓ   c   200   b   100   a   0

5   1 000   mℓ   c   800   600   b   400   a   200   0

6   1 000   mℓ   800   c   600   b   400   200   a   0

7   1 000   mℓ   c   800   600   b   400   a   200   0