$\qquad$

## GRADE:

$\qquad$

## MATHS WORKSHEETS THIRD TERM

## MEASUREMENT

| SYLLABUS | INSTAMATHS | WKSHEET |
| :--- | :--- | :--- |
| Length (practical measurement) |  | 2 |
| Equivalent lengths |  | 2 |
| Measuring length in cm and mm | 76,77, | 3 |
| Measuring lines in cm |  | 4 |
| Mass | 78,79 | 5,6 |
| Reading scales (1) |  | 7 |
| Reading scales (2) |  | 8 |
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Mathletics: www.mathletics.co.za
a) Conversions and divisions
b) What and Where?

## LENGTH

## PRACTICAL MEASUREMENT

Work with a partner and measure with a tape measure the following.

|  | Me | My partner | The difference in cm |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Around the head | cm | cm | cm |
| Length of hand | cm | cm | cm |
| Length of arm | cm | cm | cm |
| Around the chest | cm | cm | cm |
| Length of leg | cm | cm | cm |

Using a ruler, measure the following items.

| Item |  |
| :--- | :--- |
| Width of maths book | $\ldots \mathrm{cm} \ldots \mathrm{cm}$ |
| Length of your pencil | $\ldots \mathrm{cm}$ |
| Length of pencil case | cm |
| Width of this worksheet | cm |
| cm | mm |

EQUIVALENT LENGTHS

| $1 \mathrm{~cm}=10 \mathrm{~mm}$ | $1 \mathrm{~m}=1000 \mathrm{~mm}$ | $1 \mathrm{~m}=100 \mathrm{~cm}$ | $1 \mathrm{~km}=1000 \mathrm{~m}$ |
| :--- | :--- | :--- | :--- |


| $1.30 \mathrm{~mm}=\ldots \quad \mathrm{cm}$ | 2. $13 \mathrm{~cm}=\ldots \mathrm{mm}$ | 3. $80 \mathrm{~mm}=\ldots \quad \mathrm{cm}$ |
| :---: | :---: | :---: |
| 4. $40 \mathrm{~cm}=\ldots \mathrm{mm}$ | 5. $9 \mathrm{~m}=$ $\qquad$ mm | $6.1 \mathrm{~km}=\ldots \ldots \mathrm{m}$ |
| 7. $2000 \mathrm{~m}=\ldots \quad \mathrm{km}$ | 8. $6 \mathrm{~km}=\square \mathrm{m}$ | $9.6000 \mathrm{~mm}=\ldots \mathrm{m}$ |

## Measuring length in $\mathbf{c m}$ and $\mathbf{m m}$

Write down the lengths marked on each ruler below.


## MEASURING LINES IN CM

- Measure the following lines using a ruler and write the measurements in the boxes provided.
$\qquad$


INSTAMATHS EXERCISES

| Length | Instamaths 76 | Total 10 | Your mark: |
| :--- | :--- | :--- | :--- |
| Convert, add and subtract <br> length | Instamaths 77 | Total 20 | Your mark: |

MASS
1 tonne (t) = 1000 kilograms (kg)
1 kilogram (kg) = 1000 grams (g)
1 gram $(\mathrm{g})=1000$ milligrams ( mg )
Change into kg or tonnes.

| 1. $2000 \mathrm{~kg}=\ldots \ldots{ }^{\mathrm{t}}$ | 2. 5 tonnes $=\ldots \ldots \ldots \mathrm{kg}$ |
| :---: | :---: |
| 3. $8500 \mathrm{t}=\ldots \quad \mathrm{t}$ | 4. $1250 \mathrm{~kg}=\ldots \ldots \mathrm{t}$ |

Change into g or mg.

| $2 \mathrm{~kg}=\ldots \_\mathrm{g}$ | $2 \mathrm{~kg}=\ldots \_\mathrm{g}$ |
| :--- | :--- |
| $6 \mathrm{~g}=\ldots \ldots \mathrm{mg}$ | $1 \mathrm{~g}=\ldots \_\mathrm{mg}$ |

Change into kilograms or grams.

| $2000 \mathrm{~g}=\ldots \ldots \mathrm{kg}$ | $500 \mathrm{~g}=\ldots \ldots \mathrm{mg}$ | $250 \mathrm{~g}=\ldots \ldots \ldots \mathrm{kg}$ |
| :---: | :---: | :---: |
| $1 / 2 \mathrm{Kg}=\ldots \quad \mathrm{g}$ | $3 / 4 \mathrm{~kg}=\ldots \ldots \mathrm{g}$ | $1 / 4 \mathrm{Kg}=\ldots \ldots \mathrm{g}$ |
| $3 \mathrm{Kg}=\ldots \mathrm{g}$ | $6453 \mathrm{~g}=\ldots \ldots \mathrm{kg}$ | $8 \mathrm{~g}=\ldots \ldots \mathrm{kg}$ |

Work out the answers to these sums. (Revise before doing)

1. $3455 \mathrm{~g}+34 \mathrm{~g}+1 \mathrm{~kg}$ (convert kg into g )
2. $126 \mathrm{~mm}+24 \mathrm{~cm}+2479 \mathrm{~mm}$ (convert cm into mm )
3. $7435 \mathrm{~kg}-3782 \mathrm{~kg}$
4. 5 litres -359 ml (convert litres into ml )
5. 2467 tonnes $\times 7$
6. 9840 litres $\div 4$
7. 682 ml x 25
8. $7587 \mathrm{~km} \div 9$

## Problem Solving:

1. I am baking a cake and I put $1 / 4 \mathrm{Kg}$ of flour in the one bowl and $1 / 2 \mathrm{Kg}$ of sugar in another bowl. How much did the dry ingredients weigh altogether.
(Hint: change the $1 / 4 \mathrm{Kg}$ and $1 / \mathrm{g}$ into grams and work the sum out in grams.)
2. A baby is born weighing 5 kg . He loses 100 g every week for 4 weeks. How much does he then weigh? (Hint: change the 5 kg to grams. It will be easier to work with.)
3. I sent two parcels to my friend in Australia. One parcel weighed 1 kg 352 grams and the other weighed 421 grams. How much did the two parcels weigh altogether? (Hint: convert all numbers to g.)
4. I was sent two presents for my birthday! One present weighed 6 kg 436 g and the other 2 kg 100 g . What was the difference in weight between the two? (Hint: convert all numbers to g .)

## INSTAMATHS EXERCISES

| Mass | Instamaths 78 | Total 10 | Your mark: |
| :--- | :--- | :--- | :--- |
| Mass: conversion | Instamaths 79 | Total 10 | Your mark: |



## READING SCALES (1)

The scale shows 1 kilogram, each big division is 100 grams, each small division is 20 grams. Please take the point of the arrow to be on the nearest line.

Write in the reading for each of the arrows
0


## A SPRING BALANCE SCALE

Please write the answer in grams.
a)
b)
c)
d)

## READING SCALES (2)

Weighing scales can be read like a clock, the dial indicator moves as the weight increases. Each big line is 100 g , each small line is 10 g , and the arrow shows 220 g


Draw arrows on the scale to show these weights. Please use a ruler and point right up to the place you are marking.
a) 520 g (orange)
b) 400 g (blue)
c) 960 g (green)
d) 1000 g (red)

## CAPACITY (PRACTICAL)

Measure 1 litre, then $\mathbf{5 0 0} \mathbf{~ m l}$ to get acquainted with the amounts. Choose 3different containers at home and list them in the first column. First estimate the capacity of the container and then measure it carefully. Write the measurements down neatly in the correct columns. Please write ml or litres (as a cursive l) next to your answer.

| Object | Estimation | Capacity |
| :--- | :--- | :--- |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |

EXECISE 1: Please do not write a number only for your answer. You must write a word as well.

| 1. If I have a litre of water and I drink half of it, how many ml do <br> I have left? |  |
| :--- | :--- |
| 2. A can of coke is 300 ml . I drink half of it. How much do I have <br> left? |  |
| 3. I need a total of 500 ml to water my plants and my watering can <br> holds 100 ml . How many times do I need to fill it up? |  |
| 4. If I have 400 ml in a bottle and I add 600 ml , how much do I <br> now have? |  |
| 5. If I pour 30 ml of water into a bowl and 50 ml of milk. How <br> much liquid is there in total. |  |
| 6. A cup of tea is 50 ml and I drink 4 cups a day. How many ml of <br> tea do I drink in a day? |  |

## CONVERSION EXERCISES

| 1 Litre $=1000 \mathrm{ML}$ | I Kilolitre $=1000$ Litres |
| :---: | :---: |

## EXERCISE 1

Convert the following ml into litres and milliliters. Look at the following examples

| $1245 \mathrm{ml}=1$ litre 245 ml | $1034 \mathrm{ml}=1$ litre 34 ml | $2 \mathrm{ml}=0$ litre 2 ml |
| :--- | :--- | :--- |


| 1) 1237 ml | $\ldots$ | 1 | 2) 97 ml |
| :--- | :--- | :--- | :--- |
| 3) 8 ml | $\ldots$ | l | l |

## EXERCISE 2

Convert these capacities into ml and litres eg. 1 litre $400 \mathrm{ml}=1400 \mathrm{ml}$; 6 kl 300 litres $=6000$ litres

| 1) 1 litre 7 ml | ml | 2) 1 litre 79 ml | $\ldots \mathrm{ml}$ |
| :---: | :---: | :---: | :---: |
| 3) 1 litre 122 ml | _ml | 4) 1 litre 435 ml | ml |
| 5) 7 kl 254 litres | _ litres | 6) 01756 litres | litres |

## CAPACITY

1. I drink 1344 ml of my 2 litre coke. How much is left? (Hint: change 2 litres into ml ) $\qquad$
2. A bath holds 80 litres, a shower takes 35 litres and watering the garden takes 179 litres. How much would be left if my water tank at the start had 642 litres?

3. A jar has 560 ml of jam. 342 ml is used. How much is left?
4. You have collected some rain water in a bucket. The bucket holds 5565 ml . I use 3765 ml to water some plants. How much is left?

## INSTAMATHS EXERCISES

| Capacity | Instamaths 80 | Total 10 | Your mark: |
| :--- | :--- | :--- | :--- |
| Reading capacity markings | Instamaths 81 | Total 10 | Your mark: |


| Perimeter and area | Instamaths 82 | Total 10 | Your mark: |
| :--- | :--- | :--- | :--- |



## MEASURMENT: Please highlight the correct units.

7am - I had a wash in 3 ( SECONDS, LITRES, ML ) of water.
7.30am - For breakfast I had 200 ( KILOGRAMS, MILLIGRAMS, GRAMS ) of cereal, with 100 ( GRAMS, MILLILITRES, LITRES ) of milk. I also had a cup of tea, with $1 ⁄ 2 \mathrm{a}$ ( GRAM, LITRE, METRE ) of sugar in it.
8.10am - I had to run for the bus today. The bus stop is 100 ( METRES, MILES, MILLIMETRES ) away from my house.
11.00am - During break I shared out a LITRE bottle of lemonade, between five glasses. We each had 200 ( LITRES, MILLILITRES, TONNES ) of lemonade.
3.15pm - This afternoon we had P.E. I kicked the football 14 (METRES, CENTIMETRES, KILOMETRES ).
4.30pm - My brother is running in an Athletics competition this evening. He is running in the 1500 (METRES, KILOMETRES, MILLIMETRES ) event. He can run that distance in 6 ( MINUTES, HOURS, SECONDS ). My brother is taller than I am. He is 1,82 ( CENTIMETRES, KILOMETRES, METRES ) tall.
7.30pm - The road outside our house looks like a river! The main water pipe has burst and there are ( MILLILITRES, METRES, LITRES ) of water gushing down the road.
7.45pm - I am going to watch a film on TV. It is $11 / 2($ MINUTES, HOURS, SECONDS ) long.

9pm - I have just weighed my pet hamster, Gerald. Well, I tried to weigh him, but he jumped off the scales just as the arrow reached 250 ( KILOGRAMS, GRAMS, MILLIGRAMS ).
9.30pm - Time for bed! I have to get up in 10 ( METRES, MINUTES, HOURS). Before I went to sleep I had 250 (MILLILITRES, MILLIGRAMS, MILLIMETRES) of tea to drink.

## MEASUREMENT: ORDERING NUMBERS

1) Put these prices in order, starting with the Lowest first.

2) Write these distances in order, starting with the shortest first.


100 CM


4 CM


9500 CM
3) Write these weights in order, starting with the largest first.


## MONEY: SHOPPING LIST

| Tea | $R 5,50$ | Chocolate | $R 4,35$ |
| :--- | :--- | :--- | :--- |
| Coffee | $R 6,00$ | Hotdog | $R 3,25$ |
| Burger | R10,00 | Doughnut | $R 4,95$ |
| Ice Cream | R7,55 | Chips | $R 3,72$ |



## 1. If I went shopping:

a) how much would it cost me if I bought 3 tea, 2 hotdog and 1 burger?
b) how much change would I get from a R50 note?

| Tea | $\mathrm{R} 5,50 \times 3=$ |  |
| :--- | :--- | :--- |
| Hotdog | $\mathrm{R} 3,25 \times 2=$ |  |
| Burger | $\mathrm{R} 10,00 \times 1=$ |  |
| Total spent |  |  |
| Change from R50 note? | R50,00 - |  |


2. If I went shopping:
a) how much would it cost me if I bought 3 bread, 2 ice-creams, 2 packets of chips and 4 coffees?
b) how much change would I get from a R100 note?

| 3 chocolates |  |  |
| :--- | :--- | :--- |
| 2 ice-creams |  |  |
| 2 packet of chips |  |  |
| 4 coffees |  |  |
| Change from R100 note? |  |  |

## SUPERMARKET RECEIPTS (Calculator exercise)

Write in the balance (total) for each receipt and the change that would be given...


|  |  |
| :--- | :---: |
|  |  |
|  |  |
|  |  |
| Sausages | 11,10 |
| Juice | 11,50 |
| Cheese | 10,90 |
| Beans | 10,14 |
| Batteries | 12,50 |
| Apple | 10,06 |
| Balance due |  |
|  |  |
| Cash | 100,00 |
| Change |  |


|  |  |
| :--- | :---: |
|  |  |
| Tin foil | 1,01 |
| Eggs | 0,99 |
| Bread | 0,60 |
| Lemonade | 1,20 |
| Tomato sauce | 0,81 |
| Sunflower oil | 0,40 |
| Chicken | 3,20 |
| Balance due |  |
| Cash | 10,00 |
| Change |  |

## MONEY

Match each price in words to the same price in numbers. Colour the two in one colour. Choose another colour to colour the next pair and so on. In the end you will have 6 different coloured pairs.


