JUMP AHEAD™

ALL IN ONE PLACE BASE CAMP
UNITS AND MEASUREMENT ACTIVITY 1

INSTRUCTIONS

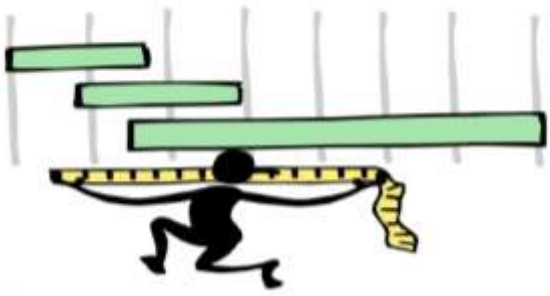
- There is no time limit for the activity – work at your own pace
- Ask a family member, teacher or friend for help if you need it
- Write answers in your Maths workbook or on the activity sheet
- Use the solution sheet to check your work
- You should not use a calculator

YOU MEASURE UP

Maybe you don't realize how many times you make measurements or think about measuring in your everyday life. Write **YES** or **NO** to these statements.

How I measure up	YES or NO
I boil the enough water to make tea.	
I use a ruler in Maths and other subjects at school.	
If I am sick, I always take the correct amount of medicine.	
I think about the temperature before choosing clothes to wear.	
I compare my body size with classmates or friends.	
I check or ask the time at least twice a day.	
I estimate the distance I will travel by bus, on a train or in a car.	
I estimate the time I get home after school.	

Read the quote by E. Thorndike, a famous American psychologist. Thorndike was interested in comparing the behviour of animals to how people learn. He used measurement and real data, not observations, to support his ideas.



"If a thing exists, it exists in some amount; and if it exists in some amount, it can be measured."
–E. L. Thorndike (1914)

Is Thorndike's quote sensible? Discuss your ideas with family members or friends.

Think about **How I measure up** at the start of this activity. Write ***distance***, ***time***, ***temperature*** or ***amount*** next to the examples of daily life measurement. The example shows you what to do.

Measurement	Type	Measurement	Type
water for tea	***amount***	comparing body size	
using a ruler		checking the time	
taking medicine		estimating distance	
choosing clothing		estimating time	

In this activity, you'll focus on length and distance measurement and

- use different units of length
- do distance and length problems
- estimate lengths and distances
- measure lengths and heights
- use scales
- work with area and perimeter

JUMP 1

Something easy to get you in the measuring mood. Next to each picture, write a sentence describing the measurement that is being made. Also circle or highlight the best unit for making each measurement.

What's being measured?

_____

_____

millimetre	centimetre	metre

What's being measured?

millimetre | centimetre | metre

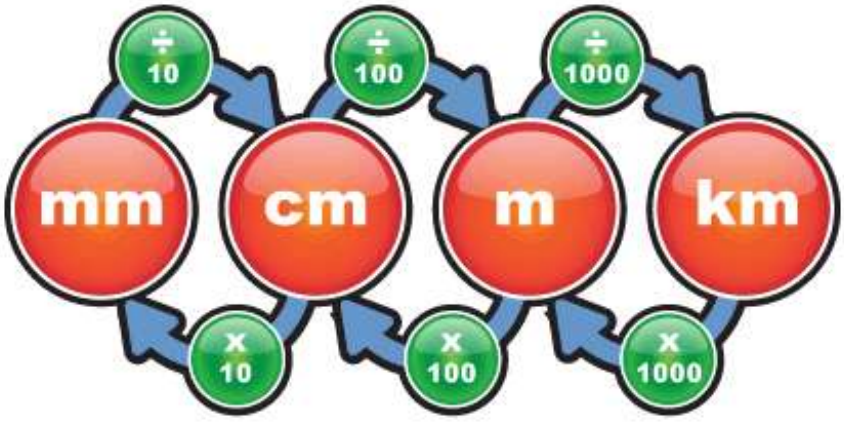
What's being measured?

millimetre | centimetre | metre

JUMP 2

Length is the distance between two points of an object. The standard metric unit for length is the ***metre*** with symbol **m**. Often you'll need to use smaller or larger units to measure length. You may need to convert metres into smaller units of centimetres of millimetres.

You've done conversions at school and know that converting units is straight forward. You either multiply or divide by 10 or 100 or 1 000. The diagram summarizes how to do conversions; use it in this exercise to crack conversions.



WHICH UNIT

Which unit of length would you use for each measurement? You only need to write the unit symbol. The example shows you what to do.

Measurement	mm cm m km
The height of your best friend.	cm
The distance from your home to school.	
The distance between London and Miami.	
The width of your eyeball.	
The length of a swimming pool.	
The width of a tablet screen.	
The width of a TV screen.	
The perimeter of a football field.	
The perimeter of a small bedroom window.	
The circumference of a Coke can.	
The diameter of a car steering wheel.	

MULTIPLY AND DIVIDE

Before you do a task on converting units, quickly check that you know your conversion rules. Circle the **x** or ÷ operation and a number to provide the correct method for each conversion. The example shows you what to do.

To convert **cm** to **mm**	÷ **x** by	**10** **100** **1000**
To convert **cm** to **mm**	÷ **x** by	**10** **100** **1000**
To convert **mm** to **cm**	÷ **x** by	**10** **100** **1000**
To convert **cm** to **m**	÷ **x** by	**10** **100** **1000**
To convert **m** to **mm**	÷ **x** by	**10** **100** **1000**
To convert **km** to **m**	÷ **x** by	**10** **100** **1000**
To convert **m** to **km**	÷ **x** by	**10** **100** **1000**
To convert **mm** to **m**	÷ **x** by	**10** **100** **1000**
To convert **m** to **cm**	÷ **x** by	**10** **100** **1000**

CONVERTING UNITS

Enter the missing numbers in each row so the lengths are expressed in millimeters, centimetres, metres and kilometres. If a cell is orange, you don't need to write anything. The examples show you what to do.

mm	cm	m	km
5 000	**500**	5	0.005
300	30	0.3	
		200	
			10
		670	
	99		
9 000			
90 000			
		7 000	
	36		
562			
			997
			0.04
2			
		0.5	
	0.1		

JUMP 3

Jake and Cathy are non-identical twins born in 2009. Cathy is 10 cm taller than Jake. Jake is 1.36 m in height. Jake's feet are 1.3 cm longer than his sister's and his shoe size is UK 5. Cathy used to have longer hands than her brother. A year ago, the length of her hand was 98 mm and Jake's was 92 mm. Now Jake's hands are 5 mm longer than Cathy's were a year ago.

a. What is Cathy's height, in centimetres, at the moment?

ANSWER _____ **cm**

b. What is Jake's current height in millimeters?

ANSWER _____ **mm**

c. Express the difference in their height in metres.

ANSWER _____ **m**

d. What was the length of Cathy's hand a year ago to the nearest whole number? Express your answer in centimetres.

ANSWER _____ **cm**

e. How long are Jake's hands at the moment? Express your answer in centimetres to one decimal place.

ANSWER _____ **cm**

f. Can you determine the current length of Cathy's hands? Explain your answer.

ANSWER AND EXPLANATION

_____

_____

h. Examine the data in the UK shoe size conversion chart for 7 to 12 year-old children.

UK size	inches	centimetres
2.5	8.6	21.9
3	8.8	22.2
3.5	9.0	22.9
4	9.1	23.2
4.5	9.3	23.5
5	9.5	24.1
5.5	9.6	24.4
6	9.8	24.8

Express Jake's current shoe size in millimetres.

ANSWER _____ **mm**

i. It is possible for Cathy to wear shoes of two different sizes. Which shoe sizes can Cathy wear at the moment?

ANSWER _____ **or** _____

j. Cathy estimates that **1 cm = 2.5 inches**. Use the data and show your working to prove that her estimation is accurate.

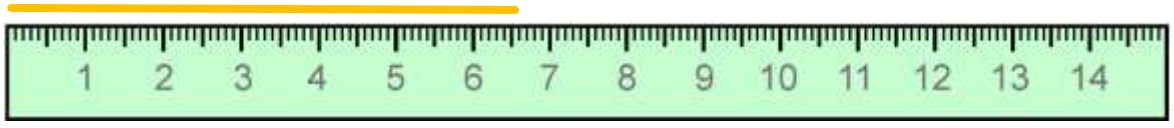
ANSWER

JUMP 4

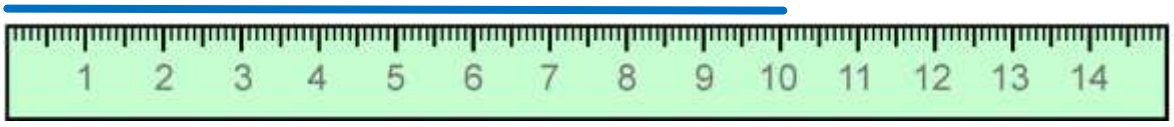
MEASURING LENGTH

For each of these centimetre rulers, write the length of the coloured lines. You'll need to write the lengths in centimetres and millimetres. The example shows you what to do.

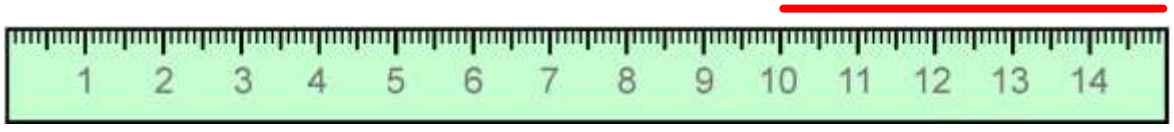
RULER 1



RULER 2



RULER 5



RULER 6

RULER	line length in cm	line length in mm
1	6.6	66
2		
3		
4		
5		
6		

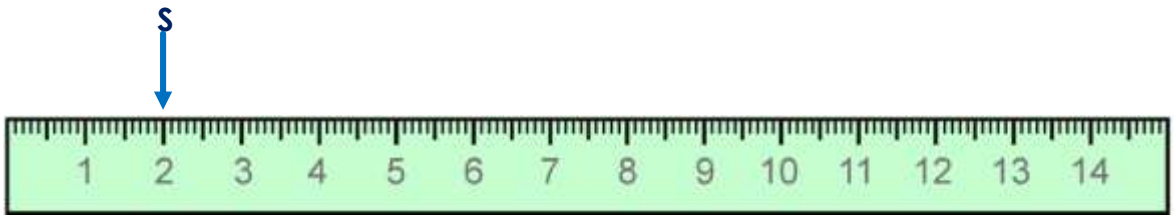
Are the **RULERS** to scale? Explain how you could find out.

ANSWER AND EXPLANATION

MARK LENGTHS

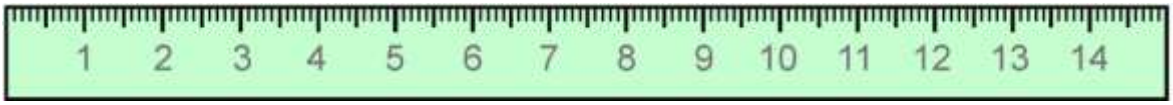
Mark points **S** to **Z** on the 15 cm ruler using a line with an arrow head for each point. The example shows you what to do.

Point	Where
S	2 cm from zero
T	6 cm from zero
U	1.4 cm from zero
V	95 mm from zero
W	7.2 cm from point **S** going right
X	50 mm from point **V** going left
Y	half way between point **S** and point **T**
Z	two thirds of the length between point **S** and point **V**



CUT AND MEASURE

Time for some measuring fun! Cut out this ruler and use it to accurately measure the lengths on the next page. The example shows you what to do.



I need to measure the	mm	cm
distance between the eyes of the green smiley	9	0.9
shortest distance between the two yellow smileys		
vertical distance between the blue smileys		
horizontal distance between two purple smileys		
longest distance between the green and a purple smiley		
shortest distance between a blue and a purple smiley		
diameter of the green smiley		
radius of the yellow smiley		
circumference of the green smiley		

Join the left eye of the three purple smileys to form a triangle.

a. What is the length of the diagonal of the triangle?

ANSWER _____ **mm**

b. What is the height of the triangle to the nearest centimetre?

ANSWER _____ **cm**

c. Is your triangle ***right-angled***, ***isosceles*** or neither? Explain your answer.

ANSWER AND EXPLANATION

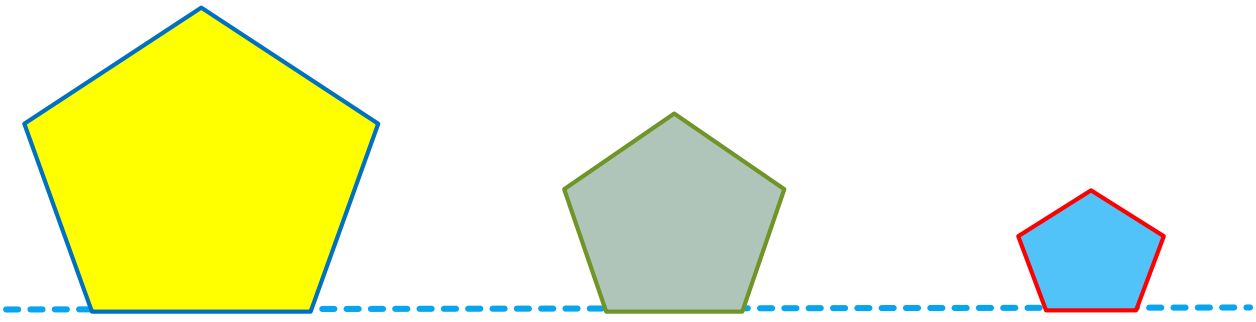
JUMP 5

MILLIMETRES AND CENTIMETRES

Keith is doing Maths homework on shapes. His teacher gives him three polygons of the same type, but different sizes.

Keith has to use the polygons and answer a set of questions using his measurement knowledge and skills.

Examine the three shapes and then answer the questions.



SHAPE A **SHAPE B** **SHAPE C**

b. Measure the base of **SHAPE B** in millimetres.

ANSWER _____ **mm**

c. Measure the vertical or ***perpendicular*** height of **SHAPE A**. Express your answer in centimetres as a decimal to one place.

ANSWER _____ **cm**

g. The shapes are on a base line shown by - - - - - - -

Measure the lengths of the base line and the bases of the shapes. Enter your measurements in the table. Your centimetre measurements should be expressed as whole number. The examples show you what to do.

Measurement	in millimetres	in centimetres
total base line length		
SHAPE A base length		
SHAPE B base length	17	
SHAPE C base length		1

CENTIMETRES AND METRES

A Year 6 class is doing a Maths and Science group project on home gardening. Each group is provided with a well-fertilized soil bed with 2 x 2.5 metre dimensions.

This group of students decide to grow carrots; it is spring which has ideal weather conditions for carrot growth.

The students do some research and use these guidelines for sowing carrot seeds. These points list some of the important information they found from their research.

POINT 1 seeds should planted 2 cm deep in moist soil
POINT 2 seeds in each row should be spaced 2 cm apart
POINT 3 a row of seeds should be 10 cm from any edge of the soil bed
POINT 4 rows of seeds should be spaced 15 cm apart
POINT 5 carrot plants from germinated seeds should be spaced 5 cm apart

a. Label the rectangle showing the dimensions of the soil bed that can be used for planting carrot seeds. Read **POINT 3** to help you work out the measurements. Express the length and width in centimetres.

b. Is the rectangle a scale drawing of the area the students can use for planting? Explain your answer.

ANSWER AND EXPLANATION

_____

_____

_____

_____

g. You know that the seeds germinate and carrot plants start to grow. For healthy growth, the plants need to be 5 cm apart. How many plants need to be removed from each row?

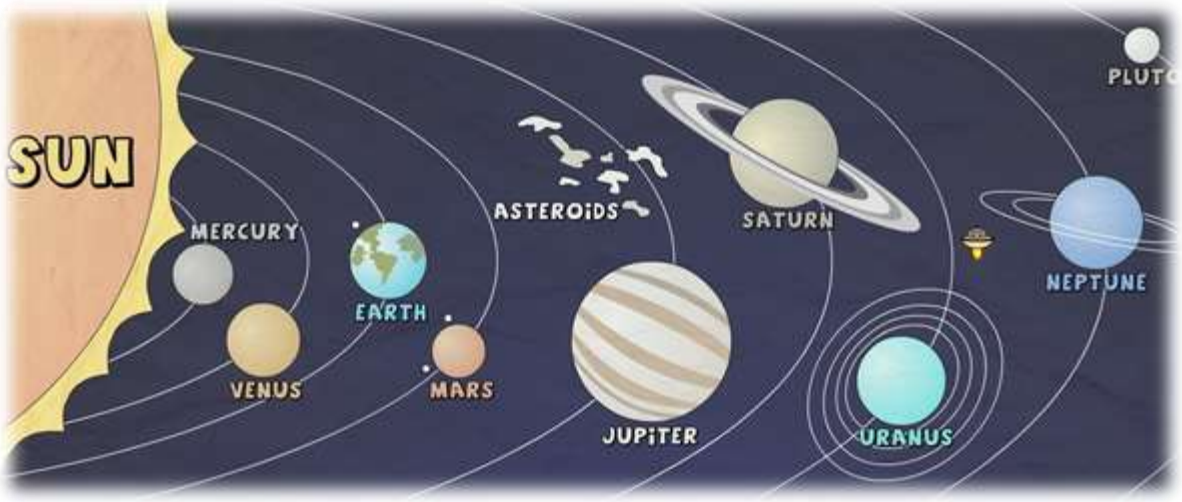
ANSWER _____

i. Express your answer to the previous question as a whole number percentage. You can use a calculator if you like.

ANSWER _____ **%**

METRES AND KILOMETRES

Jeff, Ethan, Alice and Rowan are studying the Solar System in Science. Their teacher asks them each to build a model of the Solar System. Their model should take into account the size of each planet and its distance from the Sun.



Their teacher gives them information in the table to help them.

planet	distance from the Sun in million km	diameter in km
Mercury	60	4 900
Venus	110	12 100
Earth	150	12 800
Mars	230	6 800
Jupiter	780	142 800
Saturn	1 420	120 800
Uranus	2 870	51 100
Neptune	4 500	48 600

a. What is Earth's distance from the Sun in kilometres?

ANSWER _____ **km**

b. What is Neptune's distance from the Sun in metres?

ANSWER _____ **m**

e. What is the difference in diameter between Jupiter and Saturn?

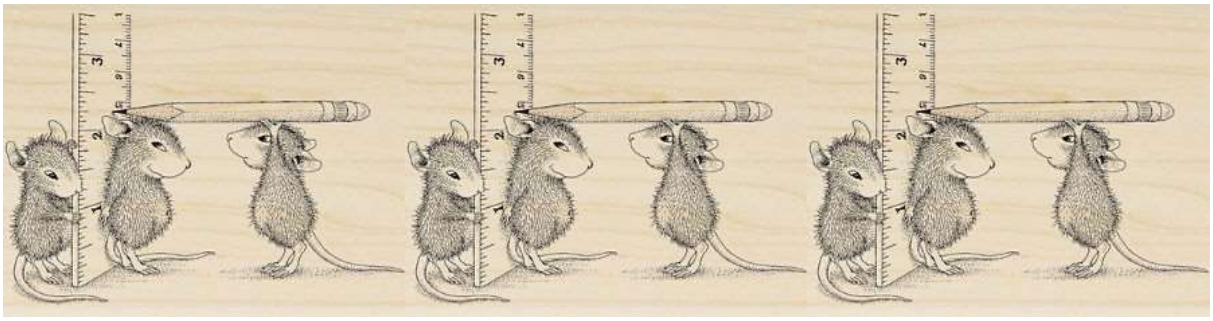
ANSWER _____ **km**

h. How many astronomical units would to travel to reach the Sun from Earth?

ANSWER _____ **AU**

i. What is the distance, in astronomical units, between Earth and Neptune?

ANSWER _____ **AU**



JUMP 6

Developing good estimation skills is important in Maths and very useful in your daily life. You do a lot of estimating without even realizing it! Estimation is finding a close, but not exact, answer.

Tick or check all the situations where you think estimation skills are useful.

USING ESTIMATION

Situation	✓
The length of a beach at a summer resort.	
How long it will take you to save £50.	
Buying ingredients to make pizza.	
The total cost of groceries before paying at the checkout.	
Mentally checking if a Maths answer is sensible without calculating.	
The number of seeds to buy to plant in your garden.	
The number of days until your birthday.	
The width of a river you're going to swim across.	
The change you receive after paying for several items.	
The morning temperature outside before you leave for school.	

UNITS FOR ESTIMATION

Decide on the best unit for providing a good estimate of each length. Circle one option.

To estimate	I would use
my height	**mm** **cm** **m** **km**
the thickness of a magazine or book	**mm** **cm** **m** **km**
the length of my fingernails	**mm** **cm** **m** **km**
the length of my thumb	**mm** **cm** **m** **km**
the length of a runway at Heathrow airport	**mm** **cm** **m** **km**
the length of a supermarket aisle	**mm** **cm** **m** **km**

ESTIMATING LENGTHS

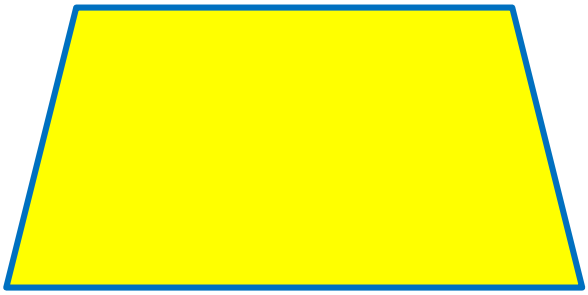
Estimate these lengths using two units. Highlight or circle the answer that is more useful as an estimation. The example shows you what to do.

What to estimate	My estimation
the length of a pen	15 **cm** or 150 **mm**
the width of my foot	____ **cm** or ____ **mm**
the height of a ceiling at home	____ **m** or ____ **cm**
the height of a tall tree	____ **m** or ____ **cm**
the width of a football field	____ **km** or ____ **m**
the distance to the nearest station	____ **km** or ____ **m**
the thickness of a £1 coin	____ **cm** or ____ **mm**
the diameter of a £1 coin	____ **cm** or ____ **mm**
the length of a train	____ **km** or ____ **m**

JUMP 8

AB and **CD** are two parallel sides of this quadrilateral, not drawn to scale.

The length of **AB** is half the length of **CD**. The length of **AB** is 1.5 centimetres.



a. Label the vertices of the quadrilateral **ABCD**.

b. What is the name of quadrilateral **ABCD**?

ANSWER _____

e. Draw two triangles on the quadrilateral so that it becomes a rectangle with vertices **XYCD**. What type of triangles did you draw? Circle one option.

isosceles	equilateral	right-angled	scalene

f. What is the length of **XA** in millimetres?

ANSWER _____ **mm**

g. If **YC** = 2 cm, determine the area of rectangle **XYCD**.

ANSWER _____ **cm²**

h. What is the perimeter of this shape?

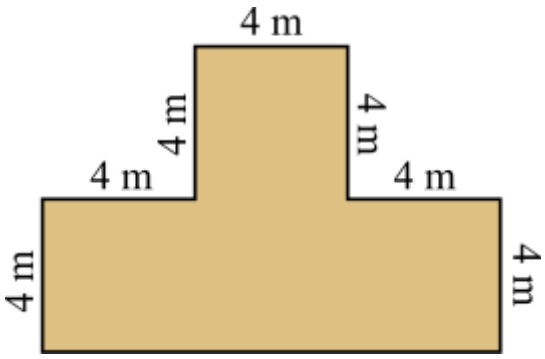
ANSWER _____ **m**

i. Calculate the area of the shape.

ANSWER _____ **m²**

j. Measure the base length of the shape.

ANSWER _____ **mm**



n. How many square tiles each with an area of 2 m² would fit into the shape?

ANSWER _____

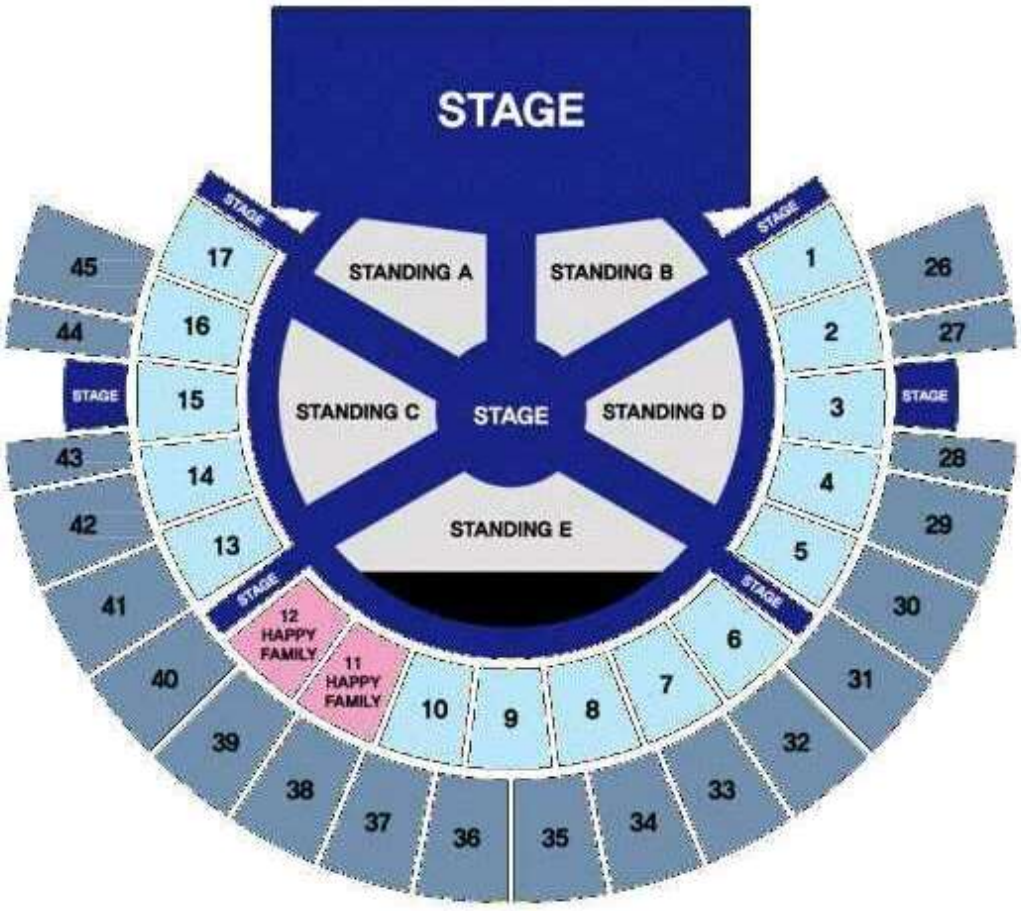
JUMP 9

The famous rock band, ***Open 24 Hours***, is performing at a local theatre.

The scale diagram on the next page shows the seating plan for the concert and the band's elaborate stage formation.

Martin and Rosa are seated in the first row of block 5. Martin has the last seat in the row.

Use a scale of the diagram is **1 mm = 1 m** to answer the measurement questions. Express all your answers as whole numbers.



a. The seats in each row of each block are numbered from 1 and the numbering increases clockwise. Mark where Martin is sitting on the diagram with **X**.

c. Assuming that the main stage is a rectangle, what is its area?

ANSWER _____ **m^2**

f. Martin has the urge to run up and join Nicole. What is the shortest distance that Martin would have to walk – or run – to be singing next to Nicole if he moves through the small circular stage?

ANSWER _____ **m**

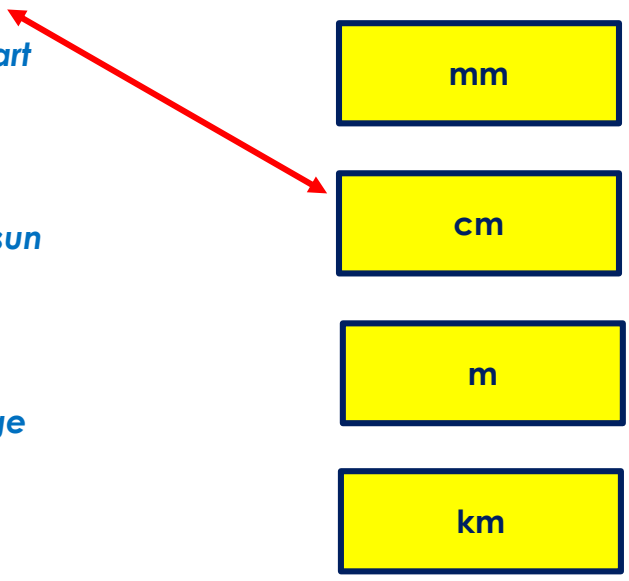
i. ***Open 24 Hours*** have a new single called ***You Measure***. Four verses of the song are related to different units of measurement. Match a unit of length with a verse from the song. The example shows you what to do.

For my pleasure
You measure
The map of my heart
Be the start

You be clever
And measure
The moon and the sun
Be the one

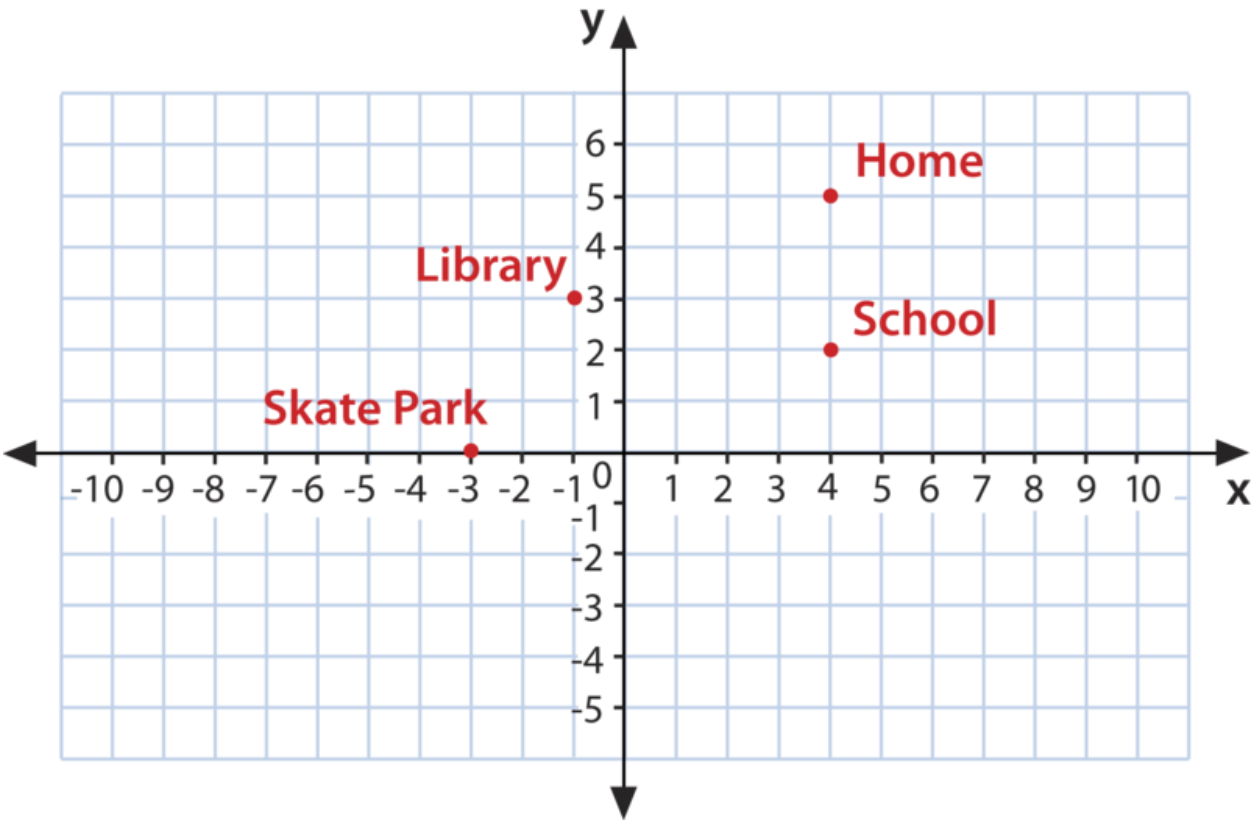
Say that never
You measure
The size of my stage
Be the rage

Be a treasure
And measure
The tip of my finger
Be the winner



JUMP 10

The position of Alison's home, her school, the skate park and the library are shown on the **x-y** coordinate plane.



a. Complete the table by entering the **x** and **y** coordinates for each place. Alison's home is done for you.

place	x coordinate	y coordinate
home	4	5
school		
library		
skate park		

b. Measure the distance between Alison's home and school in millimetres.

ANSWER _____ **mm**

h. Except on Monday when her Dad drops and collects her, Alison walks to and from school on weekdays. What is the distance that Alice walks to and from school on a Friday?

ANSWER _____ **m**

j. Solomon wants directions from the library to the Cineplex. He does not want to walk close to school. Which of Alison's directions should Solomon use? Tick or check your selection.

Alison's directions for Solomon	✓
Walk 250 metres east then 250 metres south.	
Walk 250 metres east then 300 metres south.	
Walk 250 metres south then 250 metres east.	
Walk 300 metres south then 250 metres east.	

k. If Solomon walked in a straight line from the library to the Cineplex, what distance would he cover? Use a scale of **1 cm = 75 m** and express your answer to the nearest metre.

ANSWER _____ **m**

JUMP 11

Rory would like to be an architect when he starts his working career. He is particularly interested in the construction of skyscrapers, both old and new.

Rory does a presentation to his class about the famous Twin Towers and One World Trade Center in New York City. He gives his classmates information and data about both buildings and some tasks to complete.

World Trade Center Twin Towers

The Twin Towers were two of seven buildings making up the World Trade Center Complex. The towers were known as 1WTC and 2WTC; 1WTC was completed in 1970. The skyscrapers were destroyed by an Al-Qaeda terrorist attack on 11th September 2001. The attacks resulted in the death of 2 600 people. This data is for the original 1WTC.

height (m)	417
height + antennae (m)	527
foundation depth (m)	20
stories	110
area/story (m^2)	2 200
cost in dollars (millions)	$400

One World Trade Center

The City of New York undertook the rebuilding of the World Trade Centre Complex. The designs of the original complex were closely followed. The first skyscraper, initially called 'Freedom Tower' but also known officially as 1WTC was opened to the public in November 2014. The other six building making up the complex should be complete by 2023.

height (m)	417
height + antennae (m)	541
foundation depth (m)	56
stories	104
area/story (m^2)	3 000
cost in dollars (millions)	$4 000

a. How much taller is the 2014 1WTC, including the antennae, than the original 1WTC Twin Tower?

ANSWER _____ **m**

c. Use a calculator to determine the height, in metres, of each story of the 1WTC Twin Tower. Express your answer to one decimal place.

ANSWER _____ **m**

e. A company needs 15 000 m^2 of floor space in One World Trade Center. What is the minimum number of floors they need to rent?

ANSWER _____ **m**

g. Building the 2014 1WTC cost ten times more than the construction of the original landmark. Think about reasons for this enormous difference in cost. Write two of your reasons.

REASON 1 _____

_____

REASON 2 _____

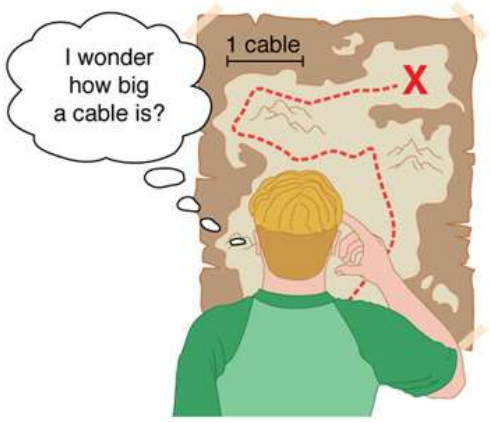
_____

JUMP 13

Let's get going on some conversions using metric and imperial units.

The table shows the four main Imperial or US measures of length – inch, foot, yard and mile.

You can see the equivalent metric lengths in either centimetres, metres or kilometres.



Imperial measurement		Metric measurement
1 inch	1 inch	2.5 cm
1 foot	12 inches	0.3 m
1 yard	3 feet	0.9 m
1 mile	1 760 yards	1.6 km

a. How many inches are in 3 feet?

ANSWER _____ **in**

b. How many yards are in 5 miles?

ANSWER _____ **yd**

d. Matt is 4 feet 4 inches tall. What is Matt's height in centimetres?

ANSWER _____ **cm**

f. Every day, Amanda jogs two miles. What distance does she run in kilometres? Express your answer to one decimal place.

ANSWER _____ **km**

i. You travel 180 kilometres by train. What is the distance in miles?

ANSWER _____ **miles**

k. The path from the yellow feet to the star is 65 metres. What is the path length in yards?

ANSWER _____ **yd**

l. The feet in the diagram are identical in size. The length of each foot 25 centimetres. What is the length, in feet, of all the feet?

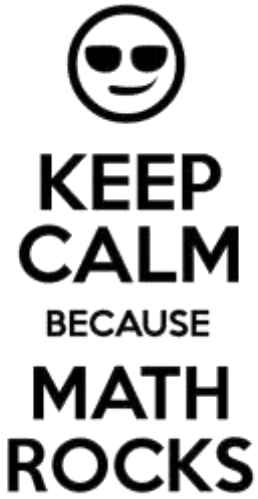
ANSWER _____ **ft**

JUMP 14

You're going to complete this activity of measuring length doing two revision exercises. In this exercise you'll

- review the main ideas of the activity
- select units for measuring length
- do measurement word problems
- make ruler measurements

Understand that revision doesn't mean boring! Revision means showing that you know how to do it!



TRUE OR FALSE

Tell if the statements are true or false. Write **T** for true and **F** for false. The example shows you what to do.

Statement	T or F
You use the term distance not length to describe the height of Big Ben.	**F**
When you climb a ladder you move a length above ground level.	
The standard metric unit for length and distance is the metre.	
There are 1000 centimetres in 1 metre.	
If you travel 4 kilometres, you're moved 4 000 metres.	
The width of a bedroom could be expressed in metres or yards.	
100 metres is a good estimate for the length of a tennis court.	
To convert centimetres to millimetres you multiply by ten.	
A scale of 1 : 100 means 1 cm on a map is 100 m in real life.	
A scale of 5 mm : 1 km means 2 km has a length of 10 mm on a map.	
Moving 50 m west and 50 m north means being NW from a start point.	
As a power of 10, 10 000 is expressed as 10^4 or 10 x 10 x 10 x 10	
The distance between the vertices of an isosceles triangle are equal.	
You cannot learn about measurement through real experiences.	

BUBBLEGUM SOUP

You are working at a store and packing cans of bubblegum soup. Each can has a height of 12 centimetres and a diameter of 8 centimetres.

a. What is the 3D soup can shape called?

ANSWER _____

b. What is the height of a can in millimetres?

ANSWER _____ **mm**

c. What is the radius of the can?

ANSWER _____ **cm**

h. You make a column of 11 cans. What is the distance between the top of the column and the top of the forth can you placed to make the column? Express your answer in metres to one decimal place.

ANSWER _____ **m**

USING THE TUBE

The London Underground or Tube has 400 kilometres of track and is the eleventh largest metropolitan train system in the world. The table shows the total lengths of six Tube lines.

Tube line	Total length (km)
Bakerloo	23
Central	74
Jubilee	36
Northern	58
Piccadilly	71
Victoria	21

a. Which is the longest Tube line?

ANSWER _____

b. How many Tube lines are longer than the Piccadilly line?

ANSWER _____

c. Express the length of the Victoria line in metres?

ANSWER _____ **m**

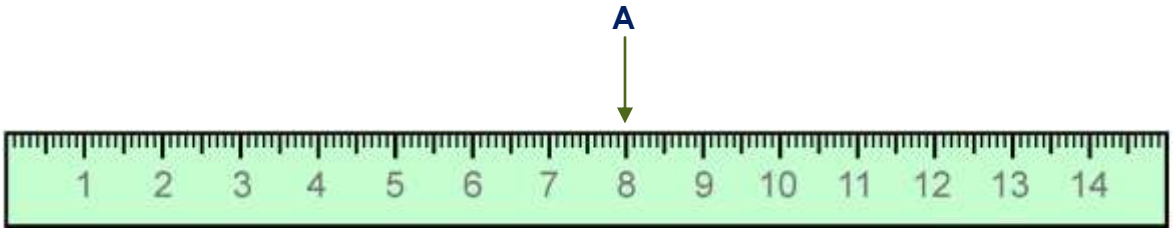
f. Imagine you are a driver on the Jubilee line working 8 hours a day for 5 days a week. Each working day you drive 4 complete return journeys. What distance do you travel in a working week?

ANSWER _____ **km**

USING RULERS

a. Mark each **POINT** on the ruler. The example shows you what to do.

POINT	Where is the POINT on the ruler?
A	8 cm from zero
B	10 cm from zero
C	57 mm from zero
D	half way between **POINT A** and **POINT B**
E	3 cm left of **POINT C**
F	40 mm right of **POINT D**
G	half way between the two largest prime numbers on the ruler



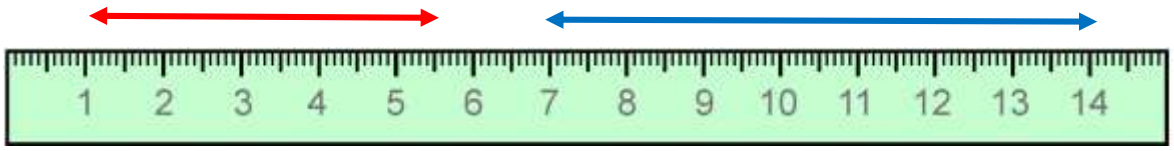
b. What is the distance between **POINT A** and **POINT B**?

ANSWER _____ **cm**

f. A friend asks you to explain how to convert centimetres to millimetres. Explain how you could use the ruler to do this. You can draw on the ruler if you like.

ANSWER AND EXPLANATION

g. Label the longer line shown on the ruler **LM** and the shorter line **NO**.



l. Measure the distance between point **N** and point **M**. Express your answer in centimetres to one decimal place.

ANSWER _____ **cm**

m. Twice the length of **LM** can be written as 2**LM**. Calculate 2**LM** + 3**NO** and express your answer in centimetres to the nearest whole number.

ANSWER _____ **cm**

JUMP 15

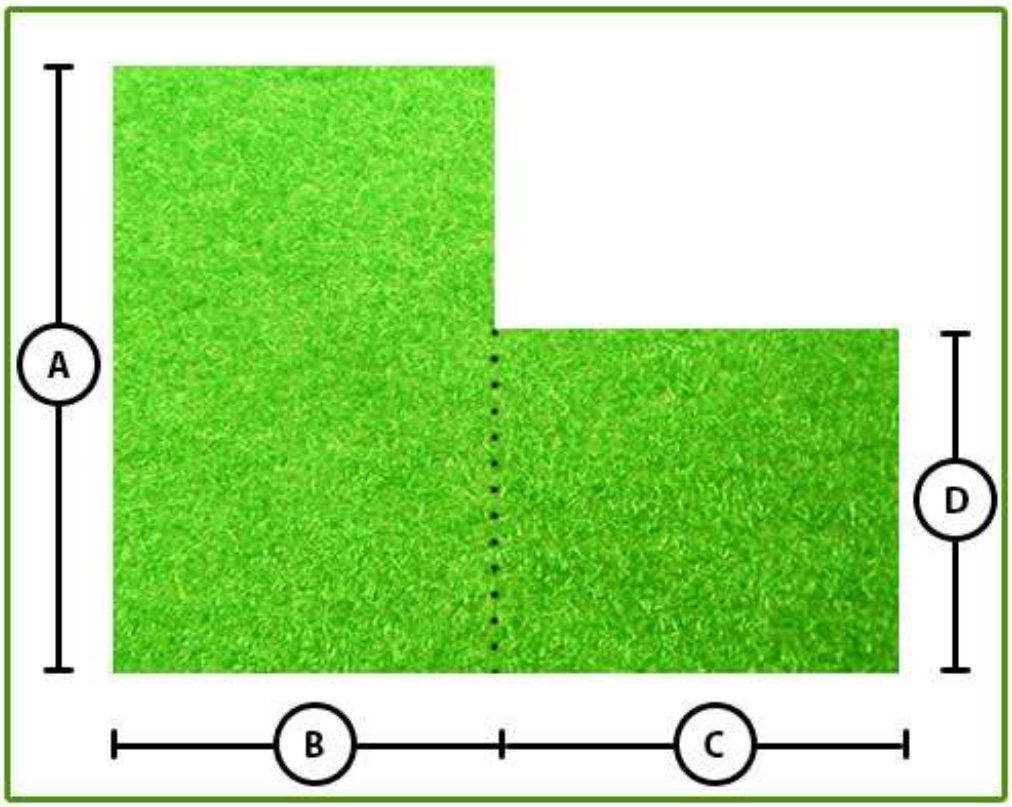
You're almost there! A few more tasks and then you can put measuring length and distance on hold for a while. In this exercise you'll

- demonstrate your estimation skills
- use diagrams to determine lengths
- practice unit conversions
- assess ideas about measurement

Show yourself and everybody else that you know how to do it.

AREA PERIMETER SCALE

In the diagram of the lawn, the length of A is 16 metres. The lengths B, C and D are equal in length and B is 7 metres less than A.



a. What is the length of D?

ANSWER _____ **m**

b. Determine the perimeter of the lawn.

ANSWER _____ **m**

c. Determine the area of the lawn.

ANSWER _____ **m^2**

e. Express your answer to the previous question in centimetres.

ANSWER _____ **cm**

YOU TEACH ABOUT THE SHARD

Your teacher asks you to give a lesson on measurement to a Year 5 class.

With their teacher, you take the students on a field trip to the Shard in London. They have to investigate data related to length and distance while on the trip.

You give each Year 5 student this checklist to complete. Having done research before the lesson, you know that the answers are all **YES**.

Shard Measurement Checklist	Yes or No
The height of the Shard is 310 metres.	**Yes**
The Shard has 87 floors of which 72 are occupied.	**Yes**
The Shangri La hotel occupies 18 floors of the Shard.	**Yes**
Offices occupy 27 floors using a total area of 54 000 m^2.	**Yes**
The Shard is 121 metres taller than the BT tower.	**Yes**

After the outing, your students work in four teams and do a worksheet to consolidate what they've learnt. These are four questions from the worksheet.

QUESTION 1

What is the height of the Shard in yards?

QUESTION 2

What is the height of each floor of the Shard in centimetres?

QUESTION 3

If you rent one floor of office space, what area will you have to use?

QUESTION 4

How tall is the BT tower in feet?

Before your students end their super Shard lesson, you ask for a volunteer from each team to give the answers to the questions. Read how they responded.

Andrew's team reports

Question	Answer
1	341
2	356
3	2 000
4	431

Answers correct = 75%

Bianca's team reports

Question	Answer
1	341
2	356
3	2 700
4	189

Answers correct = 75%

Pete's team reports

Question	Answer
1	282
2	356
3	2000
4	189

Answers correct = 75%

Jasmine's team reports

Question	Answer
1	341
2	3 560
3	2 000
4	189

Answers correct = 75%

You can see that you did a good teaching job. Each team got 75% of their answers correct. Unfortunately, this also means that they each made one mistake.

Look at each team's answers. Decide which question they got wrong. Write the number of the 'wrong' question and complete each statement so they know what to do next time. The example using Andrew's team shows you what to do.

Andrew's team corrected 	**Question** 4 **is incorrect.** **REASON** ***You should have subtracted 121 from 310 to get the BT Tower height, not added the heights.***
Bianca's team corrected 	**Question** ☐ **is incorrect.** **REASON** _____ _____ _____
Pete's team corrected 	**Question** ☐ **is incorrect.** **REASON** _____ _____ _____
Jasmine's team corrected 	**Question** ☐ **is incorrect.** **REASON** _____ _____ _____

Cut and paste the **CHECK POINT** into your workbook.

CHECK POINT
UNITS AND MEASUREMENT ACTIVITY 1

How much have you jumped applying your Maths knowledge and skills? Write a number from 1 to 10 – 10 is the biggest jump.

I've jumped _____

Circle YES or NO to these statements

1. I measure accurately.	**YES or NO**
2. I am good at estimating.	**YES or NO**
3. I can convert units of length.	**YES or NO**
4. I can solve length and distance problems.	**YES or NO**
5. I can work with scale diagrams and grids.	**YES or NO**

LEARNING OUTCOMES

Write your name in the table and ask a parent, teacher or tutor to decide **YES** or **NO** for each learning outcome or success criterion.

My name is _____ and I can	
accurately measure using a ruler.	**YES** or **NO**
do conversions for units of length.	**YES** or **NO**
explain why estimation is useful in life.	**YES** or **NO**
apply estimation to real situations.	**YES** or **NO**
solve problems involving measurement of length.	**YES** or **NO**
use scale diagrams to determine length and distance.	**YES** or **NO**