Edexcel GCSE

Mathematics (Linear) – 1MA0

METRIC & IMPERIAL MEASURES

Materials required for examination

Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser. Tracing paper may be used. Items included with question papers



Instructions

Use black ink or ball-point pen.

Fill in the boxes at the top of this page with your name, centre number and candidate number. Answer all questions.

Answer the questions in the spaces provided – there may be more space than you need. Calculators may be used.

Information

The marks for each question are shown in brackets – use this as a guide as to how much time to spend on **each** question.

Questions labelled with an **asterisk** (*) are ones where the quality of your written communication will be assessed – you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.

Advice

Read each question carefully before you start to answer it.

Keep an eye on the time.

Try to answer every question.

Check your answers if you have time at the end.

	1.	Com	plete	this	table.
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Write a sensible unit for each measurement.

	Metric	Imperial
The height of a bus		feet
The distance between two towns	kilometres	

(2 marks)

2. Complete this table.

Write a sensible unit for each measurement.

	Metric	Imperial
The weight of a turkey		pounds
The volume of water in a swimming pool		gallons
The width of this page	centimetres	

(3 marks)

3. Complete this table by writing a sensible unit for each measurement.

	Metric	Imperial
The height of a door		feet
The weight of a man	kilograms	
The volume of water in a bucket		gallons

(3 marks)

4.	(a)	Write down a sensible metric unit that can be used to measure						
		(i) the height of a tree,						
		(ii) the weight of a person.						
				(2)				
	(b)	Change 2 centimetres to millimetres.		, ,				
			millimetres	(1)				
				(1) (3 marks)				
5.	(a)	Write down the name of a sensible metric uni	t that can be used to measure					
		(i) the weight of a grape,						
		(ii) the diameter of a CD.						
				(2)				
	(b)	Change 7 kilometres to metres.	m					
				(1) (3 marks)				
6.	(a)	Write down the name of the metric unit used to measure						
		(i) the weight of a man,						
		(ii) the distance from New York to London.						
				(2)				
	(b)	Change 4 metres to centimetres.		(=)				
	` /		cm					
				(1)				
	(c)	Change 9000 millilitres to litres.						
			litres	(1)				
				(4 marks)				

7.	(a)	(i)	Change 5.6 metres to centimetres.	
			cm	
		(ii)	Change 6700 millilitres to litres.	
			litres	
				(2)
	(b)		te down the name of the metric unit which is usually used to measure the ght of a person.	
				(1) (3 marks)
8.	(a)	V	Write down a sensible metric unit that should be used to measure	
		(i)	the height of a school hall,	
		(ii)	the weight of a pencil.	
				(2)
	(b)		te down a sensible imperial unit that should be used to measure the distangent veen London and Manchester.	
				(1) (3 marks)
9.	(a)	Writ	te down a sensible metric unit for measuring	
		(i)	the distance from London to Paris,	
		(ii)	the amount of water in a swimming pool.	
				(2)
	(b)	(i)	Change 5 centimetres to millimetres.	(2)
	(8)	(1)	mm	
		(ii)	Change 4000 grams to kilograms.	
		. /	kg	
				(2)
				(4 marks)

		The first one has been done for you.						
		The distance from London to Birmingham	179 1	kilometres				
		The weight of a twenty pence coin	5					
		The height of the tallest living man	232 .					
		The volume of lemonade in a glass	250 .					
	(b)	Change 5000 metres to kilometres.	·					
					km (4 marl			
11.	(a)	Omplete this table. Write a sensible unit for each measurement. Three have been done for you.						
				Metric	Imperial			
		The length of your finger			inches			
		The distance between America and Engla		kilometres				
		The amount of petrol in a petrol tank			gallons			
	(b)	Change 3 metres to centimetres.						
	(-)	0			cm			
	(c)	Shalim says 1.5 km is less than 1400 m. Is he right? Explain your answer.						
			•••••					
					(5 marl			

Complete the table by writing a sensible metric unit on each dotted line.

10. (a)

12.	(a)	Writ	te down the name of a metric unit v	which is used to m	easure	
		(i)	the distance from London to Brigh	nton,		
		(ii)	the weight of a bar of soap.			(2)
	(b)	(i)	Change 240 millimetres to centim	etres.		(2)
		(;;)	Change 2.9 litues to millilitues		cm	
		(ii)	Change 3.8 litres to millilitres.		ml	(2) (4 marks)
13.	(a)	Writ	nplete this table. te a sensible unit for each measurem ee have been done for you.	nent. Metric	Imperial	7
		I	Distance from London to Cradiff	km		
			Weight of a bag of potatoes		pounds	
		V	olume of fuel in a car's fuel tank		gallons	(3)
	(b)		e is a picture of a woman opening a mate the height of the woman.	door that is 2 m h	igh.	(3)
					m	(2)
						(4 marks)

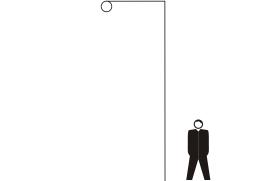
14.	(a)	Complete the table by writing a sensible metric unit for each measurement.
		The first one has been done for you.

The length of the river Nile	6700kilometres
The height of the world's tallest tree	110
The weight of a chicken's egg	70
The amount of petrol in a full petrol tank of a car	40
	(3)
(b) Change 4 metres to centimetres.	cm (1)
(c) Change 1500 grams to kilograms.	kg
	(5 marks)
15. Write down a sensible metric unit for each measurement.	
(i) The weight of a pair of sunglasses.	
(ii) The height of a house.	
(iii) The volume of toothpaste in a tube of toothpaste.	
	(3 marks)

16. Complete this table. Write a sensible unit for each measurement.

	Metric	Imperial
The weight of a bicycle		pounds
The volume of water in a watering can		pints
The length of this page	centimetres	

(3		
13	marks)	١
10	man iso	



(a) Write down an estimate for t	he height, in metres, of the m	an.
		m
(b) Estimate the height, in metre	s, of the lamppost.	
		m
a) Complete this table. Vrite a sensible unit for each measu	rement.	
•		
•	rement. Metric	Imperial inches
Write a sensible unit for each measu		Imperial
Vrite a sensible unit for each measured by the sensible u	Metric	Imperial
Write a sensible unit for each measured by the sensible u	Metric	Imperial

(4 marks)

The diagram shows a building and a man.

The man is of normal height.

The man and the building are drawn to the same scale.

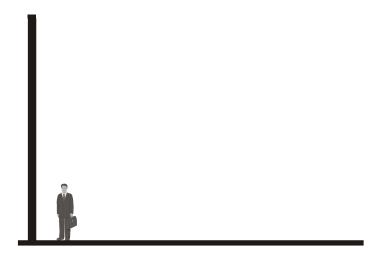
(a)	Write down an estimate for the height of the man.	
		 (1)
(b)	Write down an estimate for the height of the building.	
		 (2)
		(3 marks)

Complete this table. 20.

Write a sensible unit for each measurement.

	Metric	Imperial
The weight of a chicken		pounds
The volume of water in a petrol tanker		gallons
The length of a finger	centimetres	

(3 marks)



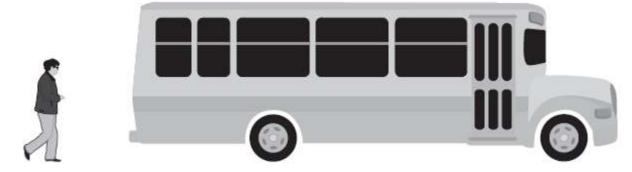
The picture shows a man standing next to a flagpole.

The man is of normal height.

The man and the flagpole are drawn to the same scale.

(a) Write down an estimate for the height, in metres, of the man.

(1)		(ł	
(2) (3 marks)	m		
	ite down a sensible metric unit for measuring	(a) '	22.
	distance from London to Birmingham,	(i) t	
	weight of a pencil.	(ii) t	
(2)			
	Change 7 centimetres to millimetres.	(b) (
mm	Change 4500 grams to kilograms.	(
kg (2)			
(4 marks)			



The diagram shows a man and a bus.
The man and the bus are drawn to the same scale
The man is of average height.

24.	(a) Write a sensible unit for each measurement.	
		(4 marks)
(ii)	Find an estimate for the length of the bus.	
(i)	Write down an estimate for the height of the man.	

	Metric	Imperial
The weight of a man		pounds
The volume of water in a bath		gallons
The length of an arm	centimetres	

	1110	ongui or an arm	continuences			
L					(3)	
	(b)	Change 6.8 metres to	centimetres.	CI	n	(1)
	(c)	Change 7500 grams to	kilograms.	k	g	(1)
					(5 ma	arks)

NOTES

DISTANCE

MET	TRIC	IMPERIAL
Kilometres	km	Miles
Metres	m	Yards
Centimetres	cm	Feet
Millimetres	mm	Inches

> 1 km = 1000 m

> 1m = 100cm

> 1cm = 10mm

WEIGHT

METRIC	IMPERIAL
Kilograms kg	Ton
Grams g	Stone
Milligrams mg	Pounds
	Ounces

> 1 kg = 1000 g

> 1g = 1000g

CAPACITY / VOLUME

METRIC	IMPERIAL
Litres l	Gallons
Millilitres ml	Pints

> 1 l = 1000ml