

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

Nil



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. Complete this table.

Write a sensible unit for each measurement.

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

(2 marks)

2. Complete this table.

Write a sensible unit for each measurement.

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

(3 marks)

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

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

(3 marks)

4. (a) Write down a sensible **metric** unit that can be used to measure

(i) the height of a tree,

.....meter.....

(ii) the weight of a person.

.....Kilogram.....

(2)

(b) Change 2 centimetres to millimetres.

.....20..... millimetres

(1)

(3 marks)

5. (a) Write down the name of a sensible **metric** unit that can be used to measure

(i) the weight of a grape,

.....gram.....

(ii) the diameter of a CD.

.....cm.....

(2)

(b) Change 7 kilometres to metres.

.....7000..... m

(1)

(3 marks)

6. (a) Write down the name of the **metric** unit used to measure

(i) the weight of a man,

.....meter.....

(ii) the distance from New York to London.

.....kilometer.....

(2)

(b) Change 4 metres to centimetres.

.....400..... cm

(1)

(c) Change 9000 millilitres to litres.

.....9..... litres

(1)

(4 marks)

7. (a) (i) Change 5.6 metres to centimetres.

.....560cm

(ii) Change 6700 millilitres to litres.

.....6.7 litres

(2)

(b) Write down the name of the **metric** unit which is usually used to measure the weight of a person.

Kilograms.

(1)

(3 marks)

8. (a) Write down a sensible **metric** unit that should be used to measure

(i) the height of a school hall,

.....meters.....

(ii) the weight of a pencil.

.....grams.....

(2)

(b) Write down a sensible **imperial** unit that should be used to measure the distance between London and Manchester.

.....miles.....

(1)

(3 marks)

9. (a) Write down a sensible **metric** unit for measuring

(i) the distance from London to Paris,

.....kilometers.....

(ii) the amount of water in a swimming pool.

.....litres.....

(2)

(b) (i) Change 5 centimetres to millimetres.

.....50 mm

(ii) Change 4000 grams to kilograms.

.....4 kg

(2)

(4 marks)

10. (a) Complete the table by writing a sensible metric unit on each dotted line.
The first one has been done for you.

The distance from London to Birmingham	179 kilometres
The weight of a twenty pence coin	5 ..grams.....
The height of the tallest living man	232 ..cm.....
The volume of lemonade in a glass	250 ..cm ³

(3)

- (b) Change 5000 metres to kilometres.

.....5.....km

(1)

(4 marks)

11. (a) Complete this table.
Write a sensible unit for each measurement.
Three have been done for you.

	Metric	Imperial
The length of your finger	.....cm.....	inches
The distance between America and England	kilometres	.....miles.....
The amount of petrol in a petrol tank	.....Litres.....	gallons

(3)

- (b) Change 3 metres to centimetres.

.....300..... cm

(1)

- (c) Shalim says 1.5 km is less than 1400 m.
Is he right?
Explain your answer.

.....No 1400m = 1.4km so 1.5km is more.....

(1)

(5 marks)

12. (a) Write down the name of a **metric** unit which is used to measure

(i) the distance from London to Brighton,

.....Kilometer.....

(ii) the weight of a bar of soap.

.....gram.....

(2)

(b) (i) Change 240 millimetres to centimetres.

.....24.....cm

(ii) Change 3.8 litres to millilitres.

.....3800.....ml

(2)

(4 marks)

13. (a) Complete this table.

Write a sensible unit for each measurement.

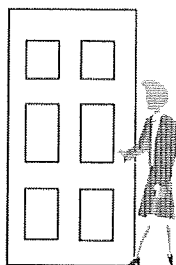
Three have been done for you.

	Metric	Imperial
Distance from London to Cradiff	km	miles..
Weight of a bag of potatoes	...Kg...	pounds
Volume of fuel in a car's fuel tank	..Litres..	gallons

(3)

(b) Here is a picture of a woman opening a door that is 2 m high.

Estimate the height of the woman.



.....1.6..... 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	6700 .....kilometres.....
The height of the world's tallest tree	110 .....meters.....
The weight of a chicken's egg	70 .....grams.....
The amount of petrol in a full petrol tank of a car	40 .....Litres.....

(3)

- (b) Change 4 metres to centimetres.400... cm

(1)

- (c) Change 1500 grams to kilograms.1.5... kg

(1)

(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.

.....grams.....

.....meter.....

.....ml.....

(3 marks)

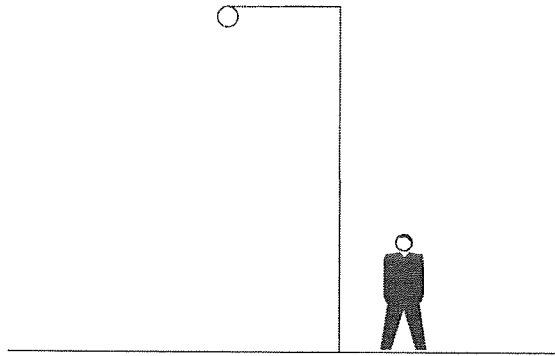
16. Complete this table.

Write a sensible unit for each measurement.

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

(3 marks)

17.



The diagram shows a man standing next to a lamppost.
The man is of normal height.

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

.....2..... m (1)

(b) Estimate the height, in metres, of the lamppost.

.....6..... m (2)

(3 marks)

18. (a) Complete this table.
Write a sensible unit for each measurement.

	Metric	Imperial
Diameter of a football	.....cm.....	inches
Amount of fuel in a car fuel tank	litres	.....gallons.....

(2)

(b) (i) Change 4 kg to grams.

.....4000..... grams

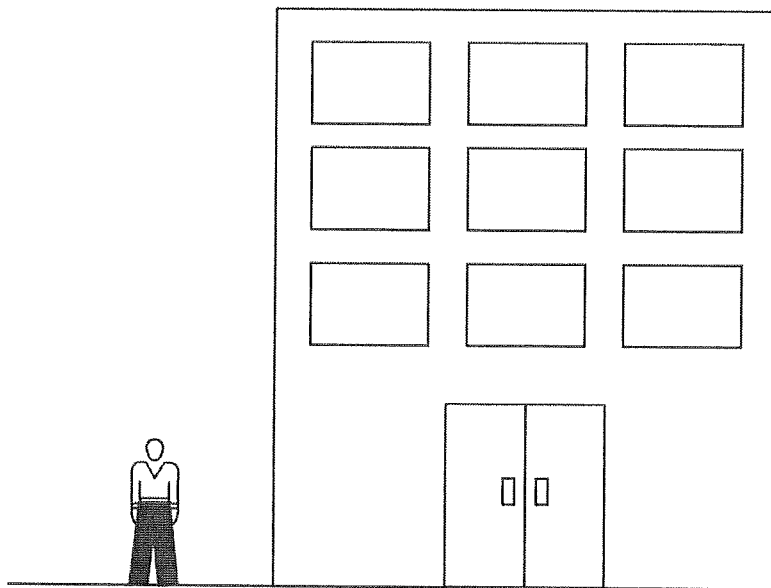
(ii) Change 3500 ml to litres.

.....3.5..... litres

(2)

(4 marks)

19.



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.

.....2m.....

(1)

(b) Write down an estimate for the height of the building.

.....7m.....

(2)

(3 marks)

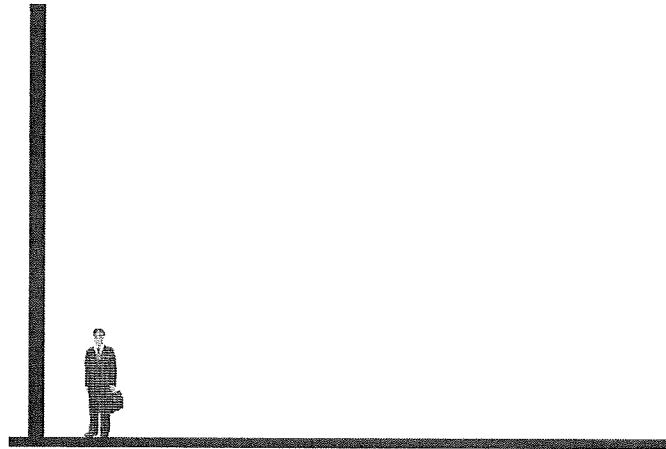
20. Complete this table.

Write a sensible unit for each measurement.

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

(3 marks)

21.



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.

.....2m..... m (1)

(b) Work out an estimate for the height, in metres, of the flagpole.

.....8m..... m (2)

(3 marks)

22. (a) Write down a sensible metric unit for measuring

(i) the distance from London to Birmingham,

.....kilometer.....

(ii) the weight of a pencil.

.....gram..... (2)

(b) (i) Change 7 centimetres to millimetres.

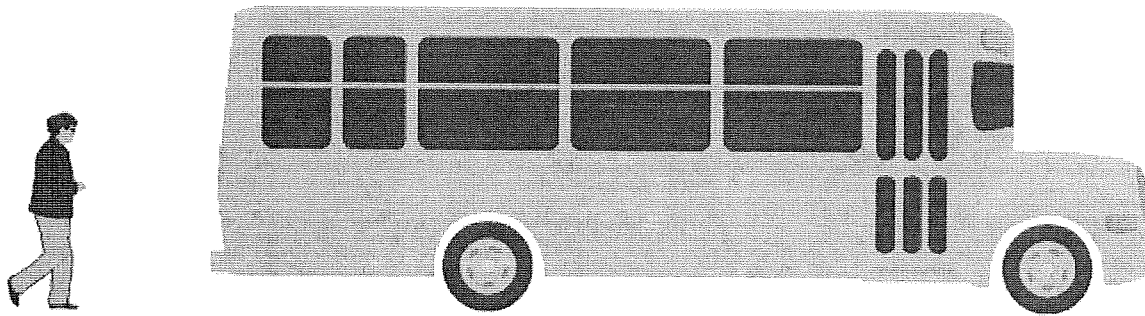
.....70..... mm

(ii) Change 4500 grams to kilograms.

.....4.5..... kg (2)

(4 marks)

23.



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.

(i) Write down an estimate for the height of the man.

.....2m.....

(ii) Find an estimate for the length of the bus.

.....8m.....

(4 marks)

24. (a) Write a sensible unit for each measurement.

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

(3)

(b) Change 6.8 metres to centimetres.

.....680..... cm

(1)

(c) Change 7500 grams to kilograms.

.....7.5..... kg

(1)

(5 marks)

NOTES

DISTANCE

<i>METRIC</i>		<i>IMPERIAL</i>
Kilometres	km	Miles
Metres	m	Yards
Centimetres	cm	Feet
Millimetres	mm	Inches

- 1 km = 1000m
- 1m = 100cm
- 1cm = 10mm

WEIGHT

<i>METRIC</i>		<i>IMPERIAL</i>
Kilograms	kg	Ton
Grams	g	Stone
Milligrams	mg	Pounds
		Ounces

- 1 kg = 1000g
- 1g = 1000mg

CAPACITY / VOLUME

<i>METRIC</i>		<i>IMPERIAL</i>
Litres	<i>l</i>	Gallons
Millilitres	<i>ml</i>	Pints

- 1 *l* = 1000*ml*