

Numeracy Initial Assessment MS- E1 - E2 – E3 – L1 – L2**{ The first two pages are strictly for the use of assessors }****This assessment is of maximum duration of 1 ½ hours with the maximum of 100 Marks.**

All questions are presented in gradually increasing difficulty and levels.

The students are to be asked to start from the beginning, even though the starting questions are too easy, to gradually progress through the questions to the higher level end.

This is an estimated recommendation only and the real abilities and assessment are to be judged in accordance with the individual requirements, any special needs and disabilities.

The questions and diagrams are taken from the web resources like <https://www.excellencegateway.org.uk/content/etf17>

I thank the teams and organisations for their resources used by me in compiling this assessment !

The assessment contain the following levels of numeracy with the corresponding distribution of marks out of the total 100 M (Marks)

1. Mile Stone – Pre-Entry --→ 5 M
2. Entry Level E1 -----→ 14 M
3. Entry Level E2 -----→ 19 M
4. Entry Level E3 -----→ 20 M
5. Entry Level L1 -----→ 23 M
6. Entry Level L2 -----→ 19 M

All 31 Questions carry a Total => 100 Marks

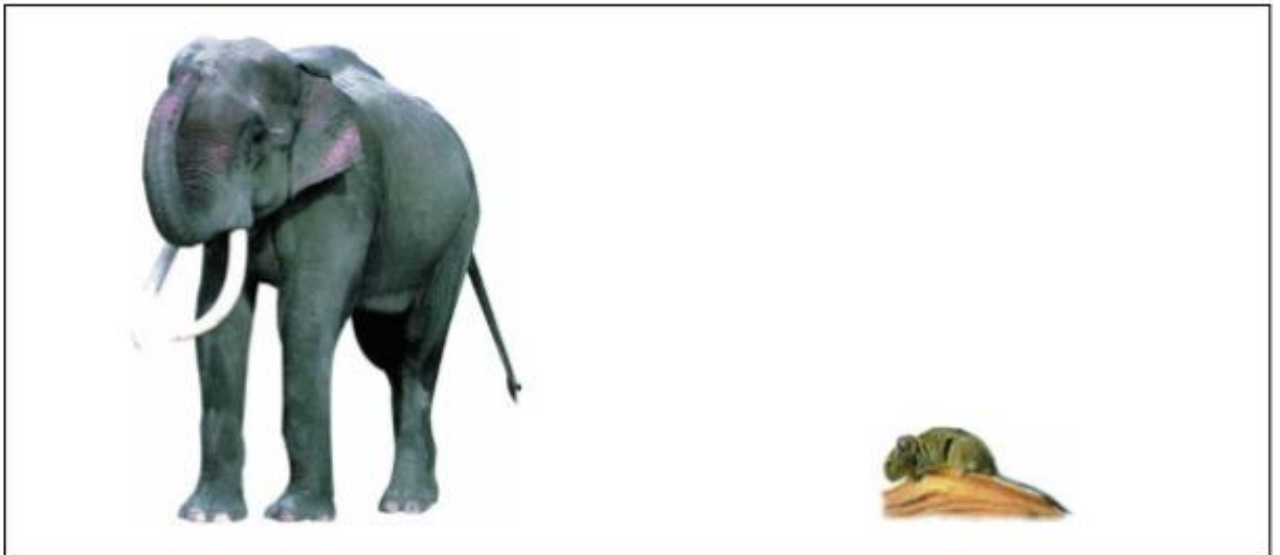
Max Marks allotted by Anwar for Each Level in Numeracy { Out of the total 100 }	Ages for Maths Achievement	Anwar's recommended Maths Level Ranges %	Maths Levels as recommended by AnwarHF	Stages & Class Years	CHALLENGE 100% National Level %
5	Ages 3 to 5 Years	0 TO 5 %	E0	PRE PRIMARY	
15	AGE 5 - 7 YEARS	6 TO 20 %	E1	KS1 Y1- Y2	0-19 %
20	AGE 7 - 9 YEARS	21 TO 40 %	E2	KS 1-2 Y2- Y4	20-39 %
25	AGE 9 - 11 YEARS	41 TO 65 %	E3	KS 2 = Y4 - Y6	40-59 %
20	AGE 11 - 14 YEARS	66 TO 85 %	L1	NEW GCSE 3 - 1 OLD GCSE D - G	60-79 %
15	AGE 14 - 16 YEARS	86 TO 100 %	L2	NEW GCSE 9-4 OLD GCSE A* - C	80-100 %

MS

Q.1

Write or express the suitable words for

Size:



Suggested tutor prompt

The elephant is

The mouse is

(1 Mark)

Q.2 Write or express the suitable words for

Length:



Suggested tutor prompt

The snake is _____

The pencil is _____

(1 Mark)

Q.3

$$4 - 2 =$$

$$5 - 4 =$$

$$6 - 3 =$$

1 2 3 4 5

$$8 - 2 =$$

6 7 8 9 10

(2 Marks)

Q.4 Indicate the name or description of each shape with the lower case letter near the corresponding shape in the following diagram.



Suggested tutor prompt

Look at the objects and show me:

- a. a circle
- b. a square
- c. something round
- d. something big
- e. something small

(1 Mark)

-- E1 --

Q.5

How many things will
you buy altogether?



What is Ted's
extension number?

EXTENSIONS	
Office	20
Bob	31
Ted	25
Ali	28
Jill	34

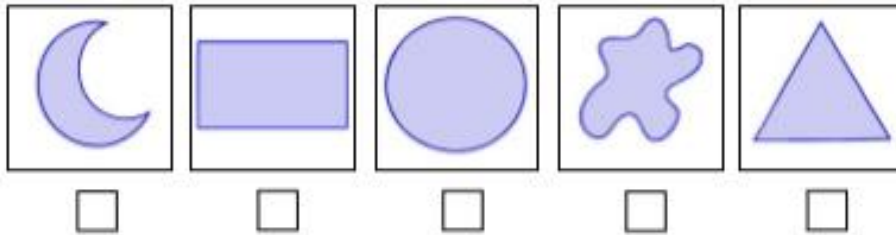
(2 Marks)

Q.6

Circle the name of the person playing at number four.



Tick all the shapes with straight sides.



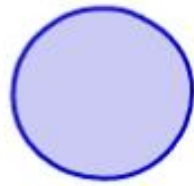
Tick all the coins that are worth less than 20 pence.



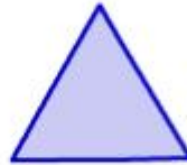
(4 Marks)

Q.7

Tick the triangle.

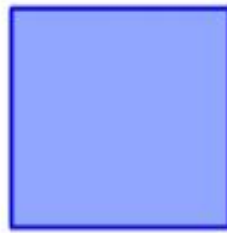

☐

☐

☐

☐

Tick the square.


☐

☐

☐

☐

Tick the cube.


☐

☐

☐

☐

(3 Marks)

Q.8

What is 7 take away 3?

$$7 - 3 = \square$$

What is 6 take away 0?

$$6 - 0 = \square$$

What do you take away from 8 to leave 3?

$$8 - \square = 3$$

10 take away 4 is the same as 8 take away.....?

$$10 - 4 = 8 - \square$$

Tick the sum that does not make 4.

$$6 - 2 \quad \square$$

$$8 - 4 \quad \square$$

$$9 - 5 \quad \square$$

$$10 - 7 \quad \square$$

(5 Marks)

-- E2 --

Q.9

How much change will you get from £20?

Write your answer in the box.



You buy 2 stamps.
How much change
will you get from £1?



Change from £1

 p

(2 Marks)

Q.10

Halve this number and write down the answer.

12

These people eat a quarter of the chocolate each.

How many pieces do they each eat?



Each person eats pieces of chocolate.

(2 Marks)

Q.11

Write down the price for pie and chips.

<div>£</div> CUT PRICE CAFE <div>£</div>			
Fish and chips	£3.20	Cup of tea	£0.60
Sausage and chips	£1.90	Pot of tea	£1.00
Pie and chips	£2.50	Coffee	£0.90
Burger and chips	£1.30	Soft drinks	£0.70
Sandwiches:			
ham, cheese, beef, salad	£1.20		
Salad: ham, cheese, egg	£1.50		
Portion of chips	£0.70		

£

What day of the week is May the sixth?

Monday ☐Tuesday ☐Wednesday ☐Thursday ☐Friday ☐Saturday ☐Sunday ☐

May						
Sun	Mon	Tues	Wed	Thurs	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

(2 Marks)

Q12

Jack is 90cm tall.
Is he tall enough to
go on this ride?

Tick yes or no.

yes ☐

no ☐



What do these letters mean?

Tick the correct answer.

kg

kilometres ☐

kilograms ☐

kilowatts ☐

How heavy is the parcel?

Write your answer in the
box.



kg

(3 Marks)

Q.13

How much does the bottle hold?

Tick the correct answer.

2 centimetres ☐

2 kilograms ☐

2 litres ☐

2 metres ☐

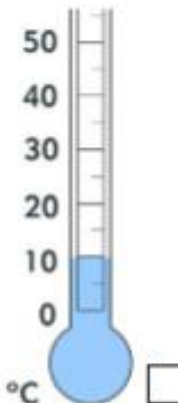
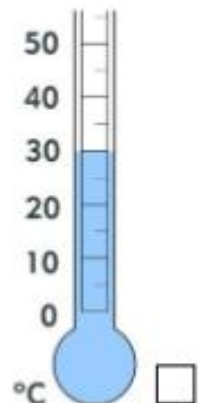
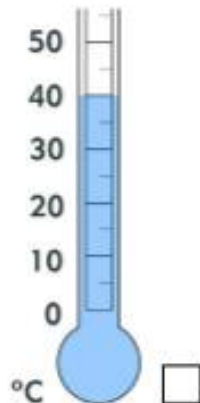


How many times can you fill the jug to the top from the milk container?

Write your answer in the box.



Tick the coolest temperature.



(3 Marks)

Q.14

Circle the 21st March 2002.

21/03/02

21/04/02

21/10/02

21/09/02

Tick the date that is **NOT** the 26th November 2002.

26/11/02

26th November 2002

02/06/02

26 Nov 02

☐
☐
☐
☐

Tick the display that shows the same time as the clockface.


☐

☐

☐

Tick the clock that says nine forty-five.


☐

☐

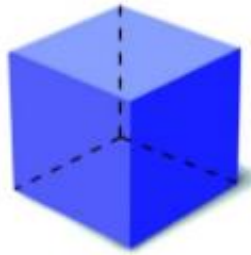
☐

(4 Marks)

Q.15

How many faces does a cube have?

Write the answer in the box.



faces

Look at the picture.

Circle the object that is on the left of the computer.



How many side roads are on the right of the High Street?

Write the answer in the box.

roads



(3 Marks)

-- E3 --

Q.16

*Call your tutor before you do this task.

3 of these have the same answer. Tick the odd one out.

- | | |
|--------------|--------------------------|
| $7 + 8$ | <input type="checkbox"/> |
| $19 - 5$ | <input type="checkbox"/> |
| 5×3 | <input type="checkbox"/> |
| $30 \div 2$ | <input type="checkbox"/> |

Use your calculator to check this sum. Tick the correct answer.

- | | | |
|----------------------|------------------|--------------------------|
| $\pounds 3.40 + 76p$ | $\pounds 11$ | <input type="checkbox"/> |
| | $\pounds 416.00$ | <input type="checkbox"/> |
| | $\pounds 79.40$ | <input type="checkbox"/> |
| | $\pounds 4.25$ | <input type="checkbox"/> |
| | $\pounds 4.16$ | <input type="checkbox"/> |

Use your calculator to check this sum. Tick the correct answer.

- | | | |
|-----------------------|-----------------|--------------------------|
| $\pounds 16.37 - 92p$ | $\pounds 15.45$ | <input type="checkbox"/> |
| | $\pounds 75.63$ | <input type="checkbox"/> |
| | $\pounds 15.45$ | <input type="checkbox"/> |
| | $\pounds 17.29$ | <input type="checkbox"/> |
| | $\pounds 15.35$ | <input type="checkbox"/> |

Use your calculator to work out this sum.

 $\pounds 14.19 \div 8 =$

- | | |
|-------------------|--------------------------|
| $\pounds 1.77$ | <input type="checkbox"/> |
| $\pounds 1.79$ | <input type="checkbox"/> |
| $\pounds 1.77375$ | <input type="checkbox"/> |
| $\pounds 113.52$ | <input type="checkbox"/> |

TOTAL

(4M)

Q.17

How many millimetres in 1 metre?

$$10\text{mm} = 1\text{cm}$$

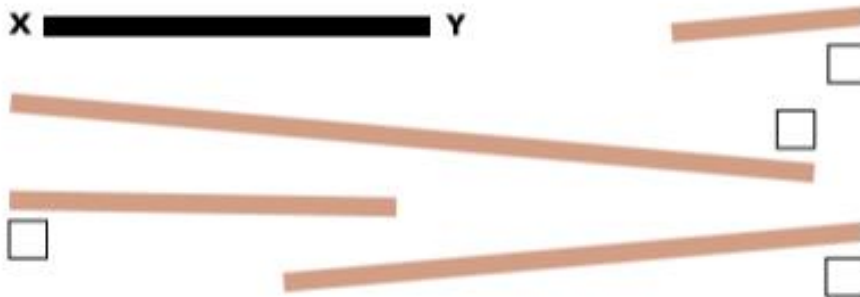
$$100\text{cm} = 1\text{m}$$

mm

 = 1m

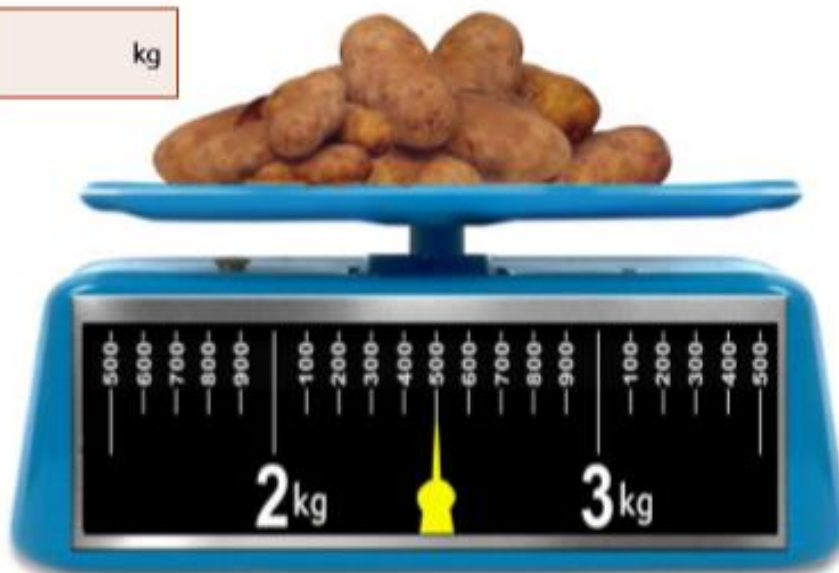
Tick the line that is about twice as long as line XY.

X  Y



What is this weight in kilograms? Write your answer in the box.

kg



(3 M)

Q.18

Mark the weight of the parcel on the scales.



How many grams in $\frac{1}{2}$ of a kilogram?

You need to weigh the fish. Tick the unit of measurement to use.

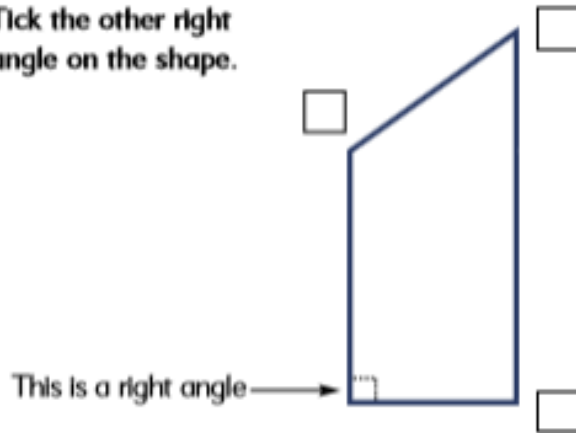


- litres ☐
- grams ☐
- metres ☐
- kilometres ☐
- centimetres ☐

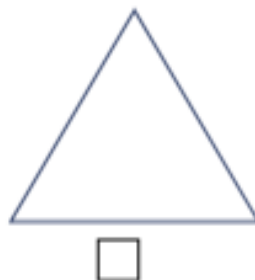
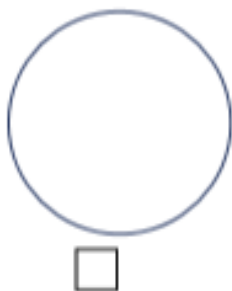
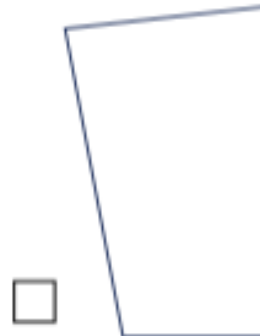
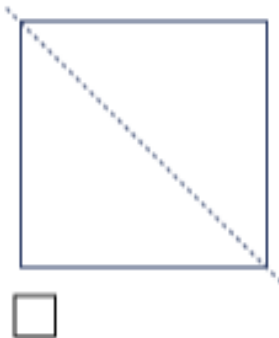
(3 M)

Q.19

Tick the other right angle on the shape.



Tick the shape that cannot be divided into 2 equal parts, with both parts the same shape.



(2 M)

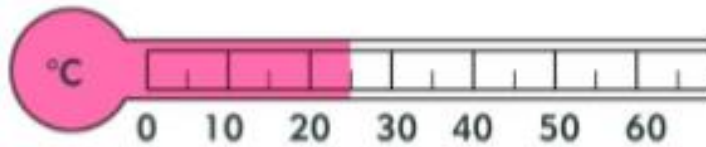
Q.20

How many millilitres in $\frac{1}{4}$ of a litre?

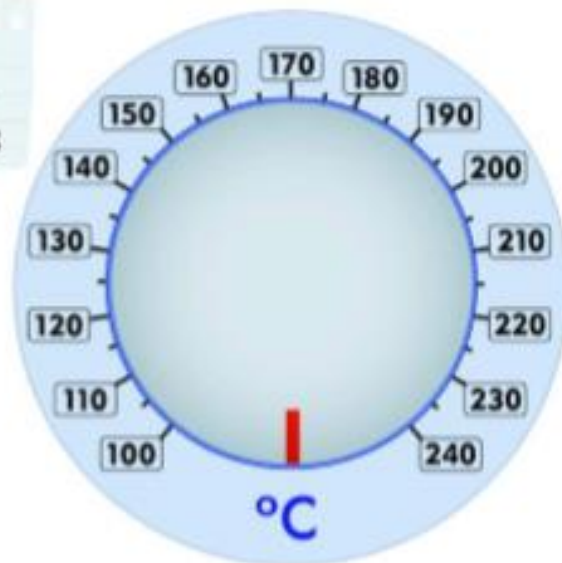
Write your answer in the box.

 ml

What's the temperature? Write your answer in the box.

 °C

Put an arrow to show the temperature you need on the dial.



(3 M)

Q.21

Write your answer in the box.

$$48 \div 4 = \boxed{}$$

Write your answer in the box.

$$90 \div \boxed{} = 30$$

Write your answer in the box.

$$\boxed{} \\ 3 \overline{) 39}$$

Write your answer in the box.

$$\boxed{} \\ 6 \overline{) 78}$$

Is this correct? Tick yes or no.

$$30 \div 2 = 2 \div 30$$

yes ☐no ☐

(5 M)

L1

Q.22

Kara works an extra 130 minutes over her normal shift time.
How many hours and minutes is this?

_____ hours _____ minutes

Sunita is on duty from 1155 to 2010 each day for 5 days.
How many hours does she work altogether?

_____ hours _____ minutes

A TV programme starts at 7.55pm and finishes at 9.50pm.
How long does it last?

_____ hours _____ minutes

This is Kara's time sheet for one week. Fill it in to show the number of hours and minutes she has worked each day and the total hours and minutes she has worked for the week.

Time sheet: hours worked			
Day	Time started	Time finished	Hours worked
Mon	0830	1615	
Tues	1020	1250	
Wed	0700	1530	
Thurs	0830	1900	
Fri	_____	_____	
Total hours worked			

TOTAL

(4 M)

Q.23

Tom has paid 75% of the cost of his car. What percentage is left to pay?

 %

Tom earns £100 a week and has a pay rise of 10%. Pat earns £300 a week and has a pay rise of 5%. Who had the bigger increase?

Tom ☐

Pat ☐

Find 10% of £90.

 £

Find 20% of £4.50.

 £

In a sale, a table costing £160 is reduced in price by 25%.
What is the new price?

 £

Petrol costing 80p a litre has a price increase of 20%.
What is the cost per litre now?

 p

TOTAL

<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>
<input type="text"/>

(6 Marks)

Q.24

Draw a line on this jug
to show 0.35 litres.



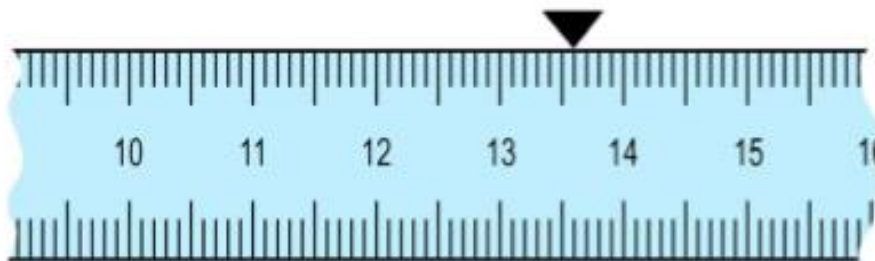
Tick the 2 jugs that have the same amount of water.


☐

☐

☐

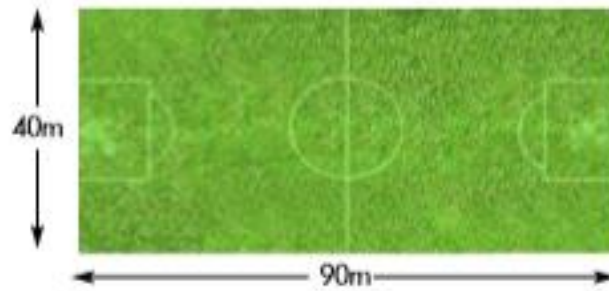
This ruler is labelled in cm. What is the measurement shown in mm?



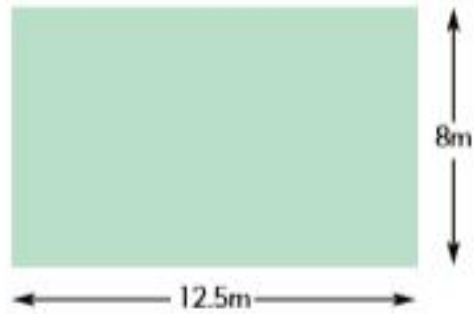
(3 M)

Q.25

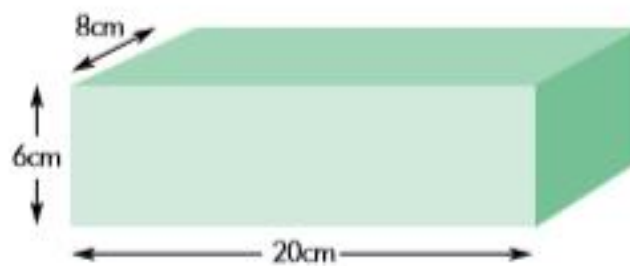
What is the perimeter
of the football pitch?

 m


What is the area
of this room?

 m²


What is the volume
of this container?

 cm³


(3 M)

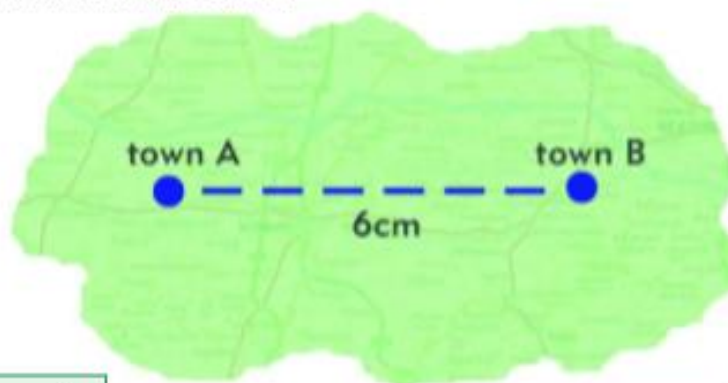
Q.26

Colln lives in Manchester. How far does he have to drive to get to York?

Birmingham	120				
Manchester	203	88			
Glasgow	413	298	220		
Oxford	57	68	161	371	
York	212	134	71	216	184
	London	Birmingham	Manchester	Glasgow	Oxford

 miles

How far is it from town A to town B?


 km

scale: 1cm = 12km

On four separate days Tom travelled 147km, 160km, 275km and 177km. How far did he travel altogether?

 km

The milometer reading on a car on 1st August was 77439.3. On 31st August it was 82312.2. How many miles did the car travel in August?

 miles

TOTAL

(4 M)

Q.27

A football team scored 15 goals in 5 games.

What was the mean (or average) rate of scoring per game?

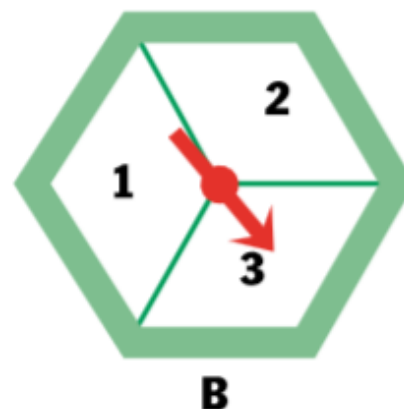
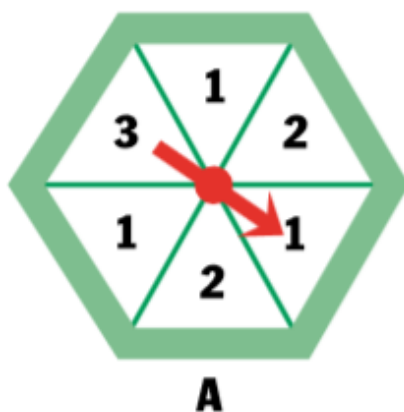
What is the range of highest daily temperatures? Tick the correct answer.

- a. 23°C ☐
- b. $22^{\circ}\text{C} - 23^{\circ}\text{C}$ ☐
- c. 20°C ☐
- d. $17^{\circ}\text{C} - 23^{\circ}\text{C}$ ☐
- e. 6°C ☐

Highest daily temperature	
Mon	22°C
Tues	18°C
Wed	19°C
Thurs	19°C
Fri	23°C
Sat	17°C
Sun	22°C

Here are two spinners, A and B. Read the statement and put a tick (✓) if it is true and a cross (✗) if it is not true.

Scoring 1 is more likely on A than on B.



(3 M)

L2

Q.28

Circle the number that is **not** a factor of 12.

2 3 4 9 12

Is 49 a multiple of 7? Tick yes or no.

yes ☐ no ☐

Circle the number that is **not** a multiple of 6.

18 26 42 60

What is the next prime number after 13?

Estimate how much money Jim would need to buy 19 items at £2.99 each. You do not need to give the exact answer.

Estimate the answer to this problem. You do not need to give the exact number.

$$\frac{2999 \times 98}{21} = \text{[]}$$

(6 M)

Q.29

There are 12 000 supporters at a football match. 10 000 are home supporters and the rest are away supporters. Complete the ratio of home supporters to away supporters.

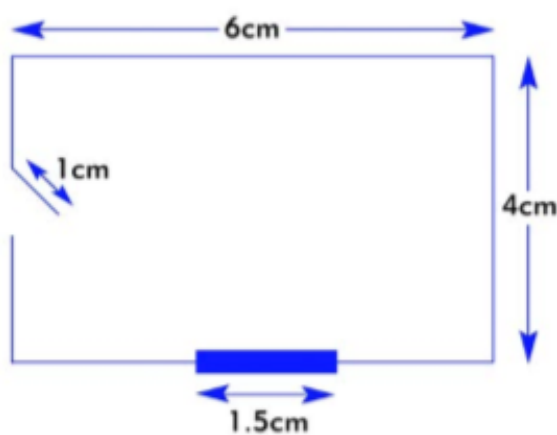
_____ : 1

Fill in the missing measurement.

Scale	Size drawn	Actual size
1:5	250m	1250m
1:10	125cm	1250cm
1:50	110mm	mm

What is the actual length of the room in metres?

_____ m



Scale:
1 : 100

(3 M)

Q.30

$$2(4 + 3) = \boxed{}$$

$$13 - (2 \times 5) = \boxed{}$$

Find the value.

$$a = 3 \quad b = 4$$

$$2a + 5b = \boxed{}$$

Tick the box to show which formula means the same as:
perimeter = $2(l + w)$.

$$2l + w \quad \boxed{}$$

$$l + l + w + w \quad \boxed{}$$

$$2 + l + w \quad \boxed{}$$

$$2 \times l \times w \quad \boxed{}$$

A car travels 180 miles in 3 hours. Use this formula to work out the average speed of the car.

$$\text{Average Speed} = \frac{d}{t} \quad \boxed{} \text{ mph}$$

(5 M)

Q.31

The population of Wales is approximately $2\frac{1}{2}$ million.
Write this in numbers in the box.

What is the value of the 7 in this number? Write your answer in words.

3700206

What is the next number after 3099 999?

How much profit or loss did this company make over the years from 1999 – 2001? Write your answer in the box. Show whether it is a profit or loss by writing a plus sign or a minus sign.

Year	Profit/Loss (£)
1999	+ 125000
2000	– 1385000
2001	+ 690000

The temperature is -2°C . It rises by 5°C . What is the temperature now?
Circle the correct choice.

7°C 0°C -7°C 3°C -3°C 5°C 2°C

(5 Marks)

---* End of the Assessment *---