St Mary's School
CAMBRIDGE

Year 5 Maths

Sample Test

Time allowed: 45 minutes

Name: _____

INSTRUCTIONS :

- **Answer all questions**
- **Answers should be written in the spaces provided**
- **Dictionaries or reference materials are forbidden**

Year 5 Key Objectives Assessed

Multiplying and dividing by 10 and 100

Ordering positive and negative integers

Rounding numbers to one or two decimal places

Relate fractions to division and their equivalent decimals

Know by heart multiplication facts up to 10 x 10

Applying short multiplication of units and tenths by units

Other Objectives Assessed

Use the relationship between +/- x/÷

Recognise reflective symmetry in 2D shapes

Measure and draw lines to the nearest mm

Calculate the perimeter of simple shapes

Recognise and extend number sequences

Recognise multiples and know some tests of divisibility

Section A

1. Write the number that should go in the empty box

a. (3 x ☐) + 4 = 19

b. (6 x ☐) + 1 = 25

c. (☐ x 5) − 1 = 19

d. (8 x 6) - ☐ = 45

e. (9 x 9) + ☐ = 83

(2)

2. Write the number that should go in the empty box

a. (☐ x ☐) + 2 = 23

b. (☐ x ☐) + 4 = 29

c. (☐ x ☐) + 1 = 64

d. (☐ + ☐) − 1 = 15

e. (☐ + ☐) − 10 = 26

(2)

3. Write the number that should go in the empty box

a. 60 + 60 = ☐

b. 130 + 130 = ☐

c. 2 x 180 = ☐

d. 2 x ☐ = 340

e. 2 x ☐ = 540

(2)

4. Round these decimal numbers to the **nearest** whole number

Decimal Number	Rounded to the nearest whole number
9.6	
11.8	
19.4	
109.6	
229.2	

(2)

5.	Round these amounts of money to the **nearest** pound		

Amount of Money	Rounded to the nearest pound
£3.98	
£5.48	
£12.51	
68p	
£29.05	

(2)

6.	Complete the table below

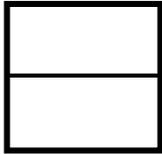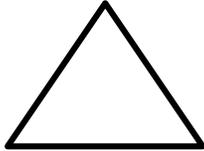| Fraction	Equivalent Decimal
H	
@	
	0.86
13	
	12.3
	0.92

(3)

7. Write these numbers out in order from the **lowest** to the **highest**

-2   -8   -6   5   7

_____

(1)

8. The temperature at midday was 5°C. At midnight the temperature had fallen by 8°C. What was the temperature at midnight?

^{o}C

(1)

9.

Shape	Show one axis of reflective symmetry	How many axis of symmetry does each shape have?
Square		4
Equilateral triangle		
Rectangle		
Pentagon		
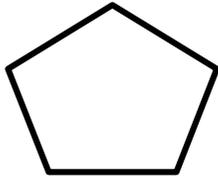
(2)

10a.

Write the length of these objects in centimetres

Object	Length	Length in cm
Pencil	180mm	cm
Table	1m 62cm	cm
Room	8.6m	cm
Fishing Rod	2.05m	cm
Book	0.29m	cm

(2)

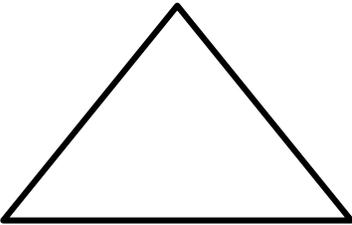| 10b.	It is 1.6km from the supermarket to the Town Centre. How many metres is this distance?		(1)
		metres	

10c.	Complete the table below. There are about 8 kilometres equal to 5 miles	

Journey	Distance in kilometres	Distance in miles
Cambridge – Bar Hill	8	5
Cambridge - Cambourne		10
Cambridge - Haverhill	32	
Cambridge - Oakham		50
Cambridge - Bedford	56	

(2)

11.

a)

How long is the base of this isosceles triangle? [   ] mm

(1)

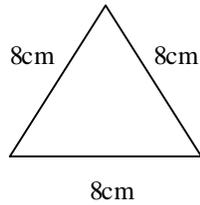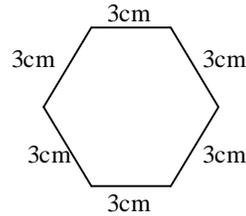b) In the box draw a line 7.3cm long. Start your line at the dot.

D

(1)

12.

a) Calculate the perimeter of these shapes.

8cm / 8cm / 8cm (triangle)

Perimeter…….. cm

3cm / 3cm / 3cm / 3cm / 3cm / 3cm (hexagon)

Perimeter…….. cm

15cm × 8cm (rectangle)

Perimeter…….. cm

(2)
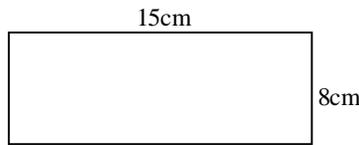
b) The perimeter of a square is 18cm. What is the length of each side?

………….. cm

(1)

13.

Complete these number sequences.

a) 0.5, 0.7, 0.9, ☐ , 1.3

b) 2.4, 2.1, 1.8, 1.5, ☐

c) 7, 10, ☐ , ☐ , 19

d) 56, 65, ☐ , 83, 92

e) 1, 4, 9, 16, ☐

(2)

14. Answer **yes** or **no** to the following statements.

e.g. Is 12 divisible by 2 [Yes]

a) Is 1937 divisible by 2 [   ]

b) Is 824 divisible by 2 [   ]

c) Is 2004 divisible by 5 [   ]

(2)

Use these numbers to answer the questions

110	3500	90
170	701	195

d) Write down a number which is divisible by 100

_____

(1)

e) Write down a number which is less than (10 x 15) **AND** is a multiple of 10.

_____

(1)

15.

a) 3.5
   x 4
   _____

   _____

b) 4.3
   x 6
   _____

   _____

c) 7.8
   x 5
   _____

   _____

(2)

Section B –

Calculators may be used throughout this paper

Objectives Assessed: Solve a Problem by -	Question
Interpreting and representing data in a bar chart	1
Using all four operations to solve word problems involving money	2, 3, 5, 6
Use all four operations to solve word problems involving time	4, 5
Using a calculator effectively	7, 8, 9
Other Objectives Assessed	
Round up or down after division	8, 9

Year 5 Section B

1.

Look at the rainfall graph below. It shows the rainfall measured on six days in March
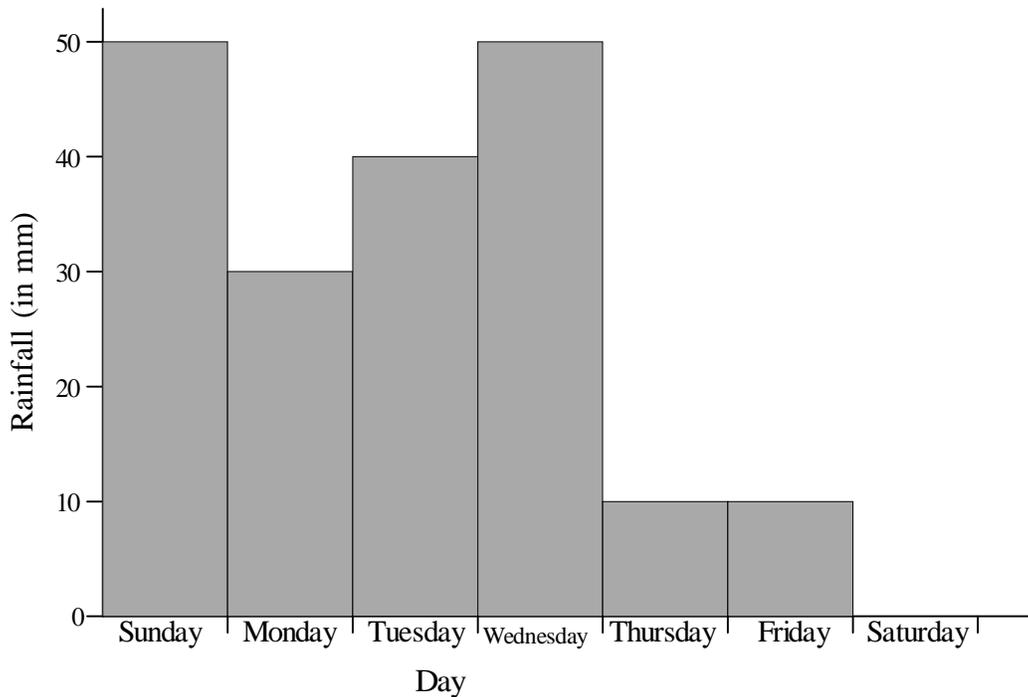
a) How much rainfall was there on Wednesday? ………………mm

b) If the total rainfall for the week was 200mm, what was the rainfall for Saturday? ………………mm

c) Complete the graph by drawing a bar for Saturday's rainfall.
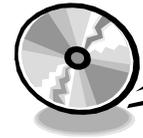
(2)

2.

Book £2.99   Cassette £1.25   CD £2.50

How much would it cost for 3 books? Show your working out

(2)

How much would it cost for 2 CD's and 1 cassette? Show your working out.

(2)

If Gemma bought 3 cassettes and 1 CD, how much change would she get from a £10 note? Show your working out.

(2)

3.

This table shows the cost of dry cleaning clothes

Clothes	Cost
Skirt	£1.95
Trousers	£2.95
Suit	£7.50
Blouse	£2.25
Coat	£3.50

a) How much would it cost to clean a skirt and a suit? ……………...

b) How much would it cost to clean 2 pairs of trousers? ……………

c) How many blouses could be cleaned for £10? …………………...

(2)

4.

<div align="center">

Leisure Centre

These are the times that the Leisure Centre is open.

Monday to Friday	Saturday	Sunday
7am to 10pm	8am to 6.30pm	8am to 5pm

</div>

a) What time does the Leisure Centre close on Thursday?

b) How long is the Leisure Centre open on a Sunday?

c) Which day is the Leisure Centre open for 101 hours?

(2)

5.

TABLE TENNIS CHARGES FOR CHILDREN	
Time	Charge
Up to 1 hour	50p
1 to 2 hours	£1.00
2 to 3 hours	£1.50
Over 3 hours	£2.00

a) Megan plays table tennis for 2 hours 35 minutes. How much does she pay?

b) Tommy plays table tennis from 9:30am to 10:45am. How much does he pay?

c) If adults have to pay double the charge for children. How much would it cost for 2 adults to play for 2 hours 15 minutes?

(2)

6.

TRAVEL AGENTS	
Pounds	**Dollars**
1	1.4
5	7.0
10	14
100	140

The chart shows that you can exchange 1.4 dollars for every pound.

a) How many dollars will Sandra get for £110?

dollars

(1)

b) How many dollars will Archie get for £105?

dollars

(1)

c) How many pounds would you need to buy 42 dollars?

pounds

(1)

7.

Calculator Exercises

Complete these number sentences.

a) 597 + 3268 = ☐   b) ☐ - 36.9 = 123.6

c) 7.28 + 15.9 = ☐   d) 1000 − 234.3 = ☐

e) 28.72 - ☐ = 14.39   f) 358 x 93 = ☐

g) 74.2 x 18 = ☐

h) 47 x ☐ = 4606

i) 349.6 ÷ ☐ = 43.7   j) ☐ ÷ 63 = 126

(5)

	Calculator Problems		
8.	Complete the table below. There are 18 biscuits in every packet. How many full packets of biscuits could be made from:		

Biscuits	Packets
72	4
234	
2826	
160	
400	
253	
1000	

(2)

	Calculator Problems - Rounding up
9.	a) In a concert hall there are 26 seats in every row. **How many rows of seats would be needed for the following audiences?**

Number of people	Rows of Seats
182	7
736	
200	
300	
1000	

(2)

b) On a school trip there needs to be 1 adult with every 16 children. How many adults were needed on the following trips?

Trip	Children	Adults
Eureka	192	
Camelot	256	
Haigh Hall	304	
Alton Towers	245	
Worthington Lakes	273	
Blackpool	350	
Southport	337	
Museum	207	
Liverpool Docks	460	
Wigan Pier	450	

(4)