

Year 6 Home Study Pack

Name: _____



SATs Companion **Maths**

www.satscompanion.com

Place Value



Write down the numerical value of the underlined digits below.

1) 8,167,857

2) 3,467,789

3) 17,500

4) 4,456,078

5) 344,567

Write the following numbers in numerals and words

Millions			Thousands			Ones		
H	T	O	H	T	O	H	T	O
			<div>●</div>	<div>●</div>	<div>●</div>	<div>●</div>	<div>●</div>	<div>●</div>
			<div>●</div>	<div>●</div>	<div>●</div>		<div>●</div>	
			<div>●</div>	<div>●</div>				
				<div>●</div>				

Answer:

Millions			Thousands			Ones		
H	T	O	H	T	O	H	T	O
		<div>●</div>	<div>●</div>	<div>●</div>	<div>●</div>	<div>●</div>	<div>●</div>	<div>●</div>
		<div>●</div>	<div>●</div>	<div>●</div>	<div>●</div>	<div>●</div>	<div>●</div>	<div>●</div>
		<div>●</div>	<div>●</div>		<div>●</div>	<div>●</div>	<div>●</div>	<div>●</div>
						<div>●</div>		<div>●</div>

Answer:

Millions			Thousands			Ones		
H	T	O	H	T	O	H	T	O
			●	●	●	●	●	●
			●	●	●	●	●	●
			●	●	●		●	●
			●	●				●
			●	●				

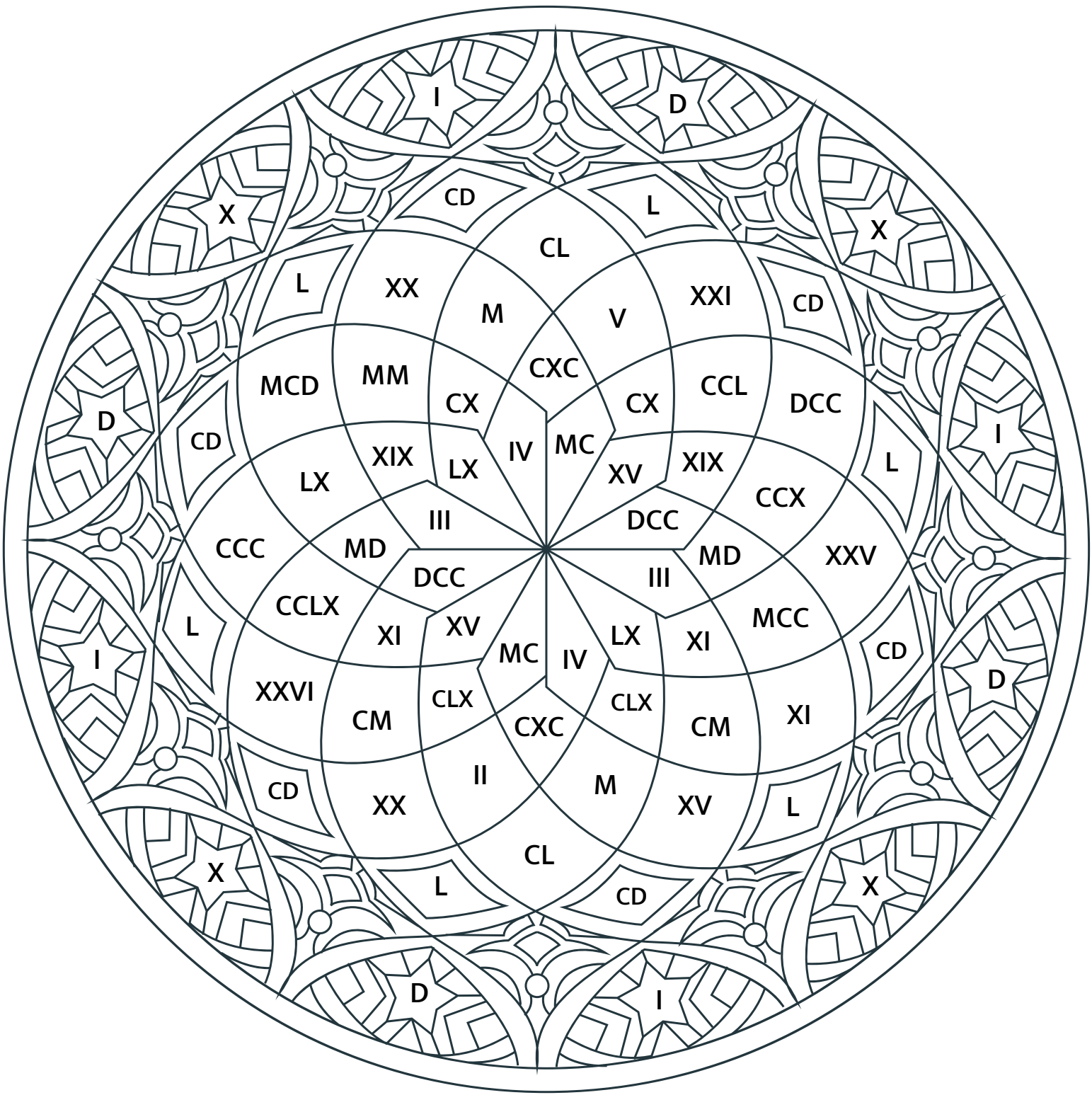
Answer:

Millions			Thousands			Ones		
H	T	O	H	T	O	H	T	O
		●	●	●	●	●	●	●
		●	●	●	●	●	●	●
		●	●	●		●	●	●
		●		●		●		

Answer:

Colour by ROMAN NUMERAL

Match the numeral with its equivalent value in number and colour in the area according to the colour stated in the colour key.



Colour by

ROMAN NUMERAL

COLOUR KEY

150 = Red	900 = Yellow	190 = Green
300 = Red	260 = Yellow	160 = Green
20 = Red	60 = Yellow	11 = Green
26 = Red	2000 = Yellow	1500 = Green
200 = Red	1000 = Yellow	19 = Green
1400 = Red	5 = Yellow	110 = Green
21 = Red	250 = Yellow	
25 = Red	210 = Yellow	
11 = Red	1200 = Yellow	
15 = Red	2 = Yellow	
1100 = Pink	1 = Orange	50 = Purple
15 = Pink	500 = Orange	400 = Purple
700 = Pink	10 = Orange	
3 = Pink		
60 = Pink		
4 = Pink		

Note:

- Some numerals appear more than once
- For other blank areas, you can choose a colour of your choice.


ROUND TO THE NEAREST TEN THOUSAND

500,000	510,000	520,000	530,000	540,000	550,000	560,000
570,000	580,000	590,000	600,000	610,000	620,000	630,000
640,000	650,000	660,000	670,000	680,000	690,000	700,000
710,000	720,000	730,000	740,000	750,000	760,000	770,000
780,000	790,000	800,000	810,000	820,000	830,000	840,000
850,000	860,000	870,000	880,000	890,000	900,000	910,000
920,000	930,000	940,000	950,000	960,000	970,000	980,000

Rounding Number Placemat

This activity is perfect to try with a friend or family member. Boost your rounding skills by rounding to the nearest ten thousand!

ROUND TO THE NEAREST TEN THOUSAND						
500,000	510,000	520,000	530,000	540,000	550,000	560,000
570,000	580,000	590,000	600,000	610,000	620,000	630,000
640,000	650,000	660,000	670,000	680,000	690,000	700,000
710,000	720,000	730,000	740,000	750,000	760,000	770,000
780,000	790,000	800,000	810,000	820,000	830,000	840,000
850,000	860,000	870,000	880,000	890,000	900,000	910,000
920,000	930,000	940,000	950,000	960,000	970,000	980,000

For more resources visit www.skillscompanion.com  Skills Companion

You will need:

Rounding number placemat

Online number generator (Make sure numbers are set between 500,000 to 1,000,000.

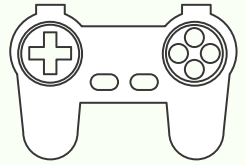
<http://numbergenerator.org/randomnumbergenerator/500000-1000000>

Some small counters for each player. Each player needs a different colour. Improvise with sweets or a random small object if you do not have any counters. (2 players max)

Instructions:

Using the number generator, on each player's turn, press go, to generate a number. The number that is shown, has to be rounded to the nearest ten thousand. Finally place your counter on the number on the board which is closest to it. To win you must be the first player to make a line of four in a row (horizontally, vertically, or diagonally) on the game board.

Percentages



Question 1

You have been given £20 for achieving a high score in your test.

The £20 must be spent in a video game store.

All games are 30% off.

Each game is £9

Work out how many games you can purchase with the £20 note.

Question 2

Find:

1% of 700

60% of 400

25% of 400

10% of 500

50% of 60

25% of 60

10% of 60

1% of 60

50% of 200

25% of 200

10% of 200





1% of 200

Trip To The Store

MONEY PROBLEM SOLVING



Work out the answers to the problems below.
Remember to show your workings out.

			
Trousers £23.86	T-shirt £12.00	Trainers £39.99	Hat £15.45
			
Skirt £18.00	Dress £29.95	Earrings £9	Handbag £25

1. How much would it cost to buy a pair of trousers, a t-shirt and a pair of trainers.
2. How much would it cost to buy a skirt, a handbag and a pair of earrings?
3. How much more than a skirt does a dress cost?
4. Tyler bought a hat and a pair of trousers with a £50 note. How much change did he get back?
5. How much less than a skirt does a pair of trainers cost?
6. Which is cheaper, two dresses or three skirts? How do you know?
7. How many pairs of earrings can you buy for the cost of a pair of trainers?
8. Samantha has £60. She bought a handbag, a skirt and a pair of earrings. How much change did she get back?

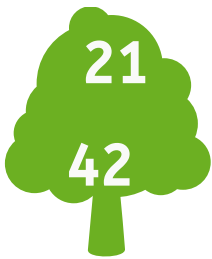


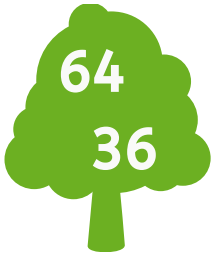
Fun with Factors

Factor Trees at Crystal Palace Park

Below are some different numbered trees from Crystal Palace Park. But they need to be factorised to help them grow!

Help the park rangers by finding the common factors for these numbers.









EQUATIONS CHALLENGE

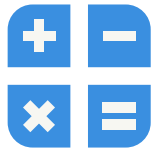
Show your working out!

1. $(11 + 2) \times (24 \div 3) =$

2. $36 \div 9 + 24 =$

3. $9 \times 6 - 24 + 16 =$

4. $(15 + 6) + 16 - 10 =$



ORDERING NUMBERS

Instructions: Put these numbers in order, smallest first.

1)

3.08	4.09	3.48	2.80	1.00	2.81	9.99	4.98

2)

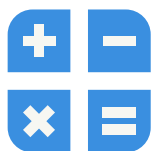
6.55	5.76	5.53	8.44	6.78	8.65	4.56	6.87

3)

7.45	6.21	6.54	6.64	6.65	6.11	6.00	6.01

4)

3.54	3.67	4.67	3.44	3.45	3.32	3.13	3.00



ORDERING NUMBERS

Name: _____

Date: _____

Instructions: Put these numbers in order, smallest first.

1)

3.432	3.283	3.433	3.704

2)

1.982	1.202	1.31	0.96

3)

4.291	4.725	4.38	4.173

4)

6.24	6.184	6.426	6.109

5)

2.318	2.293	2.52	2.9	2.68

6)

1.038	0.378	2.7	1.483	2.263

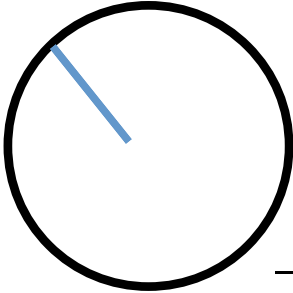
7)

1.39	0.218	1.148	2.14	0.75

QUICK MATHS WORKSHEET



1) What is the name of the blue line in this circle?



2) Turn this improper fraction into a mixed number.

$$\frac{14}{3} = \underline{\hspace{2cm}}$$

3) How many years in $2\frac{1}{2}$ decades?

4) One bar of chocolate costs £1.30. What is the cost of 11 bars?

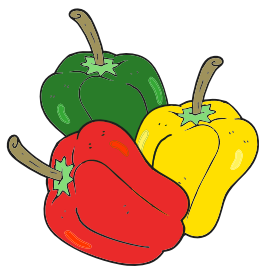
5) $10348 - 1000 =$

6) $249 + 1500 =$

7) $455 \times 4 =$

Money Calculations

This is the price of peppers and broccoli



Peppers
38p each



Broccoli
£1.20 for 1kg

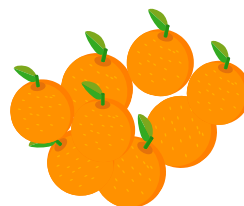
Lin buys **seven peppers** and **one and a half kilograms of broccoli**.

How much does she spend altogether?

A full-page view of a blank sheet of graph paper. The grid consists of light gray horizontal and vertical lines forming small squares across the entire page. There are no margins, text, or other markings on the paper.

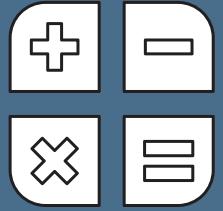
Oranges costs **25p** each.

How many oranges can Lin buy for **£1.50**?



--

DRILL EQUATIONS



Directions: Solve as many equations as you can quickly. Time yourself to see how long it takes you!

1) $548 + 497 =$

2) $0.3 + 9.3 =$

3) $3401 + 703 =$

4) $108 \div 9 =$

5) $318 - 5 =$

6) $3.04 + 12.5 =$

7) $5.32 \times 1000 =$

8) $69752 - 1426 =$

9) $72 \times 100 =$

10) $0.31 \times 25 =$

11) $7845 + 1429 =$

12) $11.71 - 0.4 =$

13) $717 + 108 =$

14) $5.1 \div 4.4 =$

15) $4619 + 622 =$

16) $63 \div 9 =$

17) $111 - 7 =$

18) $2.8 + 11.22 =$

19) $0.2 \times 1000 =$

20) $275419 - 1334 =$

21) $23 \times 100 =$

22) $107 + 286 =$

23) $0.3 + 3.4 =$

24) $36 \div 6 =$

Join our Year 6 Support Community



www.facebook.com/sats.companion



@ SATS_Companion



sats_companion

