

Year 6 - 2019

**SATS revision  $\times \div$**

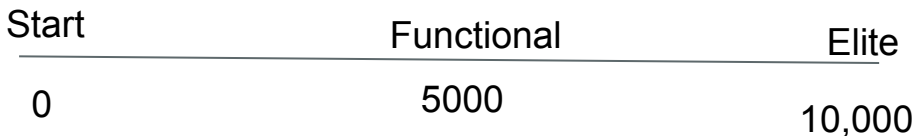


Tuesday 29nd January 2019

# 10,000 hour study

- **Total Secondary**  
math hours = 2850  
hours Y7 to Y11
- **Total Primary** math  
hours = 1330 hours  
Reception to Y6

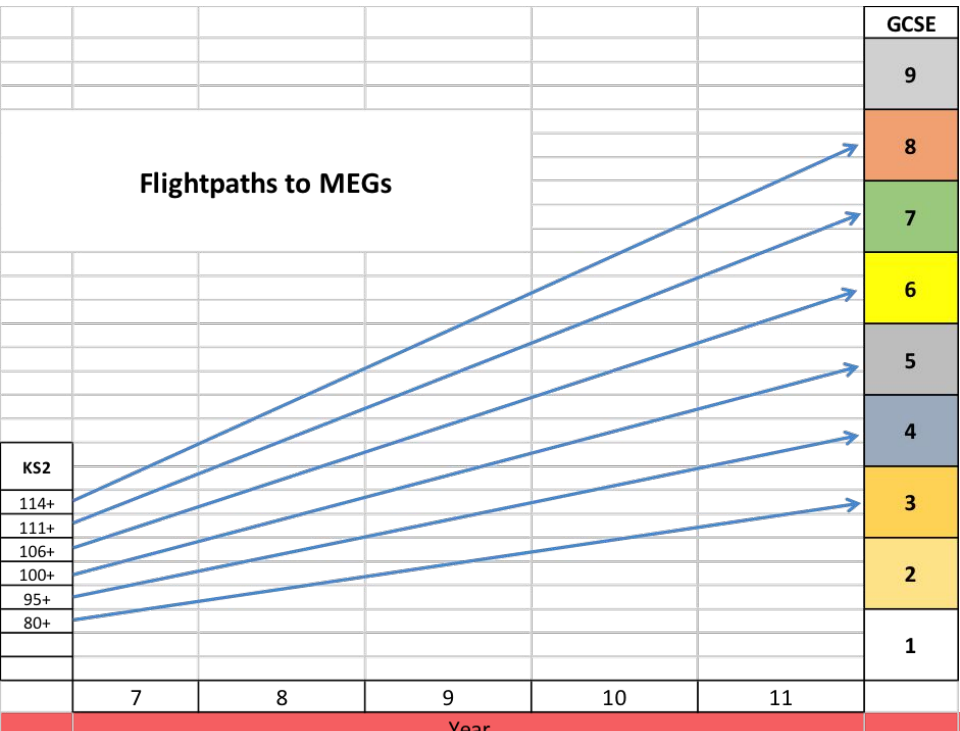
**Total math hours = 4180**



**‘Meaningful practice’**

**‘Mastery of a subject occurs through incremental gains’**

# KS2 - Where next?



# SATS vs predicted GCSE's

## School measures explanation sheet KS2 to KS3

KS2 Scaled Score (Years 7-9)	KS2 Level (Years 10-11)	GCSE Base Grade	Base Grade Vocational courses	Historical GCSE Grade Equivalent
120	6	8	D	A*
116	5a	7	D	A
112	5b	7	D	
108	5c	6	D	B
104	4a	5	M	C+
100	4b	4	P2	C
96	4c	4	P2	
92	3a	3	P2	D
88	3b	3	P2	
84	3c	3	P2	
80	2a	2	P1	E
	2b	2	P1	
	2c	1	P1	F/G
B	B	1	P1	

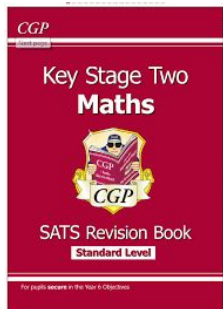
# Revision timetable

Revision timetable

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1							
2							
3							
4							
5							
6							
7							

# The role of family

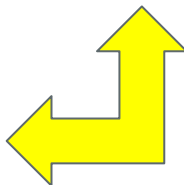
when little people  
are overwhelmed by  
big emotions, it's our job  
to share our calm,  
not to join their chaos.  
-L.R. Knost



©hannaholive

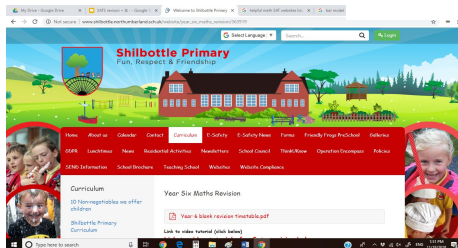


SAT Study  
Time  
Management



# Can I revise on my own?

‘How do I know if I’m doing it right?’



How do I become an independent learner?

# Resources

Not secure | www.shilbottle.northumberland.sch.uk/website

## Shilbottle Primary

Fun, Respect & Friendship



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### Welcome to Shilbottle Primary

*Fun, Respect & Friendship - Every Child*

We look forward to welcoming you to our school. We hope that our website will give you all the information you need about Shilbottle as well as the factual information you need.

As written words cannot fully convey the family orientated school, please contact our office to arrange a visit or [admin@shilbottle.northumberland.sch.uk](mailto:admin@shilbottle.northumberland.sch.uk)

To learn more about our school, please contact the message from our Head Teacher, Mr. [Name]

If you would like printed information, please contact the school office and it will be provided.

**Our vision:**

*Fun, Respect & Friendship - Every Child*

... *will aim to nurture and challenge our children to achieve their full potential for every child.*

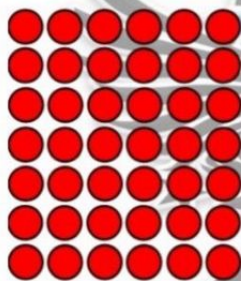
10 Non-negotiables we offer children

- Shilbottle Primary Curriculum
- The National Curriculum 2014
- Reception 2018 - 2019
- Year One 2018 - 2019
- Year Two 2018 - 2019
- Year Three 2018 - 2019
- Year Four 2018 - 2019
- Year Five 2018 - 2019
- Year Six 2018 - 2019
- Year 5 & 6 Arithmetic homework
- Year 5 & 6 Math Becoming homework
- Helpful math websites
- Homework days
- Help for parents - English
- Accelerated Reader - Home Connect - further information for parents
- Handwriting
- Reading and Phonics
- Help for parents Maths
- Multiplication fact challenge
- Multiplication fact & Number bond practice
- Year Six Maths Revision
- KS2 Calculation Policy
- Shilbottle Primary 2017-2018



# TIMES TABLE OF THE WEEK

$$6 \times 7 = 42$$



42					
7	7	7	7	7	7

$$6 \times 7 = 42$$

$$7 \times 6 = 42$$

$$42 \div 7 = 6$$

$$42 \div 6 = 7$$

# MISCONCEPTIONS

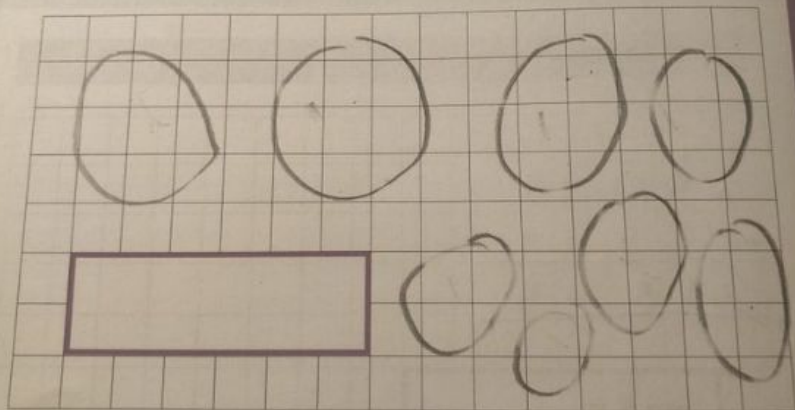


## Arrays

Arrays can limit children's understanding of multiplication to repeated addition as each 'dot' in the array often represents one.

1128

$$3160 \div 8 =$$



## Language summary

Throughout this segment, there is a strong focus on careful use of language to accurately describe division and to reflect the different structures of division.

	Quotitive division contexts	Partitive division contexts	Division calculations with no associated context
<b>Example problem</b>	<i>'There are fifteen biscuits. If I put them into bags of five, how many bags will I need?'</i>	<i>'I have twenty conkers and I share them equally between five children. How many conkers does each child get?'</i>	<div>30 ÷ 10 = <input type="text"/></div>
<b>Key language</b>	<i>'...divided into groups of...'</i> e.g. <i>'Fifteen divided into groups of five is equal to three.'</i>	<i>'...divided between...'</i> e.g. <i>Twenty divided between five is equal to four each.'</i>	<i>'...divided by...'</i> e.g. <i>'Thirty divided by ten is equal to three.'</i>

## Quotitive



8 is the total

2 is the size of the group

'Eight is divided into groups of two. There are four groups.'

There are four groups of two in eight.'

'Eight is the total number of socks.'

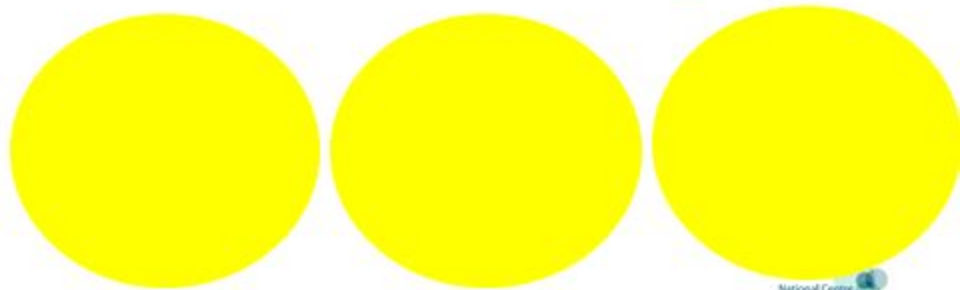
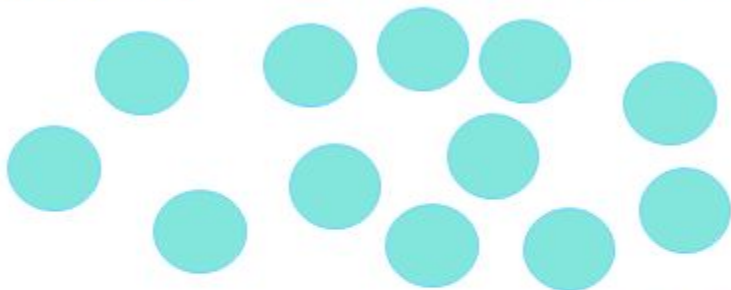
'Two is the number of socks in each group/pair.'

'Four is the number of pairs of socks.'

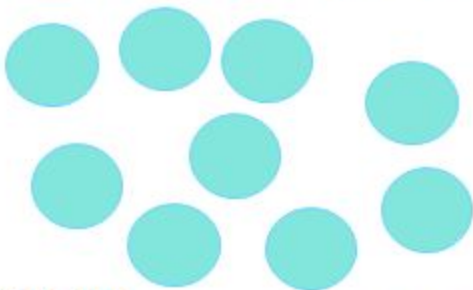
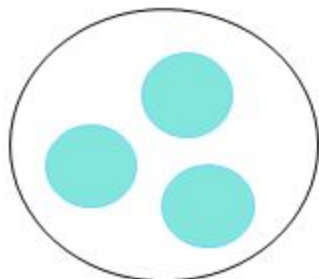
'\_\_\_ is divided into groups of \_\_\_. There are \_\_\_ groups.'



$$12 \div 3 = 4$$



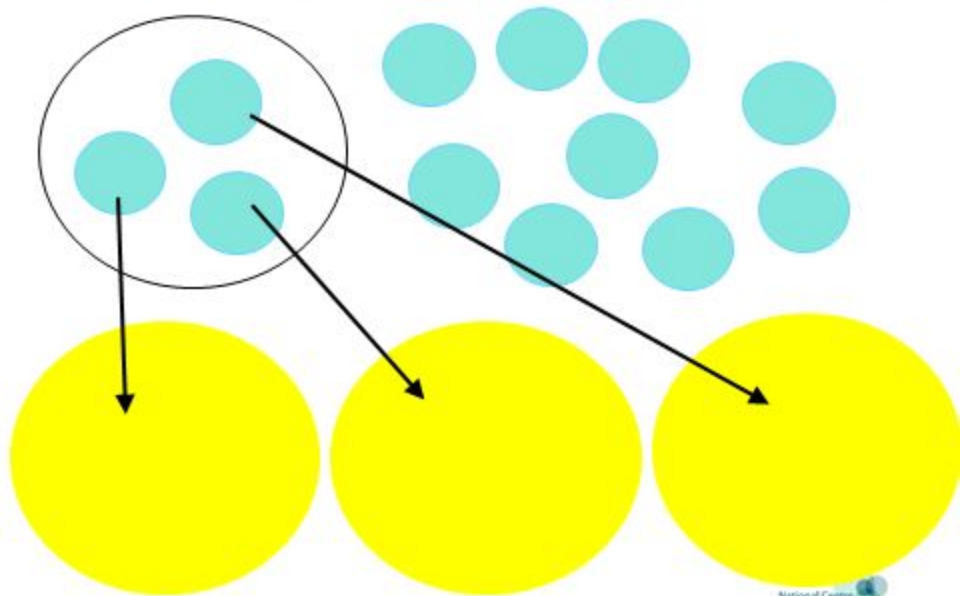
$$12 \div 3 = 4$$



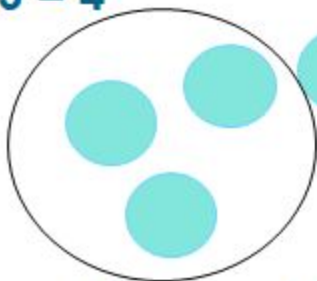
One group of 3 – one each



$$12 \div 3 = 4$$



$$12 \div 3 = 4$$

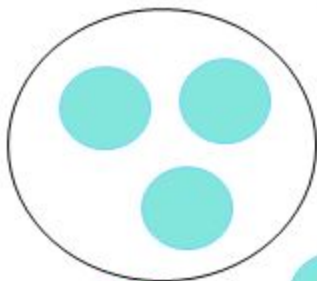


**A second group of 3**

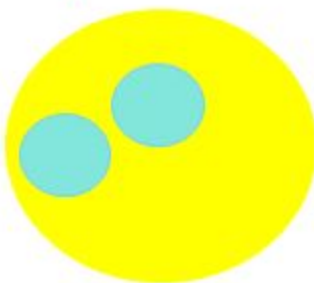




$$12 \div 3 = 4$$

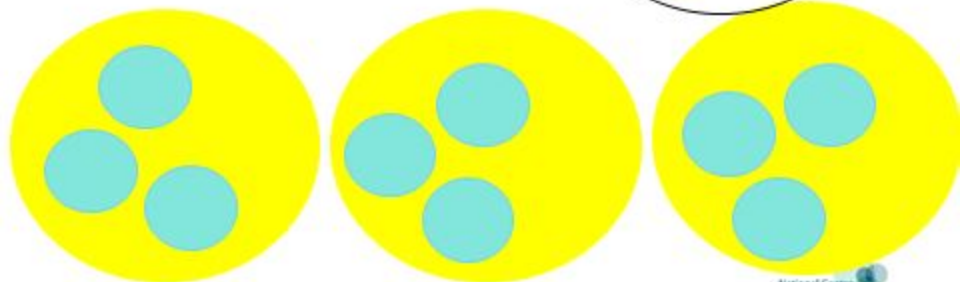


**A third group of 3**



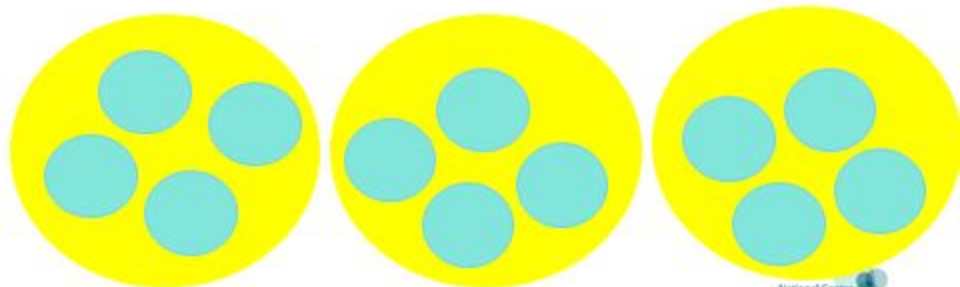
$$12 \div 3 = 4$$

**A fourth group of 3**



$$12 \div 3 = 4$$

**A fourth group of 3 – four each**

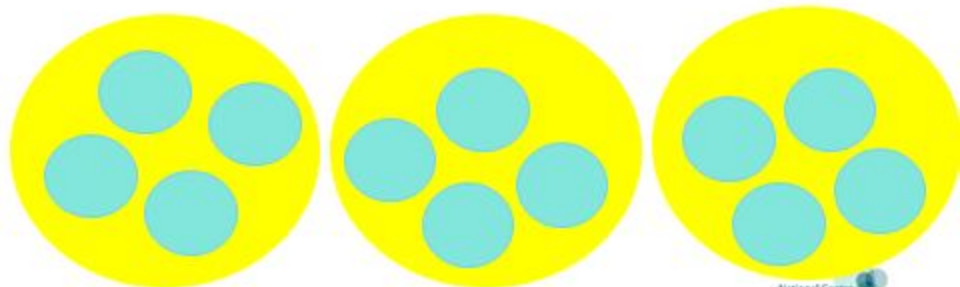


$$12 \div 3 = 4$$

**All the groups of 3 have been distributed**

**There are 4 in each set**

**4 groups of 3 were identified and distributed**



# Gattegno Chart

1000	2000	3000	4000	5000	6000	7000	8000	9000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9



# On which structures do we build short and long division strategies?



## Short division

$98 \div 7$  becomes

$$\begin{array}{r} 14 \\ 7 \overline{) 98} \end{array}$$

Answer: 14

$432 \div 5$  becomes

$$\begin{array}{r} 86 \text{ r } 2 \\ 5 \overline{) 432} \end{array}$$

Answer: 86 remainder 2

$496 \div 11$  becomes

$$\begin{array}{r} 45 \text{ r } 1 \\ 11 \overline{) 496} \end{array}$$

Answer:  $45 \frac{1}{11}$

## Long division

$432 \div 15$  becomes

$$\begin{array}{r} 28 \text{ r } 12 \\ 15 \overline{) 432} \\ \underline{30} \phantom{0} \\ 13 \phantom{0} \\ \underline{12} \phantom{0} \\ 12 \phantom{0} \\ \underline{15} \phantom{0} \\ 12 \phantom{0} \end{array}$$

Answer: 28 remainder 12

$432 \div 15$  becomes

$$\begin{array}{r} 28 \\ 15 \overline{) 432} \\ \underline{30} \phantom{0} \\ 13 \phantom{0} \\ \underline{12} \phantom{0} \\ 12 \phantom{0} \\ \underline{15} \phantom{0} \\ 12 \phantom{0} \end{array} \begin{array}{l} 15 \times 20 \\ 15 \times 8 \end{array}$$

$$\frac{12}{15} = \frac{4}{5}$$

Answer:  $28 \frac{4}{5}$

$432 \div 15$  becomes

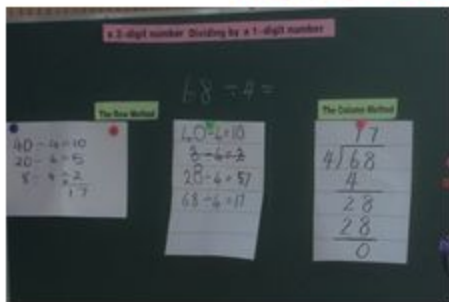
$$\begin{array}{r} 28 \cdot 8 \\ 15 \overline{) 432 \cdot 0} \\ \underline{30} \phantom{0} \downarrow \\ 13 \phantom{0} \downarrow \\ 12 \phantom{0} \downarrow \\ \underline{12} \phantom{0} \downarrow \\ 12 \phantom{0} \downarrow \\ \underline{12} \phantom{0} \downarrow \\ 0 \end{array}$$

Answer: 28.8

$$40 \div 4 = 10$$

$$20 \div 4 = 5$$

$$8 \div 4 = \frac{2}{17}$$



$$40 \div 4 = 10$$

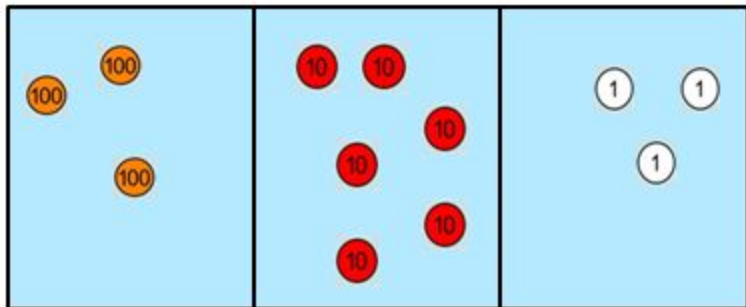
$$28 \div 4 = 7$$

$$68 \div 4 = 17$$

Context? - partitive or quotitive?

$$363 \div 3 =$$

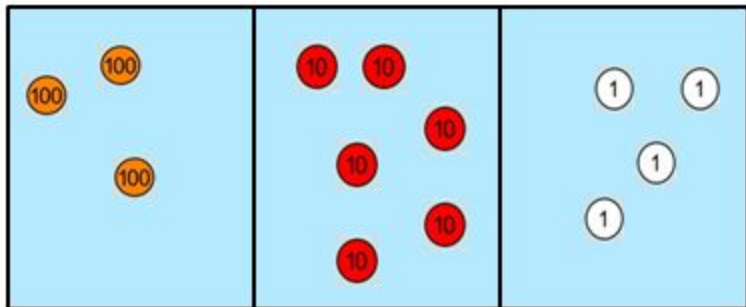
$$\begin{array}{r} 121 \\ 3 \overline{) 363} \end{array}$$





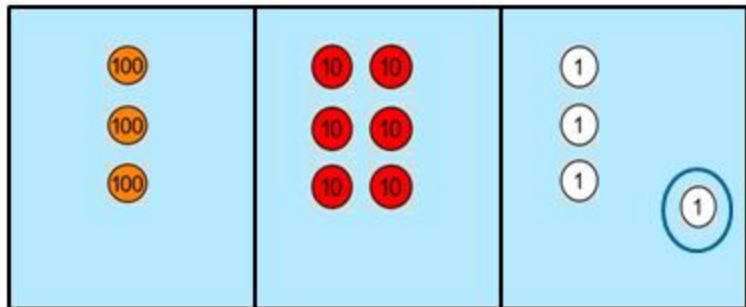
$$364 \div 3 =$$

$$3 \overline{) 364}$$



$$364 \div 3 =$$

$$\begin{array}{r} 121 \text{ rem } 1 \\ 3 \overline{) 364} \end{array}$$



$$345 \div 3 =$$

$$\begin{array}{r} 115 \\ 3 \overline{) 345} \end{array}$$

