Mastery Maths Curriculum at Ravensdale Junior School

30.9.2022

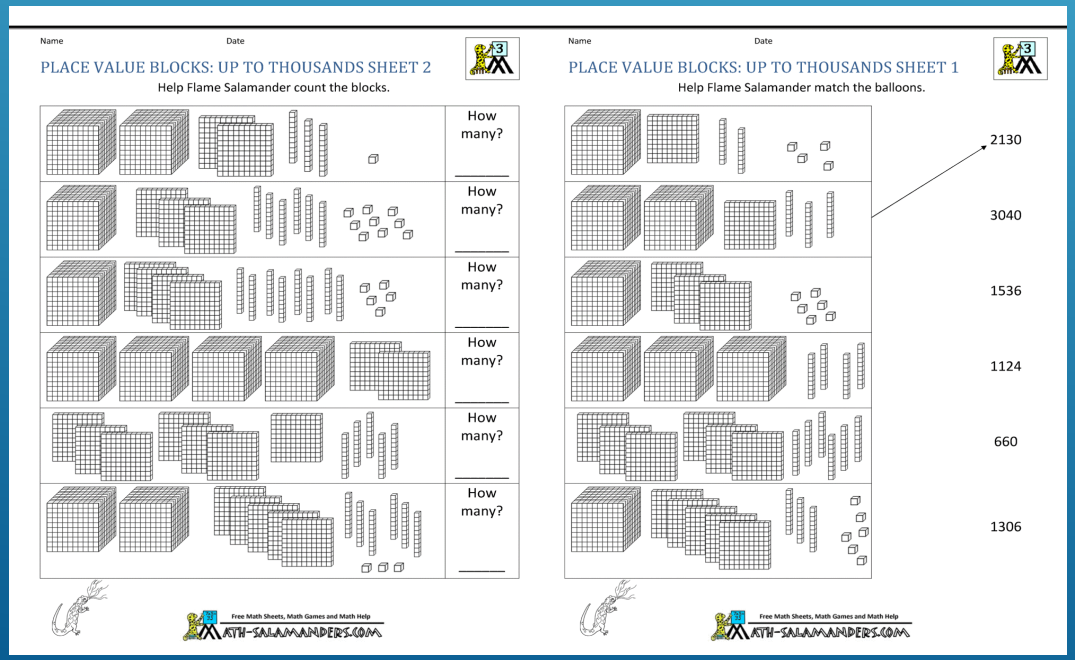
What should children be doing at home for maths?

Times Tables Rock Stars

Login required from teacher

FREE apps to be downloaded from Apple Store or Google Play on phones and tablets

Homework



Name Date

PLACE VALUE BLOCKS: UP TO THOUSANDS SHEET 2

Help Flame Salamander count the blocks.

How many? _____

How many? _____

How many? _____

How many? _____

How many? _____

How many? _____

Free Math Sheets, Math Games and Math Help MATH-SALAMANDERS.COM

Name Date

PLACE VALUE BLOCKS: UP TO THOUSANDS SHEET 1

Help Flame Salamander match the balloons.

2130

3040

1536

1124

660

1306

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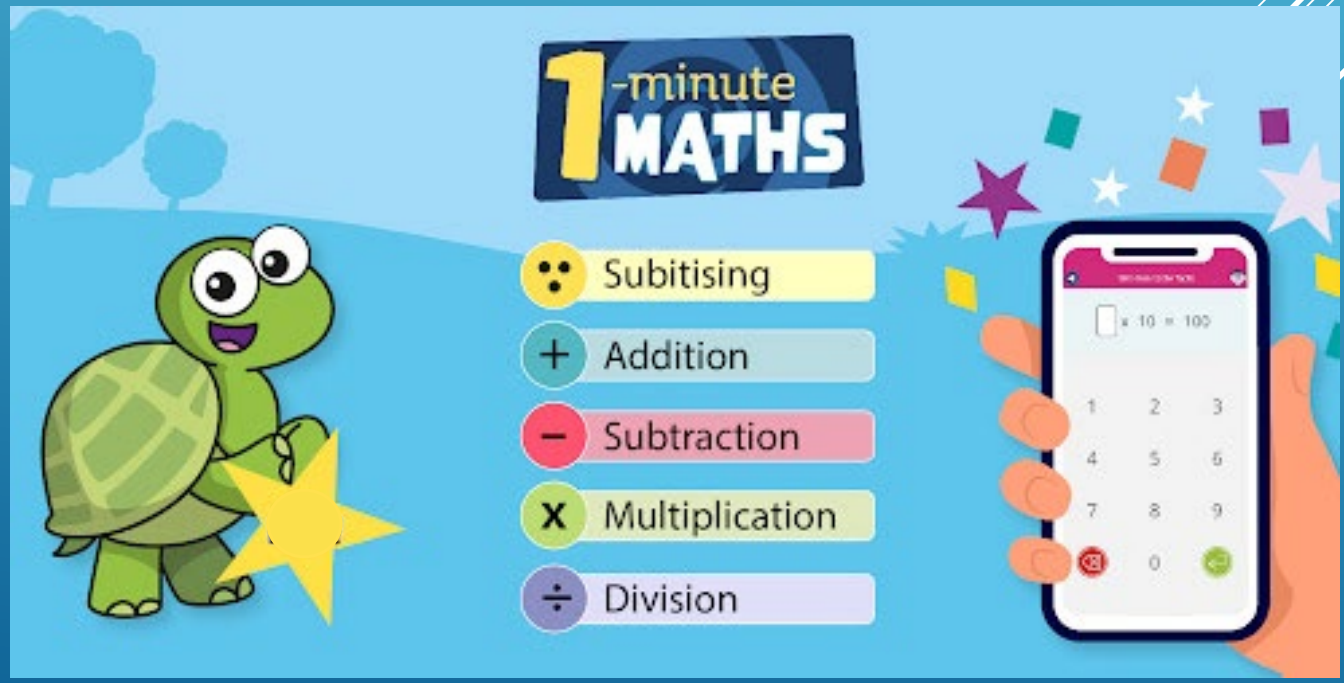


What is Mastery Maths?

- Based on the belief: ALL children can achieve in maths.
- Whole class is taught together but...
  - Extra support is given to children difficult
  - Challenging questioning are giving to those who are flying!
- Concepts are built in small, logical steps → mathematical models and images

What do our lessons look like?

Why this / Why now?

Although the basic structure of a lesson should remain the same, the amount of time spent in each section should be fluid based on the needs of the children.

Review	Assess	Model	Guide	Independent

Review	Assess: Children understand quickly	Less time can be spent modelling	Guide	More time can be spent on independent work hopefully moving toward greater depth.

Review	Assess: Children don't understand	More time can be spent modelling	More time guiding the children	Less time spent on independent work

Skills Check

Today's Tough Ten	
1	80 ÷ 10 =
2	= 10 x 4
3	57 – 40 =
4	36 + 23 =
5	67 – 35 =
6	45 + 26 =
7	90 – 30 =
8	7 x 5 =
9	$= \frac{1}{3}$ of 9
10	40 ÷ 10 =

Year 3 example

Today's Tough Ten	
1	6000 x 6 =
2	210 x 1 =
3	$\frac{1}{4} + \frac{1}{2} =$
4	42 ÷ 7 =
5	4200 ÷ 10 =
6	5403 x 5 =
7	900 – 236 =
8	613 + 9 + 5318 =
9	38 x 1000 =
10	1 – 0.3 =

Year 6 example

Year 5 example - recap quadrant

Skills Check

Last Lesson

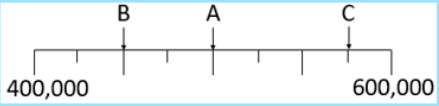
Put the numbers in ascending order.

101,010 110,001 100,110 101,100

Last Week

RAVENS

What numbers are at point A, B and C?

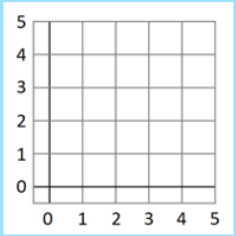


Last Fortnight

Write the number 345,207 in words.

Last Summer

Draw the grid and plot the points (1, 2), (3, 2) and (2, 4).



Times Tables Practice

1x table	2x table	3x table	4x table	5x table	6x table
1 × 1 = 1	1 × 2 = 2	1 × 3 = 3	1 × 4 = 4	1 × 5 = 5	1 × 6 = 6
2 × 1 = 2	2 × 2 = 4	2 × 3 = 6	2 × 4 = 8	2 × 5 = 10	2 × 6 = 12
3 × 1 = 3	3 × 2 = 6	3 × 3 = 9	3 × 4 = 12	3 × 5 = 15	3 × 6 = 18
4 × 1 = 4	4 × 2 = 8	4 × 3 = 12	4 × 4 = 16	4 × 5 = 20	4 × 6 = 24
5 × 1 = 5	5 × 2 = 10	5 × 3 = 15	5 × 4 = 20	5 × 5 = 25	5 × 6 = 30
6 × 1 = 6	6 × 2 = 12	6 × 3 = 18	6 × 4 = 24	6 × 5 = 30	6 × 6 = 36
7 × 1 = 7	7 × 2 = 14	7 × 3 = 21	7 × 4 = 28	7 × 5 = 35	7 × 6 = 42
8 × 1 = 8	8 × 2 = 16	8 × 3 = 24	8 × 4 = 32	8 × 5 = 40	8 × 6 = 48
9 × 1 = 9	9 × 2 = 18	9 × 3 = 27	9 × 4 = 36	9 × 5 = 45	9 × 6 = 54
10 × 1 = 10	10 × 2 = 20	10 × 3 = 30	10 × 4 = 40	10 × 5 = 50	10 × 6 = 60
11 × 1 = 11	11 × 2 = 22	11 × 3 = 33	11 × 4 = 44	11 × 5 = 55	11 × 6 = 66
12 × 1 = 12	12 × 2 = 24	12 × 3 = 36	12 × 4 = 48	12 × 5 = 60	12 × 6 = 72

7x table	8x table	9x table	10x table	11x table	12x table
1 × 7 = 7	1 × 8 = 8	1 × 9 = 9	1 × 10 = 10	1 × 11 = 11	1 × 12 = 12
2 × 7 = 14	2 × 8 = 16	2 × 9 = 18	2 × 10 = 20	2 × 11 = 22	2 × 12 = 24
3 × 7 = 21	3 × 8 = 24	3 × 9 = 27	3 × 10 = 30	3 × 11 = 33	3 × 12 = 36
4 × 7 = 28	4 × 8 = 32	4 × 9 = 36	4 × 10 = 40	4 × 11 = 44	4 × 12 = 48
5 × 7 = 35	5 × 8 = 40	5 × 9 = 45	5 × 10 = 50	5 × 11 = 55	5 × 12 = 60
6 × 7 = 42	6 × 8 = 48	6 × 9 = 54	6 × 10 = 60	6 × 11 = 66	6 × 12 = 72
7 × 7 = 49	7 × 8 = 56	7 × 9 = 63	7 × 10 = 70	7 × 11 = 77	7 × 12 = 84
8 × 7 = 56	8 × 8 = 64	8 × 9 = 72	8 × 10 = 80	8 × 11 = 88	8 × 12 = 96
9 × 7 = 63	9 × 8 = 72	9 × 9 = 81	9 × 10 = 90	9 × 11 = 99	9 × 12 = 108
10 × 7 = 70	10 × 8 = 80	10 × 9 = 90	10 × 10 = 100	10 × 11 = 110	10 × 12 = 120
11 × 7 = 77	11 × 8 = 88	11 × 9 = 99	11 × 10 = 110	11 × 11 = 121	11 × 12 = 132
12 × 7 = 84	12 × 8 = 96	12 × 9 = 108	12 × 10 = 120	12 × 11 = 132	12 × 12 = 144

Review - checking a skill they will need for the lesson

Review

RAVENS

1) What multiple of **ten** is either side of:

a) 84 b) 409

2) What multiple of **one hundred** is either side of:

a) 631 b) 1746

3) What multiple of **one thousand** is either side of:

a) 2704 b) 9603

Now, for each question, circle the multiple that the original number is closer to

Y5 Objective - to be able to round to the nearest 10, 100, 1000

Assess - how well do the class know the concept already?

Assess

RAVENS

8,317 people attend a pop concert.

Round the number of people at the concert to the nearest 10

Round the number of people at the concert to the nearest 100

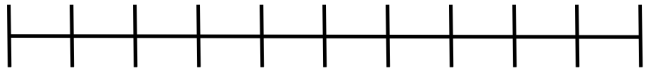
Round the number of people at the concert to the nearest 1,000

Write down your method for working out the answers to these.
Compare these with your partner.

Y5 Objective - to be able to round to the nearest 10, 100, 1000

Model - teaching the concept

Round 2,755 to the nearest 10

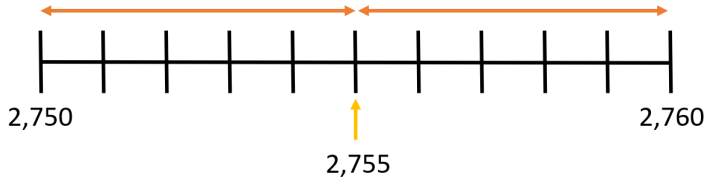


The previous multiple of 10 is _____

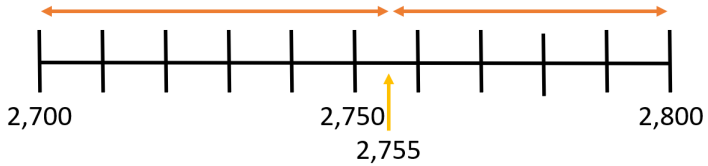
The next multiple of 10 is _____

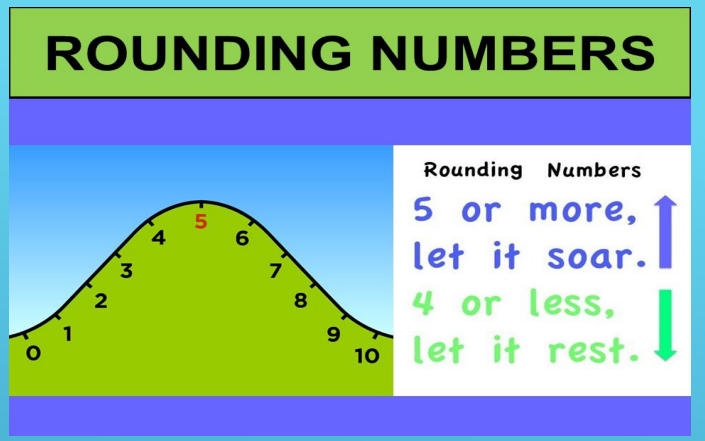
_____ rounded to the nearest 10 is _____

Round 2,755 to the nearest 10 2,760

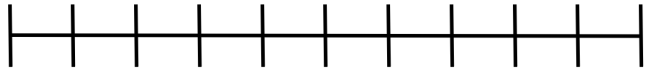


Round 2,755 to the nearest 100 2,800





Round 2,755 to the nearest 1,000



The previous multiple of 1,000 is _____

The next multiple of 1,000 is _____

2,755 is closer to _____ than _____

2,755 rounded to the nearest 1,000 is _____

Y5 Objective - to be able to round to the nearest 10, 100, 1000

Guided - chance to check and practice!

Guided

RAVENS

Think, pair, share in pairs

1)

31,409 people attend a football match.

Round the number of people at the match to the nearest 100

Round the number of people at the match to the nearest 1,000

2)

Eva runs every night for a week.

Altogether she runs 28,650 m.

Round the distance she runs to the nearest 100 m.

Round the distance she runs to the nearest kilometre.

Complete and say these sentences to your partner:

____ is closer to than ____

So ____ rounded to the nearest 10/100/1,000 is ____

1km = 1000m

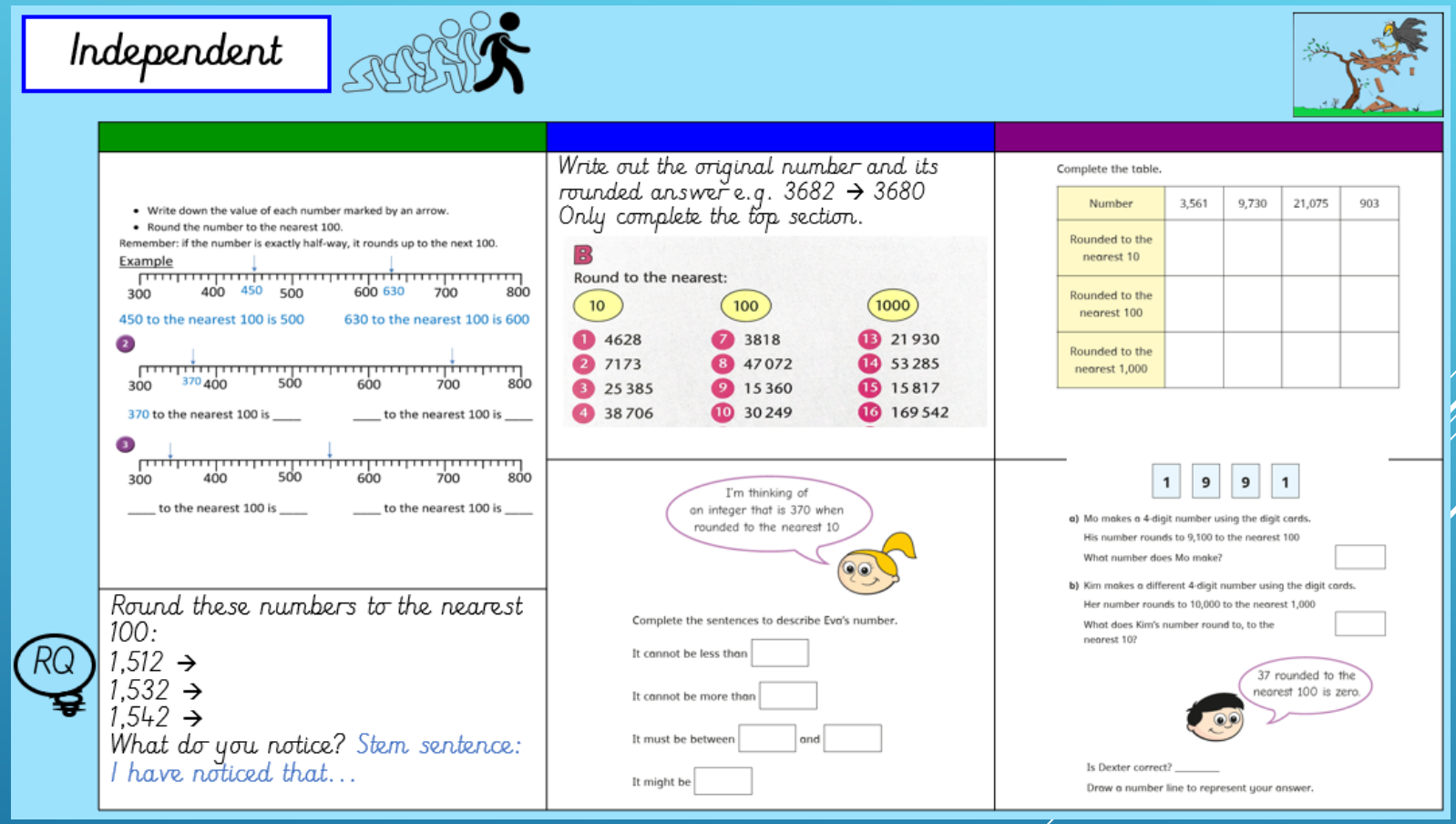
Y5 Objective - to be able to round to the nearest 10, 100, 1000

Independent - support and challenge given!

-All children to start on green

-Apparatus and adult support for those finding it difficult

-Variety of tasks practising skill, increasing in challenge



Y5 Objective - to be able to round to the nearest 10, 100, 1000

Any questions?