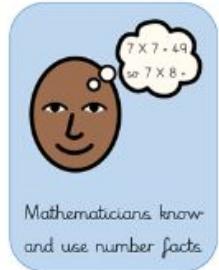


ORRANO

PRIMARY SCHOOL

Year 3/4 Maths Parent Workshop



Mathematicians know
and use number facts

Objectives:

- What is expected in Lower KS2.
- How we plan teaching and learning.
- Reasoning skills.
- What can we do at home?
- Questions.



National Curriculum context:

The principal focus of mathematics teaching in lower key stage 2 is to:

- Ensure that pupils become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value. This should ensure that pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers.
- At this stage, pupils should develop their ability to solve a range of problems, including with simple fractions and decimal place value.
- Teaching should also ensure that pupils draw with increasing accuracy and develop mathematical reasoning so they can analyse shapes and their properties, and confidently describe the relationships between them. It should ensure that they can use measuring instruments with accuracy and make connections between measure and number.
- By the end of year 4, pupils should have memorised their multiplication tables up to and including the 12 multiplication table and show precision and fluency in their work.
- Pupils should read and spell mathematical vocabulary correctly and confidently, using their growing word reading knowledge and their knowledge of spelling.

'efficient'

'accuracy'

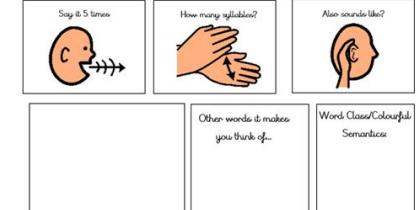
'analyse'

'fluent'

'describe relationships'

New Words _____

Think about the sounds.....



Think about the meaning..... ?





Differences in content:

New content in Y3:

- Formal written methods for Addition and Subtraction
- 3, 4, 8 times tables
- Time
- Right angles

New content in Y4:

- Rounding
- 6, 7, 9, 11 and 12 times tables
- Decimals
- Perimeter and Area
- Obtuse and Acute angles
- Points on a quadrant

Mental calculation methods

1 $72 - 10 =$

1 mark

2 $16 + 4 + 4 =$

1 mark

Times tables fluency

<https://www.timestables.co.uk/multiplication-tables-check/>

<https://mathsframe.co.uk/en/resources/resource/477/Multiplication-Tables-Check>

Pages 46/47:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/335158/PRIMARY_national_curriculum - Mathematics 220714.pdf

Addition and subtraction

789 + 642 becomes

$$\begin{array}{r} 7 & 8 & 9 \\ + & 6 & 4 & 2 \\ \hline 1 & 4 & 3 & 1 \\ & 1 & 1 \end{array}$$

Answer: 1431

874 - 523 becomes

$$\begin{array}{r} 8 & 7 & 4 \\ - & 5 & 2 & 3 \\ \hline 3 & 5 & 1 \end{array}$$

Answer: 351

932 - 457 becomes

$$\begin{array}{r} 8 & 12 & 1 \\ - & 4 & 5 & 7 \\ \hline 4 & 7 & 5 \end{array}$$

Answer: 475

932 - 457 becomes

$$\begin{array}{r} 1 & 1 \\ - & 4 & 5 & 7 \\ \hline 5 & 6 \\ 4 & 7 & 5 \end{array}$$

Answer: 475

Short multiplication

24 × 6 becomes

$$\begin{array}{r} 2 & 4 \\ \times & 6 \\ \hline 1 & 4 & 4 \\ 2 \end{array}$$

Answer: 144

342 × 7 becomes

$$\begin{array}{r} 3 & 4 & 2 \\ \times & 7 \\ \hline 2 & 3 & 9 & 4 \\ 2 & 1 \end{array}$$

Answer: 2394

2741 × 6 becomes

$$\begin{array}{r} 2 & 7 & 4 & 1 \\ \times & 6 \\ \hline 1 & 6 & 4 & 4 & 6 \\ 4 & 2 \end{array}$$

Answer: 16 446

Mathematics programmes of study: key stages 1 and 2

National curriculum in England

A collage of mathematical illustrations including a Venn diagram with numbers 65 and 23, a 10x10 grid of blue squares, a pencil holder with colored pencils, and a brain-like cloud containing the number 12.

1. Number, Addition and Subtraction

A collage of mathematical illustrations including a 10x10 grid of yellow dots, a 5x4 grid of blue dots, a person holding balloons labeled '2 each', a number line from 0 to 20 with jumps of 5, and a multiplication table showing 20 ÷ 4 = 5 and 5 × 4 = 20.

2. Multiplication and Division

A collage of mathematical illustrations including a circle divided into 3 equal parts labeled 'one-third', a fraction bar divided into 3 equal parts labeled $\frac{1}{3}$, a 3D cylinder divided into 3 equal parts, and a small potted plant.

3. Fractions

Lower Key Stage 2 - Fractions 1 video lessons

Video lessons on fractions for children
in Years 3 and 4

Lower Key Stage 2 - Fractions 2 video lessons

Video lessons on fractions for children
in Years 3 and 4

Lower Key Stage 2 - Fractions 3 video lessons

Video lessons on fractions for children
in Years 3 and 4

What do we use to form our maths lessons?



Parents & Learning

[View all our resources](#)

[Advice & guidance](#)

[Maths with Michael](#)

[Parent resources](#)

[FAQs](#)

Pupils

[Home learning](#)

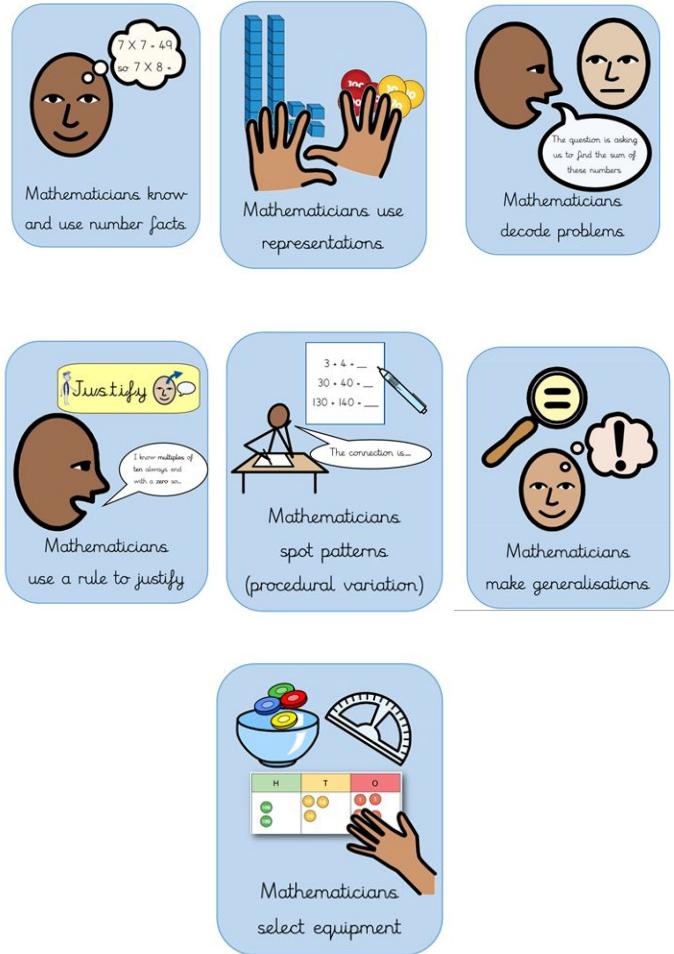
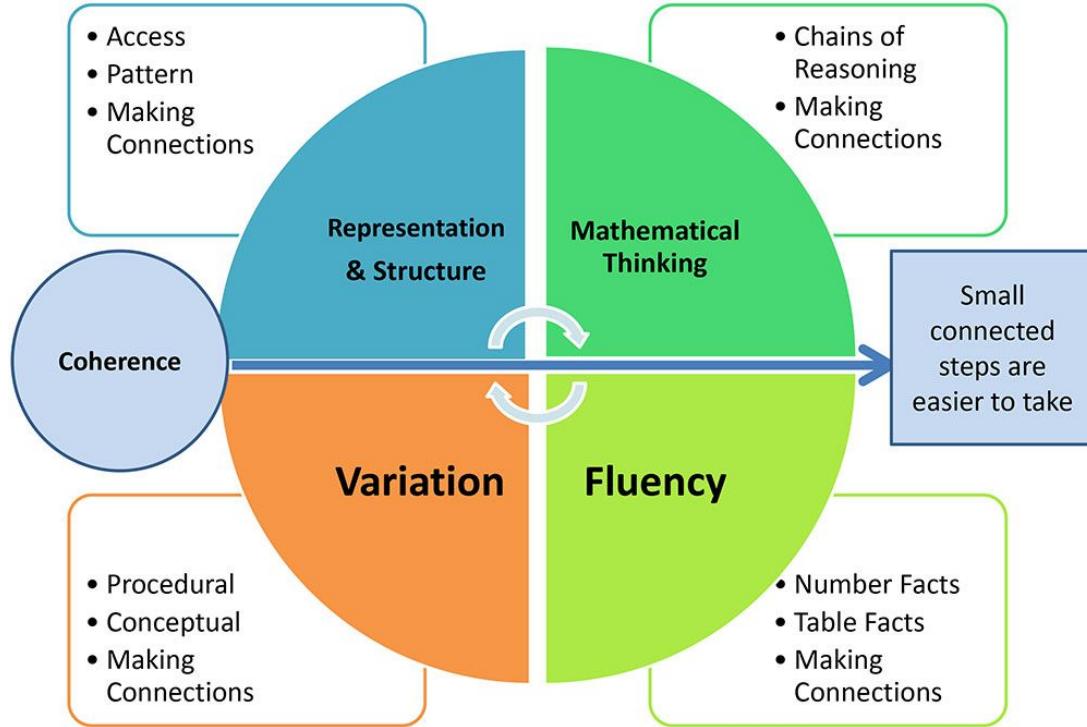
[1-Minute Maths](#)

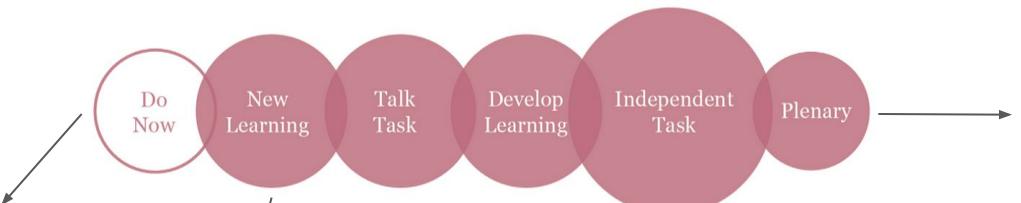
Scheme of learning

Editable reasoning & problem solving questions

End of block assessment (A)

End of block assessment (B)





Every number in the
2 times-table is even.



3, 23, 43, 63, 83...



3000, 23 000, 43 000, 63 000, 83 000...

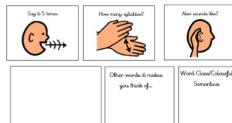


'I can see that...'

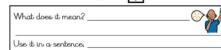
I noticed a connection between ...

New Words _____

Think about the sounds.....



Think about the meaning..... [?]



Is there an action to help you remember?



I disagree because...



Explain



$55 - 12 + 4 = \boxed{47}$



$$\begin{array}{r} 55 + 4 - 12 = \boxed{47} \\ 55 + 4 = 59 \\ 59 - 12 = 47 \end{array}$$

I know that... so I know that...

I would prefer ____'s method because...

Practice,
practice
practice



Holly says,

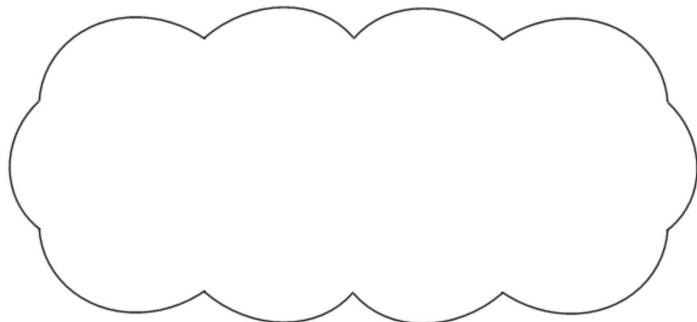
'One-third of this shape is shaded'.

Is Holly correct?

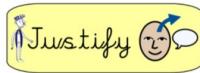
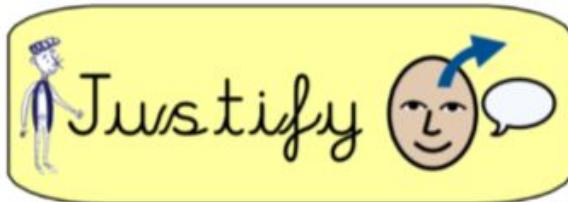
Circle Yes or No.

Yes / No

Explain how you know.



1 mark



'I know that one third means...'

'Holly is correct because...'

'If I drew this representation in a different way...'

'I can see that...'

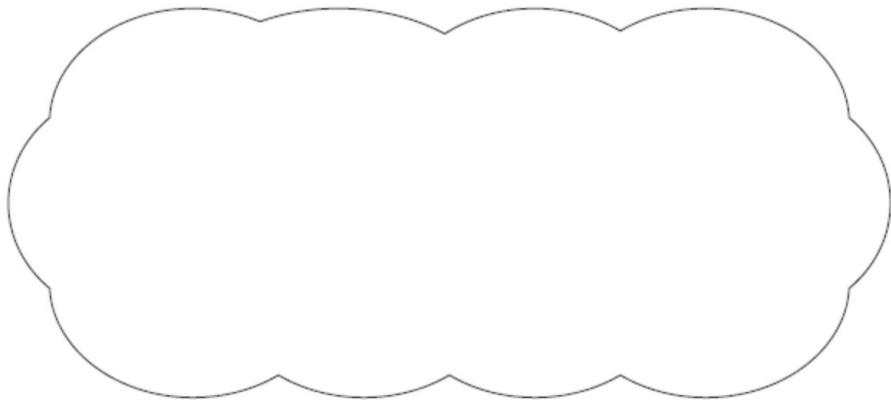
Updates to our reasoning strategies:

Circle the number which is **closer** to 1000

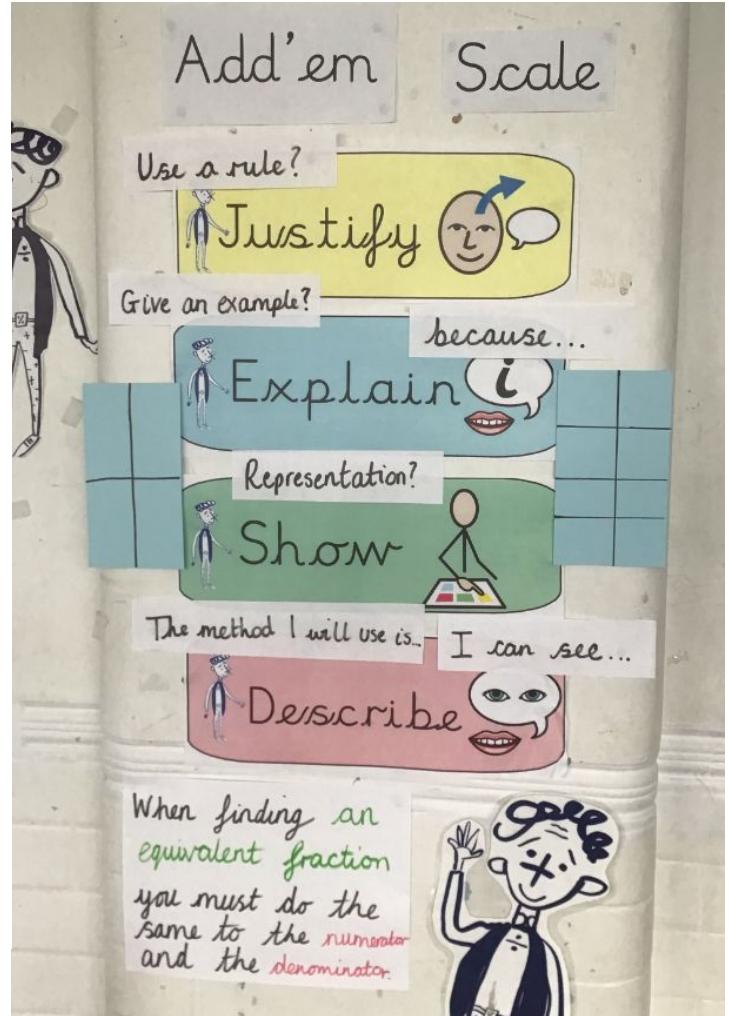
996

1006

Explain how you know.



1 mark



Current at home practice:



<https://www.londonsouthwestmathshub.co.uk/current-projects/greater-depth-2016-2017>

<https://mathsframe.co.uk/en/resources/category/22/most-popular>

<https://nrich.maths.org/9086>

Games and Interactives

We've put together some of our favourite games and interactives. Some are to play with a friend and others can be played against the computer. Let us know which are **your** favourites!



Games - Lower Primary

Playing these games will help to test your understanding of different topics.



Games - Upper Primary

Playing these Free KS1/KS2 Maths games will help to test your understanding of different mathematics topics.



Interactives - Lower Primary

Try these interactives to improve your skills in a variety of topics.



Interactives - Upper Primary

Try these interactives to improve yours skills in a variety of topics.

<https://www.ncetm.org.uk/classroom-resources/assessment-materials-primary/>