

# Years 5 and 6 Spring 1 Newsletter

24.02.2023

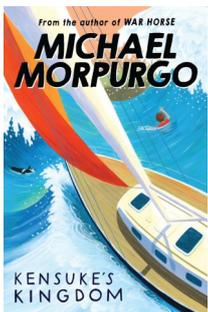


FARNFIELD ST MICHAEL'S C OF E PRIMARY SCHOOL

## We have sprung in 2023!

Our UKS2 children have had a fantastic start to 2023 and we have been really proud of how they have both embedded their skills and embraced our new learning—keep up the good work!

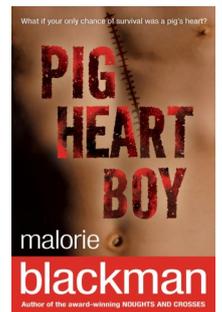
We have had a great start to our Create topic and hope you enjoy hearing a little more of what we have been up to in our learning this half term.



### Guided Reading

In Year 5, we have been reading 'Kensuke's Kingdom' (Michael Morpurgo), exploring many important themes such as: exploration, loss and friendship.

In Year 6, we have been reading 'Pig Heart Boy' (Malorie Blackman) and explored themes such as: friendship, betrayal and forgiveness.



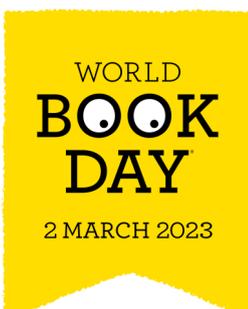
### Spellings

# SPELLING

This half term, we have reviewed double consonants and a range of suffixes.

It would be supportive if your child/ren could also regularly look at the Year 3/4 and Year 5/6 National Curriculum words as the children have found these patterns tricky to recall. These can be found in their Reading Record.

### World Book Day

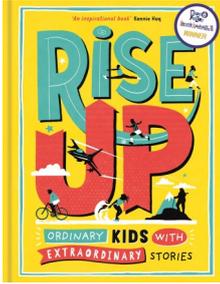
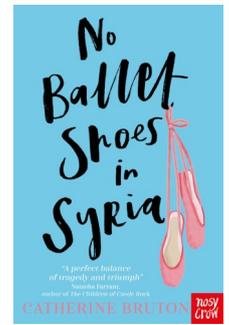


On Thursday 2nd March, we invite the children to bring in a potato decorated as a character from a book of their choice. They may use a range of materials to add to their potato design, for example, googly eyes, pipe cleaners, paint etc.

We look forward to seeing what wonderful, creative ideas the children come up with and which book character they have chosen.

# English

In English, we have read the book 'No Ballet Shoes in Syria' and focused on the genre of narrative. The children have had to be able to recall and use all the features of a narrative during this unit, building to writing their own ending to the novel.



After reading this book, we have looked at an inspirational biography in the book 'Rise Up'. In this unit, we have developed our knowledge of newspaper features and how to use a range of punctuation, suitable for the report.

We have been really impressed with the children's focus in their narrative writing. Well done Years 5 and 6!

# Maths

In Year 5, we have spent this half term focusing on our formal written methods for multiplication and division and have recently returned to fractions.

In Year 6, we have now covered measures (including area, perimeter and volume) and their geometry work on position and direction (including reflection and translation).

As we have been working in Maths this half term, it has been evident that the children need to build on learning their times tables facts. They come into many areas, and a rapid recall is required. Take a look at the examples below to see how often the children need their timestables:

Please be reminded that both Year 5 and Year 6 children have TT Rockstars set weekly and these will help improve their fluency and in turn their confidence to apply their timetables.



Adding, subtracting, multiplying and dividing fractions

$\frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$

$\frac{1}{3} + \frac{1}{6}$

$\frac{1}{3} \times 2$

$\frac{2}{6} + \frac{1}{6}$

Simplifying fractions

$\frac{9}{15} \div 3 = \frac{3}{5}$

$\frac{3}{5} \div 3$

Using scale factors

2 people: 6 eggs, 100g flour  
 1 person: 6 + 2 = 3 eggs, 100 ÷ 2 = 50g  
 5 people: 3 x 5 = 15 eggs, 50 x 5 = 250g

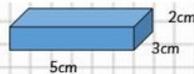
4cm, 9cm, 12cm, 27cm

Finding a fraction or a percentage of a number

$\frac{3}{4}$  of 48

$48 \div 4 = 12$   
 dividing by 4 finds one quarter.  
 $12 \times 3 = 36$   
 multiplying by 3 finds 3 quarters

Calculating volume



Using algebraic rules

1st term:  $5 \times 1 - 4 = 1$   
 2nd term:  $5 \times 2 - 4 = 6$   
 3rd term:  $5 \times 3 - 4 = 11$   
 4th term:  $5 \times 4 - 4 = 16$   
 5th term:  $5 \times 5 - 4 = 21$

Finding the area of rectangles, triangles and parallelograms.

$9 \times 4 = 36 \text{ cm}^2$

$10 \times 7 = 70 \text{ cm}^2$

$10 \times 7 = 70 \text{ cm}^2$   
 $70 \div 2 = 35 \text{ cm}^2$

Calculating ratio

A prize is shared in a ratio of 3 : 4 between Jamie and Dan. If Jamie gets £21, how much will Dan get?

Jamie: Dan  
 3 : 4  
 $21 : 28$

Using known facts

If  $3 \times 2 = 6$ , then  
 $3 \times 20 = 60$   
 $30 \times 2 = 60$   
 $30 \times 20 = 600$

Why are times tables useful?

Converting between mixed and improper fractions

$1\frac{3}{4} = \frac{7}{4}$

Convert between miles and kilometres

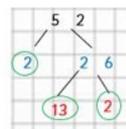
To convert km to miles:  
 5 miles = 8km  
 30 miles = 48km

1) Divide by 8 ( $48 \div 8 = 6$ )  
 2) Multiply by 5 ( $6 \times 5 = 30$ )

Short and long division

$5 \overline{) 625}$

Finding prime factors



Square and cube numbers

$2^2 = 2 \times 2 = 4$

$4^2 = 4 \times 4 = 16$

$3^3 = 3 \times 3 \times 3 = 27$

Factors and common factors

Factors of 8: 1, 2, 4, 8  
 Factors of 6: 1, 2, 3, 6  
 Common factors: 1, 2

Ordering and comparing fractions

$\frac{2}{3} \times 4 = \frac{8}{3}$

$\frac{3}{4} \times 3 = \frac{9}{4}$

$\frac{8}{3} < \frac{9}{4}$

Finding equivalent fractions

$\frac{2}{3} \times 4 = \frac{8}{12}$

$\frac{3}{4} \times 3 = \frac{9}{12}$

Identifying prime and composite numbers

A prime number is a whole number greater than 1 with no divisors except 1 and itself.

1, 2, 3, 4, 5, 6, 7, 8, 9, 10  
 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

Multiples and common multiples

Multiples of 3: 3, 6, 9, 12, 15, 18, 21, 24  
 Multiples of 4: 4, 8, 12, 16, 20, 24, 28, 32

Short and long multiplication

$853 \times 6 = 5118$

$32 \times 45 = 1440$

# Maths—Calculation with fraction:

Now Years 5 and Year 6 have covered their work on calculations with fractions, some parents/carers may find the images below helpful:

## Addition and Subtraction with Fractions

$$\frac{5}{6} + \frac{1}{3} =$$

$\frac{5}{6} + \frac{2}{6} = \frac{7}{6}$  or  $\frac{7}{6} = 1\frac{1}{6}$

$$\frac{4}{5} - \frac{3}{10} =$$

$\frac{8}{10} - \frac{3}{10} = \frac{5}{10}$  or  $\frac{1}{2}$

## Addition and Subtraction with Mixed Numbers

$$2\frac{5}{7} + 1\frac{2}{3} =$$

$3 + \frac{8}{21} = 4\frac{8}{21}$

$$2\frac{1}{4} - 1\frac{2}{3} =$$

$\frac{27}{12} - \frac{20}{12} = \frac{7}{12}$

## Multiplication with Fractions

Remember  $\times$  means 'of' eg.  $3 \times 4$  means 3 lots of 4

$\frac{5}{7} \times \frac{3}{5}$  becomes  $\frac{5}{7}$  of  $\frac{3}{5}$

First, represent the fraction  $\frac{5}{7}$  by dividing the bar vertically:

Now, represent the fraction  $\frac{3}{5}$  by dividing the bar horizontally:

When we combine the two models, we can see that:

This part is both yellow and green.

$\frac{5}{7}$  of  $\frac{3}{5} = \frac{15}{35}$  which can be simplified to  $\frac{3}{7}$

## Multiplication with Fractions and Integers

The written calculation:

$\frac{3}{4} \times 5 = \frac{15}{4} = 3\frac{3}{4}$

**Remember:**  $5 = \frac{5}{1}$  or  $19 = \frac{19}{1}$

We multiply the numerator by the integer (the whole number)

$\frac{3}{4} \times 5 = \frac{15}{4} = 3\frac{3}{4}$

We multiply the denominator by one

Multiply the numerators together.

If necessary, simplify the fraction by dividing by the greatest common factor.

Multiply the denominators together.

Here, the greatest common factor is 12.

$\frac{4}{6} \times \frac{3}{8} = \frac{12}{48} = \frac{1}{4}$

## Division with Fractions

$$\frac{1}{3} \div 5 = \frac{1}{15}$$

$\frac{1}{3} \div 5$  into 5 parts

1 of those parts =  $\frac{1}{15}$  of the whole

$$\frac{2}{5} \div 6 = \frac{2}{30} = \frac{1}{15}$$

$\frac{2}{5} \div 6$  into 6 parts each

2 of those parts =  $\frac{2}{30}$  of the whole

Look at the steps we did to calculate  $\frac{4}{5} \div 2 = \frac{2}{5}$

- Change the whole number into a fraction.  $\frac{4}{5} \div \frac{2}{1}$
- Change the division sign to a multiplication sign.  $\frac{4}{5} \times \frac{1}{2}$
- Invert (flip) the second fraction.  $\frac{4}{5} \times \frac{1}{2}$
- Multiply the numerators together.  $\frac{4}{5} \times \frac{1}{2} = \frac{4}{10}$
- Multiply the denominators together.  $\frac{4}{5} \times \frac{1}{2} = \frac{4}{10}$
- If necessary, simplify the answer by dividing by the greatest common factor.  $\frac{4}{10} = \frac{2}{5}$

## Maths—Our formal written methods:

As we continue to practise our formal written methods, some parents/carers find examples of the calculations helpful. Please see the images below:

### Column Addition and Subtraction

$$53996 + 2759 =$$

$$\begin{array}{r} 53996 \\ + 02759 \\ \hline 56755 \\ \text{\textit{x x x}} \end{array}$$

$$57034 - 8365 =$$

$$\begin{array}{r} 416912 \\ \cancel{5} \cancel{7} \cancel{0} \cancel{3} \cancel{4} \\ - 08365 \\ \hline 48669 \end{array}$$

### Column Addition and Subtraction with decimals

$$9.02 + 203.1 =$$

$$\begin{array}{r} 203.10 \\ + 9.02 \\ \hline 212.12 \\ \text{\textit{x}} \end{array}$$

$$9 - 3.03 =$$

$$\begin{array}{r} 8.9 \\ \cancel{9} \cancel{.} \cancel{0} \\ - 3.03 \\ \hline 5.97 \end{array}$$

### Long Multiplication

$$124 \times 26 =$$

$$\begin{array}{r} \cancel{1} \cancel{2} \cancel{4} \quad \cancel{1} \cancel{2} \cancel{4} \quad \cancel{1} \cancel{2} \cancel{4} \\ 124 \quad 124 \quad 124 \\ \times 26 \quad \times 26 \quad \times 26 \\ \hline 744 \quad 744 \quad 744 \\ \phantom{744} 2480 \quad + 2480 \\ \hline 3224 \\ \text{\textit{x x}} \end{array}$$

$$2854 \times 38 =$$

$$\begin{array}{r} \cancel{2} \cancel{8} \cancel{5} \cancel{4} \\ 2854 \\ \times \quad 38 \\ \hline 22832 \\ + 85620 \\ \hline 108452 \\ \text{\textit{x x}} \end{array}$$

### Short Multiplication with decimals

$$4.67 \times 7 =$$

$$\begin{array}{r} \phantom{4.} \cancel{6} \cancel{7} \\ 4.67 \\ \times \quad 7 \\ \hline 32.69 \end{array}$$

### Short Division with remainders

$$124 \div 3 =$$

$$\begin{array}{r} 041 \text{ r}1 \\ 3 \overline{) 124} \\ \underline{3} \phantom{0} \\ 041 \\ \underline{3} \phantom{0} \\ 010 \\ \underline{0} \\ 10 \end{array}$$

$$\begin{array}{r} 041.33\dot{3} \\ 3 \overline{) 124.000} \\ \underline{3} \phantom{0} \\ 041 \\ \underline{3} \phantom{0} \\ 010 \\ \underline{0} \\ 100 \\ \underline{9} \\ 10 \end{array}$$

$$\begin{array}{r} 041 \frac{1}{3} \\ 3 \overline{) 124} \end{array}$$

### Long Division

$$936 \div 36 =$$

$$\begin{array}{r} 026 \\ 36 \overline{) 936} \\ \underline{0} \phantom{0} \\ 93 \\ \underline{72} \\ 216 \\ \underline{216} \\ 000 \end{array}$$

**Jottings**

- 1 x = 36
- 2 x = 72
- 3 x = 108
- 4 x = 144
- 5 x = 180
- 6 x = 216
- 10 x = 360

### Long Division with remainders

$$609 \div 14 =$$

$$\begin{array}{r} 043.5 \\ 14 \overline{) 609.0} \\ \underline{0} \phantom{0} \\ 56 \\ \underline{56} \\ 09 \\ \underline{0} \\ 90 \\ \underline{84} \\ 60 \\ \underline{56} \\ 40 \\ \underline{42} \\ 00 \end{array}$$

**Jottings**

- 1 x = 14
- 2 x = 28
- 3 x = 42
- 4 x = 56
- 5 x = 70
- 6 x = 84
- 7 x = 98
- 8 x = 112
- 10 x = 140

## Create

This half term, Year 5 and 6 have been immersing themselves in all things to do with self-exploration! Our overarching question has been 'What if you sang your own song?', and we have focused on the themes of independence, self-discipline, equality and responsibility.

So far we have learnt about and created...

### Create Launch Day—Guess my song!



### Self-Portraits in the style of Roy Lichtenstein



'The Lord is my strength and my song.' Exodus 15 v2

## Create—Our Science Unit

We have loved diving into our Science unit on the human body, specifically the circulatory system.

### Becoming the Circulatory System



### Doctor Downer's Visit



'The Lord is my strength and my song.' Exodus 15 v2