



St John Fisher RC Primary School

Year 6 Maths Knowledge Organiser

Autumn 2 Block 4 – Fractions (1)

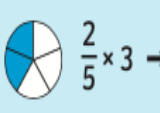
Objectives	Self-Assessment	Teacher
I can multiply simple pairs of proper fractions, writing the answer in the simplest form such as $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$.		
I can divide proper fractions by whole numbers such as $\frac{1}{3} \div 2 = \frac{1}{6}$.		

Multiply & Divide

Multiplying Fractions by Fractions

$$\frac{1}{2} \times \frac{1}{3} = \frac{1 \times 1}{2 \times 3} = \frac{1}{6}$$

Multiplying Fractions by Whole Numbers



$\frac{2}{5} \times 3 \rightarrow 3 = \frac{3}{1}$

$$\frac{2}{5} \times \frac{3}{1} = \frac{6}{5} = 1 \frac{1}{5}$$

$$\frac{2}{5} \div 2 = \frac{1}{5}$$

Multiplication and division are the inverse of one another so:

$\div 2$ is the same as $\times \frac{1}{2}$

$$\frac{2}{5} \times \frac{1}{2} = \frac{2}{10}$$

Key Vocabulary

multiplication	To take one number and continuously add it a number of times.
division	To break up a number into a given number of smaller parts.
numerator	The number above the line in a fraction.
denominator	The number below the line in a fraction.
proper fraction	A fraction that has a smaller numerator than the denominator.
improper fraction	A fraction that has a larger numerator than the denominator.
mixed fraction	An integer (number) combined with a proper fraction.
convert	To change a value from one form to another e.g. mixed fraction to an improper fraction.
partition	To separate numbers to smaller parts to make them easier to work with.

Sentence Stems

To multiply a fraction by an integer, I need to multiply the numerator by ____.	To multiply a mixed number by an integer, I can partition it into ____ and ____ and then multiply them both by the integer.
I am dividing each ____ by ____, so I must split each part into ____ equal parts.	If you divide ____ into equal groups, then each group is ____ because ____ divided by ____ = ____.

Assessment

I can multiply simple pairs of proper fractions, writing the answer in the simplest form such as $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$.	I can divide proper fractions by whole numbers such as $\frac{1}{3} \div 2 = \frac{1}{6}$.
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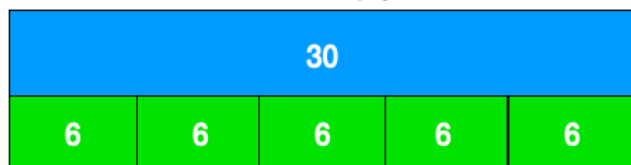
Year 6 Maths Knowledge Organiser

Autumn 2 Block 4 – Fractions (2)

Objectives	Self-Assessment	Teacher
• I can find fractions of amounts.	😊 😐 😞	
• I can find fractions of amounts to solve problems.	😊 😐 😞	

Fractions of Amounts

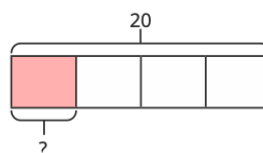
To find the fraction of a number, divide by the denominator and multiply the numerator



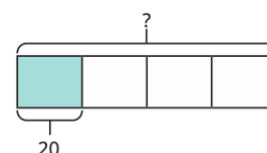
e.g. for $\frac{1}{6}$ of 30, calculation is 30 divided by 6 = 5

For $\frac{4}{6}$ of 30, calculation is 30 divided by 6 = 5,
then $4 \times 5 = 20$.

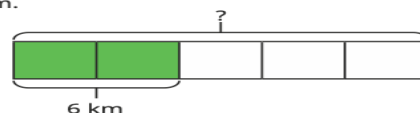
$$\frac{1}{4} \text{ of } 20 = \underline{\quad}$$



$$\frac{1}{4} \text{ of } \underline{\quad} = 20$$



Tommy runs $\frac{2}{5}$ of a race for his running club.
He runs 6 km.



How far is $\frac{1}{5}$ of the race?
How far is the race altogether?

Key Vocabulary

multiplication	To take one number and continuously add it a number of times.
division	To break up a number into a given number of smaller parts.
numerator	The number above the line in a fraction.
denominator	The number below the line in a fraction.
proper fraction	A fraction that has a smaller numerator than the denominator.
improper fraction	A fraction that has a larger numerator than the denominator.
mixed fraction	An integer (number) combined with a proper fraction.

Sentence Stems

The whole is divided into ____ equal parts. Each part is worth ____.	The numerator is ____, so the fraction is worth ____.
To find one part, I need to divide by ____.	To find the whole, I need to multiply by ____.

Assessment

I can find fractions of amounts.	I can find fractions of amounts to solve problems.
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