Maths Knowledge Organiser for Year 6

Term: Autumn 2

Key vocabulary:

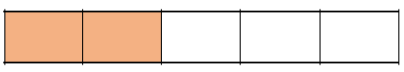
- **Simplify** - make (something) simpler or easier to do or understand
- **Denominator** - The number below the line in a vulgar fraction
- **Numerator** - The number above the line in a vulgar fraction showing how many of the parts indicated by the denominator are taken, for example, 2 in 2/3.
- **Improper** - A fraction in which the numerator is greater than the denominator, such as 5/4.
- **Coordinates** - Each of a group of numbers used to indicate the position of a point, line, or plane
- **Reflections** - The conceptual operation of inverting a system or event with respect to a plane, each element being transferred perpendicularly through the plane to a point the same distance the other side of it.
- **Translations** - movement of a body from one point of space to another such that every point of the body moves in the same direction and over the same distance, without any rotation, reflection, or change in size
- **Quadrants** - each of four parts of a plane, sphere, space, or body divided by two lines or planes at right angles.

Curriculum Objectives

- Simplify fractions
- Fractions on a number line
- Compare and order fractions by the denominator
- Compare and order fractions by the numerator
- Add and subtract fractions (1)
- Add and subtract fractions (2)
- Adding fractions
- Subtracting fractions
- Mixed addition and subtraction problems
- Multiply fractions by whole number
- Multiply fractions by fraction
- Divide a fraction by a whole number (1)
- Divide a fraction by a whole number (2)
- Four rules with fractions
- Fraction of an amount
- Fraction of an amount - finding the whole
- Coordinates in the first quadrant
- Coordinate in four quadrants
- Translations
- Reflections

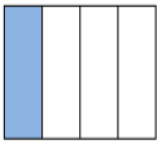
Examples

Lee has $\frac{2}{5}$ of a chocolate bar. He shares it with his friend. How much chocolate do they get each?

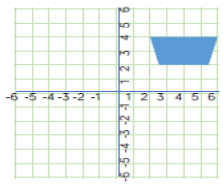


Lizzie and Marie each had an ice cream sundae. Lizzie only ate $\frac{3}{4}$ of hers and Marie left $\frac{2}{5}$ of her sundae. How much ice cream was left over? Who ate the largest fraction of their sundae? By how much?

Use the diagram below to work out $\frac{1}{3} \times \frac{1}{4}$

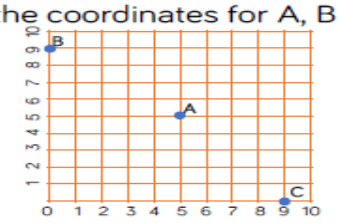


Reflect the trapezium in the x and the y axis.
Complete the table with the new co-ordinates of the shape.



	Reflected in the x axis	Reflected in the y axis
(3,4)		
(6,4)		
(7,7)		
(2,7)		

Chris plots three coordinates.
Work out the coordinates for A, B and C.



Please refer to the school Calculation Policy on the Maths page via the school website

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