



**What should I already know?**

- How to compare and order fractions whose denominators are multiples of the same number.
- How to identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths. Recognise mixed numbers and improper fractions
- How to convert from one form to the other
- How to write mathematical statements  $>1$  as a mixed number [for example  $2\frac{5}{5} + 4\frac{5}{5} = 6\frac{5}{5} = 11\frac{5}{5}$  ]
- How to add and subtract fractions with the same denominator
- How to add and subtract fractions with denominators that are multiples of the same number

**What will I know by the end of the unit?**

- How to use Highest Common Factors to simplify fractions
- How to count forwards and backwards in fractions
- How to compare and order fractions with the same denominator or denominators that are multiples of the same number
- How to order and compare fractions by finding a common denominator
- How to order and compare fractions by finding a common numerator
- How to add and subtract fractions when one denominator will stay the same
- How to add and subtract fractions when I have to find the LCM of the denominators
- How to add fractions with any denominator and mixed numbers
- How to subtract mixed numbers
- How to solve problems that involve adding and subtracting fractions and mixed numbers
- How to multiply fractions and mixed numbers by integers
- How to multiply a fraction by a fraction
- How to divide a fraction by an integer when the numerator is a multiple of the integer
- How to divide a fraction by an integer
- How to use the four operations and order of operations when calculating with fractions
- How to calculate a fraction of an amount
- How to find a whole amount when given the value of a fraction of the whole

**Vocabulary**

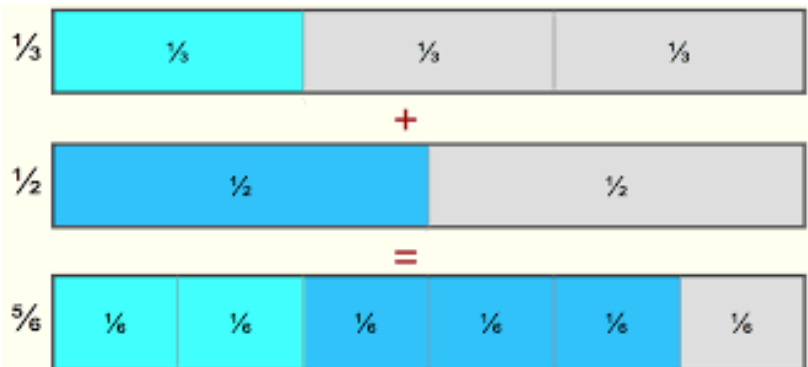
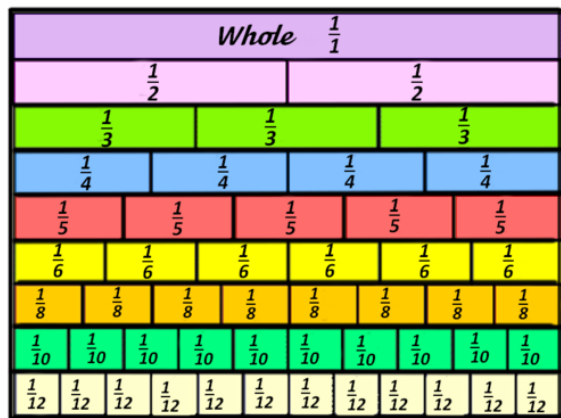
Highest common factor	Denominator	Proper	Equal parts
Equivalent fractions	Numerator	Whole number	Whole
Simplifying	Difference	Mixed number	Parts
Fraction wall	Lowest common multiple	Repeated addition	BIDMAS
Compare	Converting	Integer	
Order	Unit fraction	Common denominator	

**Investigate/Homework tasks**



- Homework will be set from the SATS practice book issued by your teacher
- You should complete at least 30 minutes of maths tasks on Maths Whizz (not games). Please attend help sessions if you do not have access to the internet at home
- Additional work you could complete:
  - Find out more about the meaning of the vocabulary list using <http://www.amathsdictionaryforkids.com/>
- To challenge yourself: Answer the key questions to deepen your knowledge

Diagram/Key Information



Key skills/Timeline/Topic Questions

- Write down a fraction what is the highest common denominator of the numerator and the denominator?
- Is a simplified fraction always equivalent to the original fraction? Why?
- If the HCF of the numerator and denominator is 1, can it be simplified?
- How can you use a number line to find the difference between two fractions?
- If the denominators are different when we are adding or subtracting fractions, what do we need to do? Why?
- How can we find the LCM of three numbers? Do we multiply them together? Is 120 the LCM of 4, 5 and 6?
- How many eighths can we exchange for one whole?
- How is multiplying fractions similar to adding fractions?
- How does partitioning a mixed number into wholes and fractions help us multiply them by an integer?
- Do you prefer partitioning a mixed number or converting it to an improper fraction to multiply it by an integer? Why?
- Does it matter if the integer is first or second in the multiplication sentence?
- Does multiplying two numbers always give you a larger product? Explain why?
- Can you draw a diagram to represent multiplying two proper fractions?
- Why does finding an equivalent fraction help us to divide fractions by integers?