



# Great Binfields Primary School



## Fraction Glossary

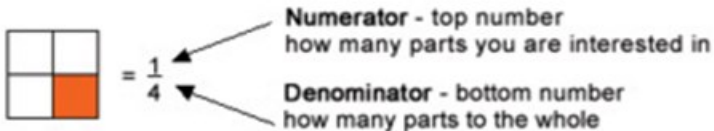
Comparing Fractions with Models

$$\frac{1}{3} < \frac{2}{4}$$

$\frac{1}{2}$   $\frac{1}{3}$   $\frac{1}{4}$   $\div$

**Real world situations**

- half
- quarter
- whole
- two thirds
- parts
- numerator/denominator



To remember which is which:  
nUmerator Up and Denominator down

**Decimal** - A decimal is a number based on the number 10. It can be thought of as a special type of fraction where the denominator is a power of 10.

**Decimal point** - A period or dot that is part of a decimal number. It indicates where the whole number stops and the fraction portion begins.

**Denominator** - The bottom part of a fraction. It shows how many equal parts that the item has been divided into.

Example: In the fraction  $\frac{3}{4}$ , 4 is the denominator

**Equivalent fractions** - Two fractions that express the same part of a whole. There is a number by which both the numerator and denominator of one fraction can be multiplied or divided to yield an equivalent fraction.  $\frac{1}{4}$ ,  $\frac{2}{8}$ , and  $\frac{3}{12}$  are all equivalent fractions.

Example:  $\frac{1}{4} = \frac{2}{8} = \frac{25}{100}$

**Fraction** - A part of a whole. A common fraction is made up of a numerator and a denominator. The numerator is shown on top of a line and is the number of parts of the whole. The denominator is shown below the line and is the number of parts by which the whole has been divided.

Example:  $\frac{2}{3}$ , in this fraction the whole has been divided into three parts. This fraction represents 2 parts of the 3.

**Half** - Half is a common fraction that can be written  $\frac{1}{2}$ . It can also be written as 0.5 or 50%.

**Improper fraction** - A fraction where the numerator is greater than the denominator. It has a value greater than 1.

Example:  $\frac{5}{4}$

**Lowest Common Multiple (Denominator)** - The least common multiple of the denominators of two or more fractions. That is, the lowest number which is a multiple of both denominators.

**Mixed number** - A number that is made up of a whole number plus a fraction. Example:  $3\frac{1}{4}$

**Numerator** - The top part of a fraction. It shows how many equal parts of the denominator are represented.

Example: In the fraction  $\frac{3}{4}$ , 3 is the numerator

**Percent** - A percent is a special type of fraction where the denominator is 100. It can be written using the % sign.

Example: 50%, this is the same as  $\frac{1}{2}$  or 50/100

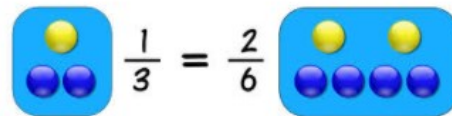


**Proper fraction** - A proper fraction is a fraction where the numerator (the top number) is less than the denominator (the bottom number).

Example:  $\frac{3}{4}$  and  $\frac{7}{8}$  are proper fractions

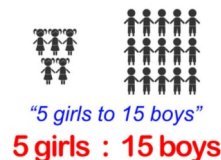
**Proportion** - An equation stating that two ratios are equivalent is called a proportion.

Example:  $\frac{1}{3} = \frac{2}{6}$  is a proportion



**Ratio** - A ratio is a comparison of two numbers. It can be written a few different ways.

Example: The following are all ways to write the same ratio:  $\frac{1}{2}$ , 1:2, 1 of 2

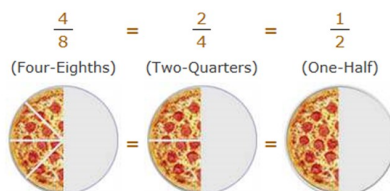


**Reciprocal** - The reciprocal of a fraction is when the numerator and denominator are switched. When you multiply the reciprocal with the original number, you always get the number 1. All numbers have a reciprocal except for 0.

Example: The reciprocal of  $\frac{3}{8}$  is  $\frac{8}{3}$ . The reciprocal of 4 is  $\frac{1}{4}$ .

**Simplify** - Simplifying (or reducing) fractions means to make the fraction as simple as possible. Rewriting the fraction with the smallest numerator and denominator but without changing the value of the fraction.

Example: Why say four-eighths ( $\frac{4}{8}$ ) when we really mean half ( $\frac{1}{2}$ )?



**Unit Fraction** - A fraction where the top number (the "numerator") is 1.

Example:  $\frac{1}{2}$  and  $\frac{1}{4}$

**Non-unit Fraction** - A fraction where the top number (numerator) is greater than 1.

Example:  $\frac{3}{8}$   $\frac{7}{8}$

**NOTES**



1 whole

$\frac{1}{2}$

$\frac{1}{2}$

$\frac{1}{3}$

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$\frac{1}{4}$

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