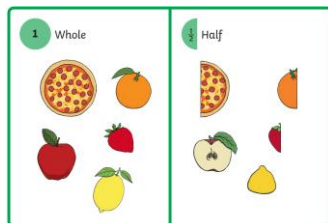


EYFS (Pre-school & Reception)



Year 1

Half of a Shape
These objects and shapes are split in half.

Each whole has 2 equal parts.

Half of a Group
There are 8 balls. Half of 8 is 4.

There are 10 balloons. Half of 10 is 5.

Quarter of a Shape
These shapes are split into quarters.

Each whole has 4 equal parts.

Quarter of a Group
There are 8 blocks. There are 2 in each quarter. A quarter of 8 is 2.

Capacity and Fractions

Year 2

Recognising Unit Fractions

Half
A whole split into two equal parts.

$\frac{1}{2}$

Quarter
A whole split into four equal parts.

$\frac{1}{4}$

Equivalent Fractions
 $\frac{1}{2} = \frac{2}{4}$

Numerator and Denominator

Counting in Fractions

Halves

Year 3

Recognising Fractions

$\frac{3}{8}$

Numerator
How many equal parts of the whole are needed?

Denominator
How many equal parts are in the whole?

Equivalent Fractions

$\frac{1}{2}$ is equal to...

$\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10} = \frac{6}{12}$

$\frac{1}{4}$ is equal to...

$\frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{4}{16} = \frac{5}{20}$

Comparing Fractions

$\frac{1}{3}$ Less than $\frac{2}{3}$

$\frac{4}{5}$ Greater than $\frac{3}{5}$

Tenths

Fractions of Amounts

$\frac{1}{4}$ of 24 = 6

$\frac{1}{3}$ of 72 = 24

$\frac{2}{5}$ of 40 = 16

Year 4

Fraction Families

Fractions of Quantities

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

To find quarters of 20:

20	5	5	5	5
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To find eighths of 56:

56	7	7	7	7	7	7	7	7
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$\frac{1}{4}$ of 20 = 5 $\frac{2}{4}$ of 20 = 10 $\frac{3}{4}$ of 20 = 15 $\frac{4}{4}$ of 20 = 20

$\frac{1}{8}$ of 56 = 7 $\frac{2}{8}$ of 56 = 14 $\frac{3}{8}$ of 56 = 21 $\frac{4}{8}$ of 56 = 28

$\frac{5}{8}$ of 56 = 35 $\frac{6}{8}$ of 56 = 42 $\frac{7}{8}$ of 56 = 49 $\frac{8}{8}$ of 56 = 56

Year 5

Equivalent Fractions To find equivalent fractions, we multiply or divide the numerator and denominator by the same number.	Compare and Order Fractions We can compare and order fractions by using common denominators.
Mixed Numbers Mixed numbers contain a whole number and a fraction. whole $2\frac{1}{4}$ fraction	Improper Fractions An improper fraction has a numerator which is greater than or equal to the denominator. $\frac{5}{3}$
Convert an Improper Fraction to a Mixed Number $\frac{9}{4} = 2\frac{1}{4}$ $9 \div 4 = 2r1$ Divide the numerator by the denominator.	Convert a Mixed Number to an Improper Fraction Multiply the whole by the denominator to make an improper fraction. $2\frac{5}{6} = \frac{12}{6} + \frac{5}{6} = \frac{17}{6}$ Add the fractions together.
Adding and Subtracting Fractions To add or subtract fractions with denominators that are multiples of the same number, we must change one fraction to have the same denominator.	

Year 6

Simplify Fractions $\frac{9}{12} = \frac{3}{4}$ Factors of 9: 1, 3, 9 Factors of 12: 1, 2, 3, 4, 6, 12 Common factor: 3 $\frac{9 \div 3}{12 \div 3} = \frac{3}{4}$	Compare and Order Fractions Use the Common Denominator Multiples of 5: 5, 10, 15 Multiples of 3: 3, 6, 9, 12, 15 Common denominator: 15 $\frac{2}{5} = \frac{4}{15}$, $\frac{1}{3} = \frac{5}{15}$ $\frac{4}{15} < \frac{5}{15}$
Adding and Subtracting Mixed Numbers Add or subtract the whole numbers and fractions separately. $2\frac{2}{5} + 1\frac{3}{10} = 3\frac{7}{10}$ $2\frac{2}{5} + 1\frac{3}{10} = 2 + 1 + \frac{4}{10} + \frac{3}{10} = 3 + \frac{7}{10} = 3\frac{7}{10}$	
Convert the mixed numbers to improper fractions. $2\frac{2}{5} = \frac{12}{5}$, $1\frac{3}{10} = \frac{13}{10}$ $\frac{12}{5} + \frac{13}{10} = \frac{24}{10} + \frac{13}{10} = \frac{37}{10} = 3\frac{7}{10}$	
Fractions of Amounts Find $\frac{1}{4}$ of 120: $120 \div 4 = 30$ Find $\frac{3}{4}$ of 120: $120 \div 4 = 30$, $30 \times 3 = 90$ Find $\frac{1}{9}$ of 120: $120 \div 9 = 13\frac{1}{3}$	

Ideas for home

Pre-School/EYFS - Sort whole and half - use pictures, objects or food. Decorate each half of a cake or biscuit. Add different toppings to each half of a pizza. Matching two halves of pictures. Use plastic eggs to put 2 halves together. Half a cake, pizza, sweets etc - share equally between 2 people - is it fair? Do we have the same/equal amount?

Year 1/ 2 - Fractions with Food - When cutting a sandwich, show your child how you can cut a whole sandwich into two equal parts, and explain that we call each part a half. Point out that we could put the two halves together again to make the whole. Try halving in different ways, such as cutting a whole sandwich into two equal rectangles or triangles. 4 equal amounts - quarters. Gather together a collection of toys. Show your child how to halve quantities by asking them to split their collection of toys into equal groups. Find half, quarter, thirds.

Year 3/4 - Divide a large pile of objects (cereal, plastic animals, blocks, etc.) equally into groups to illustrate fractions. Get out the measuring cups and spoons! Let your child play with them in the bath to experience one-half cup or one-third teaspoon. Fold a piece of paper into halves, and then into halves again with your child. Discuss the different fractions they can make. Count the rooms in your house and make some fraction facts about them. One-half of the rooms have windows. One-third of them have pillows. While in the car, mark the passing of time with fractions. "We are one-third of the way there." "It will take us 20 minutes to get to the library." "In how many minutes will we be half-way there?"



Year 5/ 6 - Deal two cards—a numerator and a denominator—and then determine whose fraction is the largest. Build Lego fractions making equivalent fractions or comparing them. Fraction hopscotch: counting in fractions. Domino fractions - Dominoes are like ready-made fractions! Multiply (or add, subtract, or divide) them and reduce the results. Turn it into a race to see who can finish first.