



# FRACTIONS

## KNOWLEDGE ORGANISER

Year 4



### Overview



**Fractions** we learn:

- Unit and Non-Unit Fractions
- What is a Fraction?
- Tenths/ Count in Tenths
- Equivalent Fractions
- Fractions Greater than One
- Count in Fractions
- Add Fractions
- Add Two or More Fractions

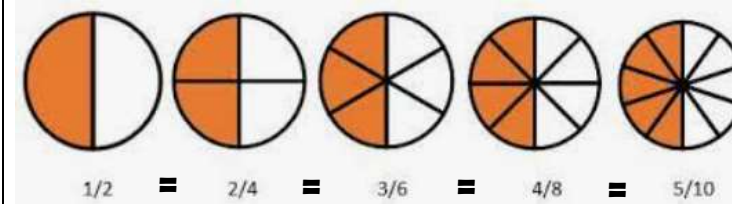
This learning is important because...

it helps us to understand the parts that can make up a whole amount. This is needed in lots of areas of life (e.g. sharing, cooking, making). Fractions are the building blocks of other learning in maths.

### Equivalent Fractions and Fractions of Quantities

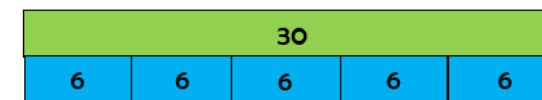
#### Equivalent Fractions

-Equivalent fractions have different numbers in them, but have the same value, e.g.  $1/2 = 2/4$ .



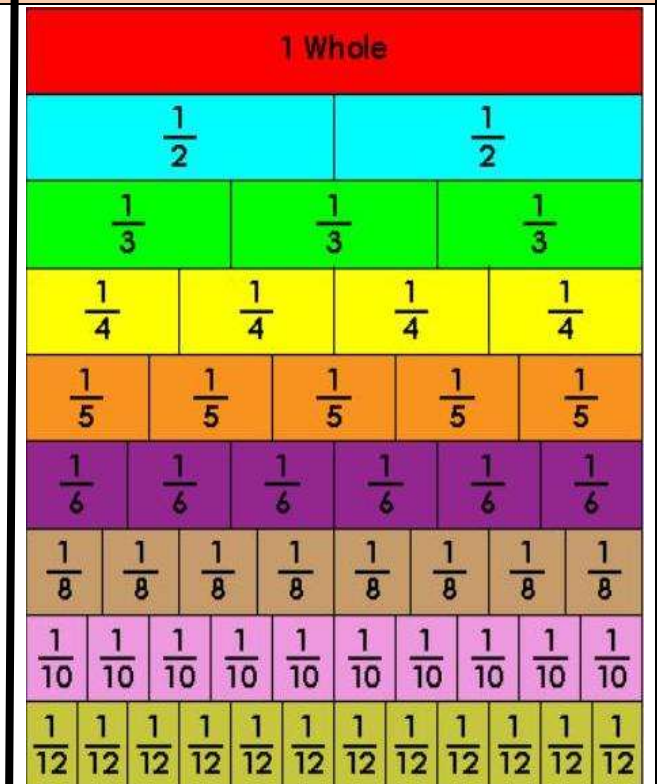
#### Fractions of Quantities

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



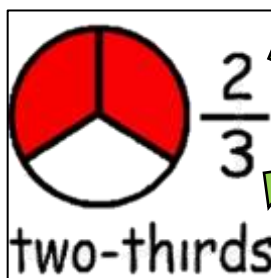
e.g. for  $1/6$  of 30, calculation is  $30 \div 6 = 5$

for  $4/6$  of 30, calculation is  $30 \div 6 = 5$ .  $5 \times 4 = 20$



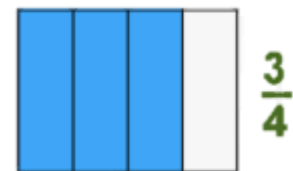
### Recognising and Comparing Fractions

#### Recognising Fractions



The **numerator** is the top number – how many equal parts of the whole are needed.

The **denominator** is the bottom number – how many equal parts there are altogether.

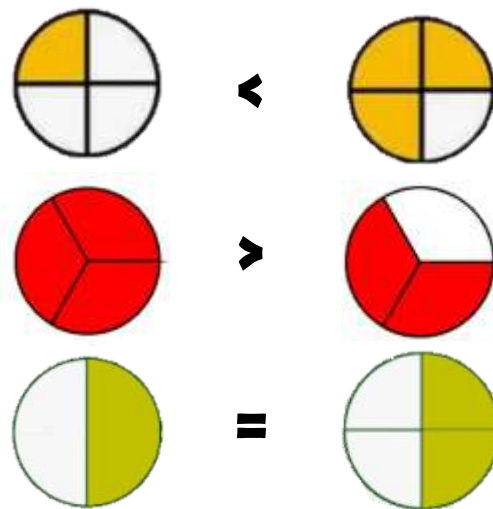


Fractions can be displayed in many ways, e.g. images, numbers, words, etc.

#### Comparing Fractions

We can use the following symbols to compare fractions:

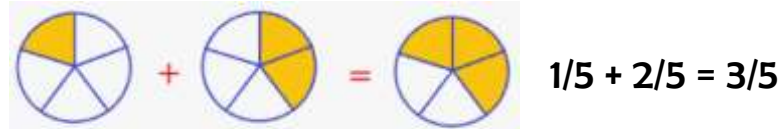
< less than   > greater than   = equal to



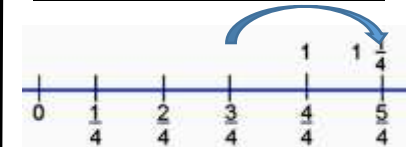
### Adding and Subtracting Fractions/ Fractions of Amounts

#### Adding Fractions

-Numerators added together. Denominator stays the same.



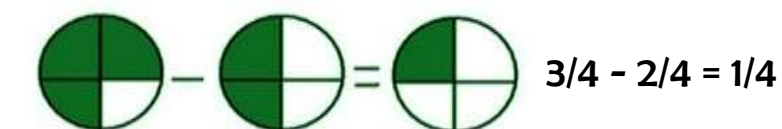
#### Adding Fractions across a whole



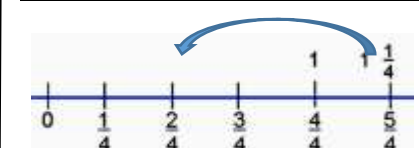
$3/4 + 2/4 = 5/4$  (or  $1 \frac{1}{4}$ )

#### Subtracting Fractions

-Numerators subtract. Denominator stays the same.



#### Subtracting Fractions across a whole



$5/4$  (or  $1 \frac{1}{4}$ ) -  $3/4 = 2/4$

### Key Vocabulary

Unit Fraction   Non-unit Fraction   Half   Quarter   Third   Fourth   Fifth   Sixth   Eighth   Tenth   Numerator   Denominator   Equivalent