



$\frac{3}{4}, \frac{0}{0}, 1\frac{3}{4}, 2\frac{1}{4}$

Mathematics Medium Term Plan

Year 5 Spring Term Unit 3 Fractions

Concept Sequence

- Multiply Fractions by integer – unit fractions. Link to repeated addition, using bar models.
- Multiply non-unit fraction by integer - Bar Modelling.
- Multiply Mixed Numbers by Integer – repeated addition. Multiply whole separately.
- Calculate fraction of a quantity – using concrete and pictorial representations. Start with unit fractions and move to non-unit fractions (this can be done as two steps if required). Begin to recognise that we divide by the denominator and multiply by the numerator.
- Fraction of an amount – use more pictorial and abstract methods.
- Find the whole – start with unit fractions before moving to non-unit fractions. Use bar models for support.
- Fractions as operators – commutative rule.

Focus: Fractions **Time:** 6 weeks

R2P: 4F-1, 4F-2, 4F-3, 5F-1, 5F-2, 5F-3

NC:

- Compare and order fractions whose denominators are multiples of the same number.
- Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths.
- Recognise mixed numbers and improper fractions and convert from one form to another and write mathematical statements >1 as a mixed number.
- Add and Subtract fractions with the same denominator and denominators that are multiples of the same number.
- Multiply proper fractions and mixed numbers by whole numbers, supported by material and diagrams.
- Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

Vocabulary

- Bar Model
- Fraction, Equivalent fraction, Mixed number
- Numerator, Denominator
- Whole, equal part, Equal grouping/sharing
- Parts of a whole, X of Y equal parts,
- Half, two halves
- Quarter, two quarters....
- Third, two thirds.....
- Fifths, sixths, sevenths, eighths, tenths, hundredths proportion

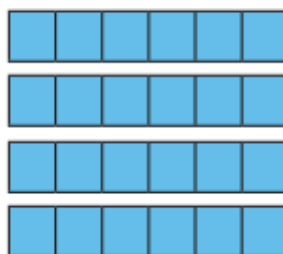
New Vocabulary

- Proper/improper fraction
- Equivalent, simplify, reduced to, cancel, thousandths

Resources

- Number lines, Bar Models
- Gordons Maths Games, Mathletics, TTRockstars
- BBC Super Movers
- <https://www.bbc.co.uk/teach/supermovers/ks2-collection/zr4ky9q>

$\frac{1}{6} \times 24$



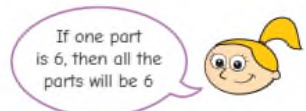
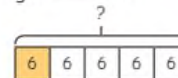
Planning Links

- Power Maths/Maths No Problem/Aspire Maths
- White Rose Scheme of Work: <https://assets.whiterosemaths.com/new-schemes/Year%205%20Spring%20Block%20%20SOL%20Fractions%20B.pdf>
- NCETM: <https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/primary-mastery-professional-development/fractions/>

Times Tables 5NF-1

- Consolidate and practice all multiplication and division facts to 12x12 – any order, missing numbers, fractions.
- Use multiplication and division facts to derive associated facts.
- Develop multiplicative reasoning - links between multiplication, division and fractions.

$\frac{1}{5}$ of _____ = 6



$6 \times 5 = 30$ $\frac{1}{5}$ of 30 = 6