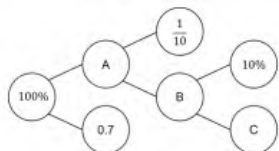# Crosby Primary School

Mathematics Medium Term Plan

Year 6 Spring Term Unit 1 Fractions, Decimals and Percentages

NC

Solve problems involving the calculation of percentages and the use of percentages for comparison.

Read and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Focus: Percentages

Time: 2 weeks

Concept Sequence

Decimal and fraction equivalents – can be split as 2 steps (decimals as fractions and fractions to decimals). Simplify fractions. Know common fractions such as thirds, quarters, fifths and eighths as decimals. Make the denominator 10, 100, 1000 to convert to decimals.

Fractions as division – to support conversions.

Understand percentages – relate to parts per hundred. Look at common percentages (10%, 20%, 25%, 75%, 50%...) using bar models.

Fractions to Percentages – convert fractions to equivalent fractions where the denominator is 100.

Equivalence in Fractions, Decimals and Percentages – look at misconceptions (eg. 1% is not 0.1), use diagrams to support understanding.

Order with Fractions, Decimals and Percentages –convert between/find equivalence in order to compare. Once compared put thgem back in th eoriginal form to answer the question.

Percentage of an amount (one-step) – use known fractional equivalences and bar models.

Percentage of an amount (multi-step) – find multiples of 10% and use to calculate 5%.

Missing Values – bar models to see relationship. Various ways to solve problem, look for most efficient.

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.

Planning Links
Maths No Problem/Aspire Maths
White Rose Scheme of Work:
https://assets.whiterosemaths.com/new-schemes/Year%206%20Spring%20Block%204%20SOL%20Fractions%20decimals%20and%20percentages.pdf
NCETM:
https://www.ncetm.org.uk/teaching-for-mastery/mastery-materials/primary-mastery-professional-development/fractions/

Vocabulary
Bar Model
Fraction/proper/improper
Equivalent fraction
Mixed number
Numerator/denominator
Whole, equal part
Equal grouping/sharing
Parts of a whole
Half, two halves
Quarter, two quarters….
Third, two thirds…..
Fifths, sixths…..
Proportion, ratio
Tenths, hundredths, thousandths
Decimal point, decimal fraction, decimal equivalent, decimal place
Percentage, per cent, %

Resources
Number lines, Bar Models, Place Value counters, Gattengo Chart
Gordons Maths Games,
Mathletics, TTRockstars
BBC Super Movers
https://www.bbc.co.uk/teach/supermovers/ks2-collection/zr4ky9q