Subject	Year	Month	
Mathematics	9	May/June	Balcarras From strength to strength

Topic:

PERCENTAGES
8 LESSONS

Content (Intent)

Prior Learning

Y7:
- writing as a percentage
- percentage change
- increase/decrease by a percentage

Y8
- Multiplier method

Future Learning

Y10 – percentages recap
- Convert between fdp
- Express a given number as a percentage of another number;
- Find a percentage of a quantity;
- Percentage increase or decrease;
- Work out a percentage increase or decrease, including: simple interest, income tax calculations, value of profit or loss, percentage profit or loss;
- Compare two quantities using percentages,
- Use percentage multipliers
- Reverse percentages

Objectives

RECAP	MAIN	FURTHER
• Convert between FDP • Express a given number as a percentage of another number; (incl. >100%) • Find a percentage of a quantity. • Find the new amount after a percentage increase or decrease.	• **percentage increase or decrease**, including: simple interest, income tax calculations, value of profit or loss, percentage profit or loss; • **Compare two quantities** using percentages, including a range of calculations and contexts such as those involving time or money; • Find a percentage of a quantity using a **multiplier**; • Use a **multiplier** to increase or decrease by a percentage in any scenario where percentages are used;	• Apply percentage increase/decrease with **harder** values e.g. fractions or 150% or … • **Reverse percentages**: Find the original amount given the final amount after a percentage increase or decrease • Use calculators for reverse percentage calculations by appropriate **division**; • **Compound interest** Understand that fractions are more accurate in calculations than rounded percentage or decimal equivalents, and choose fractions, decimals or percentages appropriately for calculations.

Pedagogical notes (implementation)

Amounts of money should always be rounded to the nearest penny, except where successive calculations are done (i.e. compound interest).
Emphasise the use of percentages in real-life situations and use a variety of terminology.

How will understanding be assessed & recorded (Impact)

At the end of the year all Y9 will get 4 lessons on "money management", in which some of this percentage work will be applied.

How can parents help at home?

MathsWatch clips (Qualification GCSE)
40, 85, 86, 87, 88, 89, 108, 109, 110, 164

Further reading/discussion

Reading / Enrichment	Literacy	Numeracy Links	Careers Links
http://passyworldofmathematics.com/ebay-math-problem/ http://passyworldofmathematics.com/olympic-games-mathematics/	increase, decrease, depreciate, inflate, VAT, (compound) interest, multiplier, discount		Money Management (final 4 lessons of the year)