Subject	Year	Month	
Mathematics	10	October	Balcarras From strength to strength

Topic:

Algebra: the basics 5 lessons

Content (Intent)

Prior Learning

Year 9 Expanding and factorising, single and double brackets October

Future Learning

Year 10 Solving linear equations October
Year 10 Quadratic graphs March
Year 10 Solving quadratic equations May
Year 12
Pure Chapter 1 Algebraic expressions

Objectives

- Know the difference between a term, expression, equation, formula and an identity, including ≠ and ≡
- Simplify expressions by collecting like terms
- Substitute positive and negative numbers into expressions and formulae
- Expand a single bracket (including surds and including opportunities to use rules of indices e.g. $2x^3(5xy^3+6x^2y)$);
- Factorise expressions into a single bracket;
- Expand the product of two linear expressions
- Factorise quadratic expressions of the form $ax^2 + bx + c$ (initially with a=1), including the difference of two squares.

Pedagogical notes (implementation)	How will understanding be assessed & recorded (Impact)
Ensure students know that squaring a linear expression is the same as expanding double brackets; Ensure students know that difference of 2 squares includes factorising $4x^2-9$ For substitution use the distance-time-speed formula, and include speed of light given in standard form.	**End of half term** Assessment in Oct **End of Year** Mocks in April **How can parents help at home?** **MathsWatch clips (Qualification GCSE)** 7, 33,34,35, 95 93,94 134a, 134b 157 (only first half)

Further reading/discussion

Reading / Enrichment	Literacy	Numeracy Links	Careers Links
			Scientist Data analyst Computer programmer Mathematician Financial analyst