Subject	Year	Month	
Mathematics	11	October	Balcarras From strength to strength

Topic:

Quadratic equations: expanding and factorising — 5 lessons

Content (Intent)

Prior Learning
Year 10 Expanding brackets November

Future Learning
Year 11 Quadratic equations: graphs December

Objectives
- Define a 'quadratic' expression;
- Multiply together two algebraic expressions with brackets;
- Square a linear expression, e.g. $(x + 1)^2$;
- Factorise quadratic expressions of the form $x^2 + bx + c$;
- Factorise a quadratic expression $x^2 - a^2$ using the difference of two squares;
- Solve quadratic equations by factorising;
- Find the roots of a quadratic function algebraically.

Pedagogical notes (implementation)
This unit can be extended by including quadratics where $a \neq 1$.
Emphasise the fact that x^2 and x are different 'types' of term – illustrate this with numbers.

How will understanding be assessed & recorded (Impact)
End of half term no
End of Year Year 11 mocks in November

How can parents help at home?
MathsWatch clips

Qualification KS3: A15, A18, A23ab

Qualification KS4: 98, 134b, 157, 160

Further reading/discussion

Reading / Enrichment	Literacy	Numeracy Links	Careers Links
			Engineering Physicist Computing Military Agriculture