## Algebra 5

## Year 10 Foundation

## Key Knowledge/Prior Learning KS2/3 and Retrieval and Suggested Starters

- Sketching linear \& quadratic graphs.
- Interpret \& find approximate solutions form these graphs.
- Identifying intercepts, gradients \& equations of linear graphs.
- Sketch real life graphs including those involving speed, distance, acceleration.
- Substitution of values into algebraic expressions.


## Retrieval and Suggested Starters

- Practising the fluency of the above skills.
- Interleaving \& problem-solving questions involving the above topics.


## KS4 National Curriculum - what students will be practicing

- Plot \& sketch cubic and reciprocal graphs.


## Specific Ambitious Knowledge

- Be able to identify the type of graph based on it's shape.


## Key Vocabulary/Literacy Opportunities

- Reciprocal
- Cubic
- Substitution
- Axis
- Intercept
- Asymptote


## Key Formulae/Knowledge:





## Cross Curricular Links

- Links to other areas of the maths curriculum such as algebra, Pythagoras.


## Student' Thinking

- Why can a reciprocal graph never have a value of $x=0$ ?
- What happens to the graph if you add a constant to the cubic equation?


## Projects/Enrichment/Investigations

Back Fitter
What's That Graph?

