

Maths – KS3

Road Map

GCSE
baseline
assessment

Number
Surds

Data
Cumulative
frequency
Box plots

Shapes
Compound
measures
Circle
theorems

End of
Spring
term

Shapes
Pythagoras
Trigonometry
Similarity
Circles

Algebra
Proportional-
ity
Sequences

Algebra
Rearranging
formulae
Plotting
graphs

End of
Autumn
term

Algebra
Parallel
and
perpendi-
cular lines

Number
Fractional
Indices
Recurring
decimals

Data
Graphs
and charts
Probability
diagrams

Number
Reverse
Percentages

Algebra
Quadratics
Simulta-
neous
equations

Y9

Data
Graphs and
charts

Shapes
Angles
Areas and
Volumes
Circles

Algebra
Inequalities
Sequences

End of
Spring
term

Algebra
Straight line

Shape
Plans and
elevations
Constructions
Bearings

Data
Averages
from
grouped
data

Numbers
Decimals
Working
with
bounds

End of
Autumn
term

Numbers
Index laws
Standard
form

Algebra
Solving
equations
Factorising
Substituting

Number
Percentages
Ratio and
proportion

Y8

Data
Probability

Number
Percentages
Indices
Ratio and
proportion

End of
Spring
term

Shapes
Transformations

Algebra
Functions
Coordinates
Straight
lines

Shapes
Units
Areas
3D shapes

End of
Autumn
term

Number
Multiples
and factors
Fractions

Data
Graphs and
charts
Averages

Shapes
Measuring
and
calculating
angles

Algebra
Expressions
and
equations

Baseline
assess-
ment

Numbers
Place value,
Rounding
BIDMAS

Y7

KS2-KS3
Transition
QLA SATs
Catch up
identification

Effective
Teaching
Strategies

Rationale

A significant amount of time at KS3 is devoted to developing core number and algebra concepts. The aim is to create continuity, build and embed learning from KS2 whilst reducing Maths anxiety that historically surrounds some areas of Mathematics.

Marking & feedback

- Classwork can be peer or self marked. Teacher regularly provides in-depth marking to which students need to respond to improve the work.
- Proactive circulation of room to give immediate feedback
- All homework marked in class on the day it's due in.

Assessment

- Summative assessment as scheduled with allocated time to determine gaps in students' knowledge and use them to plan support and intervention strategies
- Formative assessment within lessons as part of 'exit ticket' marking strategy and low stakes quizzing
- Regular low stakes quizzing to build retrieval of knowledge & build learning

Home learning

- 2 tasks set every week
- Work can be on paper or online
- Tasks centred on retrieval and retention



Specific references are made to the school's progress measures in planning. Teachers further teach to the gaps in students learning, as evidenced in Schemes of Work (SOW), progress data and external assessments.

Modelling: Allowing teachers to impart knowledge in order to ensure students are engaged in learning and generate high levels of commitment to learning. Teacher modeling is clear and against the success criteria.

Assessment proficient teaching staff: The teacher systematically and effectively check students' understanding throughout the lesson, anticipating where they may need to intervene and doing so with notable impact on the quality of learning.

Learners understand how to improve their work and are consistently supported in doing so. Very effective questioning is used to gauge understanding and inform teaching and learning. Peer and/or self-assessment will link to success criteria.

Differentiation: Teachers use well-judged and often imaginative teaching strategies that, together with clearly directed and timely support and intervention, match individual needs accurately. Planned differentiation ensures exceptional progress for all.

Assessment proficient learners: All children consistently respond to teacher marking and feedback and this will help them to make better than expected progress. Children are clear about what they are learning, how this relates to what they have done previously and what success looks like.