Content - Big ideas

Huge Idea – To master core skills required in geometry, probability and data

Geometry

- Making sensible estimates of measurements and units
- Conversions between metric and imperial units
- Dimensions
- Compound measures
- Perimeter and Area
- Surface area and volume

Data:

- Hypotheses
- Effective sample size
- Discrete and continuous data
- Pictograms, bar charts and pie charts for qualitative data
- Vertical line diagrams for discrete data
- Line graphs
- Group frequency
- Temperature charts
- Frequency polygons
- Scatter diagrams
- Averages for discrete ungrouped frequency
- distribution
- Averages for grouped data
- Comparing distributions
- Cumulative frequency
- Measures of spread
- Box and whisker plots
- Interpreting data
- Drawing conclusions

Probability:

- Vocabulary
- Probability scale
- Mutually exclusive events
- Equally likely outcomes
- Tree diagrams
- Listing outcomes

Exam Revision:

Big idea – To apply all knowledge learnt to past paper questions

Prior learning

KS3 Prior Learning

Global/IOM/Subject Links

Links to Science, Geography, D&T, computer science. Project work and real life application.

Subject specific skills development

- Modelling through abstract, concrete and pictorial methods.

- Use of manipulatives to secure a deeper understanding.

- Mental strategies for problem solving in context.

- Proficient use of a calculator

- Proficient use of geometrical equipment

- Logical reasoning skills