## HIGHFIELDS SCHOOL

OVERVIEW - SCHEME OF WORK 2021-2022

## SUBJECT: MATHEMATICS <br> KEY STAGE: 3

| AUTUMN TERM 1 - YEAR 7 | SPRING TERM 1 - YEAR 7 | SUMMER TERM 1 - YEAR 7 |
| :---: | :---: | :---: |
| Theme <br> Algebra and Fractions <br> Topics <br> - Basic number <br> - Multiplication and Division <br> - Bar Charts <br> - Introduction to Fractions <br> - Introduction to Algebra | Theme <br> Geometry <br> Topics <br> - Classify angles and find unknown angles <br> - Properties of triangles and quadrilaterals <br> - Linear Graphs <br> - Fractions, Decimals and Percentages <br> - Circles | Theme <br> Ratio and Proportion <br> Topics <br> - Probability <br> - Ordering Fractions <br> - Ratio and Proportion <br> - Sequences |
| ASSESSMENT <br> Non-calculator base line assessment. | ASSESSMENT <br> Numeracy assessment based on topics in the supplementary scheme of work. | ASSESSMENT <br> Presentation - research project. |
| AUTUMN TERM 2 - YEAR 7 | SPRING TERM 2 - YEAR 7 | SUMMER TERM 2 - YEAR 7 |
| Theme <br> Perimeter and Area <br> Topics <br> - Area and perimeter of 2D shapes <br> - Two-way tables and Venn Diagrams <br> - Multiples, factors, LCM, HCF, primes <br> - Solving Equations <br> - Construction | Theme <br> Expanding and Factorising <br> Topics <br> - Calculator skills <br> - Expanding and Factorising <br> - Volume <br> - Fractions operations | Theme <br> Percentages and pie charts <br> Topics <br> - Read and interpret pie charts <br> - Percentages <br> - Collecting data <br> - Translation and reflection <br> - Pythagoras' Theorem <br> - Indices |
| ASSESSMENT <br> Topic-based assessment based on the main scheme of work (calculator). | ASSESSMENT <br> Topic-based assessment based on the main scheme of work (calculator). | ASSESSMENT <br> End of year assessment. |

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OVERVIEW - SCHEME OF WORK 2021-2022

## SUBJECT: MATHEMATICS KEY STAGE: 3

## AUTUMN TERM 1 - YEAR 8

## Topics

- Using angle rules including with parallel lines
- Probability
- Algebra rules
- Basic number methods
- Fractions


## ASSESSMENT

Topic-based assessment based on the main scheme of work.

## AUTUMN TERM 2 - YEAR 8

## Topics

- Real-life graphs
- Area and perimeter in 2D shapes
- Sequences
- Lines and regions of a circle
- Area and circumference of a circle
- Ratio and proportion
- Negative numbers


## ASSESSMENT

Topic-based assessment based on the main scheme of work.

- Co-ordinates
- Using a calculator


## ASSESSMENT

Topic-based assessment based on the main scheme of work.

SPRING TERM 1 - YEAR 8

## Topics

- Solving equations
- Bearings
- Statistical diagrams
- Rounding and estimation
- Surface area and volume

SUMMER TERM 1 - YEAR 8

## Topics

- Graphs
- Similarity and congruence
- Pythagoras' Theorem
- Rearranging formulae
- Plans, elevations and scale drawings
- Exchange rates


## ASSESSMENT

Presentation - Maths in real life research project.
Numeracy assessment based on topics in the supplementary scheme of work.

## SUMMER TERM 2 - YEAR 8

## Topics

- Inequalities
- Indices
- Standard form
- Data handling - statistical diagrams and averages
- Column vectors and translation


## ASSESSMENT

End of year assessment.

