



Mathematics

Autumn Term

Year 8

In this booklet you will find information about what your child will be covering in Maths in the Autumn Term. To reach the expected standard by the end of the year pupils should be able to understand and apply these skills. The back page has information on how you can help your child to achieve these expectations.



Autumn Term



First Half

Unit 1— Whole numbers and decimals

- Multiply and divide by powers of 10.
- Round whole numbers and decimals.
- Work out calculations using BIDMAS.
- Identify multiples, factors and prime numbers.
- Use prime factors to find the HCF and LCM of pairs of numbers.
- Order decimals.
- Use rounding to make estimates.
- Find the upper and lower bounds of a calculation or measurement.

Unit 2—Measures, perimeter and area

- Convert between metric units.
- Convert between metric and imperial units.
- Calculate the perimeter and area of a 2D shape.
- Calculate the circumference and area of a circle.
- Recognise and use compound measures.



Autumn Term

Second Half



Unit 3—Expressions and Formulae

- Simplify expressions by collecting like terms.
- Expand and factorise brackets.
- Substitute values into expressions with brackets and formulae.
- Rearrange formulae and change the subject of a formula.
- Form expressions.
- Derive and graph formulae.

Unit 4—Fractions, decimals and percentages

- Add and subtract fractions.
- Multiply and divide fractions.
- Find a fraction of a quantity.
- Multiply and divide integers by fractions.
- Convert between decimals and fractions.
- Find a percentage of a quantity and a percentage change.
- Write one number as a percentage of another.
- Calculate percentage change.
- Solve problems involving percentages.



How can you help your child?



- **Mymaths**— This is a maths based website. Each pupil has their own login and password for this website. The website contains a wealth of resources and games for pupils to practise and consolidate learning from the classroom. This website is also often used as a homework resource.
- **Homework**—Pupils will receive one piece of Maths homework each week. This homework will be given out on a Friday and will be due in the following Friday. All details should be written in your child's homework diary. Homework will either be paper based homework or on Mymaths. Your support with this is invaluable.
- **Calculations** - There is a big emphasis in the new curriculum on using formal methods for calculating. Solid foundations of the four calculation methods (addition, subtraction, multiplication and division) will help your child greatly when applying these skills to word problems and problem solving. For more information on how we teach these methods please see our calculation policy on the school website.
- **Play games and talk maths**— Spend time with your child playing mathematical games and talking about Maths we meet everyday in real-life situations. Make your child realise Maths is fun and necessary for everyday life!

Thanks for all your support, please don't hesitate to get in touch if you have any questions or queries.