



Rome International School

Grade 6

10 – 11 years

MATHEMATICS PROGRAMME

Number and the number system

- Mental multiplication and division of decimals by 10 or 100
- Prime numbers, square numbers, triangular numbers
- Multiples and factors; common multiples and prime factors
- Reduction of fractions by cancelling common factors
- Addition and subtraction of fractions
- Fractions and percentages of whole numbers or quantities
- Mixed numbers up to three decimal places; tenths, hundredths and thousandths
- Long multiplication and long division operations by two digit numbers
- Effective use of calculators
- Problems involving ratio, proportion and probability

Measures

- Calculation of perimeter and area of simple compound shapes by splitting into rectangles
- Accurate representation and reading of measurement and scales

Shape and space

- Classification of quadrilaterals using appropriate criteria
- Properties of solid shapes and construction of nets
- Reflection, rotation and translations
- Reading and plotting coordinates in all four quadrants, using appropriate axes
- Use of a protractor and set square to measure and draw accurately angles to the nearest degree
- Sum of angles of a triangle

Handling data

- Problem solving by representing, interpreting data in tables, graphs and charts
- Finding mode, range, medium and mean of a set of data

Skills and Understanding

- Children will consolidate their understanding of the decimal number system, perfecting their ability to perform mental calculations quickly and accurately, using fractions and percentages of a whole
- They will understand that percentage is the number of parts in every 100 and will calculate fractional or percentage parts of quantities or measurements
- They will use mathematical language to describe their work and to explain their working
- Children will learn to check their solutions by using an inverse operation
- They will develop an understanding of probability, through experience as well as experiment and theory
- They will collect, represent and interpret data in a variety of representations

- The will understand and learn to describe properties of a variety of shapes, also of position and movement
- Children will learn to choose an appropriate standard units of measurement and to make sensible estimates in everyday situations
- Children will understand and use the features of a basic calculator