Year 8

- **Links to careers/SMSC/Personal Development:**
- Maths in Nature is embedded in sequences, patterns and symmetry in year 8 students will explore the Fibonacci sequence and learn how many things follow similar number pattern
- Celebrate Pi day and show appreciation to Maths and Science
- UKMCT challenge for year 8 to develop problem solving skills
- World numeracy day to promote the love and appreciation of numeracy skills to use in daily life
- Maths related careers when specific topic is taught

LEARNING JOURNEY

Loci and constructions

Constructing triangles

Project: Family holidays

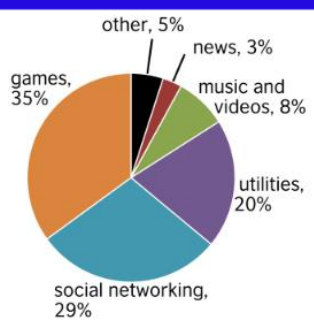
Angles in polygons

Angles in polygons

Angles on parallel lines

Volume of 3D shapes

Home learning : Weekly on Sparx



Direct and inverse proportion

Averages and data

Percentage

Assessments
- Half Termly progress check
- End of term assessments

Statistical Representations

Surface Area of 3D shapes

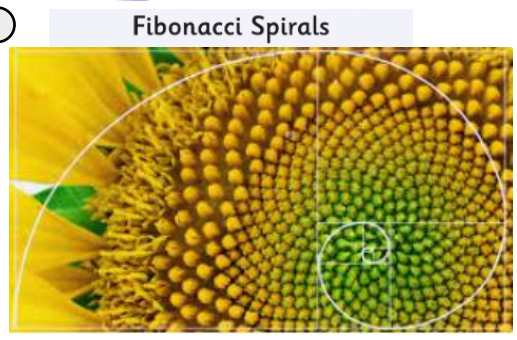
Understanding whole part relationships

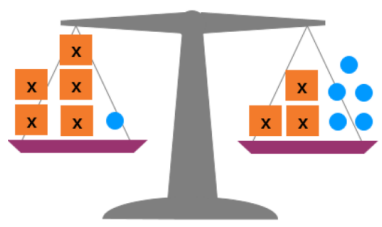
Ratio and change of rates

Fraction of an amount

Multiplicative relationships

Enrichment
- TTROCK Stars
- Chess Club

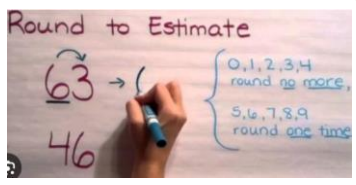




Arithmetic Sequences

Understanding equations

Solving linear equations



Forming and Solving equations

Number patterns

Degree of Accuracy

Rounding

Year 8 learning summary: Rationale

In Year 8 we will explore the following:
- a strong sense of the size of numbers and be able to use various methods of rounding, especially when giving answers in context
- non-numerical (shape) and numerical sequences, noticed a pattern, described the pattern in words and found the next term in the sequence from the previous term
- generate and generalise linear sequences
- the Fibonacci sequence and its relevance in the world around us
- a variety of strategies to solve linear equations
- the use of percentages, fractions, proportionality and ratio in context
- the way to develop knowledge of calculating measures of central tendency to include the mode and median, work with grouped data, and be introduced to a measure of spread in statistics.
- how to investigate the surface area of prims and calculate their volumes
- how to develop angle reasoning in parallel lines and investigate the angles in polygons