

# Year 7 Mathematics

These are the units of work your child will study in Year 7, with each unit lasting anything from two lessons to three weeks.

Reaction times	Alien invasion
Number skills	Filling the whole (RME)
Knowing the unknown (RME)	Easter egg hunt
Ratio and proportion	Lines and angles
Equations, functions and formulae	Sundials
Christmaths dinner	Athletics field
Fair sharing (RME)	Torbury Festival
Decimals and measures	Fitting it in (RME)

The maths and skills to be developed over the year in these units include:

Types of data, collecting of data, calculating averages, rounding decimals, sampling methods, analysing data, presenting data (e.g. bar charts/ frequency polygons/ pie charts/ stem and leaf diagrams/ inter-quartile range), predicting, comparing results between classes/ halves of year, estimation, scales, using maps, length conversions, distance-time graphs, speed/distance/time calculations, number sequences (including nth term), budgeting, compromising, converting between metric measures, working within time constraints to achieve a goal, justifying choices, inequalities, converting between fractions, decimals and percentages to solve problems, area, perimeter, bar modelling, adding, subtracting, multiplying and dividing with fractions and mixed numbers, common multiples, common factors, costing up a holiday and the excursions selected, making maximum profit from exploring multiple possibilities, getting the best mobile phone deal for people with different needs, percentage discounts, how savings accounts work, reverse percentages, deciding what is a good bargain, tessellations, solving equations, forming equations, collecting like terms, expanding and simplifying algebraic expressions, negative numbers, BIDMAS, index notation, standard form, significant figures, ratio, proportion, inverse proportion.

## Homework

<https://hegartymaths.com/> is our subscribed website for the vast majority of homework your child will be set. The site contains over 900 explanation clips and sets of questions for all the topics your child could need to know for their GCSE. Every clip has a linked set of questions (the questions your child attempts for homework). Your child can watch any clip and attempt any set of questions they like at any time.

## GCSE

The GCSE examination your child will sit consists of three papers lasting 1½ hours each. Students will either be entered for the Foundation Tier where grades of 1-5 are awarded or the Higher Tier where grades 4-9 are awarded. Your child will be entered for the tier that gives them the best possible chance of achieving their highest possible grade.

## Other recommended websites

BBC Bitesize - <http://www.bbc.co.uk/education/subjects/z6vg9j6>  
<https://corbettmaths.com/>