

Autumn Term – Year 7

Below are a series of learning objectives from each of the units that are covered in year 7. For each learning objective there are additional revision resource (video), practice and extension tasks. These resources are additional resources that you can use with your daughter.

1. Sequences

Learning Objective	Revision Resource	Practice	Extension
Describe and continue sequences	KS3 Maths - Sequences - The Basics - YouTube	Arithmetic Sequences (transum.org) Level 1 only	Missing Terms (transum.org)
Linear and non-linear sequences	Linear and Nonlinear Sequences:Real World - YouTube	Sequences (corbettmaths.com)	Find the Sequence (mathspad.co.uk)
Continue linear sequences	Continuing Sequences - YouTube	Sequences (corbettmaths.com)	Sequences patterns (corbettmaths.com)
Continue non-linear sequences	Continuing Sequences - YouTube	Geometric Sequences (transum.org) Level 1 only	

2. Understand & use algebraic notation

Learning Objective	Revision Resource	Practice	Extension
Given a numerical input, find the output of a single function machine	Number Machines - YouTube	Function Machines (corbettmaths.com)	Function Machines (corbettmaths.com)
Use inverse operations to find the input given the output	Number Machines - YouTube	Function Machines (corbettmaths.com)	Function Machines (corbettmaths.com)
Use diagrams and letters with function machines	1MM - Algebraic Function Machines - YouTube	PowerPoint Presentation (wix.com)	Function Machines Questions - MME (mathsmadeeasy.co.uk)
Substitute values into single operation expressions	Basic intro to substitution - YouTube	Substitution (transum.org)	Substitution Practice Questions – Corbettmaths
Substitute values into two-step expressions	Basic intro to substitution - YouTube	Substitution (transum.org)	Substitution Practice Questions – Corbettmaths

3. Equality & equivalence

Learning Objective	Revision Resource	Practice	Extension
Solve one-step linear equations involving +/- using inverse operations	Solving One-Step Linear Equations - YouTube	3-solving-one-step-equations.pdf (mathsgenie.co.uk)	Solving Two-Step Equations(1) - YouTube
Solve one-step linear equations involving x/÷ using inverse operations	Solving One-Step Linear Equations - YouTube	3-solving-one-step-equations.pdf (mathsgenie.co.uk)	Solving Two-Step Equations(1) - YouTube
Understand the meaning of like and unlike terms	Collecting Like Terms (1) - YouTube	Collecting Like Terms (corbettmaths.com)	
Simplify algebraic expressions by collecting like terms, using the \equiv symbol	Simplifying Algebraic Expressions - YouTube	Collecting Like Terms (transum.org)	Expanding a Single Bracket - YouTube

4. Place value & ordering integers & decimals

Learning Objective	Revision Resource	Practice	Extension
Understand and write integers up to one billion in words and figures	Words to Figures - YouTube Figures to Words - YouTube	Numbers in Words (transum.org)	Words Figures (corbettmaths.com)
Round integers to the nearest power of ten	Rounding to the nearest ten - Corbettmaths - YouTube	Rounding to the nearest whole number (transum.org)	Rounding (corbettmaths.com)
Compare and order any number up to one billion	Ordering Numbers - Corbettmaths - YouTube	Snappy Sorting (transum.org)	Ordering Numbers (corbettmaths.com)
Round a number to 1 significant figure	How to Round Numbers to Significant Figures #20 - YouTube	Rounding to the nearest whole number (transum.org)	Significant Figures (corbettmaths.com)

5. Fraction, decimal & percentage equivalence

Learning Objective	Revision Resource	Practice	Extension
Convert between fractions and decimals	Fractions to Decimals - Corbettmaths - YouTube Decimals to Fractions - Corbettmaths - YouTube	Fraction Decimal Pairs (transum.org)	Fraction Order (transum.org)
Convert fluently between fractions, decimals and percentages	Fractions decimals percentages - Corbettmaths - YouTube	FDP Mixture pdf (corbettmaths.com)	Fractions, Decimals and Percentages (transum.org)
Identify and use simple equivalent fractions	Equivalent Fractions - Corbettmaths - YouTube	Equivalent Fractions (transum.org)	
Understand the meaning of percentage using a hundred square	Fraction decimal and percent from visual model - YouTube	Percentage Squares (teachingideas.co.uk)	Estimating Percentages (transum.org)