

Mathseeds Prime lessons and the National curriculum in England: mathematics

YEAR 4		Prime Lessons	Printable Resources	Additional Resources
Domain	Statutory requirements Pupils should be taught to:	Online Lessons with Assessments & Problem Solving Activities	Lesson Summary, Worksheets, Answers	Student book & Teacher book
Number – number and place value	recognise the place value of each digit in a four-digit number (1,000s, 100s, 10s, and 1s)	NUMBER Unit 4 Numbers to 100 000: Lesson 2, 3		Year 4 Numbers, Fractions and Decimals
	order and compare numbers beyond 1,000	NUMBER Unit 4 Numbers to 100 000: Lesson 3, 4		
	identify, represent and estimate numbers using different representations	NUMBER Unit 4 Numbers to 100 000: Lesson 1		
	round any number to the nearest 10, 100 or 1,000	NUMBER Unit 5 Numbers and Decimals: Lesson 1		
	solve number and practical problems that involve all of the above and with increasingly large positive numbers	NUMBER Unit 4 Problem Solving Activity: More, more, more		
Number – addition and subtraction	add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate	OPERATIONS Unit 8 Addition and Subtraction Algorithms: Lesson 1, 2, Problem Solving Activity: Problem Algorithms		Year 4 Operations and Algebra
	estimate and use inverse operations to check answers to a calculation; solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	OPERATIONS Unit 8 Addition and Subtraction Algorithms: Lesson 3, Problem Solving Activity: A Magic Square OPERATIONS Unit 14 Word Problems: Lesson 3		
Number – multiplication and division	recall multiplication and division facts for multiplication tables up to 12×12	OPERATIONS Unit 9 Multiplication Thinking: Lesson 1 OPERATIONS Unit 11 Division Strategies: Lesson 1 OPERATIONS Unit 13 Problem Solving Activity: Timing Is Everything OPERATIONS Unit 10 Multiplication Strategies: Lesson 1, 2, 3 OPERATIONS Unit 11 Division Strategies: Lesson 2, 3 OPERATIONS Unit 19 Multiplication Thinking: Lesson 2 OPERATIONS Unit 14 Word Problems: Lesson 1, 2 Problem Solving Activities: OPERATIONS Unit 14: Wolf vs Rabbit OPERATIONS Unit 19: How Many Cookies? OPERATIONS Unit 10: Bug Racing OPERATIONS Unit 11: Okapi Operations OPERATIONS Unit 12: An Age Old Problem		Year 4 Operations and Algebra
	use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together 3 numbers			
	recognise and use factor pairs and commutativity in mental calculations			
	solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by 1 digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects			
Fractions – including decimals	recognise and show, using diagrams, families of common equivalent fractions	FRACTIONS Unit 3 Equivalent Fractions: Lesson 1, 2 FRACTIONS Unit 4 Decimal Fractions: Lesson 1 FRACTIONS Unit 3 Problem Solving Activity: Reward Cards NUMBER Unit 5 Numbers and Decimals: Lesson 2 FRACTIONS Unit 4 Decimal Fractions: Lesson 2, 4, Problem Solving Activity: Fraction Robot NUMBER Unit 5 Numbers and Decimals: Lesson 3, Problem Solving Activity: First and Last FRACTIONS Unit 4 Decimal Fractions: Lesson 3 NUMBER Unit 5 Numbers and Decimals: Lesson 4 FRACTIONS Unit 2 Problem Solving Activity: Woolly Thinking		Year 4 Numbers, Fractions and Decimals
	count up and down in hundredths; recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10			
	solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number			
	recognise and write decimal equivalents of any number of tenths or hundreds; recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$			
	compare numbers with the same number of decimal places up to 2 decimal places			
	solve simple measure and money problems involving fractions and decimals to 2 decimal places			
Geometry – properties of shapes	compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	GEOMETRY Unit 5 Shapes and Objects: Lesson 3, 4, Problem Solving Activity: Tangram Puzzles GEOMETRY Unit 7 Angles: Lesson 1, Problem Solving Activity: Equation Angles		Year 4 Geometry
	identify acute and obtuse angles and compare and order angles up to 2 right angles by size			
	identify lines of symmetry in 2-D shapes presented in different orientations; complete a simple symmetric figure with respect to a specific line of symmetry		METRY Unit 6 Shape Movements: Lesson 2, lem Solving Activity: Symmetrical Designs	