NRICH problems (nrich.maths.org) linked to the Curriculum for Wales Mathematics PoS for Year 5

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Key:	Normal text: LNF Statement		Area of Learning Skill ❖		Extended skills ▲	
Strand / PoS Element	**PoS Objective**	**NRICH Resources**	**PoS Objective**	**NRICH Resources**	**PoS Objective**	**NRICH Resources**
Using Number Skills Use number facts and relationships	Read and write numbers to 100,000		Compare numbers with 1 and 2 decimal places.	Game 4 in **Nice or Nasty** G *	Use mental strategies to recall multiplication tables for 2, 3,4,5,6, 8 and 10 and use to solve division problems.	
Using Number Skills Use number facts and relationships	Multiply and divide numbers and decimals by 10 and 100.		**Identify multiples of 2, 3, 4, 5, 6, 8 and 10; use the term multiple and factor.** ❖	**Which Is Quicker?** P * **Abundant Numbers** P *	**Identify prime numbers as having only 2 factors; recognise that 1 is not a prime number.** ❖ **Identify prime numbers below 10.** ❖	**Two Primes Make One Square** P **
Using Number Skills Fractions, decimals, percentages and ratio	Use understanding of simple fraction and decimal equivalences when measuring and calculating, *e.g.* $\frac{1}{2}$ = 0.5, $\frac{1}{10}$ = 0.1		Calculate fractional quantities, *e.g.* $\frac{1}{8}$ *of 24 = 3, so* $\frac{5}{8}$ *of 24 = 15.*	**Andy's Marbles** P **	Use doubling and halving strategies when working with simple proportions.	
Using Number Skills Fractions, decimals, percentages and ratio	**Share objects in a given ratio, eg red blocks and blue blocks in a ratio of 1:2.** ❖	**Nutty Mixture** P **	**Recognise connections between fractions, e.g. one-tenth is half of one-fifth.** ❖		**Add and subtract fractions with the same denominator.** ❖ **Add fractions with the same denominator to make a whole.** ❖	

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Using Number Skills Calculate using mental and written methods	Find differences between numbers with 1 decimal place.		Add and subtract 3-digit numbers using an appropriate mental or written method.	**Dicey Operations (Game 1) G ***	Multiply and divide 3-digit numbers by a single-digit number	**Division Rules I ***
Using Number Skills Calculate using mental and written methods	**Order negative and positive numbers, including decimals to 1 decimal place.** ❖					
Using Number Skills Estimate and check	Check answers using inverse operations		Estimate by rounding to the nearest 10, 100 or 1000.		.	
Using Number Skills Manage money	Order and compare the cost of items up to £1000.		Add and subtract totals less than £100 using correct notation, *e.g. £28.18 + £33.45.*		Plan and track money and savings by keeping accurate records. Realise that budgeting is important.	

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Strand / PoS Element	PoS Objective	NRICH Resources	PoS Objective	NRICH Resources	PoS Objective	NRICH Resources
Using Measuring Skills Length, weight/mass, capacity	**Make estimates of capacity based on knowledge of the size of real life objects.** ❖		Use measuring instruments with 10 equal divisions between each major unit, and record using decimal notation, *e.g. 4.2cm, 1.3kg.*		Make use of conversions, *e.g. ¼ of a km = 250m* **Recognise the appropriateness of units in different contexts.** ❖	
Using Measuring Skills Time	Read and use analogue and digital clocks.	**Clocks P ***	Time events in minutes and seconds, and order the results.		**Calculate start times, finish times and durations using hours and minutes.** ❖	
Using Measuring Skills Time	Carry out practical activities involving timed events and explain which unit of time is the most appropriate.		**Estimate the length of time everyday activities take to complete, extending to hours and quarters of hours.** ❖	**How Long Does it Take? G ***		
Using Measuring Skills *Temperature* Area and volume, Angle and position	Measure and record temperatures involving positive and negative readings.		Calculate temperature differences, including those involving temperature rise and fall across 0°C.		Calculate, estimate and compare the area of squares and rectangles using standard units.	**Area and Perimeter P * Through the Window P * Numerically Equal P ****

3

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Strand / PoS Element	PoS Objective	NRICH Resources	PoS Objective	NRICH Resources	PoS Objective	NRICH Resources
Using Measuring Skills Area and volume, Angle and position	Find volumes by counting and other practical methods.	**Next Size Up** P **	**Recognise acute and obtuse angles.** ❖ **Draw and measure acute angles in multiples of 10 degrees.** ❖	**Six Places to Visit** P * **How Safe Are You?** P * **Olympic Turns** I ***	Use coordinates to specify location.	**A Cartesian Puzzle** P *
Using Geometry Skills Shape Construction	**Recognise and classify triangles, using their own criteria.** ❖		**Identify congruent shapes and justify whether 2 or more shapes are congruent.** ❖		**Draw and label lines accurately e.g. AB.** ❖ **Construct solids from given nets.** ❖	**Cut Nets** P * **Air Nets** P *
Using Geometry Skills Movement	**Draw the reflection of a shape in any line.** ❖		**Complete a partly drawn shape after rotation.** ❖		**Translate a shape on squared paper horizontally or vertically.** ❖	**Transformations on a Pegboard** P * **Square Corners** P ** **More Transformations on a Pegboard** P **
Using Algebra Skills Number sequences	**Recognise and state the difference in sequences that involve adding or subtracting.** ❖	**Exploring Wild and Wonderful Number Patterns** I *	**Write the next two (or more) terms in a sequence.** ❖	**Count the Digits** I *	**Show that a number is in a sequence and / or find the position number by continuing the sequence or otherwise.** ❖	**Sticky Triangles** I ***

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Strand / PoS Element	PoS Objective	NRICH Resources	PoS Objective	NRICH Resources	PoS Objective	NRICH Resources
Using Algebra Skills Functions and graphs	**Use multi-step function machines to generate input and output using all 4 operations; express, in words, the operations of function machines.** ❖		**Read, plot and write co-ordinates in 1 quadrant e.g. (2, 4).** ❖	**Coordinate Challenge** P *		
Using Algebra Skills Equations and inequalities	**Solve 1 step equations using letters to present "unknowns" with integer solutions, e.g. 6+a=10 and b+b=8.** ❖		**Use < > to describe whether a number is less than or greater than another, working with different types of numbers.** ❖	**Greater Than or Less Than?** P *		
Using Data Skills Collect and record data Present and analyse data Interpret results	Represent data using: lists, tally charts, tables, diagrams and frequency tables. Use mean, median, mode and range to describe a data set		Represent data using: bar charts, grouped data charts, line graphs and conversion graphs.		Extract and interpret information from an increasing range of diagrams, timetables and graphs (including pie charts).	**Match the Matches** P **
Using Data Skills Probability	**Use the words "certain" and "impossible" to describe the likelihood of an event occurring.** ❖		**Recognise that some events are impossible and some events are certain.** ❖		**Recognise that some events are more likely than others.** ❖**Use the words "likely", "unlikely" and "even chance".** ❖	**Probably …** P * **Odds or Sixes?** P *

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