

The Primary Tools Decimal System: Mathematics Assessment Process



The Primary Tools Decimal Assessment System has been designed first and foremost with children's needs at heart. The mathematics system is based on the **next steps** criteria found in the National Curriculum released in 2014. Key **next steps** have been selected; **next steps** not included can be found at the end of this document for your reference.

For Pupils and Parents:

It aims to inform pupils of the **next steps** needed in order to progress learning in their mathematics. It is recommended that these assessment sheets are used alongside the Next Steps Bookmarks found on the PrimaryTools.co.uk website.

For Teachers:

The system is also designed to be easily picked up by teachers. Recommended process is detailed below, although the final rules can be decided within your school to meet your needs.

For School Leaders:

The system also creates a Decimal Score that can be used for tracking and informing planning for the needs of your pupils. It is recommended that the free tracking system is used from the PrimaryTools.co.uk website.

The Decimal System Process:

a) Year Group
(Pink = Year 3)

Next Steps Code
(Can be cross-referenced with Next Steps Bookmarks)

b) Tick/Date Boxes

b) Expected Next Steps

c) Decimal Score Conversion Table

- Use the correct assessment sheet for the year group (a):
 - Yellow is Year 1, Orange is Year 2 and so on with Blue being Year 6
 - Depending on the ability of the pupil, you may judge it appropriate to use a lower or higher year group assessment sheet.
- Tick/date the Expected **Next Steps** that have been met (b):
 - As a general rule, the pupil must show at least 80% confidence ("few errors") for it to be ticked/dated although this depends on the **next step** itself. Higher performing pupils should have no errors.
- Turn the number of ticks/dated steps into a decimal score (c):
 - The first number represents the year group, with the second number showing the finer stage within that year group.
 - For example: A score of 3.0 to 3.3 shows the pupil is Emerging against the Year 3 Expectations. 3.4 to 3.6 shows the pupil is Expected against the Year 3 Expectations. 3.7 and higher means they are Exceeding.
 - Generally speaking, a pupil should not be moved to a higher year group's sheet but should deepen and extend (through using and applying) on the current year group's next steps. You may want to apply this to the exceeding criteria rather than move up a year group.
 - This can then be input into the tracking system freely available from the PrimaryTools.co.uk website.

Name: _____

The Primary Tools Decimal System: Mathematics Assessment Sheet



Year Group Expectations:

Number and Place Value:	P1	count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number	Measurement:	P15	measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
	P2	recognise the place value of each digit in a three-digit number (hundreds, tens, ones)		P16	measure the perimeter of simple 2-D shapes
	P3	compare and order numbers up to 1000		P17	add and subtract amounts of money to give change, using both £ and p in practical contexts
Addition and Subtraction:	add and subtract numbers mentally, including:			P18	tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
	P4	a three-digit number and ones		P19	estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight
	P5	a three-digit number and tens		P20	know the number of seconds in a minute and the number of days in each month, year and leap year
	P6	a three-digit number and hundreds		P21	compare durations of events [for example to calculate the time taken by particular events or tasks]
Multiplication and Division:	P7	add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	Geometry (Properties and Position):	P22	identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle
	P8	recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables		P23	identify horizontal and vertical lines and pairs of perpendicular and parallel lines
Fractions:	P9	write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods	Statistics:	P24	interpret and present data using bar charts, pictograms and tables
	P10	count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10		P25	solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables
	P11	recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators			
	P12	recognise and show, using diagrams, equivalent fractions with small denominators			
	P13	add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$]			
	P14	compare and order unit fractions, and fractions with the same denominators			

Decimal Score Tracking:

Term 1 Score	
Term 2 Score	
Term 3 Score	
Term 4 Score	
Term 5 Score	
Term 6 Score	

Decimal Score:			
Emerging if...		Exceeding if...	
3.0	<10% of expected criteria understood and applied with few errors (consider using lower year group assessment sheet)	3.4	75-100% of expected criteria understood and applied with few errors
3.1	10-25% of expected criteria understood and applied with few errors	3.5	51-75% of expected criteria understood and applied with no errors
3.2	25-50% of expected criteria understood and applied with few errors	3.6	75-99% of expected criteria understood and applied with no errors
3.3	51-75% of expected criteria understood and applied with few errors	3.7	100% of expected criteria understood and applied with no errors
		3.8	1.7 criteria met and at least 25% of above year group expectations
		3.9	1.7 criteria met and at least 50% of above year group expectations