

Year 3 Maths Checklist

These Twinkl Maths checklists link to the expectations set out in the 2014 English National Curriculum for Mathematics and also include reference to the guidance set out in Maths Appendix 1. They are split into:

- Working Towards the Expected Standard
- Working at the Expected Standard
- Working at Greater Depth Within the Expected Standard

All of the statements are progressive within and across the year groups, and work on the expectation that the majority of pupils will be working on their own year group's aims. Consequently, Twinkl have tried to ensure that the criteria for Working Towards the Expected Standard in one year group is not the same as the criteria for Working at Greater Depth in the previous year group. The criteria for Working Towards and Working at Greater Depth in any year group is related to that year group's National Curriculum expectations.

It is important to reiterate that there are no DfE-published exemplification assessment documents available for Years 1, 3, 4 and 5, and therefore the Twinkl Maths checklists should only be used as a guide for referencing the attainment of pupils within these year groups.

Teachers may feel the need to revisit expectations from earlier years to consolidate knowledge and build on pupils' understanding, or go beyond the aims set out here if they feel it is appropriate for their highest-attaining students.

How to Use the Checklists

The grids can be used to track the attainment of individual pupils or alternatively, could be used to highlight the progress of groups of students who are focusing on the same development areas or Maths targets.

They allow teachers to make 'best fit' judgements by ticking and dating relevant criteria as a child/group progresses throughout a term or school year.

Teachers may find the Differentiated Maths Mats useful in providing more detail and exemplification.

Working Towards	Expected	Greater Depth
In most cases the objective will be simplified, by cutting aspects out, or by using smaller numbers etc. These can be seen as a step towards the expected standard. Where the objective is the same, it may be that greater adult support is required than for the expected standard.	These are the objectives from the National Curriculum. Teachers will need to make their own decisions about the level of competency required to be at the expected standard. Possible examples can be found on the Differentiated Maths Mats for each mathematical area.	In many cases, the objective is similar or the same as the expected standard. Greater depth means children explaining and reasoning, enabling them to deepen their mathematical understanding. Possible examples can be found on the Differentiated Maths Mats for each mathematical area.
Number and Place Value		
Count from 0 in multiples of 4, 50 and 100; find 10 more or less than a given number.	Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.	Count from 0 and other numbers in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number, explaining what happens to the different place value.
Recognise the place value of each digit in a three-digit number less than 200 (hundreds, tens, ones).	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).	Recognise the place value of each digit in a three-digit number (hundreds, tens, ones).
Compare and order numbers up to 200.	Compare and order numbers up to 1000.	Compare and order numbers up to 1000.
Identify, represent and estimate numbers using different representations.	Identify, represent and estimate numbers using different representations.	Identify, represent and estimate numbers using different representations.
Read and write numbers up to 200 in numerals and in words.	Read and write numbers up to 1000 in numerals and in words.	Read and write numbers up to 1000 in numerals and in words.
Solve number problems and practical problems involving these ideas.	Solve number problems and practical problems involving these ideas.	Solve number problems and practical problems involving these ideas.

Addition and Subtraction				
Add and subtract numbers with support of models or images, including:		Add and subtract numbers mentally, including:		Add and subtract numbers mentally, including:
<ul style="list-style-type: none"> • a three-digit number and ones; • a three-digit number and tens; • a three-digit number and hundreds. 		<ul style="list-style-type: none"> • a three-digit number and ones; • a three-digit number and tens; • a three-digit number and hundreds. 		<ul style="list-style-type: none"> • a three-digit number and ones; • a three-digit number and tens; • a three-digit number and hundreds.
Add and subtract numbers with up to three digits, using simple formal written methods of columnar addition and subtraction.		Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.		Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.
Estimate the answer to a calculation and use inverse operations to check answers.		Estimate the answer to a calculation and use inverse operations to check answers.		Estimate the answer to a calculation and use inverse operations to check answers.
Solve problems, including missing number problems, using number facts and place value.		Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.		Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.
Multiplication and Division				
Recall and use multiplication and division facts for the 3 and 4 multiplication tables.		Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.		Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.
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 the support of models and images.		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.		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.
Solve problems, including missing number problems, involving multiplication and division.		Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.		Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.

Fractions			
Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts.		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.	
Recognise, find and write fractions of a discrete set of objects: unit fractions.		Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.	
Recognise and use fractions as numbers: $\frac{1}{2}$ and $\frac{1}{4}$		Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.	
Recognise and show, using diagrams, equivalent fractions with small denominators.		Recognise and show, using diagrams, equivalent fractions with small denominators.	
Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$].		Add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$].	
Compare and order fractions with the same denominators.		Compare and order unit fractions, and fractions with the same denominators.	
Solve problems that involve all of the above.		Solve problems that involve all of the above.	
Measurement			
Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).		Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml).	
Measure the perimeter of simple 2D shapes.		Measure the perimeter of simple 2D shapes.	
Add and subtract amounts of money to give change, using both £ and p in practical contexts.		Add and subtract amounts of money to give change, using both £ and p in practical contexts.	

Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour clocks.		Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.		Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks.	
Estimate and read time with increasing accuracy to the nearest 5 minutes; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight.		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, am/pm, morning, afternoon, noon and midnight.		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, am/pm, morning, afternoon, noon and midnight.	
Know the number of seconds in a minute.		Know the number of seconds in a minute and the number of days in each month, year and leap year.		Know the number of seconds in a minute and the number of days in each month, year and leap year.	
Compare durations of events [for example to calculate the time taken by particular events or tasks].		Compare durations of events [for example to calculate the time taken by particular events or tasks].		Compare durations of events [for example to calculate the time taken by particular events or tasks].	

Geometry - Shape

Draw 2D shapes and make 3D shapes using modelling materials.		Draw 2D shapes and make 3D shapes using modelling materials; recognise 3D shapes in different orientations and describe them.		Draw 2D shapes and make 3D shapes using modelling materials with accuracy; recognise 3D shapes in different orientations and describe them.	
Recognise angles as a property of shape or a description of a turn.		Recognise angles as a property of shape or a description of a turn.		Recognise angles as a property of shape or a description of a turn.	
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 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.		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.	
Identify horizontal and vertical lines.		Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.		Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.	

Statistics

Interpret and present data using simple bar charts, pictograms and tables.		Interpret and present data using bar charts, pictograms and tables.		Interpret and present data using bar charts, pictograms and tables.	
Solve one-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in simple bar charts and pictograms and tables.		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.		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.	