Year 2 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 in steps of 2 and 5 from 0, and in tens from any number, forward and backward, *with support.*		Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.		Count in steps of 2, 3, and 5 forwards from 0 and any number and backwards from any number, and in tens from any number, forward and backward, *explaining what happens to the tens and ones.*	
Recognise the place value of each digit in a two-digit number (tens, ones) up to 30.		Recognise the place value of each digit in a two-digit number (tens, ones).		Recognise the place value of each digit in a two-digit number (tens, ones).	
Identify, represent and estimate numbers using different representations, including the number line.		Identify, represent and estimate numbers using different representations, including the number line.		Identify, represent and estimate numbers using different representations, including the number line.	
Compare and order numbers from 0 up to 20; use ‹, › and = signs.		Compare and order numbers from 0 up to 100; use ‹, › and = signs.		Compare and order numbers from 0 up to 200; use ‹, › and = signs.	
Read and write numbers to at least 30 in numerals and in words.		Read and write numbers to at least 100 in numerals and in words.		Read and write numbers to at least 200 in numerals and in words.	
Use place value and number facts to solve problems.		Use place value and number facts to solve problems.		Use place value and number facts to solve problems.	

Addition and Subtraction		
Solve problems with addition and subtraction: • using concrete objects and pictorial representations, including those involving numbers, quantities and measures; • applying their increasing knowledge of mental and written methods.	Solve problems with addition and subtraction: • using concrete objects and pictorial representations, including those involving numbers, quantities and measures; • applying their increasing knowledge of mental and written methods.	Solve problems with addition and subtraction: • using concrete objects and pictorial representations, including those involving numbers, quantities and measures; • applying their increasing knowledge of mental and written methods.
Recall and use addition and subtraction facts to 10 fluently, and derive and use related facts up to 20.	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.	Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.
Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • a two-digit number and ones; • a two-digit number and tens.	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • a two-digit number and ones; • a two-digit number and tens; • two two-digit numbers; • adding three one-digit numbers.	Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: • a two-digit number and ones; • a two-digit number and tens; • two two-digit numbers; • adding three one-digit numbers.
Show that addition of two numbers can be done in any order (commutative).	Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.	Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.
Recognise and use the inverse relationship between addition and subtraction and use this to check calculations.	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.	Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.

Multiplication and Division			
Recall and use multiplication facts for the 2 and 10 multiplication tables, including recognising odd and even numbers.		Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.		Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.	

Multiplication and Division					
Recall and use multiplication facts for the 2 and 10 multiplication tables, including recognising odd and even numbers.		Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.		Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.	
Calculate simple mathematical statements for multiplication and division.		Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.		Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs.	
Show that multiplication of two numbers can be done in any order (commutative).		Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.		Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.	
Solve problems involving multiplication using materials, arrays, repeated addition.		Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.		Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	
Fractions					
Recognise, find, name and write fractions $\frac{1}{3}$ and $\frac{1}{4}$ of a length, shape, set of objects or quantity.		Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity.		Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity, *explaining how to use fractions when solving problems.*	
Write simple fractions, for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.		Write simple fractions, for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$.		Write simple fractions, for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$, *counting to 10 in halves and quarters.*	

Measurement		
Use given standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.	Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels.
Compare and order lengths, mass, volume/capacity *using the appropriate language of comparison.*	Compare and order lengths, mass, volume/capacity and record the results using ›, ‹ and =.	Compare and order lengths, mass, volume/capacity and record the results using ›, ‹ and =.
Recognise and use the symbols for pence (p); combine amounts to make a particular value *up to one pound.*	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.
Find different combinations of coins that equal the same amounts of money.	Find different combinations of coins that equal the same amounts of money.	Find different combinations of coins that equal the same amounts of money.
Solve simple problems in a practical context involving addition of money.	Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.	Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.
Recognise and sequence intervals of time.	Compare and sequence intervals of time.	Compare and sequence intervals of time.
Tell and write the time to quarter of an hour, including quarter past/to the hour and draw the hands on a clock face to show these times.	Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.	Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.
Know the number of minutes in an hour and the number of hours in a day.	Know the number of minutes in an hour and the number of hours in a day.	Know the number of minutes in an hour and the number of hours in a day.
Geometry – Shape		
Identify and describe the properties of simple 2D shapes, including the number of sides.	Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line.	Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line.

Identify and describe the properties of simple 3D shapes, including the number of edges, vertices and faces.		Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.		Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.	
Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].		Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].		Identify 2D shapes on the surface of 3D shapes, [for example, a circle on a cylinder and a triangle on a pyramid].	
Compare and sort common simple 2D and 3D shapes and everyday objects.		Compare and sort common 2D and 3D shapes and everyday objects.		Compare and sort common 2D and 3D shapes and everyday objects.	
Geometry – Position and Direction					
Order and arrange combinations of mathematical objects in patterns and sequences.		Order and arrange combinations of mathematical objects in patterns and sequences.		Order and arrange combinations of mathematical objects in patterns and sequences.	
Use simple mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).		Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).		Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).	
Statistics					
Interpret and construct simple pictograms and simple tables.		Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.		Interpret and construct pictograms, tally charts, block diagrams and tables.	
Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.		Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.		Ask and answer questions by counting the number of objects in each category and sorting the categories by quantity.	
Ask and answer questions about totalling.		Ask and answer questions about totalling and comparing categorical data.		Ask and answer questions about totalling and comparing categorical data.	