Year 3 Maths Attainment and Progress Grid:

Content domain	Autumn	Assessment task	Spring	Assessment task	Summer	Assessment task
Number & Place Value	**1) Represent, identify and write (in numerals and words all the numbers to 1000) using different representations.** **2) Identify the place value in a three digit number and represent them in different ways.** **3) Order and identify on a number line where a number sits up to 1000.** **4) Compare and order numbers up to 1000.** **5) Count in 50's.**	EXS: 1. 3M9/1 - 3M10/1 2. 3M10/2 3. 3M11/1 4. 3M12/1 5.	•	EXS:	•	EXS:
		GDS: 1. 3MGD9/1 - 3MGD10/1 2. 3MGD10/2 3. 3MGD11/1 4. 3MGD12/1 5.		GDS:		GDS:
Addition & Subtraction	**1) Add and subtract ones from/ to a 3 digit number using column addition and subtraction.** **2) Add and subtract tens from/ to a 3 digit number using column addition and subtraction.** **3) Add and subtract a 2 digit number to/from a 3 digit number using column addition.** **4) Explain the place value of each number in an addition and subtraction.** **5) Use mental methods of addition and subtraction to support understanding.** **6) Add and subtract a 3 digit number to/from a 3 digit number using column addition or subtraction.** 7) Use the inverse operations as well number facts to check answers, solve missing number problems. 8) Use estimates to check the answers to their questions. 9) Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	EXS: 1. 2. 3. 4. 5. 3M13/1 - 3M15/2 6. 3M14/1 7. 3M15/2 8. 9.	•	EXS:	•	EXS:
		GDS: 1. 2. 3. 4. 3MGD13/1 5. 6. 3MGD15/2 7. 8. 3MGD14/2 9.		GDS:		GDS:

Multiplication and Division	1) Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. Including dividing and multiplying by all 3. 2) Write and calculate multiplication and division statements using times tables they know using mental methods. 3) Understand the relationship with remainders and division.	EXS: 1. 3M16/1 2. 3M16/2 - 3M17/1 3.	1) Use knowledge of division and multiplication to use the inverse operation to solve worded problems. 2) **Understand that amounts can be grouped in different ways and link these to division and multiplication facts.** 3) Multiply a 2 digit number by a one digit number using mental methods and number facts. 4) **Multiply a 2 digit number by a one digit number using written formal methods.** 5) Divide a 2 digit number by a one digit number using mental methods and number facts. 6) **Divide a 2 digit number by a one digit number using a formal written method.**	EXS: 1. 3M17/2 - 3M18/1 2. 3M17/3 3. 4. 3M17/4 5. 6.	•	EXS:
		GDS: 1. 3M16/1 2. 3M16/2 - 3M17/1 3.		GDS: 1. 3M17/2 - 3M18/1 2. 3M17/3 3. 4. 3M17/4 5. 6.		GDS:
Fractions	7)	EXS:	**1) Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.** **2) Create fractions using different representations.** 3) Show fractions as a part of a number line. 4) Count up and down in tenths. 5) Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. **6) Compare and order unit fractions, and fractions with the same denominators.** **7) Find fractions of a set of objects.** **8) Find how many of a fraction are needed to create a whole.** **9)** Solve fractions worded problems using a bar model to support understanding.	EXS: 1. 3M19/1 - 3M20/1 2. 3. 3M20/2 - 3M21/1 4. 5. 6. 7. 3M20/2 8. 3M20/3 9.	**1) Recognise and show using diagrams equivalent fractions with smaller denominators.** **2)** Compare and order fractions with the same denominators using these symbols: <,>,=. **3) Add and subtract fractions with the same denominators.** **4)** Solve worded problems that include fractions using concrete and pictorial representations.	EXS: 1. 3M21/2 2. 3. 3M20/1 4.
		GDS:		GDS: 1. 3MGD20/1 2. 3MGD19/1 3. 3MGD21/1 4. 5. 6. 7. 3MGD20/2 8. 3MGD20/3 9. 3MGD21/3		GDS: 1. 3MGD21/2 2. 3. 3MGD20/1 4.
Measurement	5)	EXS:	1) Convert between pounds and pence. 2) **Add and subtract amounts of money.** 3) Solve money questions that are in practical contexts. 4) Measure, compare, add and subtract: lengths (m/ cm/mm). 5) **Convert cm, mm and m.**	EXS: 1. 2. 3M14/2 3. 3M24/23MGD14/2 4. 3M22/1 - 3M24/1 5.	1) Know the number of seconds in a minute and the number of days in each month, year and leap year. 2) **Use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight** 3) **Estimate and read time to the nearest minute.**	EXS: 1. 2. 3. 3M25/1 4. 5. 6. 7.

			6) **Measure and calculate perimeters of simple 2d shapes.**	6.	4) Read time on a 24 and 12 hour clock. 5) **Know and identify the roman numerals 1 to 12.** 6) Find and compare the length of different intervals. 7) Measure and record time in seconds and use a stopwatch accurately.	
		GDS:		GDS: 1. 2. 3MGD14/2 3. 3MGD24/2 3MGD14/2 4. 3MGD22/1 - 3MGD24/1 5. 6.		GDS: 1. 2. 3. 3MGD25/1 4. 5. 6. 7.
Geometry	8)	EXS:	•	EXS:	**1) Identify right angles,** recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn. **2) Identify whether angles are greater than or less than a right angle.** **3) Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.** **4) Draw accurately and recognise different 3d and 2d shapes.** **5) Measure, compare, order, add and subtract: lengths (m/ cm/mm); mass (kg/g); volume/capacity (l/ml).**	EXS: 1. 3M27/2 2. 3. 4. 3M27/1 5.
		GDS:		GDS:		GDS: 1. 3MGD27/2 2. 3. 4. 3MGD27/1 5.
Statistics	**6)**	EXS:	1) Interpret, present and solve simple questions around pictograms, bar charts and tables.	EXS: 1. 3M28+29 ALL	•	EXS:
		GDS:		GDS: 1. 3M28+29 ALL		GDS:
A year 3 expected mathematician by the end of year 3 should show a developed skill in using mental methods of calculation of the four operations. This is based upon the child's quick recall of the multiplication tables appropriate for their year group and previous year groups. They are able to explain how they got their answer and use concrete materials to show the exchange of numbers. These mental methods go further so that the child can quickly and accurately use formal written methods of the 4 operations using their knowledge of exchanging between place values. Children can also see patterns within the answer, including basic estimation, inverse operations and known facts to begin to self-check answers. Their knowledge of fractions also supports their knowledge of fractions which now goes further this year than previous years with a clear understanding of what fractions represent but they are also able to manipulate fractions so that relationships can be built within a group of objects and with other resources. When solving problems, the children are able to discuss their choices of why they chose their methods and they are able to select and use different written representations to build a clear understanding of the question including bar models and other pictures.						
A Year 3 mathematician working at greater depth is able to do all of the above but shows real speed of recall with known number facts and their times tables. This allows the child to get answers mentally quickly and accurately. Furthermore, they are able to begin to select from a range of different methods and select the one which is the most efficient. They have a knowledge of number which allows them to manipulate and see patterns that would help them solve questions and not just for coincidence. They are also able to use methods and knowledge for separate areas of the curriculum to inform each other and solve problems independently. This also includes the use of jottings and bar modelling completely independently to solve worded questions or at least begin to make understanding them easier. They are also able to maths links in other subjects and are able to discuss how this links to maths.						

https://www.ncetm.org.uk/media/oaqfcvjq/mastery_assessment_y3.pdf

The codes in the assessment tasks relate to the above document. Each code to the side of each area of study relates to an assessment task to be completed by the teacher to assess the proficiency of the class in different areas of maths. This could be done at the end of a lesson, as a small group as a test as a discussion: it's the teacher's choice. However, these should be completed at regular intervals as you teach different areas of the curriculum as they will help inform you of what your children need (support with certain areas) and these do not replace the reasoning and problem solving that should be present in every maths lesson. It also needs to be evidence in some way so that assessment can be moderated. Some statements do not have an activity number, this is due to it not being overtly shown in the booklet however all skills can be found in other tasks but may not be the main skill of the task.

The code is as below:

2M12/1 – The first number is the year group booklet the task is from. The letter is if it's mastery or mastery with greater depth column. The next number is the page and the final number is which activity it is on the page.

This one would be: year 2 booklet, Mastery column, page 12, 1st activity on the page.

6MGD19/4 – Year 6 booklet, Mastery with greater depth column, Page 19, 4th activity down.