



# Ready to Progress Criteria & Number Fun Quick Links

## Year 3

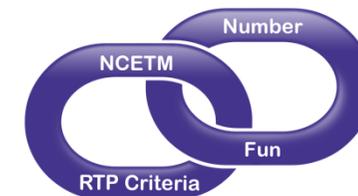
Here is a Quick Link reference guide to help you link 2020 DfE ready-to-progress criteria\* for Year 3 with the Number Fun resources.

This document contains:

- **Key Number Fun Song Video** – the ideal video to help children begin to explore this RTP Criteria.
- **Additional Number Fun Links** – additional material to support and extend the learning in this RTP Criteria.

Many song videos are accompanied by Teacher Ideas Packs, designed to provide creative games and activities to support the teaching of each objective.

For access to Dave's online training to support the concepts covered in the Ready to Progress Criteria strands, please check out our training portal: <https://teach.numberfun.com>



### KEY:

**SV** = Song Video

**SHOP**: Additional Downloadable PDF Resources

**TCV**: Additional Concept Video

	Year 2 ready-to-progress criteria	Key Song Videos	Additional Links	Year 3 ready-to-progress criteria	Key Song Videos	Additional Links
Number & PV Place Value				<b>3NPV-1</b> Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three-digit multiples of 10.	<b><u>One Hundred</u></b> <i>(This visualisation explores how one 100 is ten 10s and a hundred 1s. It clearly demonstrates how many 1s and 10s there are in 3-digit numbers using Base 10 imagery.)</i>	<a href="#">SV: Papa Titoning's Log Compound</a> <a href="#">SHOP: Base 10 Playing Cards</a> <a href="#">SHOP: Place Value Counter Playing Cards</a>
	<b>2NPV-1</b> Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and non-standard partitioning.	<b><u>Papa Titoning</u></b> <i>(Papa Titoning arranges his logs in stacks of 10 and loose logs (mirroring the Base 10 equipment). This video helps children partition 2-digit numbers in combinations of tens and ones.)</i>	<a href="#">SV: Mick the Mechanic</a> <a href="#">SV: Mick the Mechanic (Story version)</a>	<b>3NPV-2</b> Recognise the place value of each digit in three-digit numbers and compose and decompose three-digit numbers using standard and non-standard partitioning.	<b><u>One Hundred</u></b> <i>(This visualisation explores how one 100 is ten 10s and a hundred 1s. It also decomposes 3-digit numbers using standard partitioning.)</i>	<a href="#">SV: Papa Titoning (7-9)</a> <a href="#">SHOP: Base 10 Playing Cards</a> <a href="#">SHOP: Place Value Counter Playing Cards</a>

Number & PV Place Value	<p><b>2NPV-2</b> Reason about the location of any two-digit number in the linear number system, including identifying the previous and next multiple of 10.</p>	<p><b><u>Rounding</u></b> (This video helps children reason about the next and previous multiples of 10, the basis for rounding a number to the nearest 10. It uses the image of a Slavonic Abacus)</p>	<p><b><u>SHOP: Number Line Strips</u></b> <b><u>SHOP: 1-120 Number Grid</u></b></p>	<p><b>3NPV-3</b> Reason about the location of any three-digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.</p>	<p><b><u>One Hundred</u></b> (Utilise the visualisations in this video and record them on Number Line Strips.)</p>	<p><b><u>SHOP: Number Line Strips</u></b></p>
				<p><b>3NPV-4</b> Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.</p>	<p><b><u>Measurement Conversion Song</u></b> (This song converts units of length, mass and volume. A metre and a kilometre are measured into 2, 4, 5 and 10 equal parts.)</p>	<p><b><u>SHOP: Number Line Strips</u></b></p>
Number Facts	<p><b>2NF-1</b> Secure fluency in addition and subtraction facts within 10, through continued practice.</p>	<p><b><u>Sticky Toffees</u></b> (A very simple idea that helps children explore bonds up to 10. Easily adapted)</p>	<p><b><u>SV: The Number Fun Table Tennis Championships</u></b> (first half of video) <b><u>SV: Number Fun Zoo</u></b> <b><u>SHOP: Difference Challenge Grids</u></b></p>	<p><b>3NF-1</b> Secure fluency in addition and subtraction facts that bridge 10, through continued practice.</p>	<p><b><u>Bond Recall Accelerator Challenge</u></b> (This video challenges children to recall the bond facts to 20. Utilise the alternative version at the bottom of the web page)</p>	<p><b><u>SV: Difference Recall Accelerator Challenge</u></b> <b><u>SHOP: Addition Challenge Grids</u></b> <b><u>SHOP: Difference Challenge Grids</u></b></p>
				<p><b>3NF-2</b> Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number.</p>	<p><b><u>Table Troopers</u></b> (Check out Page 12 of the Resources Search Tool and click on the Table Trooper icon for the multiplication table you would like to access.)</p>	<p><b><u>SV: Tables Recall Accelerator Challenge</u></b> <b><u>SHOP: Array Cards</u></b> <b><u>SHOP: Multiplication Posters</u></b> <b><u>SHOP: Times Tables Challenge Grids</u></b> <b><u>SHOP: Multiplication Triangles</u></b></p>
				<p><b>3NF-3</b> Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).</p>	<p><b><u>Super Scaling Ladder</u></b> (This song introduces children to the concept of scaling a number as an alternative structure to multiplication.)</p>	<p><b><u>SHOP: Base 10 Playing Cards</u></b> <b><u>SHOP: Place Value Counter Playing Cards</u></b></p>
Addition and Subtraction	<p><b>2AS-1</b> Add and subtract across 10.</p>	<p><b><u>Farmer Pete's Chicken Song</u></b> (Farmer Pete's chickens lay their hens in the hen house and the barn. How many altogether?)</p>	<p><b><u>SV: Mick the Mechanic (Story version)</u></b> <b><u>SV: Make 5, Make 10</u></b> (Create stories based on the visualisations) <b><u>SV: Papa Titoning's Sharing Song</u></b> (for reasoning) <b><u>SHOP: Tens Frame Addition Cards</u></b></p>	<p><b>3AS-1</b> Calculate complements to 100.</p>	<p><b><u>Abacus Zoo</u></b> (100 monkeys are in the Abacus Zoo. Children are told how many are sleeping and they calculate how many are not!)</p>	<p><b><u>SV: Complements Recall Accelerator Challenge</u></b> <b><u>SV: Honest Joe</u></b></p>

Addition and Subtraction	<p><b>2AS–2</b> Recognise the subtraction structure of ‘difference’ and answer questions of the form, “How many more...?”.</p>	<p><a href="#"><u>Our Tower</u></a> (Two sets of builders build their cube towers. These are compared to find the difference between them)</p>	<p><a href="#"><u>SV: The Difference</u></a> <a href="#"><u>SHOP: Difference Tower Cards</u></a> <a href="#"><u>TCV: Our Tower</u></a></p>	<p><b>3AS–2</b> Add and subtract up to three-digit numbers using columnar methods.</p>	<p><a href="#"><u>Papa Titioning’s Addition Song</u></a> (This is column addition in a story context. There are 3 versions of this video - the link here is the hardest version.)</p>	<p><a href="#"><u>SV: Papa Titioning’s Subtraction Song</u></a> (There are 3 versions of this video - the link here is the hardest version. See attached Teaching video) <a href="#"><u>TCV: Column Subtraction</u></a></p>
	<p><b>2AS–3</b> Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number.</p>	<p><a href="#"><u>My Strategy for Adding 9</u></a> (This video helps children add 9 to any number by adding 10 and then subtracting 1 from a 2-digit number. Use the video to reason. See the alternative versions of this song and adapt.)</p>	<p><a href="#"><u>SV: My Strategy for Adding 8</u></a> <a href="#"><u>SV: My Adding 19 Strategy</u></a></p>	<p><b>3AS–3</b> Manipulate the additive relationship: Understand the inverse relationship between addition and subtraction, and how both relate to the part–part–whole structure. Understand and use the commutative property of addition and understand the related property for subtraction.</p>	<p><a href="#"><u>Calculation</u></a> (The first half of this video introduces children to the language and structures in addition and subtraction. Pause the video and use the imagery to explore inverse operations.)</p>	<p><a href="#"><u>SV: Commutativity</u></a> (The first half of this video explores how commutativity relates to addition and subtraction.)</p>
	<p><b>2AS–4</b> Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers.</p>	<p><a href="#"><u>Pirate Captain Hugh’s Addition Song</u></a> (Pirate Captain Hugh teaches Pirate Captain Bert to add by partitioning. Utilises the Part/Whole model and dienes. Adapt as appropriate.)</p>	<p><a href="#"><u>SV: Farmer Pete’s Chickens (Story Version)</u></a> <a href="#"><u>SV: Papa Titioning’s Addition Song (Base 10 visualisation)</u></a> <a href="#"><u>SV: Papa Titioning’s Subtraction Song (Base 10 visualisation)</u></a></p>			
Multiplication and Division	<p><b>2MD–1</b> Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.</p>	<p><a href="#"><u>Duck Wars</u></a> (This is a 5 times table song in which Luke Warmwater’s dog, Bath Evader, keeps nicking Luke’s bags of rubber ducks – see Teacher Ideas Pack for gamecards.)</p>	<p><a href="#"><u>SV: Table Troopers</u></a> (There are separate versions for the 2x, 5x and 10x tables) <a href="#"><u>SHOP: Times Table Story Cards</u></a> <a href="#"><u>SHOP: Array Cards</u></a> <a href="#"><u>SHOP: Multiplication Posters</u></a></p>	<p><b>3MD–1</b> Apply known multiplication and division facts to solve contextual problems with different structures, including quotative and partitive division.</p>	<p><a href="#"><u>GAR GAR Dance</u></a> (The GAR GAR Dance explores quotative division (i.e. grouping). Children are challenged to divide into groups of different sizes.)</p>	<p><a href="#"><u>SV: Celebrating in the Barn</u></a> <a href="#"><u>SHOP: Times Table Story Cards</u></a></p>
	<p><b>2MD–2</b> Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotative division).</p>	<p><a href="#"><u>D.I.G. Division is Grouping</u></a> (Farmer Pete and Alice plant a flower garden. They know how many flowers they need in each row, but not how many rows they can make from a given dividend.)</p>	<p><a href="#"><u>SV: Dinosaurs</u></a> <a href="#"><u>TCV: Division is Grouping</u></a> (Live video of Farmer Pete planting flower arrays.) <a href="#"><u>TCV: Dinosaurs</u></a> (Examples of Division by Grouping in action)</p>			

Fractions				<b>3F-1</b> Interpret and write proper fractions to represent 1 or several parts of a whole that is divided into equal parts.	<a href="#">Fraction Name Rock</a> (This song helps children visualise, understand and read proper fractions.)	<a href="#">SHOP: Fraction Circles</a> <a href="#">SHOP: Fraction Blocks</a>
				<b>3F-2</b> Find unit fractions of quantities using known division facts (multiplication tables fluency).	<a href="#">Doubling and Halving</a> (This song explores how halving and then halving again enables you to find a quarter of a quantity.)	<a href="#">Visual Fractions Policy</a> (Check out this policy for a wide range of posters to help children master Fractions)
				<b>3F-3</b> Reason about the location of any fraction within 1 in the linear number system.	<a href="#">The Counts of Fractions</a> (This song helps children count in fractions. The fractions can be represented on a Number Line strip.)	<a href="#">SHOP: Fraction Count Cards</a> <a href="#">SHOP: Number Line Strips</a>
				<b>3F-4</b> Add and subtract fractions with the same denominator, within 1.	See <a href="#">Fraction Circles Resource</a>	<a href="#">SHOP: Fraction Circles</a> <a href="#">SHOP: Fraction Blocks</a>
Geometry	<b>2G-1</b> Use precise language to describe the properties of 2D and 3D shapes and compare shapes by reasoning about similarities and differences in properties.	<a href="#">Polygon Memory Song</a> (A simple song to help children learn the names of polygons from 3-sided through to 8-sided. See other links for shapes to reason about)	<a href="#">SV: The 3D Shape Song (5-7)</a> <a href="#">SHOP: Polygon Property Pictures</a> <a href="#">TCV: Bear's 3D Shape Adventure</a>	<b>3G-1</b> Recognise right angles as a property of shape or a description of a turn and identify right angles in 2D shapes presented in different orientations.	<a href="#">Mini Adventure</a> (A spider takes a journey through turns and movement around it's web to catch the fly!)	<a href="#">SV: The Angle Detective</a> <a href="#">SV: Compass Rock</a> <a href="#">SHOP: Polygon Property Pictures</a>
				<b>3G-2</b> Draw polygons by joining marked points and identify parallel and perpendicular sides.	<a href="#">Where's Polygon?</a> (Pirates create polygons in the sand at the behest of a parrot!)	<a href="#">SHOP: Polygon Property Pictures</a>

\***DfE Guidance:** 'Teaching mathematics in primary schools June 2020', can be downloaded in full, or per year group, from this page: [www.gov.uk/government/publications/teaching-mathematics-in-primary-schools](http://www.gov.uk/government/publications/teaching-mathematics-in-primary-schools) Summary tables on pages 9-15 (of the full, Years 1-6 document) track criteria across year groups. Within the year group documents, the 'Making connections' blue boxes, detail connections across criteria.

**Number Fun Resources Search Tool** – this is a full hyperlinked listing of all the 320+ Number Fun Song Videos that are categorised according to mathematical domain and sub-domain. This tool is found on the homepage on [numberfunportal.com](http://numberfunportal.com) or can be downloaded here: <https://resources.numberfunportal.com/Teacher+Portal/planning-tool.pdf>

*Number Fun song videos are designed to be powerful tools for communicating conceptual understanding and stimulating reasoning through story, song, visualisation, animation and humour.*

<https://numberfun.com> – For access to all the Number Fun Resources: teaching portals, online training website, visual policies and the Number Fun Shop