

Year One

NUMBERS AND THE NUMBER SYSTEM

2-7 Counting, properties of numbers and number sequences

Know the number names and recite them in order to at least 20, from and back to zero. (p.2)	Standards Site ITP Count on and back	Interactive bead string	www.standards.dfes.gov.uk/numeracy/publications/itps/count_on_and_back
Count reliably at least 20 objects. (p.2)	Standards Site ITP Count on and back	Interactive bead string	www.standards.dfes.gov.uk/numeracy/publications/itps/count_on_and_back/
Describe and extend number sequences: count on and back in ones from any small number, and in tens from and back to zero; count on in twos from zero, then one, and begin to recognise odd or even numbers to about 20 as 'every other number'; count in steps of 5 from zero to 20 or more, then back again; begin to count on in steps of 3 from zero. (p.2,4,6)	PrimaryResources: Swinging Ted Ambleside: Supersequencer Ambleside: 'Big Count'	Counting in ones; odd and even numbers identified Counting in any steps, from any number! Counting machine, counts in 1's ,2's, 5's, 10's	www.primaryresources.co.uk/online/swingingted.swf http://ambleweb.digitalbrain.com/ambleweb/ambleweb/ambleweb/mentalmaths/supersequencer.html http://ambleweb.digitalbrain.com/ambleweb/ambleweb/ambleweb/mentalmaths/bigcount.html
8-15 Place value and ordering			
Read and write numerals from 0 to at least 20. (p.8)	Standards site ITP 20 Cards	Allows the creation of 'stacks' of moveable cards: consecutive numbers and multiples	
Begin to know what each digit in a two-digit number represents. Partition a 'teens' number and begin to partition larger two-digit numbers into a multiple of 10 and ones (TU). (p.8)	Standards Site ITP Place Value Cards	Place value cards used for partitioning numbers and also looking at the value of each number	
Understand and use the vocabulary of comparing and ordering numbers , including ordinal numbers to at least 20. Use the = sign to represent equality. Compare two familiar numbers, say which is more or less, and give a number which lies between them. (p.10)	Standards site ITP 20 Cards Primary Games Sum sense (single digit addition)	Allows the creation of 'stacks' of moveable cards: consecutive numbers and multiples Use moveable digit cards to make algorithm / statement true	www.primarygames.co.uk/pg2/sumsense/sumadd.html
Within the range 0 to 30, say the number that is 1 or 10 more or less than any given number. (p.12)	Standards Site ITP 'Number Grid'	Interactive number square, allows change of number of columns and start number	www.standards.dfes.gov.uk/numeracy/publications/itps/number_grid/
Order numbers to at least 20 , and position them on a number track. (p.14)	PrimaryResources Number Order	Lovely self checking activity of ordering numbers progressing to numbers less than 20	www.primaryresources.co.uk/online/numorder.swf

	Standards Site ITP 20 Cards	Allows the creation of 'stacks' of moveable cards: consecutive numbers and multiples	
<u>16-19 Estimating and rounding</u>			
Understand and use the vocabulary of estimation. Give a sensible estimate of a number of objects that can be checked by counting (e.g. up to about 30 objects). (p.16)			
<u>CALCULATIONS</u>			
<u>24-29 Understanding addition and subtraction</u>			
Understand the operation of addition, and of subtraction (as 'take away', 'difference', and 'how many more to make'), and use the related vocabulary. Begin to recognise that addition can be done in any order. Begin to use the +, - and = signs to record mental calculations in a number sentence, and to recognise the use of symbols to stand for an unknown number. (p.24,28)	Ambleside: 'Big Count' BBC Numbertime Snakes and Ladders Primary Games Sum Sense (single digit addition)	Counting machine, counts in 1's, 2's, 5's, 10's Interactive snakes and ladders game. One player option allows use with whole class. Great opportunity for effective questioning Use moveable digit cards to make algorithm / statement true	http://ambleweb.digitalbrain.com/ambleweb/ambleweb/ambleweb/mentalmaths/bigcount.html www.bbc.co.uk/schools/numbertime/games/snakes.shtml www.primarygames.co.uk/pg2/sumsense/sumadd.html
Begin to recognise that more than two numbers can be added together. (p.26)			
<u>30-31 Rapid recall of addition and subtraction facts</u>			
Know by heart: all pairs of numbers with a total of 10 (e.g. 3 + 7); addition facts for all pairs of numbers with a total up to at least 5, and the corresponding subtraction facts; addition doubles of all numbers to at least 5 (e.g. 4 + 4). Begin to know: addition facts for all pairs of numbers with a total up to at least 10, and the corresponding subtraction facts. (p.30)	Ambleside: NumberBond Machines BBC Numbertime Dartboard Standards Site Numberfacts	Allows practice of number bonds - to 5, 10, 100 or set your own. Fun activity to find the doubles of numbers up to 10 Visual representation of comparison 10/20. Demonstrates subtraction through modelling removal of counters	http://ambleweb.digitalbrain.com/ambleweb/ambleweb/ambleweb/mentalmaths/numberbond.html www.bbc.co.uk/schools/numbertime/games/dartboard.shtml www.standards.dfes.gov.uk/numeracy/publications/itps/number_facts/

32-41 Mental calculation strategies (+ and -)			
Use knowledge that addition can be done in any order to do mental calculations more efficiently. For example: put the larger number first and count on in ones, including beyond 10 (e.g. $7 + 5$); begin to partition into '5 and a bit' when adding 6, 7, 8 or 9, then recombine (e.g. $6 + 8 = 5 + 1 + 5 + 3 = 10 + 4 = 14$). (p.32)	Count Me In Game One and Two	Game 1: Ordering number cards and identifying one more, one less. Very similar to maths intervention type activities Game 2: Screen showing ten butterflies, 'x' fly away, how many remain? Grid partitioned into five and a bit.	www.curriculumsupport.nsw.edu.au/maths/countmein/children.htm www.curriculumsupport.nsw.edu.au/maths/countmein/children.htm
Identify near doubles, using doubles already known (e.g. $6 + 5$). (p.32)			
Add 9 to single-digit numbers by adding 10 then subtracting 1. (p.34)	Standards Site ITP 'Number Grid'	Interactive number square, allows change of number of columns and start number	www.primaryresources.co.uk/online/nurorder.swf
Use patterns of similar calculations (e.g. $10 - 0 = 10$, $10 - 1 = 9$, $10 - 2 = 8$). (p.34)			
Use known number facts and place value to add or subtract a pair of numbers mentally within the range 0 to at least 10, then 0 to at least 20. (p.36,38)			
Begin to bridge through 10, and later 20, when adding a single-digit number. (p.40)			
<u>SOLVING PROBLEMS</u>			
60-61 Making decisions			
Choose and use appropriate number operations and mental strategies to solve problems. (For examples, see pages 62-71.) (p.60)			
62-65 Reasoning about numbers or shapes			
Solve simple mathematical problems or puzzles; recognise and predict from simple patterns and relationships. Suggest extensions by asking 'What if?' or 'What could I try next?' (p.62)	Turquoise Box 'Unit the Robot'		From turquoise training sandwich box
Investigate a general statement about familiar numbers or shapes by finding examples that satisfy it. (p.64)			
Explain methods and reasoning orally. (p.64)			
66-71 Problems involving 'real life', money or measures			
Use mental strategies to solve simple problems set in 'real			

life', money or measurement contexts, using counting, addition, subtraction, doubling and halving, explaining methods and reasoning orally. (p.66,68,70)			
Recognise coins of different values. Find totals and change from up to 20p. Work out how to pay an exact sum using smaller coins (p.68)	PrimaryResources Dragable Coins	Dragable coins using variety of back drops. Please note: no £2 coin and coins may appear dark on screen	www.primaryresources.co.uk/online/movecoins.swf
	Primary Resources Coin Cards	Cards allowing random generation of coins. Varying screen layouts to allow movement of cards	www.primaryresources.co.uk/online/coincards.swf
<u>HANDLING DATA</u>			
<u>90-93 Organising and using data</u>			
Solve a given problem by sorting, classifying and organising information in simple ways, such as: using objects or pictures; in a list or simple table. Discuss and explain results. (p.90,92)			
<u>MEASURES, SHAPE AND SPACE</u>			
<u>72-79 Measures</u>			
Understand and use the vocabulary related to length, mass and capacity. Compare two lengths, masses or capacities by direct comparison; extend to more than two. Measure using uniform non-standard units (e.g. straws, wooden cubes, plastic weights, yogurt pots), or standard units (e.g. metre sticks, litre jugs). (p.72)			
Suggest suitable standard or uniform non-standard units and measuring equipment to estimate, then measure, a length, mass or capacity, recording estimates and measurements as 'about 3 beakers full' or 'about as heavy as 20 cubes'. (p.74,76)			
Understand and use the vocabulary related to time. Order familiar events in time. Know the days of the week and the seasons of the year. Read the time to the hour or half hour on analogue clocks. (p.78)	BBC Dynamo 'Clockwise'	Level 1: o'clock Level 2: ½ past, ¼ to and past Level 3: 5 minute intervals	www.bbc.co.uk/education/dynamo/den/lock/index.htm

80-89 Shape and Space

<p>Use everyday language to describe features of familiar 3-D and 2-D shapes, including the cube, cuboid, sphere, cylinder, cone, circle, triangle, square, rectangle, referring to properties such as the shapes of flat faces, or the number of faces or corners or the number and types of sides.(p.80)</p>	<p>Primary Resources Shape Reveal</p> <p>PrimaryResources 'shape sort'</p>	<p>Interactive version of guess the 2D shape appearing from behind the book. 2D shapes and 2D shapes with rotation</p> <p>Sorting 2d shapes using simple chart and number of sides</p>	<p>www.primaryresources.co.uk/online/shapereveal.swf</p> <p>www.primaryresources.co.uk/online/simpleshapesort.swf</p>
<p>Make and describe models, patterns and pictures using construction kits, everyday materials, Plasticine... Fold shapes in half, then make them into symmetrical patterns. Begin to relate solid shapes to pictures of them. (p.82)</p>			
<p>Use everyday language to describe position, direction and movement. (p.86,88)</p>			
<p>Talk about things that turn. Make whole turns and half turns. Use one or more shapes to make, describe and continue repeating patterns...(p.88)</p>	<p>PrimaryResources 'pattern'</p>	<p>Shape stamps, used to create a sequence, repeating pattern</p>	<p>www.primaryresources.co.uk/online/pattern.swf</p>