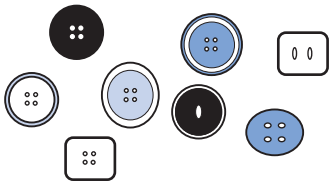
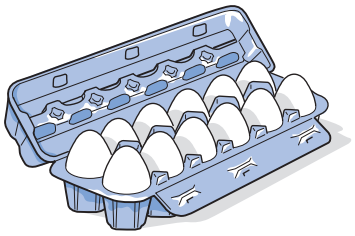
Children should be taught to:	As end-of-year outcomes, children should, for example:
Say and use the number names in familiar contexts	Say the number names in familiar contexts such as number rhymes, songs, stories, counting games and other activities. For example, join in rhymes or songs like: *One, two, three, four, five. Once I caught a fish alive...* *One potato, two potatoes, three potatoes, four...* *Higgledy, Piggledy, my fat hen...* *This old man, he played one...* Recite the sequence: *one, two, three...* • first to ten, progressing to twenty, counting consistently through the unorthodox teens; • then to beyond twenty, recognising that 'somethingty-nine' signals a change in the decade, so that 'twenty-nine' is not followed by 'twenty-ten'. Overcome difficulties and recognise recitation errors, perhaps by saying what is wrong when a puppet 'speaks'. For example, with numbers one to ten: *one, two, four, five...* word omitted *one, two, four, three, five...* words in the wrong order *one, two, three, three, four...* repeating a word Then with numbers to twenty and beyond: *thirteen, fourteen, fiveteen...* not changing the pattern *eighteen, nineteen, tenteen...* error by analogy *thirty-nine, thirty-ten...* error by analogy
Recite the number names in order, continuing the count from a given number	Recite starting from a given number name: • when the recitation is begun from one by someone else; • when it does not begin from one; • when given a specific number name to continue from. Say the number name that goes after a given number name. For example: • What number comes next after six when you count? After eight? After sixteen? Start from a given number name and stop at another. • Start with two. Hold it in your head. Count on to eight... *three, four, five, six, seven, eight.* Now start with seven. Count on to twelve... *eight, nine, ten, eleven, twelve.* • Count on round the circle of children. Start at Jo with five. Who do you think will say ten? Count on several numbers from a given number. Use your fingers to help. • Count on three numbers from four... *five, six, seven.* • Count on four, starting from eleven... *twelve, thirteen, fourteen, fifteen.* **See also counting on (page 15).**

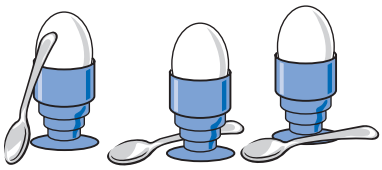
Children should be taught to:	As end-of-year outcomes, children should, for example:
Recite the number names in order, counting back from a given number	Join in rhymes or sing songs such as: *Five little ducks went swimming one day...* *Five little speckled frogs...* *Five little monkeys jumping into bed...* *Five currant buns in the baker's shop...* *Alice the camel has ten humps...* *Ten green bottles...* *One man went to mow...* Say the number name that goes before a given number name. For example: • What number comes one before six when you count? Before nine? Before fourteen? Start to use *zero* as an extension of the counting sequence when counting backwards (the number name for 'none'). **See also recognising zero (page 5).** Recite the number sequence consistently back to zero: • starting from five... from ten... from twenty... • from a number such as seven... or sixteen... or thirty-one... Start from a given number name and stop at another. • Start with nine. Hold it in your head. Count back to three... *eight, seven, six, five, four, three.* Now start with twelve. Count back to five... Now start with nineteen. Count back to ten... • Count back round the circle of children, starting at Jo with ten. Who do you think will say six? Count back several numbers from a given number. Use your fingers to help. • Count back three numbers from four... *three, two, one.* • Count back four, starting from seventeen... *sixteen, fifteen, fourteen, thirteen.* **See also counting back (page 17).**

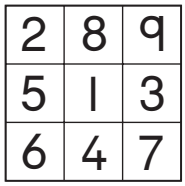
Children should be taught to:	As end-of-year outcomes, children should, for example:
Count reliably a set of everyday objects	Begin to understand in practical contexts: *count, how many...?*
	Count a number of objects (first up to 5, progressing to up to 10, then beyond, using a wide variety of opportunities). Give one and only one number name in one-to-one correspondence with each object. For example, count the number of: • sand pies made in the sand tray; • tiny things you can pack in a matchbox; • hats you can find in the set of dressing-up clothes; • pieces in the jigsaw; • children who are playing in the home corner... who are waiting in the queue... who have finished their painting...; • peas that you find in different pods; • penny coins in the till; • letters in your name; • times you can bounce or catch the ball... can throw a bean bag in the bucket... can hop while the tambourine shakes...
	Count the same number of different objects. Begin to realise when counting that the number of objects is not affected by their size or position, or whether or not they are of the same type. For example: • count six buttons, six pencils, six bricks, six tables, six children, six hoops, six £1 coins, six mixed coins, six random objects from the 'bits and pieces' box... • count them in a different order... • count them spread out, close together, in a line, stacked up...
	Count out a specified number of things from a collection of objects. For example, count out or take a given number of: • beans to plant in a pot from a packet; • plates, cups and spoons... from the 'kitchen'; • farm animals for each 'field'; • penny coins from the till.
	Recognise small numbers of objects without counting, then check by counting one by one, for example: • collections of up to three objects; • the numbers of fingers held up on one then two hands; • dot patterns on a 1–6 dice, playing cards or dominoes.
	Begin to realise through a variety of counting opportunities: • that there is no need to count when the number can be recognised without counting; • that the purpose of counting is to tell how many there are; • that the last number name spoken is the answer to 'how many?' questions and tells you how many there are; • that no matter in which order a collection is counted the number remains the same; • that if two different counts of a collection of objects give different answers, then something is wrong.

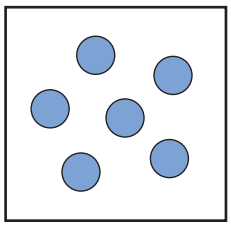
Children should be taught to:	As end-of-year outcomes, children should, for example:
Count reliably a set of everyday objects (continued)	*Count systematically to keep a track of the count* Count a collection of objects in different arrangements, organising the counting by using a strategy for keeping track of where the count begins and ends. • Count objects in a line: first touching them one by one; then without touching them. For example, count these flags.  • Count objects arranged randomly: by moving them into a straight line; by moving them across one by one when counted; by leaving them in position but touching them; by counting systematically without touching them: for example, from top to bottom, left to right.  For example, count these buttons. Recognise counting errors, perhaps made by a puppet. For example: saying the number sequence correctly but: • assigning two number names to one object (counting the same object twice); • missing out an object completely; pointing correctly to each object in turn but: • making an error in saying the counting sequence; • not giving a number name to one or more of the objects touched; or alternatively: • counting the correct number of objects but saying the wrong number: for example, counting five objects correctly but saying: 'There are six'. Discuss ways of organising counting so that it is easier to count accurately.
Begin to recognise 'none' and 'zero'	Begin to recognise 'zero' as the cardinal number associated with 'none', through stories, rhymes and when counting back.

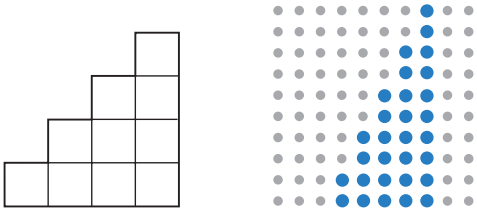
Children should be taught to:	As end-of-year outcomes, children should, for example:
Count reliably in other contexts	Realise that sounds, movements, hidden things... can be counted. For example: • Count evenly spaced or regular claps or drum beats, first with eyes open to watch, then with eyes closed. • Count pairs of claps or drum beats. • Count the sounds in repeated rhythmic patterns such as: *tap, tap, pause, tap...* • Count the number of times you skip with your skipping rope. • Count the number of times that I jump. • Count how many big strides you take across the room...  Count a collection of up to ten objects in more difficult formations, using a strategy for keeping track of where the count begins. For example: • Count objects that are out of reach: for example, panes in windows, pictures on the wall, lights hanging from the ceiling... • Count objects in a ring, such as different coloured beads on a necklace or a group of children in a circle, marking the starting point in some way. • Count some mixed objects that vary markedly in size. • Count some moving objects: for example, children playing, floating objects, fish in a fish tank, hatched chicks, the bubbles that I blow... • Begin a count starting with a named object: for example, count the animals starting with the horse. Count along and back a blank number track. For example, respond to situations such as: • Put a cone on a blank number track on the floor. Stand at the beginning of the track. Hop on to the first space, and say 'one'. Continue to count aloud the hops you make until you get to the cone. • Put a 'frog' on a blank number track on a table top. Watch the frog jump along to the blue counter. Count the jumps aloud as the frog makes them. How many jumps did the frog make? Count the jumps quietly using fingers. Count them in your head.

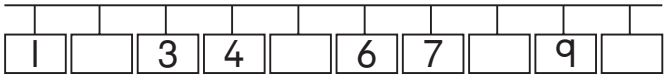
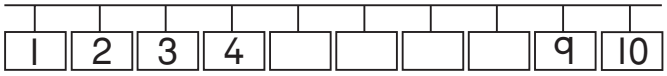
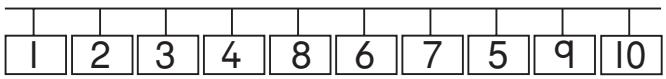
Children should be taught to:	As end-of-year outcomes, children should, for example:
Count in tens	Recite the sequence: *ten, twenty, thirty... one hundred.* Say it backwards.
	Count on or back in tens, starting from a given tens number. • Count on in tens from fifty. • Count back in tens from eighty.
	Say the tens number that goes before or after a given one. For example, when you count in tens: • what number comes just after sixty; • what number comes before ninety?
	Count along a large number track numbered only in tens.
	Count from a given tens number and stop at another. • Count on in tens from twenty and stop at seventy... • Count on in tens from thirty to ninety... • Count back in tens from eighty and stop at thirty... • Count back in tens from seventy to ten... • Count round the circle of children, starting at Paul with thirty. Who do you think will say sixty?
Count in twos	Begin to understand and use in practical contexts: *odd, even, every other...*
	Join in rhymes like: *Two, four, six, eight, Mary at the cottage gate...* *One, two, buckle my shoe...* *Ten fat sausages sizzling in the pan...* *Ten little squirrels sat on a tree...* *I've got sixpence...* Make up your own rhymes involving counting in twos.
	Count pairs: for example, the pairs of children, the pairs of socks on the line, the pairs of animals, the eggs in this egg box. 
	Count in ones, but say every other word in a whisper. Count with the teacher saying every other number.
	Look at and point to a number track. • Say aloud every other number, starting at one. • Say aloud every other number, starting at two.
	Colour hops of two on a number track to 10 or more... • Say aloud the coloured numbers as a sequence. • Say aloud the numbers that are not coloured.

Children should be taught to:	As end-of-year outcomes, children should, for example:
Estimate a number in the range that can be counted reliably, then check by counting	Begin to understand and use in practical contexts: *guess how many, estimate...* *nearly, close, about the same as, just over, just under...* *too many, too few, enough, not enough...* For example, respond to: • Guess the number of: books on the shelf, counters in a pile, penny coins in a purse, small toys in a transparent jar, dried beans in a matchbox, acorns I am holding in my hand... Are there more than 3? Are there about 5 or about 10? Now check by counting. Were you nearly right? How close were you? • Estimate how many marbles, counters, dried peas, matchsticks, small balls of cotton wool, wooden cubes... there are in a lidded tin when you shake it. When everyone has guessed, look in and count. Why did you choose your number? • Estimate the number of children present at registration, who have brought a packed lunch today, who wore a hat to school, who are five years old... Check by counting. • Estimate whether there are enough pegs for the coats, knives for the forks, chairs for the children, cups for the saucers, eggs for the egg cups, spoons for the eggs... Now check. Are there too many or too few? Are there enough or not enough?  • Estimate the number of words on the story book page. Write your estimate on a Post-it note and stick it on the chart. • Use a number track with all numbers 1 to 10 marked. Point to different numbers and say what they are. Next use a track with only 1 and 10 marked. Point to different places. What number do you think this is? Discuss your reasons. Extend to using a number track beyond 10. **See also recognising and using numerals (page 9).**

Children should be taught to:	As end-of-year outcomes, children should, for example:
Recognise and use numerals 1 to 9, extending to 0 and 10, then beyond 10	Recognise numerals familiar to them: for example, their age, house number, bus number... Recognise numerals: first from 1 to 5, progressing to 10, then beyond. For example, respond to: • Look at this number track. Count along it with me. Say each number as I point to it. Who can point to 7 on the number track? • This card says 'five'.  What does this one say?  • Take some individual number cards. Hold up your card if you have five... or eighteen... or fifty... Read this card to me. Which card is Eloise holding? • Find the birthday card with 4 on it... with 6 on it... • Find page 10 in your picture book. • Match collections of real objects, then pictures of collections of things, to numbers. • Match numbers to dot patterns: for example, in home-made dominoes, in jigsaw pieces, in pairs of dice, one with dots, one with numerals... • Point to each number on individual grids of numbers to 30, and say them together. • Point to 8 on a clock face, in this pack of shuffled cards, on a calculator key-pad, on the 'shop' till, on the telephone, on the computer keyboard, on a video recorder... • Point to the numbers on this card in order. Say them aloud.  • Spot numbers around the school, out on a walk, going to a shop, and say what they are. Begin to recognise 0 as the numeral associated with 'none', or the space before 1 on the number track. • Use these number cards as labels. Show how many animals there are in each field... Show how many eggs there are in each nest... • Stand on 6 on the floor number track. Hop back to 0. Say the numbers as you go. Begin to read the first few number names, including zero. For example: • Pick out number names on the pages of favourite rhymes or stories such as: *Three Billie Goats Gruff, Three Little Pigs, Goldilocks, Snow White...* • Read these words: *zero, one, two, three, four, five...*

Children should be taught to:	As end-of-year outcomes, children should, for example:
Begin to record numbers	Make own marks or tallies to record numbers or quantities arising in or resulting from practical activities. For example: • Bury several small things in sand. Record in own way how many are buried: for example, by drawing shapes or making tally marks. Begin to write numerals correctly, tracing from top to bottom in a continuous line where possible, first 1, 2, 3... then 0 to 5, progressing to at least 10. For example: • Trace with a finger cut-out numerals: made from sandpaper, rough fabric, smooth fabric, tin foil, corrugated paper, textured wallpaper... • Write numerals 'in the air' following a teacher's directions. For example: half round, half round for three across and down for seven • Make numerals by finger painting, using dough, Plasticine, clay... • Watch me while I trace a numeral in the air (or on the table). Can you guess what it is? • Guess what this number is when I trace it on your back. • Write a number to go with these spots.  • Make number labels for the seats in an 'aeroplane', the spaces in the 'car park', pegs for coats, appointments for the 'doctor'... • Make number labels for the number of pairs of scissors kept in the jar, the number of paint brushes kept in the pot, the number of pieces in the jigsaw box... • Make price labels for things in the 'shop', for tickets for the 'bus', for things on the menu in the 'café', for raffle tickets... • Write in the numbers on a blank number track, clock face... • Make your own number frieze or board game.

Children should be taught to:	As end-of-year outcomes, children should, for example:
Understand and use language to compare two given numbers and say which is more or less	Begin to understand and use in practical contexts: *the same number as...* *bigger, larger, smaller...* *biggest, largest, smallest...* *more, less, fewer...* *most, least, fewest...* *order, first, last, before, after, next, between...* Make a staircase pattern with bricks, or on pegboard... Make each step one more, or two more... Count how many on each step. Predict what would come next.  Find out **by counting** which of two collections has more/fewer objects. In each case, check if necessary by lining up and matching one-to-one. For example: • Count the cups and saucers (e.g. 5 cups and 3 saucers). Are there more cups or more saucers, or the same number? *(Say: 5 is more than 3.)* • Count the girls and boys (e.g. 4 girls and 3 boys). Are there fewer girls or fewer boys? *(Say: 3 is less than 4.)* • Would you rather have five £1 coins, or four £1 coins? Why? Know that a number following another number in the counting sequence is bigger. For example, look at a number track. • Which is more: 3 or 6? *(Say: 6 is more than 3.)* • Which is less: 4 or 7? *(Say: 4 is less than 7.)* Say the number that is one more or one less than a given number. For example, respond to: • What number comes before 10? • What number comes after 3? • What numbers are next to 12? • What number is one more than 7? Than 14? *(Say: 8 is one more than 7...)* • What number is one less than 5? Than 12? *(Say: 4 is one less than 5...)* Discuss (unpriced, later priced) items in the classroom 'shop'. Say which might cost more, or which might cost less. For example, respond to: • An apple costs 4p. An orange costs 1p more. What does the orange cost? **See also adding/subtracting one to/from a number (page 14).**

Children should be taught to:	As end-of-year outcomes, children should, for example:
Say a number lying between two given numbers	Say one or more numbers lying between two given small numbers. For example, respond to: • In this line of nests with eggs in, one nest is missing. Which nest is it? How do you know? • In this line of spotty cards, one card is missing. Which card is it? Where does it go? • Here is part of a number track. Can you say what the missing numbers are?  • Tell me all the numbers that lie between 4 and 9.  • Say all the numbers that lie between 5 and 10. • If you are holding a number between 4 and 8, stand between Ian and Nadia. • Playtime is between 9 o'clock and 12 o'clock. What time could it be?
Order a given set of numbers	Arrange in order a complete set of numbers (first objects, then dot patterns, then numerals): from 1 to about 5... progressing to 10 or more... Say together the complete sequence. For example, respond to: • Put in order these nests with eggs in... this set of cards with buttons on... these boxes with bricks in... these jars with walnuts in... these sticks of cubes... these pots with pens in... • Peg these dotty cards in order to the washing line. Start with the smallest/biggest number. • Put in order a set of shuffled cards... numbered carpet tiles... What number should go first? Next? What number should come after 7? Before 6? What numbers are next to 12? • Each of you take a number card from this pile. Arrange yourselves in order. You have number 7. Which side of Ali should you stand? • Which two numbers have been changed over on this track? 
Order a given set of selected numbers	Arrange in order a selection of small numbers. For example, respond to: • Put in order, smallest first, a set of numbered carpet tiles 1 to 10, with three or four of the numbers removed. Which numbers are missing?  • Put in order these raffle tickets... peg labels... birthday cards. Start with the smallest number. Start with the largest number.

Children should be taught to:	As end-of-year outcomes, children should, for example:
Begin to understand and use ordinal numbers in different contexts	Begin to understand and use in practical contexts ordinal numbers to denote position: *first, second, third, fourth...* *last, last but one...* For example, respond to: • Who is the first, second, last, last but one... in this line of children? • Make a string of beads. First thread a red one. Second thread a blue one... What colour is the first bead you threaded? And the sixth bead? • Who was first, second, third... in the skipping race? • In this line of farm animals, which animal is third? Which animal is between the fourth and the sixth? • Find the fifth page of your story book. • What is the first, second, last... letter of the alphabet? • Point to your third finger... the fourth bead we threaded on this string... the second car in the car park... • What date is your birthday? • What is the date after the 7th of June? • Make a line of plastic cars. Make the second car yellow. Make the fifth car red. • Is the fifth car in the car park black or white? Point to the second blue car.  Begin to understand the relationship between cardinal and ordinal numbers up to 'tenth': that is, an object allocated 'six' in a count is the sixth object counted. For example, respond to questions such as: • When you count, what is the third number? And the ninth number? Begin to understand that if you are fifth in a running race, then four runners beat you, and that if you are the ninth out of ten runners, then you were 'next to last' or 'last but one'. For example, respond to questions such as: • Make a queue of 7 children. Afzal is third in the queue. How many are in front of him? How many are behind him?