

1A

1 Counting to ten

Quick reference

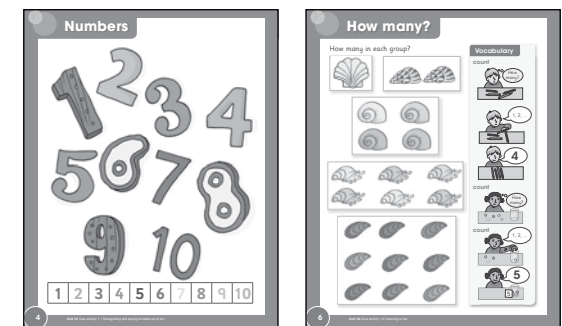
Important note: chapter 1 is different in nature from the other chapters in this resource. It offers some general ideas for activities you could do to introduce learners to counting whereas the rest of the resource offers more specific activities. Decide whether you need to include the activities of chapter 1 based on the ability of the learners in your class. If they are confident in counting numbers from 1 to 10, you could start at chapter 2.

Core activity 1.1: Recognising and saying numbers up to ten (Learner's Book p4–5)

Learners use number songs, rhymes and stories to say the numbers from one to ten, recognise the associated numerals and understand the meaning of counting.

Core activity 1.2: Counting to ten (Learner's Book p6)

Learners accurately count to ten in a wide variety of situations.

**Prior learning**

- Learners must have recognition of some spoken words for number.
- Playing at counting.
- Say the numbers one to five in order.

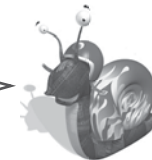
Objectives* – please note that listed objectives might only be partially covered within any given chapter but are covered fully across the book when taken as a whole

1A: Numbers and the number system

- 1Nn1 – Recite numbers in order (forwards from 1 to 100, backwards from 20 to 0).
- 1Nn2 – Read and write numerals from 0 to 20.
- 1Nn3 – Count objects up to 20, recognising conservation of number.

Vocabulary

one • two • three • four • five • six • seven • eight • nine • ten • amount • number • how many? • count



*for NRICH activities mapped to the Cambridge Primary objectives, please visit www.cambridgeprimarymaths.org
Cambridge Primary Mathematics 1 © Cambridge University Press 2014

Core activity 1.1: Recognising and saying numbers up to ten

LB: p4–5

Resources: Number stories, rhymes and songs (see *Maths rhymes* for examples (CD-ROM)). Counting resources such as counters, straws, balls, sticks, beads and cubes. Materials for creating a washing line such as string and clothes pegs. Materials for practising writing numerals such as sand trays, foam, paint, chalk, pens, dough etc. *Numeral practice* photocopy master (p9). (Optional: *Shirts* photocopy master (CD-ROM); materials for decorating and/or printing such as scrap paper and card, corks, buttons, bottle tops, and paint; large paper or card; empty plastic drinks bottles and coloured sticky tape/paper.)

Learners need to become fluent at counting to five initially, then to ten. At first, learners might simply copy the sounds, so meaning needs to be added through lots of practical counting activities.

To say the numbers from one to ten correctly in the right order, learners need plenty of experience of hearing and saying the numbers. Read number stories, and sing or say number rhymes modelling actions for the learners to copy. Learners often have favourite number songs from their local culture that they request to hear and sing again and again. This repetition helps them to remember the numbers used and what they represent.

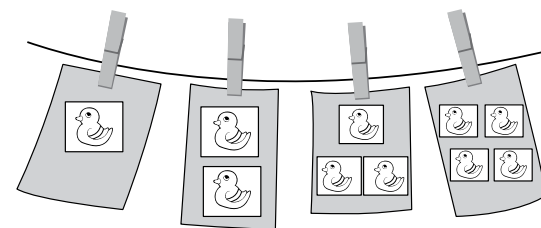
Use a range of counting resources such as counters, straws, balls, sticks, beads and cubes. There should be many counting rhymes and songs from the local culture, use these if the learners are familiar with them from pre-school clubs or you can use your own selection or there are some ideas on the *Maths Rhymes* photocopy master. Useful early ones often include finger actions, for example, *One, two, three, four, five, once I caught a fish alive*.

Many rhymes count backwards. Ensure that counting forwards is secure before attempting to count backwards. Check learners are ready to count backwards by doing the counting that the rhyme demands as a class first, before singing or saying a rhyme that counts backwards. (For example, in the rhyme *Five little ducks went swimming one day* count the five little ducks. Or in the rhyme *Five currant buns in a Baker's shop* count the five currant buns. (These rhymes have not been supplied but should be easy to find online.). If you have pictures of the items you sing about, peg these on a washing line and give learners the opportunity to peg them in order themselves, and to add or remove them as the song is sung.

Opportunity for display

Depending on the age ranges in your class, create an 'Age display'. Display colourful numerals and pictures of the children around a sentence such as 'We are 4!'; 'We are 5!' and/or 'We are 6!' You could make a border from birthday cards contributed by the learners after their special day. When a learner has a birthday, make sure they move from one display to another.

Example: pegging on a washing line.



Model counting behaviour as you share the song/rhyme, sometimes using counting resources and sometimes using the learners themselves. If the numeral in the story is written on the page, then draw attention to it. As the learners become familiar with the shape of the numeral practise writing it in the air. Learners will copy your actions, so make sure that you write the numeral in the air back to front so that they see it the right way round and learn the shape correctly.

Move on to writing numerals in wet and dry sand, then writing them using foam, paint, chalk and chunky pens, and/or modelling them in dough and in many other ways before asking the learners to record on paper. Use the *Numeral practice* photocopy master when learners are ready to write the numerals. Give learners lots of opportunity to practise forming numerals.

Example: writing the number '3' in the air.

Teacher view
whilst writing.

E

Learner view whilst
teacher is writing.

3

Look out for!

- Learners who reverse numerals when writing, for example writing 3 more like a capital 'E'; or learners who get confused between the appearances of two similar-looking numbers, for example 5 and 3 are commonly mistaken for each other by learners. *Show them how to write it correctly, or count to identify the correct number.*
- Learners who might know some larger numbers, for example the age of a sibling or a door number. *Support them to find this number on a number line and to write it if they wish.*

Summary

Learners are able to recite the numbers one to ten in order and begin to recognise the matching numeral.

Notes on the Learner's Book

Numbers (p4): point to the numerals and say their name in order together. Learners might like to refer back to this page later to remind them of the numbers one to ten.

Up to 10 (p5): count the items and look at the shape of the matching numeral.

Check up!

Sing a familiar song or rhyme together, allowing the learners to take the lead and supporting only when necessary.

More activities

Shirts (individuals)

You will need the *Shirts* photocopy master (CD-ROM).

Use the *Shirts* photocopy master to encourage learners to count or sing along the line, and to fill in the missing numbers.

My number (individuals)

You will need materials for decorating/printing, such as scrap paper and card, corks, buttons and bottle tops, and paint.

Learners readily recognise and say their age. Learners cut-out large numerals of their age and decorate it. Learners could print on their numeral using corks and other shapes dipped in paint. When a learner has a birthday, make sure they decorate a new number.

Order (groups)

You will need paper or card for making large 1 to 10 number cards and resources for making a washing line, such as string and pegs.

Make large number cards, with the number on both sides so learners can always see which number they are holding. Ten learners each hold a number card and move themselves into the correct order (from one to ten) in time with a chosen number song, which is being sung by the rest of the class. Ask each learner to give their card to a friend who doesn't have one, then repeat the activity using a different song or rhyme. Start with songs and rhymes up to 5 first. These number cards could also be pegged on a washing line as the learners sing a counting song. They can also be removed one at a time when counting back from ten to one.

Number rockets (groups)

You will need empty plastic drinks bottles and coloured sticky tape or coloured paper.

Learners put a different number on each differently coloured rocket. Learners line up the rockets in order, with 1 at the far right-hand side of the line. Learners will enjoy counting back along the line of rockets and shouting 'blast off' after saying 1.

Core activity 1.2: Counting to ten

LB: p6

Resources: (Optional: counting materials such as counters, straws, balls, sticks, beads, cubes, feathers, stones, beans, small bells, pompoms, mini cars, assorted buttons, bottle tops as well as commercial sets; assorted containers for learners to count into, such as small bowls, empty boxes and cartons; *Number tracks* photocopy master (chapter 4, p38); *0–9 digit cards* photocopy master (CD-ROM) for learners to label their counts with; a set of ten containers, each labelled with a different number. Provide equipment such as pens, paper and sticky labels for learners to make their own labels. Materials for decoration, such as paint, coloured paper, glue, pictures cut from magazines, pens and pencils; sheets of A4 paper and a stapler.)

Learners need lots of experience of counting to understand what a number really means, for example, to understand ‘the threeness of three’. Songs, rhymes and stories help learners to get the words in the right order, but unless they count items one by one and realise that the last number said is the total, learners cannot really count.

Stories often use contexts that the learners enjoy and this helps to give the counting a real purpose. Stories such as *Goldilocks and the three bears*, *The three billy goats Gruff* and others provide lots of opportunity to count to three. You might be counting bowls of porridge, bears or goats. This helps the learners to recognise that anything can be counted. Each country will have its own familiar traditional stories. Some counting stories will lead to activities that the learners can carry out to practise counting. If a story uses ten black spots in a large variety of pictures, learners can then make their own pictures with a particular number of coloured spots. Stories which focus on counting legs could be followed up by learners creating their own creature with a particular number of legs. And so on.

Actions and sounds can also be counted. Learners could tap drums, shake tambourines, clap or jump a particular number of times. They also need to count things they cannot touch, such as clouds, or things that are simply out of reach.

Opportunities for counting are all around us and learners will be happy to join in, even if the numbers go beyond the range they understand.

Look out for!

- Learners who frequently miscount and need more practice at touching and moving each object as it is counted. *Encourage them to slow down and exaggerate their movements so they can be sure of what has been counted and what still needs to be counted.*
- Learners who can confidently count objects up to ten. *Challenge them with questions such as, “What if there was one more?”*

Summary

Learners are able to accurately count to ten in a wide variety of situations.

Notes on the Learner's Book

How many? (p6): ask learners how many shells there are in each group. They could then draw a group of shells for a counting number they know, or for a number that is missing from the Learner's Book page.

Check up!

- Show the learners a small handful of items and invite them to count them with you.
- Alternatively, begin to count as you clap and encourage learners to join in then take over.

More activities

Counting box (individuals, groups or class)

You will need counting materials such as counters, straws, balls, sticks, beads, cubes, feathers, stones, beans, small bells, pompoms, mini cars, assorted buttons, bottle tops as well as commercial sets. Assorted containers for learners to count into, such as small bowls, empty boxes and cartons. Number tracks. Number cards for learners to label their counts with. A set of ten containers, each labelled with a different number. Pens, paper and sticky labels for learners to make their own labels.

Create a counting box for the learners to explore when they have completed an activity or during free time. Make the box interesting and enticing by decorating it as a treasure chest or something else that will appeal to the learners. Add sets of counting materials in assorted containers and some number tracks. Make sure the sets are of interest and change them regularly to ensure the learners are curious enough to revisit the box. Provide small bowls, boxes or containers for the learners to count into and number cards for learners to label their counts with. You could also provide a set of ten containers, each labelled with a number. Provide equipment such as pens, paper and sticky labels for learners to make their own labels.

Number street (class)

You will need empty boxes and materials for decoration.

Make a street of houses from empty boxes and other materials. Learners can complete the houses according to the house number. So house number one has one window, one door, one of anything the learners would like to include (tree, bush etc.). Arrange the houses into a street.

Opportunity for display

Display the houses made for 'Number street' along a drawn road. Make matching gardens too. Ask questions such as, "*Who might live here? How can you tell which number this house is?*"

Counting books (individuals or pairs)

You will need sheets of A4 paper, a stapler, glue, pictures and drawing materials.























Fold three sheets of paper in half and staple in the middle to form a book. Start with a large number 1 on the inside front cover and continue to number 10 on the inside back cover. You could draw these numerals and photocopy the sheets before stapling together. Learners then draw or stick the matching number of items on each page. Books could be themed: toys, bugs, animals and so on. Place the completed books in the book area for everyone to share. Alternatively, pair up the learners so that they interview one another to find out their interests, then illustrate the book according to those interests. When the learners deliver the counting books, make sure there is time for each pair to share the book together. Put the books in your reading area so that everyone can enjoy them.
















Games Book (ISBN 9781107646407)

Race to school (p1) is a game for up to four players. It reinforces accurate counting of small numbers.

Dice grid (p1) is a game for two players. It helps the learners to match their count and the numeral.

Numeral practice

1										
2										
3										
4										
5										

6									
7									
8									
9									
10	