## Students at the emergent counting stage



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## The nature of the learner

Students working within the emergent counting stage may be able to say some number words and may relate those words to the process of counting. However, the students cannot consistently reproduce the correct forward number word sequence (FNWS) or backward number word sequence (BNWS) between 0 and 10, when they are asked to count forward or backward.

Students at this stage are unable to correctly count collections of up to ten objects. They do not know all the number words and cannot coordinate the number words they know with items when asked to count a collection. That is, they cannot consistently match one number word to one item in the collection.

Students may be able to identify and name some numerals. However, they cannot consistently identify or name the numerals 0 to 10 or beyond.

Students at the emergent counting stage are yet to develop the skills required for true counting. That is, they are unable to correctly use counting to state the number of items in a collection and identify or name the numeral in order to label that collection.

Students at the emergent counting stage are working towards

- counting collections
- identifying numerals
- labelling collections.


## Teaching considerations

When developing explicit number programs for students working at the emergent counting stage, you need to consider:

## Identifying or naming

Identifying a numeral, when the name (in verbal form) has been provided for the student, is a different skill from naming a numeral which has been presented visually to the student.

Some students working within the emergent counting stage may have particular difficulty with naming numerals compared to identifying them.

You should ensure that students are given opportunities to consider and master both aspects.

The distinction between identifying and naming is emphasised in the following example.


Compare a student's response to being asked to point to the card with the numeral five on it and asking the student to say the number word when shown a numeral card.

In the first task the students need to identify the numeral in response to its spoken name, whereas in the second task the student needs to be able to name the written numeral.

## Developing strategies

Students working within the emergent counting stage often rely on a single strategy when dealing with number activities.

Students might, for example, have developed knowledge of the forward number word sequence (FNWS) from 1 to 5 . When asked to count collections, they would use their knowledge of the FNWS if the collection is limited to five items.

To support the development of numeral recognition, teachers should ensure that numeral cards are not always presented in sequence. When asked to identify the numeral 5 , students working within the emergent counting stage often rely on their knowledge of the FNWS and count the
numeral cards to find the fifth one, rather than spontaneously identifying the numeral.

## Scaffolding

To assist students at the emergent counting stage, scaffolding or support will be necessary. The following ideas assist in supporting the learner.

- Allow the students to work alongside other more capable students in the class.
- Model the activity before students are expected to complete the task independently.
- Allow extra time for the student to complete tasks.
- Develop tasks which repeat a concept using a variety of resources, thus providing revision.
- Limit the range of numerals being presented.



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## Where are they now?

- When asked to count from one, students produce some number words.
- They may have some knowledge of number words, but not in the correct sequence.


## Where to next?

Students :

- count orally to ten in the correct order
- name the number word before or after a given number
- match each number word to one, and only one, object when counting.


## Outcomes

The following activities provide opportunities for students to demonstrate progress towards the following outcomes: A student

ELFM 4: demonstrates one-to-one correspondence
NES1. 1 Counts to 30, and orders, reads and represents numbers in the range 0 to 20
NES1.3 Groups, shares and counts collections of objects, describes using everyday language and records using informal methods
WMES1.2 Uses objects, actions, imagery, technology and/or trial and error to explore mathematical problems
WMES1.4 Uses concrete materials and/or pictorial representations to support conclusions.

## LFN reference*

Emergent counting
Forward number word sequence
Numeral identification

[^0]
## How?

## Feather drop

Display to the students a row of canisters, such as empty film containers. Begin with three canisters and build up to five or beyond. Tell the students you have three feathers and then place them, one at a time, into the canisters. The students repeat the process of placing the feathers into the canisters.

Extend this activity by counting the feathers as they are dropped into the canisters. It is important to build the process of assigning one number word to one object.

Feathers from brightly coloured feather-dusters are suitable for this activity.


## Egg carton drop

This activity is similar to Feather drop. For this activity replace the feathers with counters and ask students to drop them into an egg carton, matching one counter to each cup. Cut the egg carton into parts, one part containing three cups, one containing four cups and one with five cups.

These activities are used to develop one-to-one correspondence. As this skill develops, introduce the sequence of number words when completing the activity.

## Handful of teddies

Organise students into pairs. The students take turns to pick up a handful of teddy bears and estimate how many they have picked up. One student then counts out the teddies to the other. The partner can check the count and repeat the process.

Follow this with one of the partners placing his or her teddies in a row. The second student then places a handful of teddies in a line, next to the partner's row. Encourage the students to compare the two rows of teddies and determine who has the greater number of teddies. This activity could be extended by having the students determine how many more teddies are in one line than are in the other line.

## Paper cup drop

Place a row of paper cups on the floor or on a table. Encourage the students to count the empty cups. Ask the students to drop one counter into each cup and to count the counters as they are dropped into the cups. Direct the students to empty the counters from the cups and count the group of counters.

You may extend the activity by asking students to match numeral cards with the total number of counters.

## Why?

Students need to know that a set number of objects has the same numerical quantity, no matter how they are arranged.

## Counting patterns

Lead the students in oral counting to ten. Coordinate body actions, such as clapping, clicking or stamping, with each number as it is counted. Alternatively, instruct the students to perform various body actions on alternate numbers, for example touching their shoulders on odd numbers and clapping on even numbers. Vary the activity to using voice patterns, such as counting softly on odd numbers and loudly on even numbers.

## Egg game

Provide each student with a base board (see blackline masters on pp. 58 and 59) displaying an outline of an egg. Cut a second egg outline into pieces to create a jigsaw. The first student rolls a die with a standard dot pattern and selects a piece of the "egg" jigsaw displaying a corresponding dot pattern. This piece is placed on top of the game board. Continue the game until all children have completed their egg.


## Ten pegs

Provide each student with ten clothes pegs and a length of cardboard displaying ten dots. Students take turns to roll a die and count the dots on the die. After counting the die pattern the student then takes a corresponding number of pegs and attaches them to the cardboard strip, matching each peg to a dot. Play continues until the students have attached pegs to all the dots on their strip of cardboard. They need to roll the exact number needed to finish.

## Ten teddies

This activity is similar to "Ten pegs". Change the cardboard strip to show ten teddies in a line (see BLM pp. 60 and 61). The student rolls the die, counts the dots and collects the correct number of plastic teddies to place onto the cardboard strip of teddies.


## Why?

Students need to be able to match a number word to an object in order to count perceived items.

When introducing the forward number word sequence, concentrate on number words 1 to 5 before moving to 1 to 10 .

At this stage concentrate on number words 1-5 when teaching the backward number word sequence.

## Throw and pin



This activity is similar to "Ten pegs". Substitute a fabric strip displaying ten large dots for the cardboard strip. The students take turns to roll a die. The number of dots on the uppermost face of the die indicates the number of safety pins to pick up. Students then attach each pin to a dot.

This activity should be completed with teacher supervision and attention given to the safety aspects.


## Coat hangers

Provide each student with a coat hanger and ten clothes pegs. The students take turns to roll a die displaying dot patterns and attach the corresponding number of pegs to the coat hanger. They continue until all ten pegs are attached to the hanger. The exact number needed to form ten must be rolled to finish.


## Ten frames

Provide each student with a ten frame (see BLM p.55) and ten counters. Students take turns to roll a die displaying dot patterns, count the dots and place the corresponding number of counters onto the ten frame. The exact number needed to complete the ten frame must be rolled to finish.

## Why?

Instant recognition of dot patterns can lead to strong visualisation or mental images for students. This visualisation will assist them in counting and problem-solving tasks.

Have students fill the ten frame horizontally across the top row first. This emphasises "fives" in the ten frame.

## Variation

## Ten frames

Substitute paperclips for counters. Students roll a die and collect the corresponding number of paperclips. They then slide them onto the ten frame squares (see BLM p.55).

Use the overhead projector to introduce and model ten-frame activities.


## Candle holders

Place candle holders upright in six containers. Each container should hold a different number of candle holders within the range of one to six. Students take turns to roll a standard die. After counting the dots on the uppermost face, students count out a corresponding number of candles. Students then find a container with the same number of candle holders and place the correct number of candles in the candle holders. Students continue until candles have been placed in all the holders.


Containers could be made from strawberry punnets or plastic food containers filled with foam, plasticine or playdough to enable the candle holders to remain upright.

## Pendulum swing

Construct a pendulum from plasticine and string. The teacher, or a nominated student, holds the pendulum, and the class joins in counting each swing.

## Variation

A metronome, if available, could be used to count along with each beat.

## Physical activities



Ask individual students to complete such actions as skipping with a rope, bouncing a ball, star jumps or hopping, while the rest of the class counts each action in unison.

## Popstick patterns

Distribute a pile of popsticks to the students. Each student is asked to count out five popsticks and use them to make a pattern. Students continue by making different patterns with five popsticks. The students then count the popsticks used for each pattern.


## Variation

Use other material such as tiles, coloured paper squares, toothpicks, straws, pattern blocks or unifix blocks to make patterns.

## Musical cushions

Place a number of cushions in a circle formation on the floor. Initially, begin with enough cushions so that there is one per student. Ask the students to count the cushions. This activity is played as for traditional musical chairs, with students skipping to music around the cushions. Once the music stops the students quickly sit down on a cushion. After a short period of time allow the students to stand up and then remove one of the cushions. Ask the students to count the cushions prior to playing the music. Continue the music and allow students to skip around the cushions again. Each time the music stops, the students find a cushion to sit on. Any student unable to find a cushion is out of the game.

Pose questions to the students which will encourage predicting and counting skills. For example, present the same number of cushions as children and ask the students to predict what will happen when the music stops.

Encourage determining the number before and after.

## Why?

Students need to be proficient in forward number word counting to move to counting on strategies.

## Where are they now?

Students are unable to identify and name all numerals 1-10.

## Where to next?

Students automatically recognise numerals 1-10.

## Outcomes

The following activities provide opportunities for students to demonstrate progress towards the following outcomes: A student

ELFM 4: demonstrates one-to-one correspondence
NES1.1 Counts to 30, and orders, reads and represents numbers in the range 0 to 20
NES1.3 Groups, shares and counts collections of objects, describes using everyday language and records using informal methods
PAES1.1 Recognises, describes, creates and continues repeating patterns and number patterns that increase or decrease
WMES1.1 Asks questions that could be explored using mathematics in relation to Early Stage 1 content

WMES1.4 Uses concrete materials and/or pictorial representations to support conclusions.

## LFN reference

Numeral identification
Forward number word sequence

## How?

## Posting blocks

Label containers with numerals 1 to 5 , one numeral for each container. Instruct students to drop the correct number of blocks into each container as indicated by the label on the outside. As the students become proficient in the range 1-5, extend the activity to numerals 1-10.

## Take a numeral

Provide the students with a set of numeral cards for the numbers one to six (see BLM p.57). Arrange the numeral cards face up on the floor in front of the students. The students take turns to roll a standard die and select a corresponding numeral card. If the card has already been taken the student forfeits a turn. Play continues until all cards have been taken.


Make multiple copies of each card as they will be used for many of the suggested activities.

## Mothers and babies

Duplicate and cut out cards displaying a set of bear cubs in the range one to ten (see BLM pp.62,63). Construct a second set of mother bear cards displaying numerals in the range 1-10. Students select a "cub card", count the cubs and match the card to a corresponding mother bear card. Students continue until all cards have been matched.


These activities are suitable for either partners or individuals. However, it may be beneficial to have a more competent student paired with a student at the emergent counting stage to support effective peer tutoring.

## Beehive

Construct base boards displaying beehives with numerals written on them (see BLM pp.64,65). Create a supply of cut-out bees. Students state the numeral written on the hive and collect the correct corresponding number of bees. They then attach the bees to the hive, using paperclips or foldback clips. Other students in the group should count the bees to confirm that the number of bees matches the numeral on the hive.



## Concentration

Make two sets of cards containing the numbers one to five. One set of cards should display dot patterns for each numeral and the other set display the numerals. Place the two sets of cards face down on a table forming two rows. Students take turns to turn over two cards. If the cards match, that is a dot pattern and a numeral card for the same number, the student keeps the pair. If the cards do not match, the student turns the cards back over. The game continues until all cards have been matched.

It is easier if the dot cards are on cardboard of a different colour from the numeral cards.


## Fences

Construct sets of fence base boards using the BLM on p. 56 and popsticks displaying numerals in the range 1 to 10 for each student or pair of students. Students match the numerals on the popsticks with the numerals written on the base boards. Extend this activity by constructing base boards displaying blank fences. The students sequence the numbered paddle pop sticks along the fence.


## Why?

Students need to name and identify numerals in order to record their mathematics.

Students need to be able to use the corresponding numeral for a set of objects.

## Hang it on the line

Hang a washing line (nylon rope or similar) across the chalkboard or between two chairs. Ask the students to peg numeral cards in the correct sequence onto the washing line. Vary this activity by having students peg the cards in a backwards sequence or by displaying some numeral cards on the line and asking students to replace the missing cards correctly.

## Sandwich boards

Attach coloured shoelaces to large numeral cards so they can be hung around the students' necks. Provide each student with a numeral card. Students move around the room to music. Once the music stops the students arrange themselves into a line in a correct forward or backward number sequence.

## Variations

Provide each student with a numeral card. Students collect the correct number of objects from around the room to match their card. For example, a student with the numeral card "three" might collect three pencils.

Distribute all but one of the numeral cards. Students organise themselves into a line to sequence their number cards and discover which numeral is missing.

## The price is right (higher/lower)

For this activity a leader thinks of a secret number. Display a vertical number line on the chalkboard to indicate the range in which the secret number lies. The leader asks the group to try and guess the "secret" number. The leader responds to the groups' guesses by stating if the secret number is higher or lower than the suggested number. Attach two pegs to the vertical number line. As the group make their guesses the leader can move the pegs to indicate the range in which the secret number lies.

## Guess the number

Display a number line in the range 1 to 10 on an overhead projector. Select a number in the range. Students attempt to guess the "secret" number. If the guess is incorrect, cover the numeral on the number line with a counter. Continue the activity until the students are able to identify the number correctly. As the students become more competent, extend the range of numerals.

## Count and classify

Construct numeral base cards and collections of objects for each number indicated on the numeral card. For example, for the numeral cards one to five collect one toy boat, two plastic cars, three rocks, four lids and five buttons. Students classify the objects. Ask the students to match the correct numeral card to the set.


Commercially produced kits are available.

## Numeral flip strip

A flip strip is a hinged cardboard strip. The hinge, usually a plastic spiral, joins two cardboard strips along the top edge. In this way the top cardboard strip can be lifted to reveal the bottom cardboard strip. The top piece of cardboard is cut into vertical strips. Numerals are written on the bottom piece of cardboard or on another piece of cardboard which can be attached between the two hinged strips.

Conceal a number line between the flaps of the flip strip. Direct students to determine the missing numerals, before, after, or between nominated numbers on the flip strip, by lifting the strips. Then answers can be verified.

Vary the beginning number on the numeral line so students do not memorise the numeral by its position. For example, you may begin with the numeral three instead of one.


Teacher: If I lift this flap tell me the number you can see.
Students: Three!
Teacher: Well, can you work out which number will be under this flap?
Students: Five!
Teacher: Let's lift the flap and check. Were you right?
Students: Yes!
Teacher: Now let's count on from three.
Students: Three, four, five.

## The number dance

Allow students to dance freely around the room to music. By using a prearranged signal, such as tapping a tambourine, indicate to the students that you are holding up a numeral card. The students then form groups with the number of people indicated by the numeral card and continue to dance in the group.

## Why?

Students need to know the corresponding numeral for a set of objects.

## What's in the square?

On a large sheet of cardboard construct a $5 \times 6$ grid. Along the top row of the grid write the numerals one to five, starting from the second column. Down the first column, starting from the second square, draw a different symbol in each square. Students complete the grid by drawing the correct number of shapes onto each blank square.

Alternatively, provide the students with cut-out shapes corresponding to those drawn in the first column. The students count out the correct number of shapes and place them appropriately on the grid.

|  |  | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | 4 | 5 |
| $\square$ |  |  |  |  |  |
| $\square$ |  |  |  |  |  |
| $\square$ |  |  |  |  |  |

Commercially produced kits are available.

## The number train

Construct a train from Lego ${ }^{\circledR}$ blocks or cut-off milk cartons. Display a numeral on each carriage of the train. Students place the correct number of items, such as Lego ${ }^{\circledR}$ people, counters or blocks, into each carriage. Instruct partners to count the items in each carriage to confirm that the collection of items corresponds with the numeral.


## Make a zoo

Construct clear plastic containers, such as strawberry punnets, displaying numerals in the range one to five and collections of zoo animals for each number indicated on the containers. For example, one elephant, two camels, three tigers, four zebras and five monkeys. Direct students to sort the animals and place each group into a plastic container, ensuring that the number of animals matches the numeral card on the container.

## Paperclip cards



Ask students to slide the correct number of paperclips onto numeral cards. Place the numeral cards in either a forward or backward counting sequence.

Vary this activity by asking students to form a chain of safety pins and attach it to the fabric strip with the corresponding numeral. This activity will need to be completed under teacher supervision and attention paid to safety aspects.

## Flowers in the vase



Label small plastic orange-juice containers with numerals. Ask the students to place a corresponding number of plastic flowers into each vase. Students should count the flowers in each vase to verify the count.


## Colourful clowns

Construct base boards with an outline of a clown wearing oversized trousers (see BLM p.72). Ten circles are drawn on the trousers. Students roll a die and collect a corresponding number of counters. The counters should all be of the same colour. Instruct the students to place the counters onto the circles on the clown's trousers. On the next roll the student repeats the process, using counters of a different colour. The process continues until all circles are covered. To finish, students must roll the exact number needed to cover all the circles. When all circles are covered, students make statements about their clown's trousers. For example, "My clown has three red circles, five green circles and two yellow circles on his trousers."


## Hidden treasure

Collect boxes to represent treasure chests and label them with numerals. Randomly place the "treasure chests" on the floor. Ask students to close their eyes while a "secret treasure" is hidden under one of the boxes. Students ask questions to determine which "chest" contains the treasure. For example, "Is the treasure under chest number four?" As a student nominates a chest, another student locates the chest displaying the nominated numeral and looks to see if the secret treasure is under the box.

## Peg boards

Construct ten frames from cardboard and punch a hole in the centre of each square large enough for golf tees to pass through without the head of the tee falling through the hole. Provide ten golf tees with each ten frame for the student. Students select a numeral card and place a corresponding number of tees into the ten frame.

## Variations

Students roll a die, collect the correct number of tees and place them into the ten frame.

Attach numeral tags to the end of each ten frame card.
Students read the numeral tag, then place the correct number of tees into the ten frame.


## Pick up chips

Construct a deck of dot pattern cards for numbers one to six with four of each pattern. Distribute five counters to each player and place 100 counters in a central pile. Shuffle the cards and place them face down in the centre of the table. Students take turns to take a card from the pile and pick up a corresponding number of counters from the central pile to add to their collection. That is, a student who draws a "three card" collects three counters from the central pile. The activity continues until all cards have been drawn. The student with the most counters wins. Vary the game by adding "magic numbers". For example, if a "magic two" is drawn, the child takes two counters from all other players. If a "crazy five" is drawn, the player puts five counters back into the central pile. A player who runs out of counters is out of the game.


I feel
This activity is designed for a pair of students. Instruct one partner to sit opposite a row of numeral cards. The other student stands behind the partner and taps him or her on the shoulder a certain number of times. The student who is sitting counts the number of taps and picks up the numeral card which corresponds to the number of taps.

## Numeral chairs

Attach numeral cards to the seats of chairs. Give each student in the group a card illustrating a group of objects. Students count the objects and, on a given signal, sit on the chair displaying a corresponding numeral card.

## King or queen for a day



Construct a crown for a student who will be the class Queen or King. Attach a numeral card to the crown. Other students present a collection of items to the Queen or King, corresponding to the numeral card.

## Object hunt

Construct picture cards showing different objects found in the classroom. The teacher should display the picture card and direct nominated students to move from the point where they are standing in the classroom to the actual object. The class counts the number of steps it takes the student to reach the object.

## Teddy bear race



Construct playing boards for each pair of students using the BLM on p.66. Line up plastic teddies at the start of the playing board, so that one teddy is on each numeral. Students take turns to roll a die and move a teddy one space each time its corresponding numeral is rolled. Play continues until all teddies reach "home" on their playing board.

## Patty papers

Present a collection of patty papers to the students. Write a numeral in the range one to ten on the inside of each patty paper. Instruct the students to place the correct number of items, such as counters, shells, beans or rocks, into each patty paper according to the numeral that is written on the bottom.


## Why?

Students need to recognise and identify numerals in order to record their mathematics.

Students need to know the corresponding numeral for a set of objects.

## Where are they now?

Students are unable to recognise and state the number of dots arranged in a standard die pattern for numbers one to six without counting the dots.

## Where to next?

Students automatically identify and name a number when shown standard dice patterns.

## Outcomes

The following activities provide opportunities for students to demonstrate these outcomes. A student:

ELFM 2: demonstrates an awareness of pattern
NES1.1 Counts to 30, and orders, reads and represents numbers in the range 0 to 20
WMES1.3 Describes mathematical situations using everyday language, actions, materials and informal recordings
WMES1.4 Uses concrete materials and/or pictorial representations to support conclusions.

## LFN reference

Subitising and spatial patterns

## Look and say

Hold up dot pattern cards for approximately one second each. Students state the number of dots that were shown on the card. This should be a fast "drill" activity to encourage automatic responses in students rather than the counting of dots.

## Look and say (overhead)

Make a pattern with transparent counters on the overhead projector and turn the light on for only a second. The students call out the number of dots they see. Switch the light of the projector back on to allow students to check their answer.

## Look and snap

Place numeral cards in front of the group of students about to play this game. Briefly flash a dot pattern card to the students in the group. The aim of the game is for the students to recognise the dot pattern, say the number of dots they see and locate the corresponding numeral card. Students "snap" the correct card by quickly placing their hand on the card. The first student to snap the correct card keeps it. The student with the most cards at the end of the game wins.


## Feel and find

Construct a set of dot pattern cards with raised dots. Using a scarf or other appropriate item, blindfold a student. Select one of the dot cards and show the card to the remainder of the group. Hand the card to the blindfolded student, allowing him or her to feel the card for a short period of time. Return the dot pattern card to the set. Remove the blindfold from the student and ask him or her to identify the dot pattern card previously held.

## More, fewer or the same?



Provide students with a pack of cards displaying dot patterns and a sorting tray (see diagram). Students draw one card from the pack and place it at the top of the sorting tray indicated by a star. As each successive card in
the pack is drawn the student places it into an appropriate box in the sorting tray. To do this the student will need to determine if the drawn card has the same number of dots, more dots or fewer dots than the one at the top of the tray.

This activity can be modified to be more specific by sorting cards into one-more-than or one-fewer-than the card at the top of the tray.


## Speedy dominoes

Distribute domino pieces to the players. This activity is played in the same way as regular dominoes, except that there is no turn taking. As soon as players see the opportunity to place a domino in the game, they may do so. The first player to correctly place all dominoes is the winner.

## Robot race

Provide each student with a set of ten dot pattern cards for numbers one to ten and a playing base board (see BLM pp. 68 and 69). A nominated person shuffles the cards and places them face down on the "YOU WIN" robot. Students then take turns to draw dot pattern cards from the pack and place them on a robot outline displaying a corresponding numeral. The first student to correctly place all cards and reveal the "YOU WIN" sign on the base board is the winner.

## Load the trucks

The same instructions apply as those used with Robot race. The truck base board is used instead of the robot base board (see BLM pp. 70 and 71. BLM on pp. 67 may also be used).


Snap
Construct a set of dot pattern cards with multiple copies of each pattern. A nominated person distributes the cards among the students. Students then take turns to place a card down to form a central pile. Instruct the students to place the cards face up so the group can easily see the card. As soon as matching pattern cards are placed one on top of the other, any student may "snap" the pile by placing a hand over the pile of cards. The first to "snap" the cards wins the pile and the game continues until one player has all the cards.

## Make a pattern

Provide students with ten counters and ask them to place them on the desk in front of them. Display a dot pattern using transparent counters on the overhead projector and flash the pattern to the students for approximately one second. The students quickly make the same pattern using the counters on their desks. Discuss the number of counters used to make the pattern.

## Why?

When introducing children to numbers in the range one to five we want them to develop strong mental images for those numbers. We want children to automatically recognise a group of five counters, for example.

When children instantly recognise a set of objects and are able to associate a number word with the set, the need for the child to count from one is eliminated.

## Assessment tasks

| Task | Student response | Assessment |
| :---: | :---: | :---: |
| T: "Start counting from one and I'll tell you when to stop." | S: States the forward number word sequence from one to ten accurately. | Does the student know the FNWS? |
| T: "Count backwards from ten to one." | S: States the backward number word sequence from ten to one accurately. | Does the student know the BNWS? |
| T: Displays a set of numeral cards from 0 to 10. <br> T: "Point to numeral (Do not place numeral cards in order. Do not ask numerals in sequence.) | S: Points without hesitation to the correct numeral as it is given by the teacher. | Can the student identify any or all of the numerals from 0 to 10 ? |
| T: Holds up numeral cards in the range from 0 to 10 . "Tell me the name of this numeral." | S: Without hesitation says the correct name of the numeral being displayed by the teacher. | Can the student name any or all of the numerals as they are displayed? |
| T: Holds five counters and openly displays them to the student. "How many counters do I have here in my hand?" | S: As s/he touches each counter s/he says a number word in correct sequence from one to five. | Does the student know and name the FNWS? Does the student have a one word, one counter match? |
| T: Displays a container of approximately 20 counters to the student. "Give me six counters from the pile." | S: Takes counters from the container and correctly says the FNWS until six is reached. | Does the student: <br> - know the FNWS? <br> - have a one word, one counter match? <br> - stop at six? <br> - have a concept of the number of items in a collection? |
| T: Displays a set of numeral cards from 0 to 10 and a large container of counters. Points to various numerals and each time says to the student: <br> T: "Make a pile of this many counters". | The student makes the correct collection of counters to match each numeral in the set displayed. | Does the student: <br> - know the FNWS? <br> - have a one word, one counter match? <br> - have a concept of the number of items in a collection? |

## 睤 Three－minute lesson breakers


－As students complete a lesson，have them count the number of steps they take in returning to a central position in front of the teacher．Teachers may then direct students to find another student who counted the same，one less，or one more step，than they did．
－The teacher，or a nominated student，leads the class in a game of Simon says，where a number has been nominated．For example，if the number three has been nominated，then every Simon says action should be done three times．
－The teacher nominates a number and students must look for a collection with that number of items．This should be played quickly so that students are encouraged to identify collections visually．
－Use routine classroom activities involving the calendar and roll marking，for example，counting the number of boys and girls at school and the number of students altogether．
－Students sit in a circle．A nominated student draws a numeral on another student＇s back．The second student must recognise the
 numeral and draw it on the back of the next student．This continues around the circle until the last student writes the numeral on the blackboard．

Class counting from one by ones．Record the highest number the class can reach．For example：＂Today we counted to ．．．＂



[^0]:    * Learning framework in number

