

RESOURCE PACK

CSS Early Standard

MATHEMATICS

for

NURSERY

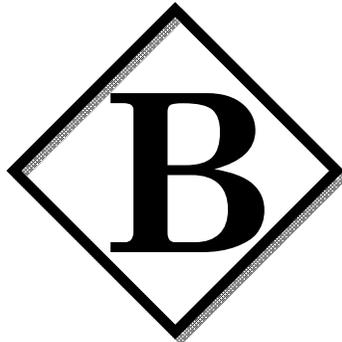


TABLE OF CONTENT

Sr No	Contents	Page #
First Term		
1	Primary Colours	2
2	Practice With Primary Numbers	5
3	What Comes After, Before and Between (0 to 9)	7
4	Backward counting (9 to 0)	9
5	Primary Shapes with Primary Colours	9
6	Secondary numbers after 9 (10 to 20)	11
7	What Comes After, Before and Between (11 to 20)	20
Second Term		
1	Backward counting (20 to 0)	
2	Comparison of Big and Small	
3	Secondary Colours	
4	Secondary Numbers (21 to 30)	
5	Concept of Many and Few	
6	Revision of Numbers (0 to 30)	
7	What Comes After, Before and Between (20 to 30)	
8	Backward counting (30 to 0)	
9	Comparison of Big, Bigger and Biggest	
Third Term		
1	Secondary Numbers	
2	What Comes After, Before and Between (30 to 40)	
3	Directions	
4	Subtraction	
5	Rough and Smooth	
6	Secondary Numbers (41 to 50)	
7	What Comes After, Before and Between (40 to 50)	
8	Identify the difference	
9	Assessments	

primary colours

Teaching objectives:

To make clear students with the primary colours red, blue and yellow.

Learning outcomes:

Students should be able to:

- ✧ Group objects according to their colour.
- ✧ Use the terms red, blue, and yellow correctly to identify colours.

Materials required:

- ✧ A selection of items that are blue, red or yellow, if possible with one identical item in each colour e.g. a red, yellow, and blue balloon or ball.
- ✧ Student sets of blue, red and yellow coloured pencils or crayons.
- ✧ Sheets of white paper.
- ✧ A large sheet of paper to make a poster, with three columns and the headings red, blue, and yellow.
- ✧ Page # 3 of CSS early standard Mathematics Book B.

Introduction

Begin by showing the students the red objects that you have brought into the lesson. Ask them to name the colour of the objects and if necessary, teach the name of the colour red. Ask the students if they can see any other red objects in the room.

Show the students the matching red and blue items and ask the students to tell you how they are the same and how they are different e.g.

both are balls, both are round, they are of the same size, but they are of different colours.

If necessary, teach the name of the colour blue and show the students the blue items you have brought into the lesson. Can they see any other blue items in the room?

Hold up an object and ask individual student to tell you what colour it is? Red or blue?

Teach the colour yellow in the same way, comparing identical objects before showing the collection of yellow objects.

Student activity

Ask the students to open their books at page 4. Next look at the three objects at the top right of the page (ball, umbrella and aeroplane), and draw a rough sketch of them on the board. Teach the names of the objects and check learning by asking the students to point to the objects in their books as you name them. Ask the students questions about the colours of the objects, e.g. ‘what colour is the ball?’ or ‘Is the umbrella red or yellow?’ Explain the task to the students and demonstrate by circling the aeroplane on your rough sketch before they draw the circles in their own books. Repeat this process for the other two groups of objects.

Review 1:

Make a poster to show the students’ favourite colours. Display the poster you have prepared and ask each student in turn to tell you which of the three colours is their favourite. Put a cross in the correct column each time. When the poster is complete, display it in the classroom and talk about their preferences, e.g. which is the favourite /least favourite colour?

Give each student a red, yellow, and blue pencil or crayon. Explain that you are going to say a colour and they should hold up the pencil of the correct colour. This activity will enable you to spot any student who is experiencing difficulty with learning the names. Finally give each student a

sheet of paper and ask them to draw a pattern or picture using the three colours. These can be used to make primary colours display in the classroom.

Review 2:

Do the activity on page # 3 of the book.

Note: At this stage it is not necessary for the students to learn the term primary colours.

Practice with Primary Numbers (0 to 9)

Teaching objectives:

- To practice writing the numerals 0–9

Learning outcomes:

Students should be able to:

- ✧ Demonstrate the correct pencil grip and posture.
- ✧ Write the numerals 0–9 with increasing accuracy.

Materials required:

- ✧ Mini-whiteboards, markers and erasers.
- ✧ Pages # 4, 5, 6, 7, 8, 9, 10 of CSS early standard Mathematics Book B.

Introduction:

Give each student a mini-whiteboard, marker and eraser. Explain that you are going to say a number or hold up a number of items (e.g. pencils or fingers) and they should write the number and hold up their work for you to see. This activity will enable the teacher to identify any student who is having difficulty writing numerals 0–9 and to provide extra support at a suitable time.

Student activity

Ask the students to open their books at page #4. Explain that they are going to practice writing the numbers 0 and 1, first by tracing and then by writing in the empty boxes. Make sure, before they start, that they are all sitting straight and holding their books and pencils correctly. Explain that it

is better to work slowly and produce neat, careful work rather than rush and make mistakes. Monitor their progress as they complete the task and praise all good work and effort. In the same way ask them to do the activities on pages # 5, 6, 7 and 8.

Review:

Do the activity on pages # 9 and 10 of the book.

What comes before, after and between (0 to 9)?

Teaching objectives:

- ✧ To help students complete a written number sequence.
- ✧ To revise “*before*”, “*after*” and “*in between*”.
- ✧ To help students write the number that comes before, after or in between given numbers.

Learning outcomes:

Students should be able to:

- ✧ Complete a written number sequence.
- ✧ Understand and use the terms before, after and in between correctly.
- ✧ Write the number that comes before, after or in between given numbers.

Materials required:

- ✧ About 10 student number cards for each student (any selection of numbers from 0 to 9).
- ✧ Pages # 11,12, 13 of CSS early standard Mathematics Book B.

Introduction:

Draw on the board (or prepare on paper) a number line. When a number line is complete, use it to revise the terms before, after and in between by asking questions about a number on the line, e.g., which number comes before 7? after 4?, in between 1 and 3? To encourage the students to use, point to a number and ask a student to tell you something about the number using the word before, after or in between, e.g. point to number 8 and ask a student to make a sentence about the number using the word after.

Student activity:

Ask the students to open their books at pages # 11,12 and 13. Make sure they understand the task and give them a set amount of time to complete it before checking their work as a class.

Ask them to look at page pages # 11, 12 and 13, explain each task, and ask them to complete all of the questions in a given amount of time. When you check their work, ask them to reply in sentences to practice the terms before, after and in between.

Example:

- ✧ As 2 comes between 1 and 3.
- ✧ As 3 comes after 2.
- ✧ As 4 comes before 5.

Review:

Ask the students to work in pairs. Give each student a set of cards and ask them to place the cards in a pile face down in front of them. The students should take turns to turn over a card and make sentences about the number it shows. For example, a student who turns over the number 2 could say, ‘It comes before 3.’ Students should award themselves a point for every correct sentence. Pairs should check each other’s scoring and ask the teacher if there is any doubt.

Backward Counting (9 to 0)

Follow the pattern on the book to understand the concept of backward counting.

Materials required

- ✧ Page # 14 of CSS early standard Mathematics Book B.

Primary shapes with Primary Colours

Objectives: To draw some basic shapes.

Required resources:

- ✧ Rectangular, circle or triangular shaped objects.
- ✧ Additional cut-outs of shapes.
- ✧ Glue.
- ✧ Shape sorting and colouring worksheet.
- ✧ Page # 15 of CSS early standard Mathematics Book B.

Activity 1:

- ✧ Display some objects that are circular, rectangular or triangular.
- ✧ Pick out some rectangular objects, e.g. a tile, book, a mirror.
- ✧ Draw a rectangle on the board and show how each of the objects has the same shape as the rectangle.
- ✧ Tell students, ‘This is a rectangular’ and ask students to repeat it three times.
- ✧ Repeat with some circular objects, e.g. a wall clock, a biscuit, a wheel.
- ✧ Repeat with some triangular objects as well.

Activity 2:

- ✧ Ask students to look at Activity at page # 15 of the book.

- ✧ Read the instruction, ‘Colour the circles in red, triangles in yellow and rectangles in blue.’
- ✧ First ask students to trace the shape of the rectangles in the air with a finger, after that ask the students to pick blue colour or crayon and fill in the rectangle.
- ✧ Repeat these steps to draw and colour the triangles and circles in yellow and red respectively.

Secondary Number After 9 (10 to 20) **Number “10”**

Teaching objectives

- ✧ To explain the concept of 10.
- ✧ To demonstrate and practice how to write the number 10.
- ✧ To explain that ten is the word form of the number 10.

Learning outcomes

Students should be able to:

- ✧ Count up to ten items.
- ✧ Write the number 10 by following verbal instructions and by tracing.
- ✧ Recognize that the word ten means the same as the number 10.

Materials required

- ✧ A large pencil or crayon for each student.
- ✧ A selection of sets of ten items, e.g. ten large wooden beads on a thread, ten building blocks, etc (you can arrange any ten items at your ease).
- ✧ Flashcards of numbers and words 1–10.
- ✧ A set of ten small items e.g. bottle caps, beads for each pair of students.
- ✧ Pages # 16, 17 of CSS early standard Mathematics Book B.

Introduction

Show the students one of the sets of ten items you have prepared, e.g. the beads on the thread. Count them with the students and as you count the last bead, say ten. Explain that ten means one more than nine. Do the same

with the other sets of items you have prepared, making it clear that each time that nine and one more makes ten, and asking the students to count with you.

Ask the students to count as they hold up their fingers one at a time. They will realize that they have ten fingers altogether. Draw a large number 10 on the board and explain that this is the sign that means ten. Explain that, unlike the numbers 1–9, ten is written using two numbers together, 1 and 0 (zero). Explain that it is very important to write the two numbers in the correct order.

Ask the students to trace the number in the air, using their whole arm and moving it from the shoulder. Demonstrate this and also select students who do this well to show the action to the class. Repeat the air tracing several times and then use any of the other techniques (sandpaper / velvet / finger paints / mini-whiteboards) for copying the number, and finally ask the students to draw the number on the palm of their hand.

Write the word ten on the board and explain that is how the number 10 is written as a word.

Student activity

Ask the students to open their books at page 16 and to tell you what they can see (balloons). Ask them to count the balloons with you and establish that there are ten of them.

Ask the students to look at page 17 and before asking the students to trace the large number 10, ask them to check their pencil grip and position. Ask the students to trace all the numbers carefully, starting at the top of each number. Check their work as they finish and praise neat, careful work.

Review:

Do the activity on page # 17 of the book.

Number “11”

Teaching objectives:

- ✧ To explain that eleven means a group of ten and one extra one.
- ✧ To help students count up to eleven items.
- ✧ To explain that the number 11 represents a group of ten and one extra one.
- ✧ To demonstrate and practice how to write the number 11.
- ✧ To explain that eleven is the word form of the number 11.

Learning outcomes:

Students should be able to:

- ✧ Explain that eleven means one group of ten and one extra one.
- ✧ Count up to eleven items.
- ✧ Write the number 11 by following verbal instructions and by tracing.
- ✧ Write the number 11 to represent one group of ten and one extra one.
- ✧ Recognize that the word eleven means the same as the number 11.

Materials required:

- ✧ A selection of groups of 10 plus extra items, e.g. a bundle of 10 pencils and a few extra pencils.
- ✧ 10 exercise books held together with an elastic band and a few extra exercise books.
- ✧ 10 plastic bottle tops / buttons in a clear plastic bag and a few extra bottle tops / buttons, etc.
- ✧ A sheet of A4 size paper folded or divided into 4 sections for each student.
- ✧ Coloured pencils or crayons.

☒ Pages # 18, 19 of CSS early standard Mathematics Book B.

Introduction:

Draw two boxes next to each other on the board. Above the one on the left (as you face the board) write tens and above the other write ones. Ask the students to clap their hands ten times. When they have finished, ask them how many sets of ten claps they did and write 1 in the tens box, explaining that they clapped one set of ten times. Ask them how many extra claps they did, and write 0 in the ones box. Ask them to read the number in the boxes (10) and explain that this number means one set of ten and no extras. Draw a second pair of boxes on the board below the first pair. Now ask the students to clap ten times and then add one extra clap. When they have finished, ask the same questions to establish that they clapped one set of ten times and one extra, and complete the boxes with 1 and 1. Ask if anybody knows the number you have written. If necessary, explain that it is eleven and it represents one set of ten and one extra.

Put out the sets of items you have prepared and ask a student to come and make a set of 11 pencils. When she/he has made the set, count them with the students (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and one more makes 11). Repeat this with the other items, each time pointing out that 11 is one set of ten plus one extra item.

Student activity

Ask the students to open their books at page 18. Talk a little about cows and how it is useful for us. Count the small cows and establish that there is a set of ten cows. Ask the students to draw round the set of ten. Ask them how many big cows there are and establish that a set of ten plus one extra makes 11, and then count all the cows.

Ask the students to look at the bottom of page 18 and help them to read the word eleven. Then ask them to trace carefully the large number 11 in the bottom of the page, first with a finger and then using a pencil. Give

them a set amount of time to write or draw the other numbers and to write 11 in the empty boxes. When they finish this they should colour the picture of the cow on page 18.

Review:

Do the activity on page # 19 of the book.

Number “12”

Teaching objectives:

- ✧ To explain that twelve means a group of ten and two extra ones.
- ✧ To help students count up to twelve items.
- ✧ To explain that the number 12 represents one group of ten and two extra ones.
- ✧ To demonstrate and practice how to write the number 12.
- ✧ To explain that twelve is the word form of the number 12.

Learning outcomes:

Students should be able to:

- ✧ Explain that twelve means one group of ten and two extra ones.
- ✧ Count up to twelve items.
- ✧ Write the number 12 by following verbal instructions and by tracing.
- ✧ Write the number 12 to represent one group of ten and two extra ones.
- ✧ Recognize that the word twelve means the same as the number 12.

Materials required:

- ✧ A selection of groups of 10 plus extra items, e.g. a bundle of 10 pencils and a few extra pencils.
- ✧ 10 exercise books held together with an elastic band and a few extra exercise books.
- ✧ 10 plastic bottle tops / buttons in a clear plastic bag and a few extra bottle tops / buttons, etc.
- ✧ A sheet of A4 size paper folded or divided into 4 sections for each student.
- ✧ Coloured pencils or crayons.
- ✧ Pages # 20, 21 of CSS early standard Mathematics Book B.

Introduction

Begin by writing the numbers 10 and 11 on the board and asking the students to tell you what each number represents (one set of ten and no extras; one set of ten and one extra).

Draw two boxes next to each other as for the previous lesson. Ask the students to nod their heads ten times and then nod two more times. When they have finished, ask them how many sets of ten nods they did and write 1 in the tens box, explaining that they nodded one set of ten times. Ask them how many extra nods they did, and write 2 in the ones box. Ask if anybody knows the number you have written. If necessary, explain that it is twelve and it represents one set of ten and two extra ones.

Put out the sets of items you have prepared and ask a student to come and make a set of 12 bottle tops. When she/he has made the set, count them with the students (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, and two more make 12). Repeat this with the other items, each time pointing out that 12 is one set of ten plus two extra items.

Student activity:

Ask the students to open their books at page 20. Ask the students to count ten of the small cats and draw a circle around the set. Ask them how

many extra cats there are (2) and establish that a set of ten plus two extra ones makes 12, and then count all the cats.

Ask the students to look at the bottom of page 20 and help them to read the word twelve. Then ask them to trace carefully the large number 12 in the box at the bottom of the page, first with a finger and then using a pencil. Emphasize that the numbers must be written in the order shown, the number of tens coming before the number of ones.

Give them a set amount of time to draw or write the other numbers and to write 12 in the empty boxes. When they finish this they should colour the picture of the two cats on page 20.

Review:

Do the activity on page # 21 of the book.

Number “13”

Teaching objectives:

- ✧ To explain that thirteen means a group of ten and three extra ones.
- ✧ To help students count up to thirteen items.
- ✧ To explain that the number 13 represents one group of ten and three extra ones.
- ✧ To demonstrate and practice how to write the number 13.
- ✧ To explain that thirteen is the word form of the number 13.

Learning outcomes

Students should be able to:

- ✧ Explain that thirteen means one group of ten and three extra ones.
- ✧ Count up to thirteen items.
- ✧ Write the number 13 by following verbal instructions and by tracing.

- ✧ Write the number 13 to represent one group of ten and three extra ones.
- ✧ Recognize that the word thirteen means the same as the number 13.

Materials required:

- ✧ A selection of groups of 10 plus extra items, e.g. a bundle of 10 pencils and a few extra pencils.
- ✧ 10 exercise books held together with an elastic band and a few extra exercise books.
- ✧ 10 plastic bottle tops / buttons in a clear plastic bag and a few extra bottle tops / buttons, etc.
- ✧ A sheet of A4 size paper folded or divided into 4 sections for each student.
- ✧ Coloured pencils or crayons.
- ✧ Pages # 22, 23 of CSS early standard Mathematics Book B.

Introduction:

Begin by writing the numbers 10, 11 and 12 on the board and asking the students to tell you what each number represents (one set of ten and no extras; one set of ten and one extra, one set of ten and two extras).

Draw two boxes next to each other as for the previous lesson. Ask the students to nod their heads ten times and then nod three more times. When they have finished, ask them how many sets of ten nods they did and write 1 in the tens box, explaining that they nodded one set of ten times. Ask them how many extra nods they did, and write 3 in the ones box. Ask if anybody knows the number you have written. If necessary, explain that it is thirteen and it represents one set of ten and three extra ones.

Put out the sets of items you have prepared and ask a student to come and make a set of 13 bottle tops. When she/he has made the set, count them with the students (1,2, 3, 4, 5, 6, 7, 8, 9, 10, and three more make 13).

Repeat this with the other items, each time pointing out that 13 is one set of ten plus three extra items.

Student activity

Ask the students to open their books at pages 22 and 23. Talk about the mangoes and make sure the students circle a group of ten small mangoes and count the extra three big mangoes to make one set of ten and three extra ones (13).

Review:

Do the activity on page # 23 of the book.

Number “14”

Teaching objectives:

- ✧ To explain that fourteen means a group of ten and four extra ones.
- ✧ To help students count up to fourteen items.
- ✧ To explain that the number 14 represents one group of ten and four extra ones.
- ✧ To demonstrate and practice how to write the number 14.
- ✧ To explain that fourteen is the word form of the number 14.

Learning outcomes

Students should be able to:

- ✧ Explain that fourteen means one group of ten and four extra ones.
- ✧ Count up to fourteen items.
- ✧ Write the number 14 by following verbal instructions and by tracing.
- ✧ Write the number 14 to represent one group of ten and four extra ones.

- ✧ Recognize that the word fourteen means the same as the number 14.

Materials required:

- ✧ A selection of groups of 10 plus extra items, e.g. a bundle of 10 pencils and a few extra pencils.
- ✧ 10 exercise books held together with an elastic band and a few extra exercise books.
- ✧ 10 plastic bottle tops / buttons in a clear plastic bag and a few extra bottle tops / buttons, etc.
- ✧ A sheet of A4 size paper folded or divided into 4 sections for each student.
- ✧ Coloured pencils or crayons.
- ✧ Pages # 24, 25 of CSS early standard Mathematics Book B.

Introduction:

Draw two pairs of boxes on the board headed tens and ones. In the first set write the number 13 and ask the students to tell you the name of the number (13) and what the numbers represent (one set of ten and three extra ones). Ask a student to come to the board and write in the second set of boxes the number that represents one set of ten and four extra ones, (14). When this has been done correctly, ask if any student knows the name of the number, or tell them that it is fourteen. Ask one or two students to make a set of fourteen using the items you have prepared.

Student activity:

Ask the students to open their books at pages 24, 25 and proceed as for given instructions. Make sure the students circle a group of ten small fish and count the extras to make one set of ten and four extra ones (14).

Review:

Do the activity on page # 25 of the book.

Number “15”

Teaching objectives:

- To explain that fifteen means a group of ten and five extra ones.
- To help students count up to fifteen items.
- To explain that the number 15 represents one group of ten and five extra ones.
- To demonstrate and practice how to write the numeral 15.
- To explain that fifteen is the word form of the number 15.

Learning outcomes

Students should be able to:

- Explain that fifteen means one group of ten and five extra ones.
- Count up to fifteen items.
- Write the number 15 by following verbal instructions and by tracing.
- Write the number 15 to represent one group of ten and five extra ones.
- Recognize that the word fifteen means the same as the number 15.

Materials required:

- ✧ A selection of groups of 10 plus extra items, e.g. a bundle of 10 pencils and a few extra pencils.
- ✧ 10 exercise books held together with an elastic band and a few extra exercise books.
- ✧ 10 plastic bottle tops / buttons in a clear plastic bag and a few extra bottle tops / buttons, etc.
- ✧ A sheet of A4 size paper folded or divided into 4 sections for each student.
- ✧ Coloured pencils or crayons.

- ✧ Pages # 26,27,28,29 of CSS early standard Mathematics Book B.

Review:

- ✧ Give the students the paper and coloured pencils or crayons and ask them to draw a set of 15 items in the second section and write the number 15.
- ✧ Do the activity on pages # 25, 28 and 29 of the book.

Number “16”

Teaching objectives:

- To explain that sixteen means a group of ten and six extra ones.
- To help students count up to sixteen items.
- To explain that the number 16 represents one group of ten and six extra ones.
- To demonstrate and practice how to write the numeral 16.
- To explain that sixteen is the word form of the number 16.

Learning outcomes

Students should be able to:

- Explain that sixteen means one group of ten and six extra ones.
- Count up to sixteen items.
- Write the number 16 by following verbal instructions and by tracing.
- Write the number 16 to represent one group of ten and six extra ones.
- Recognize that the word sixteen means the same as the number 16.

Materials required:

- ✧ A selection of groups of 10 plus extra items, e.g. a bundle of 10 pencils and a few extra pencils.

- ✧ 10 exercise books held together with an elastic band and a few extra exercise books.
- ✧ 10 plastic bottle tops / buttons in a clear plastic bag and a few extra bottle tops / buttons, etc.
- ✧ A sheet of A4 size paper folded or divided into 4 sections for each student.
- ✧ Coloured pencils or crayons.
- ✧ Pages # 30, 31 of CSS early standard Mathematics Book B.

Review:

- ✧ Give the students the paper and coloured pencils or crayons and ask them to draw a set of 16 items in the second section and write the number 16.
- ✧ Do the activity on page # 31 of the book.

Number “17”

Teaching objectives:

- To explain that seventeen means a group of ten and seven extra ones.
- To help students count up to seventeen items.
- To explain that the number 17 represents one group of ten and seven extra ones.
- To demonstrate and practice how to write the numeral 17.
- To explain that seventeen is the word form of the number 17.

Learning outcomes

Students should be able to:

- Explain that seventeen means one group of ten and seven extra ones.
- Count up to seventeen items.
- Write the number 17 by following verbal instructions and by tracing.

- Write the number 17 to represent one group of ten and seven extra ones.
- Recognize that the word seventeen means the same as the number 17.

Materials required:

- ✧ A selection of groups of 10 plus extra items, e.g. a bundle of 10 pencils and a few extra pencils.
- ✧ 10 exercise books held together with an elastic band and a few extra exercise books.
- ✧ 10 plastic bottle tops / buttons in a clear plastic bag and a few extra bottle tops / buttons, etc.
- ✧ A sheet of A4 size paper folded or divided into 4 sections for each student.
- ✧ Coloured pencils or crayons.
- ✧ Pages # 32, 33 of CSS early standard Mathematics Book B.

Review:

- ✧ Give the students the paper and coloured pencils or crayons and ask them to draw a set of 17 items in the second section and write the number 17.
- ✧ Do the activity on page # 33 of the book.

Number “18”

Teaching objectives:

- To explain that eighteen means a group of ten and eight extra ones.
- To help students count up to eighteenth items.
- To explain that the number 18 represents one group of ten and eight extra ones.
- To demonstrate and practice how to write the numeral 18.

- To explain that eighteen is the word form of the number 18.

Learning outcomes

Students should be able to:

- Explain that eighteenth means one group of ten and eight extra ones.
- Count up to eighteenth items.
- Write the number 18 by following verbal instructions and by tracing.
- Write the number 18 to represent one group of ten and eight extra ones.
- Recognize that the word eighteenth means the same as the number 18.

Materials required:

- ✧ A selection of groups of 10 plus extra items, e.g. a bundle of 10 pencils and a few extra pencils.
- ✧ 10 exercise books held together with an elastic band and a few extra exercise books.
- ✧ 10 plastic bottle tops / buttons in a clear plastic bag and a few extra bottle tops / buttons, etc.
- ✧ A sheet of A4 size paper folded or divided into 3 sections for each student.
- ✧ Coloured pencils or crayons.
- ✧ Pages # 34, 35 of CSS early standard Mathematics Book B.

Review:

- ✧ Give the students the paper and coloured pencils or crayons and ask them to draw a set of 18 items in the second section and write the number 18.
- ✧ Do the activity on page # 35 of the book.

Number “19”

Teaching objectives

- To explain that nineteen means a group of ten and nine extra ones.
- To help students count up to nineteen items.
- To explain that the number 19 represents one group of ten and nine extra ones.
- To demonstrate and practice how to write the number 19.
- To explain that nineteen is the word form of the number 19.

Learning outcomes

Students should be able to:

- Explain that nineteen means one group of ten and nine extra ones.
- Count up to nineteen items.
- Write the number 19 by following verbal instructions and by tracing.
- Write the number 19 to represent one group of ten and nine extra ones.
- Recognize that the word nineteen means the same as the number 19.

Materials required:

- ✧ A selection of groups of 10 plus extra items, e.g. a bundle of 10 pencils and a few extra pencils.
- ✧ 10 exercise books held together with an elastic band and a few extra exercise books.
- ✧ 10 plastic bottle tops / buttons in a clear plastic bag and a few extra bottle tops / buttons, etc.
- ✧ A sheet of A4 size paper folded or divided into 3 sections for each student.
- ✧ Coloured pencils or crayons.
- ✧ Pages # 36, 37 of CSS early standard Mathematics Book B.

Review:

- ✧ Give the students the paper and coloured pencils or crayons and ask them to draw a set of 19 items in the second section and write the number 19.
- ✧ Do the activity on page # 37 of the book.

Number “20”

Teaching objectives:

- ✧ To explain that twenty means two groups of ten and no extra ones.
- ✧ To help students count up to twenty items.
- ✧ To explain that the number 20 represents two groups of ten and no extra ones.
- ✧ To demonstrate and practice how to write the numeral 20.
- ✧ To explain that twenty is the word form of the number 20.

Learning outcomes

Students should be able to:

- ✧ Explain that twenty means two groups of ten and no extra ones.
- ✧ Count up to twenty items.
- ✧ Write the number 20 by following verbal instructions and by tracing.
- ✧ Write the number 20 to represent two groups of ten and no extra ones.
- ✧ Recognize that the word twenty means the same as the number 20.

Materials required:

- ✧ 2 sets of 10 items, e.g. 2 bundles of 10 pencils, 2 bunches of 10 balloons, etc.
- ✧ A ball.
- ✧ Paper and coloured pencils or crayons.
- ✧ Pages # 38,39,40,41 of CSS early standard Mathematics Book B.

Introduction:

Draw two sets of boxes on the board, headed tens and units, as in previous lessons. Write the number 19 in the first set of boxes and elicit from the students that it means one set of ten and nine extra ones. Now write the number 20 in the second set of boxes and ask the students to tell you what it represents. If necessary, explain that it stands for two complete sets of ten and no extra ones. Explain that the number is twenty.

Show the students the materials you have prepared; count each bundle in turn to establish that there are two sets of ten, and then count all of the items, from 1–20. Ask the students to clap twenty times, counting in two sets of ten claps.

Review:

- ✧ Ask the students to form a circle and play the ball game to practice counting from 1–20. Give the students the paper and coloured pencils or crayons and ask them to draw a set of 20 items in the last section and write the number 20.
- ✧ Do the activity on pages # 39, 40, 41 of the book.

What Comes After, Before And Between (11 to 20)?

Teaching objectives

- ✧ To help students complete a written number sequence
- ✧ To revise before, after and in between
- ✧ To help students write the number that comes before, after or in between given numbers

Learning outcomes

Students should be able to:

- ✧ Complete a written number sequence.
- ✧ Understand and use the terms before, after and in between correctly.
- ✧ Write the number that comes before, after or in between given numbers.

Materials required

- ✧ About 10 student number cards for each student (any selection of numbers from 11 to 20).
- ✧ Pages # 42, 43, 44 of CSS early standard Mathematics Book B.

Introduction

Draw on the board (or prepare on paper) a number line. When a number line is complete, use it to revise the terms before, after and in between by asking questions about a number on the line, e.g., which number comes before 17?, after 14?, in between 11 and 13? To encourage the students to use the terms, point to a number and ask a student to tell you something about the number using the word before, after or in between, e.g. point to number 18 and ask a student to make a sentence about the number using the word after.

Student activity

Ask the students to open their books at pages # 42,43 and 44. Make sure they understand the task and give them a set amount of time to complete it before checking their work as a class.

Ask them to look at page pages # 42, 43 and 44, explain each task, and ask them to complete all of the questions in a given amount of time. When you check their work, ask them to reply in sentences to practice the terms before, after and in between.

Example:

- ✧ As 12 comes between 11 and 13.
- ✧ As 13 comes after 12.
- ✧ As 14 comes before 15.

Review

Ask the students to work in pairs. Give each student a set of cards and ask them to place the cards in a pile face down in front of them. The students should take turns to turn over a card and make sentences about the number it shows. For example, a student who turns over the number 12 could say, ‘It comes before 13.’ Students should award themselves a point for every correct sentence. Pairs should check each other’s scoring and ask the teacher if there is any doubt.