



Methodical Counting

Lesson Plan: Class 01 / LCR / 02



Overall goal of the lesson	Methodical counting, how to count such that each object gets counted only once, various strategies used to count correctly, counting from a number other than 1.
Prior knowledge required	Knowledge of numbers 1 to 20, Class 01 / LCR / Period 01 (preferable, not necessary)

MODULE 1: **Module time:** 35 minutes

Goal:	Methodical Counting
Description:	<p>The focus of this class is methodical counting of objects, so that each object gets counted once. It also highlights some strategies to count correctly such as:</p> <ul style="list-style-type: none">> By moving the counted objects from one side to another once counted.> Using objects drawn on notebooks (which cannot be moved): by ticking off each counted drawing. <p>Besides teaching students different ways to count correctly, it highlights the concept of counting from a number other than 1.</p>
Material required:	<p>Physical:</p> <p>For the student - Printed copy of the worksheet 01-LCR- 02_WS.docx for each student, pencil and eraser.</p> <p>For the teacher - Blackboard, Laptop, internet connection, paper and pencil , a few coins to perform counting exercise.</p>
Procedure Summary:	<ol style="list-style-type: none">1. Refer to the presentation accompanying this lesson plan Class 01 - P02 - LCR02 - PPT.pptx. During preparation stage, please refer to the notes section of each slide, as it has specific comments and insights in addition to the ones mentioned in this lesson plan.2. At the end of the class, distribute the worksheet copy 01-LCR- 02_WS.docx to the students.3. Ask the students to complete the worksheet exercises to determine whether they have understood the lesson. It can also be given out as homework.
Procedure Details:	<p>Slide #2: Begin the class by greeting children loudly and ask them if they can see the slide projected clearly. Ask children if they see any birds on the slide. How many birds? At this point, draw their attention to the table of contents, the three bullets. Say aloud and let children know that in today's class we will cover numbers and counting, some methods or ways by which they can count correctly. Tell them we will discuss what is counting 'right' or 'correctly' later once we reach to that part of the lesson plan / class. Lastly, we will also learn that counting can also be started from a number other than 1. We will try to figure out when we need to begin counting from 1 and when to count from a number other than 1.</p> <p>Slide #3: Before we begin studying, let's play a game. Note to the teacher: This game is about subitizing which is a skill that can be honed at kindergarten. Subitizing means instantly seeing and knowing how many instead of counting one by one. Game is a means to warm up students for the methodical counting class. In this game, you ask children to show up their hand, any hand. Ask them how many fingers are there in one hand. Some children may be confused and say 4 fingers and 1 thumb, which is correct technically. For now, you can tell them that for this game we will count the thumb as a finger too. So there</p>

are 5 fingers in a hand.

Next, ask them to show both hands and tell how many fingers now? Ask them if they can tell without counting each finger one by one.

Answer is 10.

Ask the students to keep their hands down on the desk. We will play a bit more, let's move on the next slide.

Slide 4: Now the teacher shows them 2 fingers of one hand (fold the remaining behind your palm). Ask them to answer how many fingers - they are not allowed to count 1,2 and so on. Tell them, simply look at teacher's hand and speak out the number aloud. Number should be same as the number of fingers that the teacher shows. Try a few more numbers as shown in pictures on Slide 4. This slide has animations. One click shows pictures and second click reveals the answers. It shows pictures of hands with different number of fingers that are pointed to indicate a number. Let children guess and tell the correct number before you reveal the answers on the slide. Now you say that the game is over. Ask students if they did enjoy the game? Let them say loudly - yes. If they are not speaking ask them if they had their breakfast / snack - where is all the energy? Let the students know that this game sharpens skills to count quickly in our mind - simply see some objects and know quickly how many. Do not introduce subitizing term to them it is only for the teacher (Std 1).

Slide #5: Move on to Slide #5. Let us understand what does counting correctly mean. Counting Right or counting correctly means that when you count, each object must be counted only once. No object should be counted more than one time. Ask them what happens if we count one object more than once - it is a counting mistake - we will get the wrong count of objects. Let us understand this by an example. Let us look at the smiley faces on the left hand side of the slide. The correct way to count them is one by one such that every object gets touched or counted only once. Notice the arrows - we will go over the dotted path and count smileys one by one. This is the correct way because we counted every smiley only once. Now look at the smiley's on the right hand side. Notice the dotted path - this is example of someone who is counting wrong. If you follow the dotted path, you will see that one smiley got counted more than once. That is why the answer is wrong. Can you tell which smiley got counted more than once? Answer 3rd smiley. Incorrect answer is 6. The correct answer is 5.

Slide #6: There are many ways to count correctly. Let us learn what are the different ways or 'methods' to count correctly. In this slide we have simply listed the methods. We will go over the next few slides and learn more about these methods one by one.

Slide #7: Use the blackboard to give examples for the first method. "Speaking out aloud while counting". Let us take an example - write 1,2,3,4 on the blackboard and tell children to say them loudly as you write. When you stop, ask them how many numbers were written on the board. What is the count? Answer = 4

Slide #8: Let us now try the second method of counting "Touch and count each object". Example - Ask children to touch all legs of their desk and count how many legs each desk has. You can also ask each student to touch and count the number of buttons on their shirt. Ask them to not look at the buttons but look at the board while they touch and count the buttons on their shirt by feeling them. Tell them - you are smart kids - you can count even without seeing the objects. Tell them to try this trick if they are at home before they go to

bed and there is no light in the room.

Slide #9: We have completed 2 methods or 2 ways to count. Do you remember what they are? Ask children to repeat loudly after you as you remind them of method 1 and method 2. Next we will learn about Method 3 - "Move and count every item". Show them the animation on slide 9. It has some objects shown on top right, we will ask the computer to move them one by count while we count them. Say aloud how many objects? Answer 6. Let us take one more example - Call one of the students in front of the class near the teacher's desk. Give him a bunch of coins. Ask him to put them in a pile on the teacher's desk. Now he has to move coins one by one, keep it on other corner of the teacher's desk and count them as he moves them one by one. After he completes, ask him what is the count of coins? Ask another student to come and repeat the process. Do the counts match? What is the correct count? Let's us check together. Now the teacher can repeat the process of moving coins and showing them to the class while rest of the class counts loudly 1,2,3...until all coins are moved from the pile to the other side of teacher's desk.

Slide #10: This slide shows teh 4th method "Draw objects in your notebook and count. " to count correctly. Show students the animation on the slide #10. There are a bunch of heart shapes and then we ask the computer to draw them one by one in a notebook and then we count them. Another Example - Ask children to draw a small square in their notebook for each electric light in the class (or window in the class - if there are more than one). Then ask them to count the number of squares in their notebook. The count of squares is the count of windows (or light) in the classroom. This is how we can draw and count as we draw.

Slide #11: Lastly, the method to count correctly is to "Repeat - count once again and check". Illustrate this by the animation in the slide - it shows how to count the smiley faces and then retrace back and count again to check. Another Example - Ask children to count the number of books (or notebooks) in their school bag and write down the count on their notebook. Now ask them to repeat the process and check if they got the same count. You can make it interesting (if time permits), by asking the children to check the count of books for their neighbouring student.

Slide #12: Activity for children - Count and check The instructions are listed on the slide. The teacher may choose to make groups of students and ask them to pool their school diary together and count them using any of the method. Later, ask them to recount and check if everyone got the same count. Alternatively, to keep things simple and in the interest of time, you could choose to perform the individual activity in the slide.

Slide #13: This slide summarizes the different ways or methods to count correctly that were listed in previous slide. Do a quick recap with children to reinforce the different methods. Ask children which is their favorite method? Ask them if they can use any method anytime? Answer no. You cannot always move objects and count (counting stars :-), or counting animals that are moving. Ask them how can we count something that is moving - say animals in a herd or birds flying together? Answer - take a picture, or pause the movie - touch and count them.

Slide #14: Counting things that move. Ask children to observe slide #15 carefully and count the number of things shown there. What is the total count? Answer 11. Ask them how many of these objects move? Ask them to count them. Answer 5. (Car, aeroplane, cycle, clock, bug/caterpillar). Let the students know that while counting they began like this - car 1, aeroplane 2, cycle 3 and so on. The counting began from 1. Let us now find out if we

	<p>always count from 1 or if we can count from a number other than 1.</p> <p>Slide #15: Now let us move onto another topic - counting from a number other than 1. The slide is self explanatory. It explains when and how to count from a number other than 1. The next slide has an activity related to this topic. After that activity, refer to notes of Slide 16 to highlight when this method is used. Two examples are given.</p> <p>Slide #16: Activity - Show them the dice on slide 16 and ask them what number does it represent? Answer 5. Ask them to count after the number shown on the dice and stop when the count is 10. Now ask them to repeat the counting exercise starting from the number shown on the dice on the slide - there are three more examples shown. Let them know this is called counting from a number other than 1. We started counting at the number shown on dice. When do we do so? See if someone can give an example. Answer: When we have already counted some objects and more objects are added to the bunch. For example: We counted coins on the teacher's desk. Now if the principal comes and gives another handful of coins - we will not count them all over again. we know how many coins we already had. We will simply start from that count and then move the principal's coin one by one in a similar manner to count total number. Similarly, in a car parking if there already are some cars and some more cars come in, we can count total cars by starting to count from the last 'count' of cars in the parking.</p> <p>Slide #17: Activity - This slide gives instructions on how to perform the activity. The idea is to involve students - all those whose names begin with alphabet 'A' stand up while the rest of the class decides and uses one of the methods of counting to count them.</p> <p>Slide #18: Recap. Say out aloud - read the topics learnt in today's class with the students. Give them the activity sheet and ask them to solve it (as homework or if time permits in the class).</p>
Assessment:	Worksheet activities and questions.
Information Broadcast:	Homework: Let children find out whether their siblings and parents can count by simply looking at the number of fingers shown in one or two hands. Ask them to play that game with their friends at home. Another way to play the game is - while they are waiting at the traffic signal - ask them if they can instantly count how many buses are standing on the opposite side of the signal waiting for the light to turn green - without counting them one by one - just look at them and tell how many.