

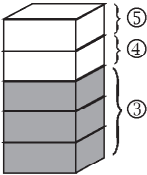
Learning Outcomes

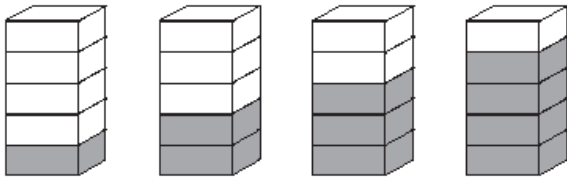



2.1.1	Arrange objects to the following characteristics
	a. size b. length c. height d. coin
4.2.1	Count from 1-10
4.2.2	Match numbers from 1-10 to the objects
4.2.3	Match the objects with the numbers 1-10
4.2.4	Count the numbers 10 - 1 in descending order
6.1.3	Comparison

Page	Learning Outcomes	Objectives	Teaching steps and activities	Teaching aids
			<p>1. At first, teachers use counting stick or other items to do showing to introduce number from 11-15 by combining several objects. This is to let children understand 1 ten or several ones form each number, eg. 12 is formed by 1 ten and 2 ones. Thus, 10 and 2 is equal to 12.</p> <p>2. To do the following activity for the purpose of enhancing learning outcomes:</p> <ol style="list-style-type: none"> Teachers order children to use objects to represent digit number. For example: Arrange the combination of 11 objects. Do matching between objects combination and flashcards For matching between flashcards and mathematical cards. <p>3. After object showing, can use page 9 and 10 in the textbook as material to guide children to say numbers on pages 11-15.</p> <p>4. Need to guide children to use correct way of number writing when teaching numbers 11-15. At first, can ask children to do exercise in the air and also in the column, then practise individually in the workbook. Should mention place value of tens and place value of ones must be written equally in the centre of the column eg: When writing number "12", the distance between "1" and "2" cannot be too far or too up or down.</p> <div style="text-align: center; border: 1px solid black; width: 30px; margin: 10px auto; padding: 2px;">12</div> <p>Get to know the digit value from 16-20</p> <ol style="list-style-type: none"> Use counting stick or other objects to do showing for the purpose of introducing the numbers 16-20. Combine several objects to let children understand that every number is formed by 1 ten and several ones e.g. 16 is consisting of 1 ten and 6 ones, therefore 10 and 6 is equal to 16. After object demonstration, combining page 11 in the textbook as material to guide children to speak on number 16 -20. Can do the following activity to enhance the certainty of learning outcomes. 	<p>Counting stick Objects e.g. Building blocks, sweets</p>



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			<ul style="list-style-type: none"> a. Teachers order children to use objects to indicate digit number e.g. arrange 18 objects' combination. b. Matching between object combination and mathematical flashcards. c. Matching between pictures and mathematical-flashcards. 	
<p>11 12 13</p>	<p>4.3.3</p>	<p>Count according to full sequence.</p>	<ul style="list-style-type: none"> 1. Can do the following activity to correspond with learning outcomes: <ul style="list-style-type: none"> a. Teachers ask children to write out numbers 11 - 20 on the blackboard. b. Children write out the numbers spoken by the teacher and children. c. Guide children to fill in the numbers from 1-20 on the vertical line. d. Guide children to use the picture and flashcard to arrange numbers between 1-20 in plain sequence and backward sequence. e. Teachers put 1 set of picture cards on the table. Children open one in it, then complete the counting from one, which has opened. f. Teachers write one group of number in plain sequence and backward sequence to let children complete them. g. Made several pictures as shown below to ask children answer orally, then speak out the answers in the blanks. <div style="display: flex; justify-content: space-around; margin: 10px 0;"> <div style="border: 1px solid black; padding: 5px;">12,13, _____</div> <div style="border: 1px solid black; padding: 5px;">_____, 10,11, _____</div> </div> <div style="display: flex; justify-content: space-around; margin: 10px 0;"> <div style="border: 1px solid black; padding: 5px;">16, _____, 18</div> <div style="border: 1px solid black; padding: 5px;">14, 13, 12, _____, _____</div> </div> <div style="display: flex; justify-content: space-around; margin: 10px 0;"> <div style="border: 1px solid black; padding: 5px;">_____, 11,12</div> <div style="border: 1px solid black; padding: 5px;">16, 15, 14, _____, _____</div> </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;">_____, 11,12</div> 2. After activity, combining material in the textbook and workbook to do discussion and Q&A session. 	<p>Flashcards</p>

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Addition 14 15 16	5.1.1	<ol style="list-style-type: none"> Children are able to explain a story about “combination” and “addition”. Children are able to understand concepts of “combination” and “addition”. 	<ol style="list-style-type: none"> Use objects to show “combination” and “addition”. <ol style="list-style-type: none"> Teachers ask 2 children to come in front of the class to blow balloons. After blowing, teachers tell children to combine the balloons together. Teachers explain and tie up the balloons together at the same time. Teachers also can display one pencil box with two pencils, then ask one child to add 1 pencil inside the box. Afterwards, use the other objects and pictures to do multi “combination” and “addition” activities. In the process of demonstration, it is no need to ask children to count number and the total amount. Just need to guide them to pay attention for the increment after “combination” and “addition” processes. After demonstration, teacher can combine material in the textbook to do discussion and explanation about “combination” and “addition” stories. In this stage, the main purpose is to let children understand “combination” and “addition” meanings. No need to introduce the meanings represented by “+” and “=”. 	Balloons Pencil box Pencils
17	5.1.2 5.1.3 5.1.4	Children are able to understand concepts of “combination” and “addition”. Then try to explain them by mathematical sentence.	<ol style="list-style-type: none"> Let children understand the previous lessons of “combination” and “addition” stories. Use symbols “+” and “=” for addition. Introduce “addition” through demonstration. <ol style="list-style-type: none"> Teachers give child A 1 apple and give child B 2 apples, asking them to put inside a basket. Teachers are showing and explaining to the children simultaneously: “ 1 apple and 2 apples combine together are 3 apples.” Then tell children that we can write the process of combination as $1+2=3$ and read it as “one plus two equal to three”. And finally introduce the meaning of symbols “+” and “=”. Teachers arrange building blocks in 3 rows on the table, then add two more on the building block number 3. Teachers are showing and explaining at the same time: “Originally here got 3 building blocks and add 2 more. Then use finger to point to the building block number 3 and say: “ 3,4,5”. After that say: “3 building blocks plus 2 building blocks are equal to 5 building blocks. 	Some objects eg. : Apples, baskets, building blocks

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			 <p>Children count: "3,4,5" and not: "1,2,3,4,5".</p> <p>Take note of "addition" is to add amount from same group of objects, which is counting from original number and not counting from number 1.</p> <ol style="list-style-type: none"> Then tell children that above addition process can be written as "$3+2=5$" and read it as "three plus two is equal to five". After showing, combining page 8 and page 9 in the textbook to further use "+" and "=" for addition. Later, teachers guide children to explain a story about addition and circle correct calculation according to picture on page 10. <p>For example: (Page 10 in the textbook)</p> <ol style="list-style-type: none"> 2 cars and the other 2 cars combined together is equal to 4. Therefore 2 plus 2 is 4. 2 ducks and 3 ducks combined together is equal to 5 ducks, 2 plus 3 is equal to 5. 	
18	5.1.5	Learn to use symbols "+" and "=", then complete the addition.	Teachers ask questions, guiding children to explain a story of the addition for the pictures' meaning on page 18 in the textbook. Then let children calculate and circle the method of addition. For example: (page 18 in the textbook) At first, Ali has 2 pieces of chocolate, then his mother gives him 3 pieces again, now the total is 5 pieces of chocolate. $2 + 3 = 5$	
19	5.1.4			
	5.1.5	Learn the formation of 2.	Teachers use different objects and pictures to guide children to do a performance and explain about combination of " $1+1=2$ " at the same time.	Objects or pictures
20	5.1.4			
21	5.1.5	Learn the formation of 6,9 and their addition.	1. Guide children to pile different colours of wooden cube up. For example: Use two different types of wooden cube to arrange the formation of 5.	Building blocks or cards

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23	5.1.5		<div style="text-align: center;">  </div> <p>(i) $1 + 4 = 5$ (ii) $2 + 3 = 5$ (iii) $3 + 2 = 5$ (iv) $4 + 1 = 5$</p> <p>2. Also can use two hard papers with different colour, cutting them into small - card columns like below to do pile up activity for 3,4,5. The formation of 4 are:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center;"> $1 + 3 = 4$ </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 5px;"> <div style="text-align: center;">  </div> <div style="text-align: center;"> $2 + 2 = 4$ </div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 5px;"> <div style="text-align: center;">  </div> <div style="text-align: center;"> $3 + 1 = 4$ </div> </div> <p>3. After activity, combining material in the textbook to do discussion and Q&A session.</p>	
		Learn the vertical form of addition.	Teachers ask questions, guiding children to calculate according to the meaning of the picture and write down the answer on page 23 of the textbook. Then explain on the blackboard about vertical and horizontal forms.	

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Subtraction 24	5.2.1 5.2.2	Let children understand “ less “ concept.	<ol style="list-style-type: none"> Use objects or pictures to do several simple showings of “less” activity in order to let children get preliminary concept. When showing, need not to ask children to count number or total amount. Just ask children to pay attention for the fewer amounts. For example: <ol style="list-style-type: none"> Teachers take out 3 books from the bag, then put 1 of them on the child’s table. Showing and explaining at the same time: “ I have 3 books and I take out one to give to Xiao Li”. Teachers put 5 pieces of biscuit in the plate. Ask one child to come forward to eat 2 pieces of biscuit. Showing and explaining: “ Originally in the plate has 5 pieces of biscuit, then Xiao Ming eats, the amount left is 2 pieces. After demonstration, teachers can combine material in the textbook to do discussion with children and explain story about “take out” and “less”. In this stage, the focal point is to let children understand “less” concept. No need to introduce symbol “-”. 	Books Sacks Plates Biscuits
25 26 27	5.2.2 5.2.3 5.2.4	<ol style="list-style-type: none"> Use mathematical sentences to explain subtraction. Use symbols “ - “ and “=” for mathematical sentences. 	<ol style="list-style-type: none"> Introduce subtraction through demonstration: <ol style="list-style-type: none"> Repeat the above activity by showing and explaining at the same time: I have 3 books, I take out 1 book to give to Xiao Li and I still less 2 books. This condition can be written as $3-1=2$ and read as 3 subtract 1 is equal to 2. Repeat demonstration of plate and biscuit; teachers showing and explaining at the same time: “Originally in the plate has 5 pieces of biscuit, then let Xiao Ming eat, less 2 pieces, now still has 3 pieces of biscuit. We can write it as $5-2=3$ and read it as 5 minus 2 is equal to 3”. After demonstration, combining pictures’ meaning on pages 24,25,26 in the textbook to further explain the story of the subtraction. 	Books Plates Biscuits
28 29	5.2.3 5.2.4	Divide one group from the other one and count the difference.	<ol style="list-style-type: none"> Teachers can guide children to do the following activity which regards to “Ali and Minah”. It must base on learning outcomes 5.24. Tools: 	Toys Coins Sweets Shells

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			<p>i. Collect many groups of small item such as toy car, coin, shell, sweet and etc.</p> <p>ii. Prepare one card, which had drawn with 2 children. (as below)</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Ali</p> </div> <div style="text-align: center;">  <p>Minah</p> </div> </div> <p>Activity:</p> <ol style="list-style-type: none"> Guide children to use the picture above, which has two children and their collected things, to form a simple story. For example: "Ali has 3 candles." Ask children to put 3 candles on the card which drawn with Ali's picture while speaking. "Ali gives 2 candles to Minah." Ask children to take 2 candles out of 3 from Ali and put them on the Minah's picture. Then ask children to say how many candles are left and also ask children to repeat the simple story again. "Ali has 3 candles, he gives 2 to Minah, now Ali left 1 candle only." Let the other children use others small item to do the above activity. Then guide children to do subtraction on the blackboard based on the story told by them. Teachers remind children to pay attention to the amount which can be given by Ali to Minah. And the amount cannot more than his own amount that is the subtract number cannot more than subtracted number. Let children answer exercises in the textbook and the workbook to further strengthen their mastering of learning outcomes. 	

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30	5.2.4	Get to know the way of writing for vertical form subtraction.	Teachers based on the exercises on page 28 in the textbook to do vertical form showing on the blackboard. Then discuss together with children about exercises on page 30 in the textbook.	

Thematic Approach - Mathematics 3

