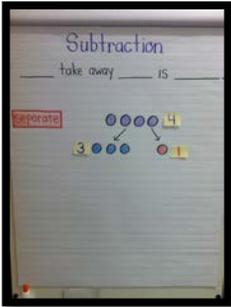


## Kindergarten Math Lessons

### Subtraction 7-1: Separating

<b>Lesson 7-1 On/Below</b>	Small Group Instruction "On (1 day) & Below (2 days)"
<b>Objective</b>	Students will separate groups of counting objects to tell separation stories.
<b>Materials</b>	Story backgrounds (Lesson 7-1 has good story examples), counting objects (dinosaurs, frogs, ladybugs, cows, etc....), math journals
<b>Math Talk</b>	"How many are left?" "How many are there now?" Vocabulary: separation, left, go away, went away
<b>Anticipatory Set and Review</b>	<ul style="list-style-type: none"><li>• Give students a bowl/basket of the counting objects and allow them to "play" for a minute or two.</li><li>• Ask students to recall yesterday's lesson when we made separation stories using the things in their caddies.</li><li>• Tell them that today we will tell separation stories using the story backgrounds and the counting objects.</li></ul>
<b>Direct Instruction and Modeling</b>	<ul style="list-style-type: none"><li>• You model a few separation stories using your own background and counting objects.</li><li>• Tell stories for the students to model using their story backgrounds and counting objects.</li><li>• Don't forget to have the students say the sentence, " ___ take-away ___ is ___".</li><li>• Kinesthetic Learners:<ol style="list-style-type: none"><li>1. Put your hands together in front of your body and say, "Subtraction..."</li><li>2. Separate your hands and say, "means to SEPARATE!"</li></ol></li><li>• Teach Anchor Chart:</li></ul>
<b>Anchor Chart</b>	
<b>Independent Practice</b>	<ul style="list-style-type: none"><li>• Have non-volunteers tell separating stories for students to model.</li><li>• Don't forget to have the students say the sentence, " ___ take-away ___ is ___".</li></ul>
<b>Reflection and Assessment</b>	<ul style="list-style-type: none"><li>• Have student use their math journals to draw and label separation stories using pictures and "x" out the objects to show the separation. (Do not write the sentence at this time.)</li></ul>

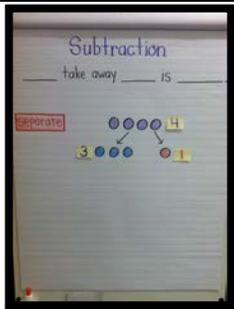
## Kindergarten Math Lessons

### Subtraction 7-1: Separate

<b>Lesson 7-1 Above</b>	Small Group Instruction
<b>Objective</b>	Students will determine the number of objects taken away from a given starting number to reach a given difference.
<b>Materials</b>	Story backgrounds, counting objects (dinosaurs, frogs, ladybugs, cows, etc....,) math journals
<b>Math Talk</b>	"There were ___ counters on the mat. Now there are ___ left. How many did you take away?"

<b>Anticipatory Set and/or Review</b>	<ul style="list-style-type: none"><li>• Give them a bowl/basket of the counting objects and allow them to "play" for a minute or two.</li><li>• Ask students to recall yesterday's lesson when we made separation stories using the things in their caddies.</li><li>• Tell them that today we will tell separation stories using the story backgrounds and the counting objects.</li><li>• Tell students the challenge for today is that <u>they</u> have to figure out how many objects were taken away.</li></ul>
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<b>Direct Instruction and Modeling</b>	<ul style="list-style-type: none"><li>• You model a few separation stories with a partner using your own background and counting objects.</li><li>• Start with a set of objects. Ask a student to secretly remove a few objects while your back is turned.</li><li>• Count how many are left.</li><li>• Discuss with students how they can visualize in their head how many were taken away now that they know how many are left.</li><li>• Kinesthetic Learners:<ol style="list-style-type: none"><li>1. Put your hands together in front of your body and say: subtraction.</li><li>2. Separate your hands and say, "means to SEPARATE!"</li></ol></li></ul>
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<b>Anchor Chart</b>	
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<b>Guided and Independent Practice</b>	<ul style="list-style-type: none"><li>• Now model a few problems with the students. Have the students turn around and the teacher removes a few counters.</li><li>• Have students practice in partners.</li><li>• Don't forget to have the students say the sentence, " There</li></ul>
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	were ____ counters on the mat. Now there are ____ left. How many did you take away?"
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- |                                  |  |
|----------------------------------|--|
| <b>Reflection and Assessment</b> | <ul style="list-style-type: none"><li>• Have student use their math journals to draw and label separation stories using pictures.</li><li>• Have students circle the part their partner took away.</li></ul> |
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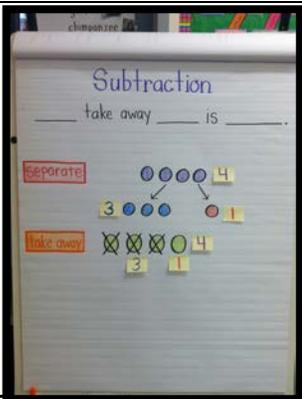
## Kindergarten Math Lessons

### Lesson 7-2: TAKE AWAY

<b>Lesson 7-2 On/Below</b>	Small Group Instruction "On (1 day) & Below (2 days)"
<b>Objective</b>	Students will...use concrete objects to determine the answers to subtraction problems using numbers no greater than 5.
<b>Materials</b>	Story mat, manipulatives, subtraction sentence frame,
<b>Math Talk</b>	Vocab: take away, left over Sentence frame: " --- take away---- is -----"

<b>Anticipatory Set and/or Review</b>	Tt introduces the story that Ss will be using, building interest in the math subtraction story
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<b>Direct Instruction and Modeling</b>	<ul style="list-style-type: none"> <li>• Tt will tell a subtraction story, modeling the use of the story mat and the manipulatives</li> <li>• Ex: 5 birds are sitting in a tree. 3 birds fly away. Watch as I take away 3 birds. "How many birds are left?"</li> <li>• Let's put our answer into our sentence frame " 5 take away 3 is 2"</li> <li>• This is how you will record your subtraction story in a subtraction sentence</li> </ul>
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<b>Anchor Chart</b>	
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<b>Guided Practice</b>	Each student gets a story mat along with manipulatives The Tt will direct Ss to demonstrate the subtraction story as the Tt provides numbers (tells the story)
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<b>Independent Practice</b>	Ss then take turns telling the whole group a subtraction story. The group will then demonstrate the story with manipulatives, while also reciting the subtraction sentence.
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<b>Reflection and Assessment</b>	Each student is prompted to demonstrate taking away when they are given a subtraction story
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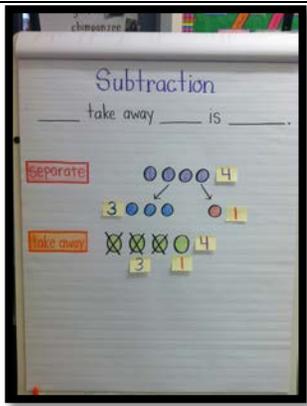
## Kindergarten Math Lessons

### Subtraction 7-2: TAKE AWAY

<b>Lesson 7-2 Above</b>	Students will...use concrete objects to determine the answers to subtraction problems using numbers no greater than 5.
<b>Objective</b>	Students will...use concrete objects to determine the answers to subtraction problems using numbers no greater than 5.
<b>Materials</b>	Story mat, manipulatives, subtraction sentence frame,
<b>Math Talk</b>	Vocab: take away, left over Sentence frame: " --- take away---- is -----"

<b>Anticipatory Set and/or Review</b>	<p>It introduces the story that Ss will be using, building interest in the math subtraction story</p> <p>We will be teaching you a new strategy that you might like to try when solving subtraction problems. It is called taking away away.</p>
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<b>Direct Instruction and Modeling</b>	<ul style="list-style-type: none"><li>• It will tell a subtraction story, modeling the use of the story mat and the manipulatives</li><li>• Ex: 5 birds are sitting in a tree. 3 birds fly away. Watch as I take away 3 birds. "How many birds are left?"</li><li>• Let's put our answer into our sentence frame " 5 take away 3 is 2"</li></ul>
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<b>Anchor Chart</b>	
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<b>Guided Practice</b>	Each student gets a story mat along with manipulatives The Tt will direct Ss to demonstrate the subtraction story as the Tt provides numbers (tells the story)
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<b>Independent Practice</b>	Ss then take turns telling the whole group a subtraction story. The group will then demonstrate the story with manipulatives, while also reciting the subtraction sentence.
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<b>Reflection and Assessment</b>	The record sheet will act as an assessment
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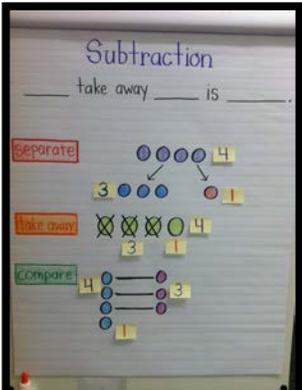
## Kindergarten Math Lessons

### 7-3: Comparing

<b>Lesson 7-3 On/Below</b>	Small Group Instruction "On (1 day) & Below (2 days)"
<b>Objective</b>	Students will be able to find two groups to find how many more or fewer.
<b>Materials</b>	Objects, pencil, recording sheet, linker cubes and dice, popsicle sticks
<b>Math Talk</b>	There are/is ____ (#) more ____ (s) There are/is ____ (#) fewer ____ (s) The difference is _____.

<b>Anticipatory Set and/or Review</b>	Yesterday, we learned about math take away stories. Today, you will learn another strategy for solving subtraction problems.
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<b>Direct Instruction and Modeling</b>	Watch me as I show you how I take two numbers and compare them noticing how many more and then how many fewer. (Model with manipulative and sentence frames) Refer to pg. 137 in Topic 7
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<b>Anchor Chart</b>	 <p>The anchor chart is titled "Subtraction" and includes the sentence frame "____ take away ____ is ____". It illustrates three methods:</p> <ul style="list-style-type: none"><li><b>Separate:</b> Shows a group of 4 blue dots and a group of 1 red dot. An arrow points from the 4-dot group to a group of 3 blue dots, and another arrow points from the 4-dot group to the 1 red dot.</li><li><b>Take away:</b> Shows a group of 4 green dots. Three of the dots are crossed out with an 'X', leaving 1 green dot. A number '3' is written below the crossed-out dots, and a number '1' is written below the remaining dot.</li><li><b>Compare:</b> Shows two groups of dots. The first group has 4 blue dots and the second group has 3 purple dots. A number '4' is written to the left of the first group, and a number '3' is written to the right of the second group.</li></ul>
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<b>Guided Practice</b>	Practice comparing with a partner using sentence frames, manipulatives, and a die.
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<b>Independent Practice</b>	Introduce Subtraction Trains Worksheet- Each individual student creates 2 trains to compare and completes recording sheet independently. Do with a partner
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<b>Reflection and Assessment</b>	By comparing two numbers we notice which has number has more or fewer. This is one way mathematicians learn to subtract.
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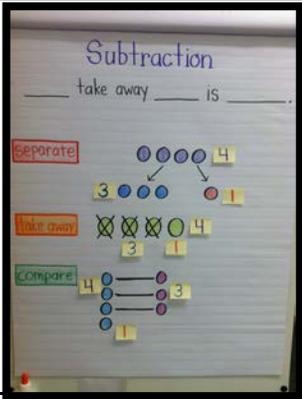
## Kindergarten Math Lessons

### Subtraction 7-3: Comparing

<b>Lesson 7-3 Above</b>	Beyond – Compare Larger Numbers, dissimilar shaped objects, and/or numerals
<b>Objective</b>	Students will be able to find two groups to find how many more or fewer.
<b>Materials</b>	Objects, pencil, recording sheet, linker cubes and dice, popsicle sticks
<b>Math Talk</b>	There are/is ____ (#) more ____ (s) There are/is ____ (#) fewer ____ (s) The difference is _____. (extension)

<b>Anticipatory Set and/or Review</b>	Yesterday, we learned about math take away stories. Today, you will learn another strategy for solving subtraction problems.
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<b>Direct Instruction and Modeling</b>	<p>Pose this problem: George has 12 pennies and Sandra has 8 pennies. How many more pennies does George have than Sandra? Show students using manipulatives how you can line up 12 and 8, and using popsicle sticks, make a line from one on the 12 side to one on the 8 side. At the end there will be 4 left on the 12 side. Model how you would solve this problem, using pg. 137 as a reference. If we were to write this as a subtraction sentence, it would read: <math>12 - 8 = 4</math></p> <p>Solve a few more problems together, allowing the students to use manipulatives and popsicle sticks to demonstrate understanding</p>
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<b>Anchor Chart</b>	
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<b>Guided Practice</b>	Have students solve this problem: Tony has 8 cookies. Samuel has 5. How many more cookies does Tony have?
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<b>Independent Practice</b>	Teach Subtraction Train Game- Each individual student creates 2 trains to compare and completes recording sheet
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independently.

(This can game can be placed in centers next week)

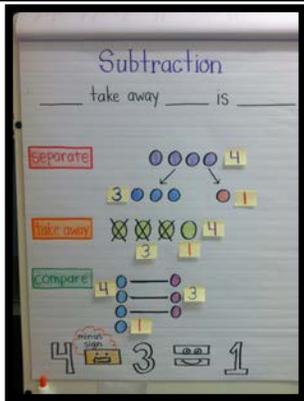
## Kindergarten Math Lessons

### Subtraction 7-4: Minus Sign

<b>Lesson 7-4 On/Below</b>	Small Group Instruction "On (1 day) & Below (2 days)"
<b>Objective</b>	Students will use the - sign to represent "take-away" when recording subtraction.
<b>Materials</b>	Paper bag puppet, manipulatives (that the puppets eat) recording sheet
<b>Math Talk (Sentence Frames)</b>	Teacher talk: "The Munching Puppet is hungry, he/she ate ___ how many are left? Now say a number sentence using "Minus" instead of "Take a way." Student talk: " ___ minus ___ equals ___"

<b>Anticipatory Set and/or Review</b>	We've been learning different ways to subtract. We learned how to separate, take away and to compare...now we are going to learn a new way to record our subtraction stories.
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<b>Direct Instruction and Modeling</b>	"This sign is for subtraction. It is called a minus sign. 6 minus 4 means subtraction." (Model with a an example 6 take away 4 is 2, and now compare that with the number sentence $6 - 4 = 2$ )
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<b>Anchor Chart</b>	
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<b>Guided and Independent Practice</b>	<ol style="list-style-type: none"><li>1. Prep the Munching Puppets paper and white out the minus sign, (below group might need one day of tracing the minus sign before independent practice.)</li><li>2. Model how to use the puppet using the manipulatives. Use the sentence frame and record using the symbol.</li></ol>
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<b>Reflection and Assessment</b>	Teacher observation, check with the students while they use the Puppet to manipulate the equations.
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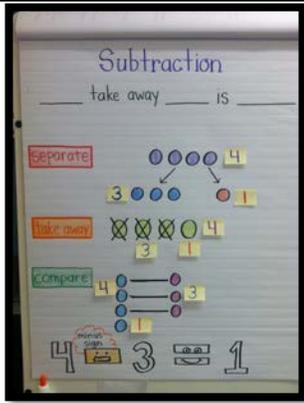
## Kindergarten Math Lessons

### Subtraction 7-4: Minus Sign

<b>Lesson 7-4 Above</b>	Small Group Instruction
<b>Objective</b>	Students will use the – sign to represent “take- away” when recording subtraction.
<b>Materials</b>	Paper bag puppet, manipulatives (that the puppets eat) recording sheet
<b>Math Talk (Sentence Frames)</b>	Teacher talk: “The Munching Puppet is hungry, he/she ate ___ how many are left? Now say a number sentence using “Minus” instead of “Take a way.” Student talk: “ ___ minus ___ equals ___ ”

<b>Anticipatory Set and/or Review</b>	We’ve been learning different ways to subtract. We learned how to separate, take away and to compare...now we are going to learn a new way to record our subtraction stories.
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<b>Direct Instruction and Modeling</b>	“This sign is for subtraction. It is called a minus sign. 6 minus 4 means subtraction.” (Model with a an example 6 take away 4 is 2, and now compare that with the number sentence $6 - 4 = 2$ )  When creating your own subtraction problem, you will always want to start with the greater number. We call this a “whole.”
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<b>Anchor Chart</b>	
<b>Guided and Independent Practice</b>	<ol style="list-style-type: none"><li>1. Prep the Munching Puppets paper and white out the minus sign, <i>and the numbers.</i></li><li>2. Model how to use the puppet using the manipulatives. Use the sentence frame and record using the symbol.</li><li>3. Students will use a deck of cards and pull 2 cards. They will find the “whole” or the larger number and place the cards in the correct order.</li><li>4. They will act out the story with the puppet.</li><li>5. They will write an equation using the minus sign.</li></ol>

<b>Reflection and</b>	Teacher observation, check with the students while they use the
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<b>Assessment</b>	Puppet to manipulate the equations.
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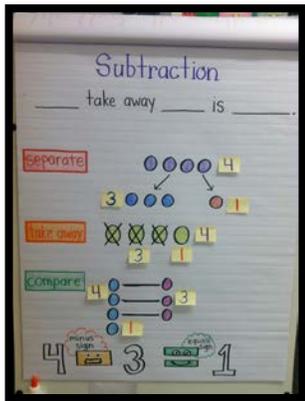
## Kindergarten Math Lessons

### Subtraction 7-5: Equals sign

<b>Lesson 7-5 On/Below</b>	Small Group Instruction "On (1 day) & Below (2 days)"
<b>Objective</b>	Finding differences Use the equals sign to write a subtraction sentence
<b>Materials</b>	Counters, anchor chart, subtraction story worksheet
<b>Math Talk</b>	___ minus/subtract ___ is ____.
<b>Anticipatory Set and Review</b>	There are 12 birds. 8 fly away. How many are left? (Give counters to have students solve on their own)
<b>Direct Instruction and Modeling</b>	<p>You had the whole number of 12 and the number 8 was one of the parts of 12. We found out that the part you did not know what 4. Here is a way we can write it: <math>12-8=4</math></p> <ul style="list-style-type: none"> <li>Use anchor chart to teach the 5 parts of the equation, be sure to teach the minus sign as minus or subtract, not take away.</li> </ul> <p>Show students a few sample equations/word problems, support students as they solve the problems with you using manipulatives.</p>
<b>Anchor Chart</b>	
<b>Independent Practice</b>	<p>Work with a partner:</p> <p>*You have 5 fire hats, 3 fire fighters need to go, how many hats are left? Show them the equation, <math>5-3=2</math>. Student's solve on their own.</p> <p>*If time: Subtraction Stories (see attached sheet)</p>
<b>Reflection and Assessment</b>	Check Subtraction Story Picture

## Kindergarten Math Lessons

### Subtraction 7-5: Equals Sign

<b>Lesson 7-5 Above</b>	Small-Group Above: 1 Day
<b>Objective</b>	Students will use the minus sign and equal sign to show subtraction
<b>Materials</b>	Counters, anchor chart.
<b>Math Talk</b>	___ minus/subtract ___ is ____.
<b>Anticipatory Set and Review</b>	<p>A school of fish was swimming together in the ocean. There were 12 fish in all. Another school of fish decided to join them, making a larger school of fish. The new larger group had 18 fish. How many fish were in the school that joined the first group of fish?</p> <p>Let the students use manipulatives or white boards to see if they can work together to solve the problem.</p>
<b>Direct Instruction and Modeling</b>	<p>You had the whole number of 18 and the number 12 was one of the parts of 18. We found out that the part you did not know what 6. Here is a way we can write it: <math>18 - 12 = 6</math></p> <ul style="list-style-type: none"> <li>Use anchor chart to teach the parts of the equation</li> <li>Also teach the other way to write an equation:</li> </ul> $\begin{array}{r} 18 \\ -12 \\ \hline 6 \end{array}$ <p>Focus on the ones place and the tens place and subtracting each place value</p>
<b>Anchor Chart</b>	
<b>Independent Practice</b>	<p>Work with a partner to solve these problems:</p> <p>"Sophie has 8 shoes pennies and Luke has 12 shoes. How many more pennies does Luke have than Sophie? "</p> <p>"Liam has 7 fewer pennies than Tony. Tony has 11. How many pennies does Liam have?"</p> <p>"Elizabeth has some candies. She gives 17 to Ruben. Now she has 8 candies. How many did she give to Ruben?"</p>

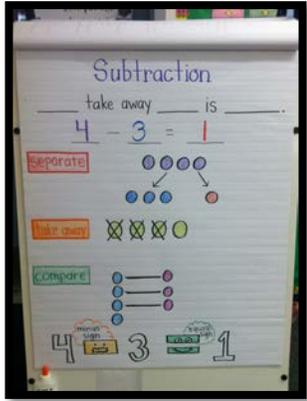
## Kindergarten Math Lessons

### Subtraction 7-6: Subtraction Sentences

<b>Lesson 7-6 On/Below</b>	Small Group Instruction "On (1 day) & Below (2 days)"
<b>Objective</b>	Write and solve subtraction sentences
<b>Materials</b>	Counters, Oh Fishsticks Game prepped
<b>Math Talk</b>	___ minus ___ equals ___
<b>Anticipatory Set and Review</b>	Act out a subtraction story using counters: 5 puppets are on the puppet stage. 2 puppets leave the stage. How many puppets are left on the stage?
<b>Direct Instruction and Modeling</b>	Show students how you can take the story above and turn it into a subtraction sentence.  ___ - ___ = ___  Use the worksheet for 7-6 to solve the problems together. (Day 2 for Below/Day 1 for On) Teach students the "Oh, fishsticks!" Game Solve some together
<b>Anchor Chart</b>	<p>The anchor chart is titled "Subtraction" and shows the equation <math>4 - 3 = 1</math>. Below the equation are three visual models:         <ul style="list-style-type: none"> <li><b>Separate:</b> A group of 4 blue circles, with 3 crossed out and 1 remaining.</li> <li><b>Take away:</b> 4 circles in a row, with 3 crossed out and 1 remaining.</li> <li><b>Compare:</b> Two rows of circles, the top row has 4 blue circles and the bottom row has 3 pink circles.</li> </ul> </p>
<b>Independent Practice</b>	Oh Fishsticks! Game

## Kindergarten Math Lessons

### Subtraction 7-6 Subtraction Sentences

<b>Lesson 7-6 Above</b>	Small-Group Above: 1 Day
<b>Objective</b>	Write and solve subtraction sentences
<b>Materials</b>	Counters, Oh Fishsticks Game prepped
<b>Math Talk</b>	___ minus ___ equals ___
<b>Anticipatory Set and Review</b>	We have been working on different ways to show and solve subtraction problems. Today, you are going to use the method you prefer (take away, comparing, using your fingers, manipulatives, dots) to solve and write subtraction problems.
<b>Direct Instruction and Modeling</b>	Do a few different problems, using the stories from 7-7, adapting the numbers if they need a challenge.  Teach the students that the order that they do and write the subtraction problems is very important in subtraction.
<b>Anchor Chart</b>	 <p>The anchor chart is titled "Subtraction" and illustrates three methods for solving the problem 4 - 3 = 1. At the top, it says "___ take away ___ is ___" with the equation 4 - 3 = 1 written below. The first method, labeled "take away", shows 4 blue dots with 3 crossed out and 1 remaining. The second method, labeled "separate", shows 4 blue dots with 3 crossed out and 1 remaining. The third method, labeled "compare", shows 4 blue dots and 3 pink dots. At the bottom, the numbers 4, 3, and 1 are written with small icons representing each number.</p>
<b>Independent Practice</b>	Teach "Oh Fishsticks!" game, giving this group the more challenging spinners.