| Component: | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Count Down and Number Book |
| Focus: | Math vocabulary, counting, geometry |

## Materials:

White boards
Crayolas
Socks
Glue sticks
decks of cards with face cards and jokers removed page for the number book (This is the page for 1 ) items that children can choose to show one (stickers, stamps, something flat

## Opening

## State the objective

Today we are going to learn some math vocabulary-words that we need to use when we talk about numbers and shapes. We are also going to practice some of the math skills that we will need to be excellent at math.

## Gain prior knowledge by asking students the following questions

Count from 1-10 forwards
Count from 10-1 backwards
Give an example of one more than 5 one more than 1, on more than 4
Counting is essential in math. You can't do any sort of math if you can't count, so we will spend time learning how to count objects and write the numeral that represents the number of things that have been counted.

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day <br> Help the children figure out how to solve this problem by giving them several examples. Then put this problem on the board and have them draw the answer that they select on the white board. <br> Jill has 4 Happy Faces. Draw a group of Happy Faces that has 1 more than Jill. | *Activity $\rightarrow$ Teachable <br> Moment(s) throughout <br> During the lesson check in with students repeatedly. <br> Check in about what is happening and what they are thinking. |
| Fact Practice <br> The Number Book <br> During this next 11 days you will be working with Kindergartners to develop the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create a number book. After working with the Kindergartners, if they can verbally count to 10 , then make the number book go to 10 . If they struggle counting to 10, make the number book with 2 pages for each number 1-5. <br> The Book <br> Counting Items: You will want to have a variety of items for children to count and then | Take advantage of any teachable moments. <br> Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking. <br> When possible, engage |

KIDS
paste or blue to the number page. You can have shapes (squares, circles, triangles, ovals, stars, and hearts), stickers (any that are similar such as flowers, birds, cats, dogs, dinosaurs, etc.), or you can have children draw. This is the least desirable as it will be difficult to tell if the child is having trouble drawing or counting.

Writing the number: You will want to help the Kindergartners learn how to write each number. You will want them to practice writing the number first in the air as you direct them step by step, then on paper (without lines) and then finally in the book. Don't stress over students struggling to coordinate the muscle control needed to write the numbers correctly. One of the strategies you can use is to create the number in a dotted line format and having students trace over the dotted lines several times prior to trying it on their own. It is important that you teach the students to make the numbers correctly. Place a dot at the starting point and then show them with a arrow the direction that they should go. The directions for doing that follow:

Directions for writing the number $8: 8 \mathrm{~s}$ are tricky. When you see them printed they look exactly like at 2 piece snowman, or a completed 3. However, that is not how they are made. While the $3 s$ start a circle to the right, or clock wise, the 8 is really made by creating the letter "S: and then connecting the ending point with the beginning point with a straight line. An " S " is really two parts of circles, one to the left, the top one, and then the bottom one is to the right, like in a three. Have the students practice making "s"s in the air to capture the feel of the "s". Once they get that idea, the rest of the 8 is a straight line to connect the two points.

Make the page for the book. Remember to have the book pages cut (an 8" square works nicely, glue sticks, and tems for the children to select and paste 8 on the page before they write the number.

|  |  |
| :--- | :--- |
| Word for Today: triangle $\quad$ Math Vocabulary | It is important to review |
| A triangle is a three sided shape. Two lines come together at a point and then push away | academic math vocabulary |
| often throughout the day |  |
| from each other. A third line connects the two lines that have pushed apart. An Indian | Complete the Vocabulary |
| tepee is shaped like a triangle, a church steeple is shaped like a triangle, and so is a piece | notebook for each word. |
| of pizza (although pizza has a round edge as a connector instead of a flat one. | When possible, have |
| Have children practice drawing a triangle on the white board. Remind them that they draw | students experience the word |
| all three line separately (later they can start at the top and complete the triangle). Tell them |  |
| that it it best to draw a triangle by starting at the top point and drawing the two legs of the | (Exigh sceating a |
| right angle, multiple students |  |
| ladder and then connect the legs as the bottom. After they have drawn 4 triangles ask | acting out an equation). |

academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word.
When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). them to put a line under the one that they think they drew the best. Have them show you the squares they drew by turning over the white board.
Tell the children that you are going to make a pattern on the white board. The pattern is an A A BB C pattern, circle, triangle, square and then a repeat, circle, triangle, square

Ask them to draw this pattern across the white board.

## Activity

Count Down!
Review how to play the game Count Down with the students. Have them tell you the rules
students in a "teach to learn" opportunity and have the student become the teacher.
of play. After they have reviewed and are comfortable playing on their own, give a deck of cards to each pair.

Purpose of the game: Practice counting backwards from 10 to ensure the student understands the relationship between numbers, one greater, one less, etc. To win, the cards will be in four stacks with 10 on the bottom and the ace or 1 on the top.
Materials: Deck of Cards (remove face cards and jokers)
Players: 2
Directions:

1. Shuffle the cards.
2. Make a $4 \times 3$ grid of cards, face up. (A grid that has 4 columns and 3 rows),
3. Place the remainder of the cards to the right of the grid.
4. Player one looks at the cards and stacks cards in backwards order, putting the smaller card on top of the larger number.
5. Player continues to stack until there are no more additional moves.
6. If player creates an entire stack 10-1, then he/she turns the stack upside down to show that it is no longer in play.
7. When Player 1 finished his/her turn, Player 2 places cards from the remaining deck to re-create the $3 \times 3$ grid.
8. Play then continues with Player 2 stacking the numbers.
9. Player may move a stack to another card. For example a stack of 3-2-1 could be placed on a 4.

Play continues until there are four stacks, 10-1.
Note: If there are no moves and no spaces, then player may draw a card from the deck to "jump start" play.

Variation: Create stacks that count up, with the Ace or 1 on the bottom and the 10 on the top.
is mastered you can utilize it in the "When Homework Is Complete" center.

| $\quad$ Closing |
| :--- | :--- |
| Say: |
| - Please recap what we did today. |
| - Did we achieve our objectives? |
| What did you like about what we did today in math? |
| What would you like to do more of the next time we do math? |
| What are the names of several shapes? |
| What does it mean that a number is one more? One less? |

## Consult 4 Kids Lesson Plans

## Reflection (Confirm, Tweak, Aha!)

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.

| Component: | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Memory Match and Number Book |
| Focus: | Corresponding the numbers said with an actual number of objects |

## Materials:

White boards
Crayolas
Socks
Glue sticks
decks of cards with face cards and jokers removed page for the number book (This is the page for 1 ) items that children can choose to show one (stickers, stamps, something flat

## Opening

## State the objective

Today we are going to learn some math vocabulary-words that we need to use when we talk about numbers and shapes. We are also going to practice some of the math skills that we will need to be excellent at math.

## Gain prior knowledge by asking students the following questions

What do you know about math?
What do you know about numbers?
How old are you? What does that number look like on your fingers? How do you count them?
Counting is essential in math. You can't do any sort of math if you can't count, so we will spend time learning how to count objects and write the numeral that represents the number of things that have been counted.

## Content (the "Meat")

Problem of the Day

Romeo the cat is wearing a glove on each of his paws. How many gloves is Romeo wearing?
Draw this for the students so they can see how to solve the problem..

## Fact Practice

The Number Book
During this next 11 days you will be working with Kindergartners to develop the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create a number book. After working with the Kindergartners, if they can verbally count to 10 , then make the number book go to 10 . If they struggle counting to 10, make the number book with 2 pages for each number 1-5.

## The Book

Counting Items: You will want to have a variety of items for children to count and then paste or blue to the number page. You can have shapes (squares, circles, triangles, ovals, stars, and hearts), stickers (any that are similar such as flowers, birds, cats, dogs, dinosaurs, etc.), or you can have children draw. This is the least desirable as it will be

## *Activity $\rightarrow$ Teachable Moment(s) throughout

During the lesson check in with students repeatedly.
Check in about what is happening and what they are thinking.
Take advantage of any teachable moments.
Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking.
When possible, engage
difficult to tell if the child is having trouble drawing or counting.
Writing the number: You will want to help the Kindergartners learn how to write each number. You will want them to practice writing the number first in the air as you direct them step by step, then on paper (without lines) and then finally in the book. Don't stress over students struggling to coordinate the muscle control needed to write the numbers correctly. One of the strategies you can use is to create the number in a dotted line format and having students trace over the dotted lines several times prior to trying it on their own. It is important that you teach the students to make the numbers correctly. Place a dot at the starting point and then show them with a arrow the direction that they should go. The directions for doing that follow:

Directions for writing the number I: Begin at the top and draw a line straight down.

Make the page for the book. Remember to have the book pages cut (an 8" square works nicely, glue sticks, and items for the children to select and paste 1 on the page before they write the number.

Word for Today: number
A number is a symbol that stands for the items that you have counted. There are only ten numerals, but how you combine them makes a difference as to the number of items you have counted. For now, we are going to focus on the numbers 1-10. Another symbol that you will need to learn are letters of the alphabet. Letters are not numbers and numbers are not letters. However, the numeral 1 looks like the letter "l", and the numeral 0 looks like the letter " 0 "
Write the following 3 letters and 3 numerals on the board or chart paper. Make 2 sides of the chart-1 side that says Letters (a, b, c) and the other that says Numbers (3, 4, 5). Ask the students to tell you where each of the symbols goes-under letters or numbers.
Symbols: 7 e 53 s r
Have students copy the chart that you made on the white boards. Be sure to praise the efforts that they make to copy (it isn't easy to do it)

> Activity Memory Match

Demonstrate how to play the game by bringing the children all together around a single table. Ask for children to volunteer to learn how to play the game. Begin with 2 children. Once you have taught 2, have each of them teach 1 other student while everyone is watching. Repeat one more time so that you now have 4 children teaching 4 other children. When you start to play the game, put the 8 who know how to play the game with 8 who do not and you can observe the final four play.

Purpose of the game: Practice recognizing the numbers between 1 and 10.
Materials: Deck of Cards for each pair of students (remove face cards and jokers)
Players: 2-4
Directions:

1. Shuffle the cards.
students in a "teach to learn" opportunity and have the student become the teacher.

It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation)

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center
2. Make a $4 \times 4$ grid, placing cards face down. ( 4 columns, 4 rows)
3. Place the remainder of the cards to the right of the grid.
4. Player 1 turns over two cards. If they match (have the same numeric value) then the player takes both of the cards and places them face down by them.
5. Player 1 then replaces the 2 cards with ones from the deck.
6. If Player 1 matches, then he/she takes a second turn. If Player 1 does not match, he/she turns the cards back over and play continues with Player 2.
7. Play continues until all of the cards are matched.

Winner is the player with the most cards at the end of the game.

## Closing

## Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?


## Debrief

What did you like about what we did today in math?
What would you like to do more of the next time we do math?
Draw the number of circles that match with these numbers: $3,6,9$

## Reflection (Confirm, Tweak, Aha!)

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.

| Component: | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Memory Match \#2 and Number Book |
| Focus: | Shapes, numbers, and math vocabulary |

## Materials:

White boards
Crayolas
Socks
Glue sticks
decks of cards with face cards and jokers removed page for the number book (This is the page for 1 ) items that children can choose to show one (stickers, stamps, something flat

## Opening

## State the objective

Today we are going to learn some math vocabulary-words that we need to use when we talk about numbers and shapes. We are also going to practice some of the math skills that we will need to be excellent at math.

## Gain prior knowledge by asking students the following questions

What do you know about math?
What do you know about numbers? How are the different from letters? (numbers count things, letters tell you what sound to make)
How many fingers do you have on one hand? How many on two?
Counting is essential in math. You can't do any sort of math if you can't count, so we will spend time learning how to count objects and write the numeral that represents the number of things that have been counted.

## Content (the "Meat")

## Problem of the Day

Before giving the children this problem, show them another AB pattern and ask them to identify what comes next. Let them practice several before the problem below.

Look at the pattern below. Copy it and add the next 3 shapes. How do you know you are correct?

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## Fact Practice

The Number Book
During this next 11 days you will be working with Kindergartners to develop the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create a number book. After working with the Kindergartners, if they can verbally count to 10 , then make the number book go to 10. If they struggle counting to 10, make the number book with 2 pages for each number 1-5.
The Book

## *Activity $\rightarrow$ Teachable Moment(s) throughout

During the lesson check in with students repeatedly.
Check in about what is happening and what they are thinking.
Take advantage of any teachable moments.
Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking.

Counting Items: You will want to have a variety of items for children to count and then paste or blue to the number page. You can have shapes (squares, circles, triangles, ovals, stars, and hearts), stickers (any that are similar such as flowers, birds, cats, dogs, dinosaurs, etc.), or you can have children draw. This is the least desirable as it will be difficult to tell if the child is having trouble drawing or counting.
Writing the number: You will want to help the Kindergartners learn how to write each number. You will want them to practice writing the number first in the air as you direct them step by step, then on paper (without lines) and then finally in the book. Don't stress over students struggling to coordinate the muscle control needed to write the numbers correctly. One of the strategies you can use is to create the number in a dotted line format and having students trace over the dotted lines several times prior to trying it on their own. It is important that you teach the students to make the numbers correctly. Place a dot at the starting point and then show them with a arrow the direction that they should go. The directions for doing that follow:

Directions for writing the number 2: Begin at the point of the 2 that is at the top, curve the line around like you are going to make a circle. Before you finish the circle bring the line straight down angling to the left so the line ends underneath the spot where you began. You will then continue by drawing a straight line to the right, forming a straight horizontal line.

Make the page for the book. Remember to have the book pages cut (an 8" square works nicely, glue sticks, and items for the children to select and paste 2 on the page before they write the number.

## Math Vocabulary

## Word for Today: number

A number is a symbol that stands for the items that you have counted. There are only ten numerals, but how you combine them makes a difference as to the number of items you have counted. For now, we are going to focus on the numbers 1-10. Other symbols that you will need to learn are letters of the alphabet. Letters are not numbers and numbers are not letters. However, the numeral 1 looks like the letter "l", and the numeral 0 looks like the letter " 0 "
Write the following 3 letters and 3 numerals on the board or chart paper. Make 2 sides of the chart-1 side that says Letters ( $a, b, c$ ) and the other that says Numbers $(3,4,5)$. Ask the students to tell you where each of the symbols goes-under letters or numbers.
Symbols: ch 92 u 6
Have students copy the chart that you made on the white boards. Be sure to praise the efforts that they make to copy (it isn't easy to do it)

## Activity Memory Match

Review the game of Memory Match with the children. Ask them to "teach" you how to play the game. Be sure that they understand how to play and take turns, etc. Once you have reviewed the game, let students pick a partner to play the game with.

When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.

It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word.
When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation)

Purpose of the game: Practice recognizing the numbers between 1 and 10.
Materials: Deck of Cards for each pair of students (remove face cards and jokers)

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

Players: 2-4
Directions:

1. Shuffle the cards.
2. Make a $4 \times 4$ grid, placing cards face down. (4 columns, 4 rows)
3. Place the remainder of the cards to the right of the grid.
4. Player 1 turns over two cards. If they match (have the same numeric value) then the player takes both of the cards and places them face down by them.
5. Player 1 then replaces the 2 cards with ones from the deck.
6. If Player 1 matches, then he/she takes a second turn. If Player 1 does not match, he/she turns the cards back over and play continues with Player 2.
7. Play continues until all of the cards are matched.
8. Winner is the player with the most cards at the end of the game.

|  | Closing |
| :--- | :--- |
| Say: | Review |
| - Please recap what we did today. |  |
|  |  |
| What did you like about what we did today in math? |  |
| What would you like to do more of the next time we do math? |  |
| When you play Memory, what strategies to you use? |  |
| What happens to the cards you match? |  |

## Reflection (Confirm, Tweak, Aha!)

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.

| Component: | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Count Down \#2 and Number Book |
| Focus: | Math vocabulary, counting, geometry, |

## Materials:

White boards
Crayolas
Socks
Glue sticks
decks of cards with face cards and jokers removed page for the number book (This is the page for 1 ) items that children can choose to show one (stickers, stamps, something flat

## Opening

## State the objective

Today we are going to learn some math vocabulary-words that we need to use when we talk about numbers and shapes. We are also going to practice some of the math skills that we will need to be excellent at math.

## Gain prior knowledge by asking students the following questions

What is a circle? Draw a circle in the air. Do the ends of a circle touch one another?
What is a square? Draw a square in the air. How is a square different from a circle?
What is a triangle? Draw a triangle in the air. How is a triangle different from a square? A circle?
Give an example of one more than 2 one more than 1, on more than 5
Counting is essential in math. You can't do any sort of math if you can't count, so we will spend time learning how to count objects and write the numeral that represents the number of things that have been counted.

\begin{tabular}{|c|c|}
\hline \multicolumn{2}{|l|}{Content (the "Meat")} <br>

\hline \begin{tabular}{l}
Problem of the Day <br>
Help the children figure out how to solve this problem by giving them several examples. Then put this problem on the board and have them draw the answer that they select on the white board. <br>
Name the shapes below.

$\square$

 \& 

*Activity $\rightarrow$ Teachable <br>
Moment(s) throughout <br>
During the lesson check in with students repeatedly. <br>
Check in about what is happening and what they are thinking. <br>
Take advantage of any
\end{tabular} <br>

\hline | Fact Practice |
| :--- |
| The Number Book |
| During this next 11 days you will be working with Kindergartners to develop the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create a number book. After working with the Kindergartners, if they can verbally count to 10 , then make the number book go to 10 . If they struggle counting to 10 , make the number book with 2 pages for each number 1-5. | \& Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking. <br>

\hline
\end{tabular}

## The Book

Counting Items: You will want to have a variety of items for children to count and then paste or blue to the number page. You can have shapes (squares, circles, triangles, ovals, stars, and hearts), stickers (any that are similar such as flowers, birds, cats, dogs, dinosaurs, etc.), or you can have children draw. This is the least desirable as it will be difficult to tell if the child is having trouble drawing or counting.

Writing the number: You will want to help the Kindergartners learn how to write each number. You will want them to practice writing the number first in the air as you direct them step by step, then on paper (without lines) and then finally in the book. Don't stress over students struggling to coordinate the muscle control needed to write the numbers correctly. One of the strategies you can use is to create the number in a dotted line format and having students trace over the dotted lines several times prior to trying it on their own. It is important that you teach the students to make the numbers correctly. Place a dot at the starting point and then show them with an arrow the direction that they should go. The directions for doing that follow:

Directions for writing the number 7: A 7 is made like and upside down beginning of a 4 . Instead of looking at the left hand, have students make that same shape with the thumb and pointer finger of the right hand. Instead of having the pointer finger pointing up, have children turn their hands so the pointer finger is pointing down. The thumb and pointer finger now make the 7 . Have students trace that shape with their left pointer finger beginning at the thumb. The motion is over to the right and then down. After practicing several times have students try the shape in the air and then with a pencil.

Make the page for the book. Remember to have the book pages cut (an 8" square works nicely, glue sticks, and items for the children to select and paste 7 on the page before they write the number.

## Math Vocabulary

## Word for Today: triangle

A triangle is a three sided shape. Two lines come together at a point and then push away from each other. A third line connects the two lines that have pushed apart. An Indian tepee is shaped like a triangle, a church steeple is shaped like a triangle, and so is a piece of pizza (although pizza has a round edge as a connector instead of a flat one.
Have children practice drawing a triangle on the white board. Remind them that they draw all three line separately (later they can start at the top and complete the triangle). Tell them that it is best to draw a triangle by starting at the top point and drawing the two legs of the ladder and then connect the legs as the bottom. After they have drawn 4 triangles ask them to put a line under the one that they think they drew the best. Have them show you the squares they drew by turning over the white board.
Tell the children that you are going to make a pattern on the white board. The pattern is an A B C pattern, circle, triangle, square and then a repeat, circle, triangle, square


Ask them to draw this pattern across the white board.

When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.

It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.
When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).

Demonstrate how to play the game by bringing the children all together around a single table. Ask for children to volunteer to learn how to play the game. Begin with 2 children. Once you have taught 2, have each of them teach 1 other student while everyone is watching. Repeat one more time so that you now have 4 children teaching 4 other children. When you start to play the game, put the 8 who know how to play the game with 8 who do not and you can observe the final four play.

Purpose of the game: Practice counting backwards from 10 to ensure the student understands the relationship between numbers, one greater, one less, etc. To win, the cards will be in four stacks with 10 on the bottom and the ace or 1 on the top.
Materials: Deck of Cards (remove face cards and jokers)
Players: 2
Directions:

1. Shuffle the cards.
2. Make a $4 \times 3$ grid of cards, face up. (A grid that has 4 columns and 3 rows),
3. Place the remainder of the cards to the right of the grid.
4. Player one looks at the cards and stacks cards in backwards order, putting the smaller card on top of the larger number.
5. Player continues to stack until there are no more additional moves.
6. If player creates an entire stack 10-1, then he/she turns the stack upside down to show that it is no longer in play.
7. When Player 1 finished his/her turn, Player 2 places cards from the remaining deck to re-create the $3 \times 3$ grid.
8. Play then continues with Player 2 stacking the numbers.
9. Player may move a stack to another card. For example a stack of 3-2-1 could be placed on a 4.

Play continues until there are four stacks, 10-1.
Note: If there are no moves and no spaces, then player may draw a card from the deck to "jump start" play.

Variation: Create stacks that count up, with the Ace or 1 on the bottom and the 10 on the top.
small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

## Closing

Review
Say:

- Please recap what we did today.
- Did we achieve our objectives?


## Debrief

What did you like about what we did today in math?
What would you like to do more of the next time we do math?
Can you count backwards? What helps you to do that?
Name three different shapes.

Reflection (Confirm, Tweak, Aha!)

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.

| Component: | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | One More and Number Book |
| Focus: | Math vocabulary, counting, number recognition |

## Materials:

White boards
Crayolas
Socks
Glue sticks
decks of cards with face cards and jokers removed page for the number book (This is the page for 1 ) items that children can choose to show one (stickers, stamps, something flat

## Opening

## State the objective

Today we are going to learn some math vocabulary-words that we need to use when we talk about numbers and shapes. We are also going to practice some of the math skills that we will need to be excellent at math.

## Gain prior knowledge by asking students the following questions

What do you know about math?
What do you know about numbers? How are the different from letters? (numbers count things, letters tell you what sound to make)
How many toes do you have on one foot? How many on two?
Counting is essential in math. You can't do any sort of math if you can't count, so we will spend time learning how to count objects and write the numeral that represents the number of things that have been counted.

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day <br> Help the children figure out how to solve this problem by giving them several examples. Then put this problem on the board and have them draw the answer that they select on the white board. <br> Look at the two boxes below. Which one has the most Happy Faces in it? | *Activity $\rightarrow$ Teachable Moment(s) throughout <br> During the lesson check in with students repeatedly. <br> Check in about what is happening and what they are |
| Fact Practice <br> The Number Book <br> During this next 11 days you will be working with Kindergartners to develop the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create a number book. After working with the Kindergartners, if they can verbally count to 10 , then make the number book go to 10 . If they struggle counting to 10 , make the number book with 2 pages for each number 1-5. <br> The Book <br> Counting Items: You will want to have a variety of items for children to count and then | Take advantage of any teachable moments. <br> Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking. |

paste or blue to the number page. You can have shapes (squares, circles, triangles, ovals, stars, and hearts), stickers (any that are similar such as flowers, birds, cats, dogs, dinosaurs, etc.), or you can have children draw. This is the least desirable as it will be difficult to tell if the child is having trouble drawing or counting.

Writing the number: You will want to help the Kindergartners learn how to write each number. You will want them to practice writing the number first in the air as you direct them step by step, then on paper (without lines) and then finally in the book. Don't stress over students struggling to coordinate the muscle control needed to write the numbers correctly. One of the strategies you can use is to create the number in a dotted line format and having students trace over the dotted lines several times prior to trying it on their own. It is important that you teach the students to make the numbers correctly. Place a dot at the starting point and then show them with a arrow the direction that they should go. The directions for doing that follow:

Directions for writing the number 3: Begin at the top, just like the 2 . This time you will begin a circle, but this time before you close this circle, you are going to start a second one and then end underneath the starting point. The 3 looks at great deal like a snowman with half the body missing.

Make the page for the book. Remember to have the book pages cut (an 8" square works nicely, glue sticks, and items for the children to select and paste 3 on the page before they write the number.

## Math Vocabulary

## Word for Today: circle

A circle is a shape that starts and stops at the same place. It is round like the sun and the full moon. Other things that can be round are a can, a clock face and a plate.
Have the children draw several circles on their white boards. After they have drawn at least 4 circles have them but a line underneath the one that they think is the best.
Write the following numbers and letters on the board randomly, but low enough for the children to reach:
$\mathrm{r}, \mathrm{t}, \mathrm{p}, \mathrm{m}, \mathrm{n}, \mathrm{s}, 32,5,4,1$
Ask for volunteers to come up to the board and "circle" the number or letter that you name. Praise the efforts at circle drawing. Each time a student come up to the front, have the other children practice another circle on the white board. Have them show the circles to you so you can keep track of how they are doing.

## Activity <br> One More

Demonstrate how to play the game by bringing the children all together around a single table. Ask for children to volunteer to learn how to play the game. Begin with 2 children. Once you have taught 2, have each of them teach 1 other student while everyone is watching. Repeat one more time so that you now have 4 children teaching 4 other children. When you start to play the game, put the 8 who know how to play the game with 8 who do not and you can observe the final four play.

When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.

It is important to review academic math vocabulary often throughout the day Complete the Vocabulary notebook for each word.
When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

Purpose of the game: Practice recognizing the numbers between 1 and 10 and the number that is 1 more. Note: 10 can only be an answer card.

Materials: $\quad$ Deck of Cards (remove face cards and jokers)
Players: 2-4

## Directions:

1. Shuffle the cards.
2. Deal 5 cards to each player.
3. Player 1 asks Player 2 for a card that is a number 1 more than his or her card. For example, if the player wants to play his/her 2 , he/she would ask for a 3.
4. If Player 2 has the card asked for, he/she gives it to Player 1. Player 1 then lays down his/her card and says, "__ (the card asked for) is one more than $\qquad$ (the card Player 1 started with." Example: "3 is one more than 2."
5. If Player 2 does not have the card asked for, he/she says, "Draw A Card", and Player 1 draws a card and adds to his/her hand.
6. Player 2 then repeats the procedure.
7. Game is over when all cards are matched or time is called.

## Closing

## Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?


## Debrief

What did you like about what we did today in math?
What would you like to do more of the next time we do math?
Name several things that are in the shape of a circle.

## Reflection (Confirm, Tweak, Aha!)

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.

| Component: | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | One Less and Number Book |
| Focus: | Math vocabulary, counting, geometry |

## Materials:

White boards
Crayolas
Socks
Glue sticks
decks of cards with face cards and jokers removed page for the number book (This is the page for 1 ) items that children can choose to show one (stickers, stamps, something flat

## Opening

## State the objective

Today we are going to learn some math vocabulary-words that we need to use when we talk about numbers and shapes. We are also going to practice some of the math skills that we will need to be excellent at math.

## Gain prior knowledge by asking students the following questions

Count from 10-1 backwards
Count from 1-10 forwards
Using your hands, show a circle. Show a triangle. Show a square.
What is the difference between a number and a letter?

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day <br> Help the children figure out how to solve this problem by giving them several examples. Then put this problem on the board and have them draw the answer that they select on the white board. <br> Look at the rectangles below. Which is the widest? How do you know? <br> A <br> B <br> Draw this on the white board. Put an X in your choice. | *Activity $\rightarrow$ Teachable Moment(s) throughout <br> During the lesson check in with students repeatedly. <br> Check in about what is happening and what they are thinking. <br> Take advantage of any teachable moments. <br> Stop the class and focus on a student's key learning or understanding. Ask openended questions to |
| Fact Practice <br> The Number Book <br> During this next 11 days you will be working with Kindergartners to develop the number sense of corresponding the numbers said with an actual number of objects. To help them | determine what the rest of the group is thinking. <br> When possible, engage students in a "teach to learn" |

do that you will create a number book. After working with the Kindergartners, if they can verbally count to 10 , then make the number book go to 10 . If they struggle counting to 10, make the number book with 2 pages for each number 1-5.

## The Book

Counting Items: You will want to have a variety of items for children to count and then paste or blue to the number page. You can have shapes (squares, circles, triangles, ovals, stars, and hearts), stickers (any that are similar such as flowers, birds, cats, dogs, dinosaurs, etc.), or you can have children draw. This is the least desirable as it will be difficult to tell if the child is having trouble drawing or counting.

Writing the number: You will want to help the Kindergartners learn how to write each number. You will want them to practice writing the number first in the air as you direct them step by step, then on paper (without lines) and then finally in the book. Don't stress over students struggling to coordinate the muscle control needed to write the numbers correctly. One of the strategies you can use is to create the number in a dotted line format and having students trace over the dotted lines several times prior to trying it on their own. It is important that you teach the students to make the numbers correctly. Place a dot at the starting point and then show them with a arrow the direction that they should go. The directions for doing that follow:

Directions for writing the number 9: A nine is like an upside down 6 however it is made completely differently from a six. A 9 is like making the letter " $c$ " and then lifting the pencil and making a 1 that connect both ends of the " $c$ " and then extends beyond the " $c$ " for the stem.

Make the page for the book. Remember to have the book pages cut (an 8" square works nicely, glue sticks, and items for the children to select and paste 9 on the page before they write the number.

## Math Vocabulary

## Word for Today: rectangle

A rectangle is like a square as it has 4 straight sides. It is different from a square because two sides are short and two sides are long. The short sides are across from each other and the long sides are across from each other as well. Doors are rectangles, windows are rectangles, and cookie sheets are rectangles.
Have children practice drawing a rectangle on the white board. Remind them that they draw all four lines separately. Tell them that it is best to draw a rectangle by starting at the top-side left, drawing a straight line horizontally and then connect it to a vertical line on either end. Finally, make the final connecting line to join the rectangle. After they have drawn 4 rectangles ask them to put a circle under the one that they think they drew the best. Have them show you the squares they drew by turning over the white board.
Have them create a pattern using triangles and rectangles. Have them draw it across the entire white board.

## Activity <br> One Less

Demonstrate how to play the game by bringing the children all together around a single table. Ask for children to volunteer to learn how to play the game. Begin with 2 children. Once you have taught 2, have each of them teach 1 other student while everyone is
opportunity and have the student become the teacher.

It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.
When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is
watching. Repeat one more time so that you now have 4 children teaching 4 other children. Complete" center. $_{\text {. }}$
When you start to play the game, put the 8 who know how to play the game with 8 who do not and you can observe the final four play.

Purpose of the game: Practice recognizing the numbers between 1 and 10 and the number that is 1 less. Note: 1 can only be an answer card.
Materials: Deck of Cards (remove face cards and jokers)
Players: 2
Directions:

1. Shuffle the cards.
2. Deal 3 cards to each player.
3. Make a $3 \times 3$ grid with the cards face up ( 3 rows $\times 3$ columns)
4. Player 1 looks at the cards in his or her hand and the cards on the grid, looking for a card that represents 1 less than the cards in his/her hand.
5. If a card that represents 1 less is in the grid, the player collects the card and says,
$\qquad$ (the card picked up) is one less than $\qquad$ (the card from his/her hand) and places them both in a pile to his/her left.
6. Player replaces the card taken from the grid with a card from the extra deck
7. Player 2 now takes his/her turn.
8. Play continues until all cards are matched or time is called.

## Closing

## Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?


## Debrief

What did you like about what we did today in math?
What would you like to do more of the next time we do math?
What does one less mean?
Name numbers that are one less than 5,9 , and 2

## Reflection (Confirm, Tweak, Aha!)

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.

| Component: | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Number Book and Game Choice |
| Focus: | Math vocabulary, counting, geometry |

## Materials:

White boards
Crayolas
Socks
Glue sticks
decks of cards with face cards and jokers removed page for the number book items that children can choose to show one (stickers, stamps, something flat

## Opening

## State the objective

Today we are going to learn some math vocabulary-words that we need to use when we talk about numbers and shapes. We are also going to practice some of the math skills that we will need to be excellent at math.

## Gain prior knowledge by asking students the following questions

What do you know about numbers? How are the different from letters? (numbers count things, letters tell you what sound to make)
What is a circle? Draw a circle in the air. Do the ends of a circle touch one another?
What is a square? Draw a square in the air. How is a square different from a circle?
Give an example of one more than 4 one more than 1, on more than 4
Counting is essential in math. You can't do any sort of math if you can't count, so we will spend time learning how to count objects and write the numeral that represents the number of things that have been counted.

| Content (the "Meat" |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Problem of the Day <br> Help the children figure out how to solve this problem by giving them several examples. Then put this problem on the board and have them draw the answer that they select on the white board. <br> Below there is a ten frame. Some of the boxes have a Happy Face in them. How many more Happy Faces are needed to have 10? Tell how you know. |  |  |  |  | *Activity $\rightarrow$ Teachable Moment(s) throughout <br> During the lesson check in with students repeatedly. <br> Check in about what is happening and what they are thinking. <br> Take advantage of any teachable moments. <br> Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of |

make the number book with 2 pages for each number 1-5.

## The Book

Counting Items: You will want to have a variety of items for children to count and then paste or blue to the number page. You can have shapes (squares, circles, triangles, ovals, stars, and hearts), stickers (any that are similar such as flowers, birds, cats, dogs, dinosaurs, etc.), or you can have children draw. This is the least desirable as it will be difficult to tell if the child is having trouble drawing or counting.

Writing the number: You will want to help the Kindergartners learn how to write each number. You will want them to practice writing the number first in the air as you direct them step by step, then on paper (without lines) and then finally in the book. Don't stress over students struggling to coordinate the muscle control needed to write the numbers correctly. One of the strategies you can use is to create the number in a dotted line format and having students trace over the dotted lines several times prior to trying it on their own. It is important that you teach the students to make the numbers correctly. Place a dot at the starting point and then show them with a arrow the direction that they should go. The directions for doing that follow:

Directions for writing the number 6: A 6 starts like a one with a tiny bend to the right. When you get to the bottom of the one you move again to the right and make a circle by joining the line that came straight down. You might want to have children practice making the circle by starting at the top and having them move counterclockwise to complete the circle, ending where they started.

Make the page for the book. Remember to have the book pages cut (an 8" square works nicely, glue sticks, and items for the children to select and paste 6 on the page before they write the number.

## Math Vocabulary

## Word for Today: square

A square is a shape that has only straight sides. The straight sides of a square are all the exact same size. No matter which way you turn a square it looks exactly the same. Some things that are square can be a table, a book, a sign, or a yard.
Have children practice drawing a square on the white board. After they have drawn 4 squares ask them to put an $x$ in the one that they think they drew the best. Have them show you the squares they drew by turning over the white board.
Tell the children that you are going to make a pattern on the white board. The pattern is circles and squares mixed: $\bigcirc \bigcirc \square \square \bigcirc \bigcirc \square \square$
Ask them to draw this pattern across the white board.

## Activity Student Choice

Review how to play the games One More and Memory Match with the children. Let the children know that today they are going to select one of these two games to play. Ask them if they want to play the game today that they did not play yesterday. Invite them to do that, put do not force. Give them the cards to play and walk around helping them to play successfully. Remind them that tomorrow they will be learning a new game.
the group is thinking.
When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.

It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.
When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

| $\quad$ Closing |
| :--- | :--- |
| Say: |
| - Please recap what we did today. |
| - Did we achieve our objectives? |
| What did you like about what we did today in math? |
| What would you like to do more of the next time we do math? |
| What do you do to help you remember where items are located when you play Memory? |
| Name at least 3 different shapes that you and 3 friends can demonstrate. |

Reflection (Confirm, Tweak, Aha!)

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.

| Component: | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Number Book and One More |
| Focus: | One More |

## Materials:

White boards
Crayolas
Socks
Glue sticks
decks of cards with face cards and jokers removed page for the number book (This is the page for 1 ) items that children can choose to show one (stickers, stamps, something flat

## Opening

State the objective
Today we are going to learn some math vocabulary-words that we need to use when we talk about numbers and shapes. We are also going to practice some of the math skills that we will need to be excellent at math.

## Gain prior knowledge by asking students the following questions

What do you know about math?
What do you know about numbers? How are the different from letters? (numbers count things, letters tell you what sound to make)
What is a circle? Draw a circle in the air. Do the ends of a circle touch one another?
Counting is essential in math. You can't do any sort of math if you can't count, so we will spend time learning how to count objects and write the numeral that represents the number of things that have been counted.

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day <br> Help the children figure out how to solve this problem by giving them several examples. Then put this problem on the board and have them draw the answer that they select on the white board. <br> Look at the lines below. Which line is longer? How can you tell? $\qquad$ <br> A <br> B | *Activity $\rightarrow$ Teachable <br> Moment(s) throughout <br> During the lesson check in with students repeatedly. <br> Check in about what is happening and what they are thinking. <br> Take advantage of any |
| Fact Practice <br> The Number Book <br> During this next 11 days you will be working with Kindergartners to develop the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create a number book. After working with the Kindergartners, if they can verbally count to 10 , then make the number book go to 10 . If they struggle counting to 10 , make the number book with 2 pages for each number 1-5. | Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking. |

## The Book

Counting Items: You will want to have a variety of items for children to count and then paste or blue to the number page. You can have shapes (squares, circles, triangles, ovals, stars, and hearts), stickers (any that are similar such as flowers, birds, cats, dogs, dinosaurs, etc.), or you can have children draw. This is the least desirable as it will be difficult to tell if the child is having trouble drawing or counting.

Writing the number: You will want to help the Kindergartners learn how to write each number. You will want them to practice writing the number first in the air as you direct them step by step, then on paper (without lines) and then finally in the book. Don't stress over students struggling to coordinate the muscle control needed to write the numbers correctly. One of the strategies you can use is to create the number in a dotted line format and having students trace over the dotted lines several times prior to trying it on their own. It is important that you teach the students to make the numbers correctly. Place a dot at the starting point and then show them with a arrow the direction that they should go. The directions for doing that follow:

Directions for writing the number 4: Look at the "L" shape made by the thumb and pointer finger on your left hand. With your right hand, trace that shape several times so you will know how to make the first part of the 4. Start at the top of the "L" come straight down and then continue the line by drawing to the right. Pick up your pencil. You will now make a "1" that crosses through the "thumb" part of the "L" you made.

Make the page for the book. Remember to have the book pages cut (an 8" square works nicely, glue sticks, and items for the children to select and paste 4 on the page before they write the number.

## Math Vocabulary

## Word for Today: circle

A circle is a shape that starts and stops at the same place. It is round like the sun and the full moon. Other things that can be round are a can, a clock face and a plate.
Have the children draw several circles on their white boards. After they have drawn at least 4 circles have them but a line underneath the one that they think is the best.
Write the following numbers and letters on the board randomly, but low enough for the children to reach:
anspgn974351
Ask for volunteers to come up to the board and "circle" the number or letter that you name. Praise the efforts at circle drawing. Each time a student come up to the front, have the other children practice another circle on the white board. Have them show the circles to you so you can keep track of how they are doing.

## Activity <br> One More

Review how to play the game with the children. This is a more difficult game than matching numbers, however it will give them necessary practice.

Purpose of the game: Practice recognizing the numbers between 1 and 10 and the number that is 1 more. Note: 10 can only be an answer card.
Materials: Deck of Cards (remove face cards and jokers)

When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.

It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.
When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

Players: 2-4
Directions:

1. Shuffle the cards.
2. Deal 5 cards to each player.
3. Player 1 asks Player 2 for a card that is a number 1 more than his or her card. For example, if the player wants to play his/her 2 , he/she would ask for a 3.
4. If Player 2 has the card asked for, he/she gives it to Player 1. Player 1 then lays down his/her card and says, " $\qquad$ (the card asked for) is one more than $\qquad$ (the card Player 1 started with." Example: " 3 is one more than 2."
5. If Player 2 does not have the card asked for, he/she says, "Draw A Card", and Player 1 draws a card and adds to his/her hand.
6. Player 2 then repeats the procedure.
7. Game is over when all cards are matched or time is called.

## Closing <br> Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?


## Debrief

What did you like about what we did today in math?
What would you like to do more of the next time we do math?
What does one more mean?
What does one less mean?
Give examples.

## Reflection (Confirm, Tweak, Aha!)

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.

| Component: | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Number Book and One Less |
| Focus: | Math |

## Materials:

White boards
Crayolas
Socks
Glue sticks
decks of cards with face cards and jokers removed page for the number book (This is the page for 1 ) items that children can choose to show one (stickers, stamps, something flat

## Opening

## State the objective

Today we are going to learn some math vocabulary-words that we need to use when we talk about numbers and shapes. We are also going to practice some of the math skills that we will need to be excellent at math.

## Gain prior knowledge by asking students the following questions

Using your fingers show each of these numbers: $4,3,6,8,1,10$
Count from 10-1 backwards
Count from 1-10 forwards
Using your hands, show a circle. Show a triangle. Show a square. Stretch the square into a rectangle What is the difference between a number and a letter?

## Content (the "Meat")

## Problem of the Day

Help the children figure out how to solve this problem by giving them several examples. Then put this problem on the board and have them draw the answer that they select on the white board.

Counting backwards is fun. Look at the list of numbers below. If you are counting backwards, what numbers fit into the spaces? How do you know?

$$
10,9,8,7, \ldots, 5, \ldots, \ldots, 2,1
$$

## Fact Practice

The Number Book
During this next 11 days you will be working with Kindergartners to develop the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create a number book. After working with the Kindergartners, if they can verbally count to 10 , then make the number book go to 10 . If they struggle counting to 10 ,
$*$ Activity $\rightarrow$ Teachable
Moment(s) throughout

During the lesson check in with students repeatedly.
Check in about what is happening and what they are thinking.
Take advantage of any teachable moments.
Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking.
make the number book with 2 pages for each number 1-5.

## The Book

Counting Items: You will want to have a variety of items for children to count and then paste or blue to the number page. You can have shapes (squares, circles, triangles, ovals, stars, and hearts), stickers (any that are similar such as flowers, birds, cats, dogs, dinosaurs, etc.), or you can have children draw. This is the least desirable as it will be difficult to tell if the child is having trouble drawing or counting.

Writing the number: You will want to help the Kindergartners learn how to write each number. You will want them to practice writing the number first in the air as you direct them step by step, then on paper (without lines) and then finally in the book. Don't stress over students struggling to coordinate the muscle control needed to write the numbers correctly. One of the strategies you can use is to create the number in a dotted line format and having students trace over the dotted lines several times prior to trying it on their own. It is important that you teach the students to make the numbers correctly. Place a dot at the starting point and then show them with a arrow the direction that they should go. The directions for doing that follow:

Directions for writing the number 10: A ten is 2 numbers the 1 , and then the zero. A zero is made by starting at the top and arching around until you come back to the beginning. The arch travels in a counterclockwise motion.

Make the page for the book. Remember to have the book pages cut (an 8" square works nicely, glue sticks, and items for the children to select and paste 10 on the page before they write the number.

## Math Vocabulary

## Word for Today: rectangle

A rectangle is like a square as it has 4 straight sides. It is different from a square because two sides are short and two sides are long. The short sides are across from each other and the long sides are across from each other as well. Doors are rectangles, windows are rectangles, and cookie sheets are rectangles.
Have children practice drawing a rectangle on the white board. Remind them that they draw all four lines separately. Tell them that it is best to draw a rectangle by starting at the top-side left, drawing a straight line horizontally and then connect it to a vertical line on either end. Finally, make the final connecting line to join the rectangle. After they have drawn 4 rectangles ask them to put a circle under the one that they think they drew the best. Have them show you the squares they drew by turning over the white board.
Have them create a pattern using triangles, circles and rectangles. Have them draw it across the entire white board.

## Activity <br> One Less

Review how to play the game, One Less. Talk about how it is different and similar to the game One More. Also ask students how this game is like Count Down. When you have reviewed the game, have children select a partner to play the game with.
Purpose of the game: Practice recognizing the numbers between 1 and 10 and the number that is 1 less. Note: 1 can only be an answer card.

When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.

It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.
When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

Materials: Deck of Cards (remove face cards and jokers)
Players: 2
Directions:

1. Shuffle the cards.
2. Deal 3 cards to each player.
3. Make a $3 \times 3$ grid with the cards face up ( 3 rows $\times 3$ columns)
4. Player 1 looks at the cards in his or her hand and the cards on the grid, looking for a card that represents 1 less than the cards in his/her hand.
5. If a card that represents 1 less is in the grid, the player collects the card and says,
$\qquad$ (the card picked up) is one less than $\qquad$ (the card from his/her hand) and places them both in a pile to his/her left.
6. Player replaces the card taken from the grid with a card from the extra deck
7. Player 2 now takes his/her turn.
8. Play continues until all cards are matched or time is called.

|  | $\quad$ Closing |
| :--- | :--- |
| Say: |  |
| - Please recap what we did today. |  |
| - Did we achieve our objectives? |  |
| What did you like about what we did today in math? |  |
| What would you like to do more of the next time we do math? |  |
| What does it mean to find one less than the amount you have? |  |
| What does it mean to find one more? |  |

## Reflection (Confirm, Tweak, Aha!)

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
- Ask them to comment on something (if anything) they have learned today that was brand new to them.

| Component: | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Student Activity Choice |
| Focus: | Math vocabulary, counting, geometry |

## Materials:

White boards
Crayolas
Socks
Glue sticks
decks of cards with face cards and jokers removed page for the number book items that children can choose to show one (stickers, stamps, something flat)

## Opening

State the objective
Today we are going to learn some math vocabulary-words that we need to use when we talk about numbers and shapes. We are also going to practice some of the math skills that we will need to be excellent at math.

## Gain prior knowledge by asking students the following questions

What do you know about numbers? How are the different from letters? (numbers count things, letters tell you what sound to make)
What is a circle? Draw a circle in the air. Do the ends of a circle touch one another?
Give an example of one more than 3 , one more than 2 , on more than 4
Counting is essential in math. You can't do any sort of math if you can't count, so we will spend time learning how to count objects and write the numeral that represents the number of things that have been counted.

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day <br> Help the children figure out how to solve this problem by giving them several examples. Then put this problem on the board and have them draw the answer that they select on the white board. <br> Look at the list of number. What are the missing numbers? Write them in. How do you know you are right? $1,2, \ldots, 4,5,6, \ldots, 8,9,10$ | *Activity $\rightarrow$ Teachable <br> Moment(s) throughout <br> During the lesson check in with students repeatedly. <br> Check in about what is happening and what they are thinking. <br> Take advantage of any |
| Fact Practice <br> The Number Book <br> During this next 11 days you will be working with Kindergartners to develop the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create a number book. After working with the Kindergartners, if they can verbally count to 10 , then make the number book go to 10 . If they struggle counting to 10 , make the number book with 2 pages for each number 1-5. | Stop the class and focus on a student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking. |

## The Book

Counting Items: You will want to have a variety of items for children to count and then paste or blue to the number page. You can have shapes (squares, circles, triangles, ovals, stars, and hearts), stickers (any that are similar such as flowers, birds, cats, dogs, dinosaurs, etc.), or you can have children draw. This is the least desirable as it will be difficult to tell if the child is having trouble drawing or counting.

Writing the number: You will want to help the Kindergartners learn how to write each number. You will want them to practice writing the number first in the air as you direct them step by step, then on paper (without lines) and then finally in the book. Don't stress over students struggling to coordinate the muscle control needed to write the numbers correctly. One of the strategies you can use is to create the number in a dotted line format and having students trace over the dotted lines several times prior to trying it on their own. It is important that you teach the students to make the numbers correctly. Place a dot at the starting point and then show them with an arrow the direction that they should go. The directions for doing that follow:

Directions for writing the number 5: The 5 begins like the four, only instead of taking a line straight out on the lower part of the "L", you begin the straight line and then make a part of a circle like you did for the bottom of the three. Lift your pencil and touch down at the place you started the five and make a straight line to the right.

Make the page for the book. Remember to have the book pages cut (an 8" square works nicely, glue sticks, and items for the children to select and paste 5 on the page before they write the number.

## Math Vocabulary

## Word for Today: square

A square is a shape that has only straight sides. The straight sides of a square are all the exact same size. No matter which way you turn a square it looks exactly the same. Some things that are square can be a table, a book, a sign, or a yard.
Have children practice drawing a square on the white board. After they have drawn 4 squares ask them to put an $x$ in the one that they think they drew the best. Have them show you the squares they drew by turning over the white board.
Tell the children that you are going to make a pattern on the white board. The pattern is circle, square, circle, square.
Ask them to draw this pattern across the white board.

## Activity <br> Student Choice

Review how to play the games One More and Memory Match with the children. Let the children know that today they are going to select one of these two games to play. Give them the cards to play and walk around helping them to play successfully.

When possible, engage students in a "teach to learn" opportunity and have the student become the teacher.

It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).

Focus on having young people "compete" in pairs or small groups. Once a game is mastered you can utilize it in the "When Homework Is Complete" center.

## Closing <br> Review

Say:

- Please recap what we did today.
- Did we achieve our objectives?


## Debrief

What did you like about what we did today in math?
What would you like to do more of the next time we do math?
What is a square?
How can you make a square using people for the edges?

Reflection (Confirm, Tweak, Aha!)

- Ask students to think about what they did today in math.
- Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
- Ask them to comment on what they did today that was like something they had done before except in one particular way which was new to them. (Tweak)
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