| Component | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Building Shapes |
| Focus: | Building Shapes |

## Materials:

White boards
Crayolas
Socks (for erasers)
Pencils
$\qquad$

Activity at the end of the lesson plan
Marshmallows (tiny)
Toothpicks

## 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 are some of the shapes that you know the name of? What does a square look like? How is similar to a rectangle? How are squares and rectangles different? What does a triangle look like? How is a triangle like a square? How is it different? What is your favorite shape? Draw it on your white board.

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day Today is Tuesday. Yesterday was $\qquad$ Tomorrow will be $\qquad$ . | *Activity $\rightarrow$ Teachable Moment(s) throughout During the lesson check in |
| Fact Practice Counting <br> During this next 11 days you will be working with Kindergartners to reinforce number sense and counting. It is important that Kindergartners understand that when they say a particular number that the word or words they say actually represents a physical number of objects. For the next 11 days, we will ask children to represent a certain number by drawing a domino and counting the dots on the domino and then recording the total number of dots. <br> Directions: <br> 1. Divide children into pairs. <br> 2. Give each pair a set of dominoes and 2 white boards, pens/crayons. <br> 3. Each child selects a domino and then draws a picture of the domino that shows the number that is represented by the dots on the domino. <br> 4. When they have drawn the domino, child should write the number that is represented. | 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 the group is thinking. <br> Engage students in a "teach to learn" opportunity and have the student become the teacher. |


|  |
| :--- |
| Word for Today: trapezoid |
| Description: A trapezoid is a shape that has 4 sides. However, it is not a square or a |
| rectangle. A trapezoid has 2 sides that are equal in length and are opposite of each other |
| on the sides. The other 2 sides are not the same, one is shorter than the other. A |
| trapezoid looks like this: |

When you look at the trapezoid you can see a triangle with a flat top rather than a point on the top.
Ask children to draw a trapezoid on their white boards. Ask them which sides of the trapezoid have the angle of a triangle. Place a piece of paper over half of the trapezoid so the children can see the how the sides mirror each other. Count the number of sides with the students. Ask them where they would need to connect the toothpicks with marshmallows to make the shape.

## Activity

## Building Shapes

Kindergartners need hands-on, concrete experience when it comes to building shapes. There are several key shapes that we will want Kindergartners to build:


One at a time, draw these shapes on the board, and then ask students to create these shapes using marshmallows and flat toothpicks.

As children make each shape, have them practice saying the name. When finished with all of the shapes probably the end of the second day, have students point to them as you call them out.

Complete the following chart for each shape as well:

| Shape | \# of toothpicks | \# of marshmallows |
| :---: | :---: | :---: |
| $\triangle$ |  |  |
| $\square$ |  |  |
| $\square$ |  |  |

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.

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $\square$ |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |


|  | Closing |
| :--- | :--- |
| Say: | Review |
| - 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 is a number? |  |
| What is a letter? |  |
| Are they the same? |  |

## Reflection (Confirm, Tweak, Aha!)

1. Ask students to think about what they did today in math.
2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
3. 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)
4. 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: | Building Shapes Data |
| Focus: | Building Shapes |

## Materials:

White boards
Crayolas
Socks (use as an eraser)
Glue sticks

Activity at the end of the lesson plan marshmallows (tiny) toothpicks

## 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 are some of the shapes that you know the name of? What does a square look like? How is similar to a rectangle? How are squares and rectangles different? What does a triangle look like? How is a triangle like a square? How is it different? What shape did we make yesterday that you really liked? Draw it on your white board.

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day Name the months of the year in order, beginning with January. | *Activity $\rightarrow$ Teachable Moment(s) throughout <br> During the lesson check in |
| Fact Practice Counting <br> During this next 10 days you will be working with Kindergartners to reinforce number sense and counting. It is important that Kindergartners understand that when they say a particular number that the word or words they say actually represents a physical number of objects. For the next 10 days, we will ask children to represent a certain number by drawing a domino and counting the dots on the domino and then recording the total number of dots. <br> Directions: <br> 1. Divide children into pairs. <br> 2. Give each pair a set of dominoes and 2 white boards, pens/crayons. <br> 3. Each child selects a domino and then draws a picture of the domino that shows the number that is represented by the dots on the domino. <br> 4. When they have drawn the domino, child should write the number that is represented. | 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 the group is thinking. <br> When possible, engage students in a "teach to learn" opportunity and have the student become the teacher. |



| $\square$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |


|  | 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 to 20? If yes, then do. If no, then how high can you go.
Are numbers and letters the same?

## Reflection (Confirm, Tweak, Aha!)

1. Ask students to think about what they did today in math.
2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
3. 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)
4. 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: | Symmetry \#1 |
| Focus: | Symmetry |


| Materials: |  |
| :--- | :--- |
| White boards | pencils |
| Crayolas | paint |
| Socks (for an eraser) | straws |
| Paper | construction paper |

## 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

Draw a picture of a face. Be sure to put on the eyes, the nose, the mouth, and the ears. When you have finished the face, draw a vertical line down the center. Do you have an eye on both sides? Do you have an ear on both sides? Do you have $1 / 2$ of a nose on both sides? Do you have $1 / 2$ of a mouth on both sides? Although not perfect, you should have the same on both sides. It is like when you look in a mirror and you see the same face looking back at you. When you have a mirrored image it is called symmetry. You drew a face that had symmetry.

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day <br> Roll 2 dice. How many dots (pips) are on the dice. Draw a picture to show the two dice. | *Activity $\rightarrow$ Teachable Moment(s) throughout |
| Fact Practice <br> Counting 1:1 Correspondence <br> During this next 9 days you will be working with Kindergartners to reinforce number sense and counting. It is important that Kindergartners understand that when they say a particular number that the word or words they say actually represents a physical number of objects. For the next 9 days, we will ask children to represent a certain number by drawing a domino and counting the dots on the domino and then recording the total number of dots. <br> Directions: <br> 1. Divide children into pairs. <br> 2. Give each pair a set of dominoes and 2 white boards, pens/crayons. <br> 3. Each child selects a domino and then draws a picture of the domino that shows the number that is represented by the dots on the domino. <br> 4. When they have drawn the domino, child should write the number that is represented. | 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 the group is thinking. <br> When possible, engage students in a "teach to learn" opportunity and have the |


|  | student become the teacher. |
| :---: | :---: |
| Math Vocabulary <br> Word for Today: symmetry <br> Description: Symmetry is a word that describes a mirror image, that something is the same on two sides (or nearly the same). Give children a piece of paper. Ask them to make a hamburger fold. Ask them to tell how the rectangles on either side of the fold are the same. Now ask them to fold the paper with a hot dog fold and ask the same question. Ask them to think about their own bodies. What body parts would they find on both sides if they were to do a "hot dog" fold on themselves. Would this be symmetry? (yes) Ask them to think about what would be on both sides if they were to do a hamburger fold on themselves. Would this be symmetry? (no) | It is important to review academic math vocabulary often throughout the day. <br> Complete the Vocabulary notebook for each word. <br> When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). |
| Symmetrical Designs <br> Symmetry is another way of saying mirror image. If you were to take a piece of paper and fold it in half, if the picture or image on the page is symmetrical, what you can see on one side of the page is exactly what you can see on the other. <br> Today we are going to do an art activity that will demonstrate what is meant by symmetrical. <br> Materials you will need: white construction paper, folded in half with a hot dog fold, straw for each student, basic colors of tempera paint: red, green, yellow, blue, orange, purple, and black. The tempera paint should be liquid, and you will want one eye dropper for each color. Although you do not want the paint to be runny, you will want it to be liquid enough to be blown across the page. If possible, have an older student for each color to support you. Open the folded paper and on one side of the paper add a drop or two of three different colors that the child selects. The paint should be in three different location on the same side of the page (stay as far from the mid line as you can. <br> Give the child a straw and have them blow the paint around, trying to stay on $1 / 2$ of the page. When child is finished, refold the paper and make a print of the first side onto the second side. <br> When you open up the paper, you will be able to see the symmetry. Talk about how what is near the center on one side is near the center on the other. Talk about how what is in the corner on one side is in the corner on the other. Share with students that this is symmetry-mirror images on both sides. <br> Let painting dry for child to take home tomorrow. | 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 |
| Say: | Review |
| - Please recap what we did today. |  |
| $\bullet$ |  |

Consult 4 Kids Lesson Plans

## 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 number?
What is a letter?
Are they the same?

## Reflection (Confirm, Tweak, Aha!)

1. Ask students to think about what they did today in math.
2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
3. 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)
4. 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: | Symmetry \#2 |
| Focus: | Symmetry |

## Materials:

White boards
Activity at the end of the lesson plan
Crayolas
Socks (for erasers)
Glue sticks

## 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

Draw a picture of a body. Be sure to put on arms and legs on both side. When you draw a face be sure to include eyes, ears, nose and mouth. When you have finished the drawing, fold the paper in half like a hot dog. Ask children if they have a picture with some symmetry. Ask them to list the things that are the same on both sides. Now have them fold the body in a hamburger fold. Ask them what happened to the symmetry. Look around the room and have children identify things that have symmetry and things that do not. Ask them which letters of the alphabet have symmetry.

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day What are the next three items in this pattern? Draw your answer. $\qquad$ $\qquad$ | *Activity $\rightarrow$ Teachable Moment(s) throughout <br> During the lesson check in with students repeatedly. |
| Fact Practice <br> Counting 1:1 Correspondence <br> During this next 8 days you will be working with Kindergartners to reinforce number sense and counting. It is important that Kindergartners understand that when they say a particular number that the word or words they say actually represents a physical number of objects. For the next 8 days, we will ask children to represent a certain number by drawing a domino and counting the dots on the domino and then recording the total number of dots. <br> Directions: <br> 1. Divide children into pairs. <br> 2. Give each pair a set of dominoes and 2 white boards, pens/crayons. <br> 3. Each child selects a domino and then draws a picture of the domino that shows the | 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 the group is thinking. <br> When possible, engage students in a "teach to learn" opportunity and have the student become the teacher. |

number that is represented by the dots on the domino.
4. When they have drawn the domino, child should write the number that is represented.

## Math Vocabulary

Word for Today: symmetry
Description: Ask children to describe the meaning of symmetry to you. Ask them to recount the experiences they have had the past two days that have helped them to understand symmetry. Look around the room and find things with symmetry (this is an extension of an earlier activity today). Ask them about the flag and if there is symmetry. (no) Ask them about the letters " o ", "m", "s", and "a". Which have symmetry and which do not? Will the way you "fold" the letter in $1 / 2$ make a difference in symmetry?
Activity
Symmetry

## Symmetrical Designs

Symmetry is another way of saying mirror image. If you were to take a piece of paper and fold it in half, if the picture or image on the page is symmetrical, what you can see on one side of the page is exactly what you can see on the other.
Today we are going to do another activity that will demonstrate what is meant by symmetrical.

## Symmetry

Directions:

1. Give each child a piece of graph paper (attached to the lesson plan.
2. Show the child the mid line of the graph paper.
3. Tell the child that using crayons, he/ she will color in some of the squares of the graph paper, using different colors.
4. Explain that the child can only color on one side of the mid line. (Actually fold the paper pack so he/she cannot even see the other half.
5. When child is finished, he/she should fine another student to trade papers with and he/she should create a mirror image-remember that what is near the midline, stays near the midline, and what is in the corners stays in the corners, and so on.

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: | Review |
|  |  |
|  | Dlease 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? |  |
| What is a number? |  |
| What is a letter? |  |
| Are they the same? |  |

## Reflection (Confirm, Tweak, Aha!)

1. Ask students to think about what they did today in math.
2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
3. 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)
4. Ask them to comment on something (if anything) they have learned today that was brand new to them.

Consult 4 Kids Lesson Plans
KIDS
Graph Paper-Kindergarten—Symmetry


| Component: | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Graphing Skittles |
| Focus: | Graphing |

## Materials:

White boards
Crayolas
Cereal

Activity at the end of the lesson plan
Skittles for each group

## 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 graphing? What can a graph look like? If we were to graph the number of boys and girls in this classroom, what would we need to do? Create the graph and write it on the board.

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day If you have 5 cookies and you eat 2 of them, how many cookies do you have left? Draw a picture to show your answer. | *Activity $\rightarrow$ Teachable Moment(s) throughout <br> During the lesson check in |
| Fact Practice <br> Counting 1:1 Correspondence <br> During this next 7 days you will be working with Kindergartners to reinforce number sense and counting. It is important that Kindergartners understand that when they say a particular number that the word or words they say actually represents a physical number of objects. For the next 7 days, we will ask children to represent a certain number by drawing a domino and counting the dots on the domino and then recording the total number of dots. <br> Directions: <br> 1. Divide children into pairs. <br> 2. Give each pair a set of dominoes and 2 white boards, pens/crayons. <br> 3. Each child selects a domino and then draws a picture of the domino that shows the number that is represented by the dots on the domino. <br> 4. When they have drawn the domino, child should write the number that is represented. | 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 the group is thinking. <br> When possible, engage students in a "teach to learn" opportunity and have the student become the teacher. |
| Math Vocabulary | It is important to review |

## Word for Today: graph

Description: A graph is a picture that gives you information quickly. Draw a graph on the board or chart that has three columns, one labeled paper, one labeled rock, and the third labeled scissors. Show the children how to make each symbol. Explain that you are going to count to three and then the children will make paper, rock, or scissors. Practice several times so they know how to do this. Then tell children you are going to graph which sign they make. Do the activity and then record the number of children in each group. On the graph record a happy face for each child in each column. Ask them to tell you what information they know by looking at the graph.

## Activity <br> Graphing

## Graphing

Graphing is a process that allows you to make sense of information. For example, you could make a graph of how many children walk to school, are driven in a car, and maybe even ride the bus. You could also make a graph that would show how many children are more in each month. If you use a bar graph it is easy to tell which item has the most, which the least, and everything in between.

Today students will work in groups of 3-4 and make a graph of Skittles. At the end of the exercise, after students have shared the graph that they have made with the group, students may divide the Skittles up among themselves for a treat.

## Skittles

Materials you will need: graph paper, small bag of Skittles for each group, crayons, paper plate.

After children are divided into groups, model for them how they will open the bag of Skittles and then graph the number of Skittles by color. Demonstrate be counting the number of red Skittles and then coloring in that many squares in red. Continue the demonstration by counting the yellow Skittles and coloring in that number of squares in yellow. Continue until all of the Skittles have been charted.

Ask if the children have questions. Answer them and then distribute the supplies for the children to replicate exactly what was modeled.

At the end, have children share the bar graphs with the other groups.
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: | 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? |  |
| What is a number? |  |
| What is a letter? |  |
| Are they the same? |  |

Reflection (Confirm, Tweak, Aha!)
Ask students to think about what they did today in math.

1. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
2. 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)
3. Ask them to comment on something (if anything) they have learned today that was brand new to them.

Graph Paper for Skittles, Fruit Loops, Gummy Gears, Button Sort


| Component | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Graphing Pennnies |
| Focus: | Graphing |

## Materials:

White boards
Crayolas
Socks (for erasers)
Glue sticks

Activity at the end of the lesson plan
pennies (real or plastic
small container

## 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 graphing? What can a graph look like? If we were to graph the number of people wearing white tennis shoes compared to people wearing tennis shoes that have a color, what would that look like. Create the graph on the board. (If most children have white/colored shoes, use another descriptor.)

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day <br> If you have 8 cookies and someone gives you 3 more cookies, how many cookies do you have all together? | *Activity $\rightarrow$ Teachable Moment(s) throughout |
| Fact Practice <br> Counting 1:1 Correspondence <br> During this next 6 days you will be working with Kindergartners to reinforce number sense and counting. It is important that Kindergartners understand that when they say a particular number that the word or words they say actually represents a physical number of objects. For the next 6 days, we will ask children to represent a certain number by drawing a domino and counting the dots on the domino and then recording the total number of dots. <br> Directions: <br> 1. Divide children into pairs. <br> 2. Give each pair a set of dominoes and 2 white boards, pens/crayons. <br> 3. Each child selects a domino and then draws a picture of the domino that shows the number that is represented by the dots on the domino. <br> 4. When they have drawn the domino, child should write the number that is represented. | 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 the group is thinking. <br> When possible, engage students in a "teach to learn" opportunity and have the student become the teacher. |


|  |  |
| :---: | :---: |
| Math Vocabulary <br> Word for Today: graph <br> Description: A graph is a picture that gives you information quickly. Draw a graph on the board or chart that has three columns, one labeled walk, one labeled ride, and the third labeled bus. Explain that you are going to graph the way children get to school. Ask children to share how they get to school. Do the activity and then record the number of children in each group. On the graph record a happy face for each child in each column. Ask them to tell you what information they know by looking at the graph. | It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. <br> When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). |
| Activity <br> Graphing <br> Graphing is a process that allows you to make sense of information. For example, you could make a graph of how many children walk to school, are driven in a car, and maybe even ride the bus. You could also make a graph that would show how many children are more in each month. If you use a bar graph it is easy to tell which item has the most, which the least, and everything in between. <br> Today students will work in groups of 3-4 and make a graph pennies-heads or tails. At the end of the exercise, after students have shared the graph that they have made with the group, students will collect the pennies that they used and return them to you. (If you don't want to use real pennies, you can use plastic pennies purchased through Lakeshore or other school supply store. <br> Penny Graphs <br> Materials you will need: graph paper, 2 oz Dixie cup of pennies for each group, crayons, paper plate. <br> After children are divided into groups, model for them how they will take one penny at a time and flip it, having it land on either heads or tails. Each time the coin shows heads, the children will draw a penny in the graphing square for heads. Each time the coin shows tails, the children will draw a penny in the graphing square for tails. <br> Ask if the children have questions. Answer them and then distribute the supplies for the children to replicate exactly what was modeled. <br> At the end, have children share the bar graphs with the other groups. | 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: | 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? |  |
| What is a number? |  |
| What is a letter? |  |
| Are they the same? |  |

## Reflection (Confirm, Tweak, Aha!)

1. Ask students to think about what they did today in math.
2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
3. 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)
4. Ask them to comment on something (if anything) they have learned today that was brand new to them.

Kindergarten: Penny Graph
Heads


Tails


| Component | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Graphing Fruit Loops |
| Focus: | Graphing |

## Materials:

White boards
Crayolas
Socks (use for erasers)
Glue sticks
decks of cards
Activity at the end of the lesson plan
Fruit Loops
small Dixie cups

## 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 graphing? What can a graph look like? If we were to graph the color of your eyes, what colors would we need to include in our graph? How would we set that up? How would we find out how many people there were in each category? What other things could we graph?

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day <br> Count aloud from 1-30. Pick one of the numbers that you said and draw a picture to show that number. | *Activity $\rightarrow$ Teachable Moment(s) throughout |
| Fact Practice <br> Counting 1:1 Correspondence <br> During this next 5 days you will be working with Kindergartners to reinforce number sense and counting. It is important that Kindergartners understand that when they say a particular number that the word or words they say actually represents a physical number of objects. For the next 5 days, we will ask children to represent a certain number by drawing a domino and counting the dots on the domino and then recording the total number of dots. <br> Directions: <br> 1. Divide children into pairs. <br> 2. Give each pair a set of dominoes and 2 white boards, pens/crayons. <br> 3. Each child selects a domino and then draws a picture of the domino that shows the number that is represented by the dots on the domino. <br> 4. When they have drawn the domino, child should write the number that is represented | 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 the group is thinking. <br> When possible, engage students in a "teach to learn" opportunity and have the student become the teacher. |


|  |  |
| :---: | :---: |
| Math Vocabulary <br> Word for Today: graph <br> Description: A graph is a picture that gives you information quickly. Take one of the suggestions from the children during the earlier time frame. Ask the children to guide you step by step through the graph creation process. If they give a faulty instruction, either question the step at the time, or try to do what they have said and when you run into a snag, ask them to help you figure it out and then go back and start again. Children will learn as much from "not giving" the correct directions as they will from "giving" the correct instructions. | It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. <br> When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). |
| Activity <br> Graphing <br> Graphing <br> Graphing is a process that allows you to make sense of information. For example, you could make a graph of how many children walk to school, are driven in a car, and maybe even ride the bus. You could also make a graph that would show how many children are more in each month. If you use a bar graph it is easy to tell which item has the most, which the least, and everything in between. <br> Today students will work in groups of 3-4 and make a graph of Fruit Loops. At the end of the exercise, after students have shared the graph that they have made with the group, students may divide the Fruit Loops up among themselves for a treat. <br> Fruit Loops <br> Materials you will need: graph paper, small Dixie cup of Fruit Loops for each group, crayons, paper plate. <br> After children are divided into groups, model for them how they will take the Fruit Loops out of the cup one at a time and then graph the number of Fruit Loops by color. Demonstrate be counting the number of red Fruit Loops and then coloring in that many squares in red. Continue the demonstration by counting the yellow Fruit Loops and coloring in that number of squares in yellow. Continue until all of the Fruit Loops have been charted. <br> Ask if the children have questions. Answer them and then distribute the supplies for the children to replicate exactly what was modeled. <br> At the end, have children share the bar graphs with the other groups. | 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: | Review |
|  |  |
|  | Please recap what we did today. |
|  | Did we achieve our objectives? |
| What would you like to do more of the next time we do math? |  |
| What is a number? |  |
| What is a letter? |  |
| Are they the same? |  |

## Reflection (Confirm, Tweak, Aha!)

1. Ask students to think about what they did today in math.
2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
3. 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)
4. Ask them to comment on something (if anything) they have learned today that was brand new to them.

## Consult 4 Kids Lesson Plans

Graph Paper for Skittles, Fruit Loops, Gummy Gears, Button Sort


| Component | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Graphing Gummy Bears |
| Focus: | Graphing |

## Materials:

White boards decks of cards
Crayolas Gummy Bears

Socks (for erasers)
Glue sticks
Gummy Bears

## 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 graphing? What can a graph look like? If we were to graph the color of your eyes, what colors would we need to include in our graph? How would we set that up? How would we find out how many people there were in each category? What other things could we graph?

objects. For the next 4 days, we will ask children to represent a certain number by drawing a domino and counting the dots on the domino and then recording the total number of dots.

## Directions:

1. Divide children into pairs.
2. Give each pair a set of dominoes and 2 white boards, pens/crayons.
3. Each child selects a domino and then draws a picture of the domino that shows the number that is represented by the dots on the domino.
4. When they have drawn the domino, child should write the number that is represented

## Math Vocabulary

## Word for Today: graph

Description: A graph is a picture that gives you information quickly. Take one of the suggestions from the children during the earlier time frame. Ask the children to guide you step by step through the graph creation process. If they give a faulty instruction, either question the step at the time, or try to do what they have said and when you run into a snag, ask them to help you figure it out and then go back and start again. Children will learn as much from "not giving" the correct directions as they will from "giving" the correct instructions.

## Activity <br> Graphing

## Graphing

Graphing is a process that allows you to make sense of information. For example, you could make a graph of how many children walk to school, are driven in a car, and maybe even ride the bus. You could also make a graph that would show how many children are more in each month. If you use a bar graph it is easy to tell which item has the most, which the least, and everything in between.

Today students will work in groups of 3-4 and make a graph of Gummy Bears. At the end of the exercise, after students have shared the graph that they have made with the group, students may divide the Gummy Bears up among themselves for a treat.

## Gummy Bears

Materials you will need: graph paper, Dixie cup of Gummy Bears for each group, crayons, paper plate.

After children are divided into groups, model for them how they will take the Gummy Bears out of the cup and then graph the number of Gummy Bears by color. Demonstrate be counting the number of red Gummy Bears and then coloring in that many squares in red. Continue the demonstration by counting the yellow Gummy Bears and coloring in that number of squares in yellow. Continue until all of the Gummy Bears have been charted.

Ask if the children have questions. Answer them and then distribute the supplies for the children to replicate exactly what was modeled.

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.

At the end, have children share the bar graphs with the other groups.

## 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 is one more than 6 ?
What are the numerals?

## Reflection (Confirm, Tweak, Aha!)

1. Ask students to think about what they did today in math.
2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
3. 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)
4. Ask them to comment on something (if anything) they have learned today that was brand new to them.

Graph Paper for Skittles, Fruit Loops, Gummy Gears, Button Sort


| Component | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Sorting and Graphing Buttons |
| Focus: | Sorting |

## Materials:

White boards
Crayolas
Socks (use for erasers)
Glue sticks
activity at end of the lesson plan
buttons
2 oz. Dixie cup
Graph paper

## 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 does it mean when you say that you are going to "sort" something? How would you go about deciding how you would sort items? What is an attribute? How would you use an attribute to make sorting easier?

| Content (the "Meat") |
| :--- |
| Problem of the Day |
| On the white board or chart paper draw 3 clock faces, one showing 3:00, one showing 5:00, |
| and 1 showing 1:00. Ask children to identify the time on each clock and explain how they |
| know. |

## Fact Practice <br> Counting 1:1 Correspondence

During this next 3 days you will be working with Kindergartners to reinforce number sense and counting. It is important that Kindergartners understand that when they say a particular number that the word or words they say actually represents a physical number of objects. For the next 3 days, we will ask children to represent a certain number by drawing a domino and counting the dots on the domino and then recording the total number of dots.

## Directions:

1. Divide children into pairs.
2. Give each pair a set of dominoes and 2 white boards, pens/crayons.
3. Each child selects a domino and then draws a picture of the domino that shows the number that is represented by the dots on the domino.
4. When they have drawn the domino, child should write the number that is represented.
*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 students in a "teach to learn" opportunity and have the student become the teacher.

| Word for Today: sort $\quad$ Math Vocabulary |
| :--- |
| Description: The word sort refers to a way of putting items into categories. There are |
| many ways to sort items-color, size, shape, other attributes could be shiny, rough, light, |
| heavy or any other attribute that it would make sense to sort by. To begin sorting, you need |
| to look closely at the items, looking for the smallest of details. Today children are going to |
| sort buttons. Show them several buttons. Ask them what attributes they see. List those on |
| the board or a piece of chart paper. Share with children that there is no right or wrong |
| attribute, they just need to decide on what attributes they are going to use. |

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 |
| :--- | :--- |
| Say: | Review |
| - Please recap what we did today. |  |
| - Did we achieve our objectives? |  |
| What did you like about what we did today in math? $\quad$ Debrief |  |
| What would you like to do more of the next time we do math? |  |
| What is a number that is one less than 13? One less than 8? One less than 16? |  |

## Reflection (Confirm, Tweak, Aha!)

1. Ask students to think about what they did today in math.
2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
3. 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)
4. Ask them to comment on something (if anything) they have learned today that was brand new to them.

## Consult 4 Kids Lesson Plans

Graph Paper for Skittles, Fruit Loops, Gummy Gears, Button Sort


| Component | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Graphing Cats |
| Focus: | Sorting |

## Materials:

White boards Activity at end of lesson plan
Crayolas
Socks

| Opening |
| :---: |
| State the objective |
| Today we are going to learn some math vocabulary-words that we need to use when we talk about telling time. 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 does it mean when you say that you are going to "sort" something? How would you go about deciding how you would sort items? What is an attribute? How would you use an attribute to make sorting easier? What would be some attributes of a dog that you could use to help you sort?

| Content (the "Meat") |  |
| :---: | :---: |
| Problem of the Day <br> Beginning at 10, count backwards to 0 . Write the numbers in the order you say them. | *Activity $\rightarrow$ Teachable Moment(s) throughout |
| Fact Practice <br> Counting 1:1 Correspondence <br> During this next 3 days you will be working with Kindergartners to reinforce number sense and counting. It is important that Kindergartners understand that when they say a particular number that the word or words they say actually represents a physical number of objects. For the next 3 days, we will ask children to represent a certain number by drawing a domino and counting the dots on the domino and then recording the total number of dots. <br> Directions: <br> 1. Divide children into pairs. <br> 2. Give each pair a set of dominoes and 2 white boards, pens/crayons. <br> 3. Each child selects a domino and then draws a picture of the domino that shows the number that is represented by the dots on the domino. <br> 4. When they have drawn the domino, child should write the number that is represented. | 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 the group is thinking. <br> When possible, engage students in a "teach to learn" opportunity and have the student become the teacher. |


|  |  |
| :---: | :---: |
| Math Vocabulary <br> Word for Today: sort <br> Description: The word sort refers to a way of putting items into categories. There are many ways to sort items-color, size, shape, other attributes could be shiny, rough, light, heavy or any other attribute that it would make sense to sort by. To begin sorting, you need to look closely at the items, looking for the smallest of details. Today children are going to sort buttons. Show them several buttons. Ask them what attributes they see. List those on the board or a piece of chart paper. Share with children that there is no right or wrong attribute, they just need to decide on what attributes they are going to use. | It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word. <br> When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation). |
| Activity <br> Graphing <br> Which Cat Do You Like the Best? <br> Graphing is a process that allows you to make sense of information. For example, you could make a graph of how many children walk to school, are driven in a car, and maybe even ride the bus. You could also make a graph that would show how many children are more in each month. If you use a bar graph it is easy to tell which item has the most, which the least, and everything in between. <br> Cat Graph <br> Materials you will need: pictures of cats (attached to this lesson plan) and graph paper. One by one go through the different cats and ask the students which one is a favorite for them. <br> Once you have reviewed all of the cats, have children select the cat that is their favorite and place it on the chart. <br> When all children have placed a cat on the graph, then count the number for each cat. Create a graph that shows the results. | 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 |
| :--- | :--- |
| Say: | Review |
| - Please recap what we did today. |  |
|  |  |
| What did you like about what we did today in math? $\quad$ Debrief |  |
| What would you like to do more of the next time we do math? |  |
| What is a number? |  |
| What is a letter? |  |
| Are they the same? |  |

## Reflection (Confirm, Tweak, Aha!)

1. Ask students to think about what they did today in math.
2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
3. 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)
4. Ask them to comment on something (if anything) they have learned today that was brand new to them.

Cat Graph

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
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| Component | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Student Activity Choice |
| Focus: | Review |

## Materials:

White boards
materials you will need for all of the games you have played the past 10 days
Crayolas
Socks (use or erasers)

| 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 20 backwards
Using your fingers show each of these numbers: $6,3,2,8,9,7$
Count from 1-10 forwards
Count from 1-20 forward
Practice the Penny, Nickel, Dime, and Quarter Chants
Count by 10's to 100
Count by 5's to 50

objects. For the next 3 days, we will ask children to represent a certain number by drawing a domino and counting the dots on the domino and then recording the total number of dots.

## Directions:

1. Divide children into pairs.
2. Give each pair a set of dominoes and 2 white boards, pens/crayons.
3. Each child selects a domino and then draws a picture of the domino that shows the number that is represented by the dots on the domino.
4. When they have drawn the domino, child should write the number that is represented.

| Math Vocabulary <br> Word for Today: review the words from this week | It is important to review <br> academic math vocabulary <br> often throughout the day. <br> Complete the Vocabulary <br> notebook for each word. <br> When possible, have <br> students experience the word <br> (Ex. 4 students creating a <br> right angle, multiple students <br> acting out an equation). |
| :--- | :--- |
| Activity | Focus on having young <br> people "compete" in pairs or <br> small groups. Once a game <br> is mastered you can utilize it |
| in the "When Homework Is |  |
| Today is a review day. Students should select from the following list of activities: |  |
| Building Shapes <br> Symmetry <br> Skittles <br> Penny Graphs <br> Fruit Loops <br> Gummy Bears <br> Button Sort <br> Cat Graph | Compler |

## Closing

## Review

Say:

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


## Consult 4 Kids Lesson Plans

## 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 number?
What is a letter?
Are they the same?

## Reflection (Confirm, Tweak, Aha!)

1. Ask students to think about what they did today in math.
2. Ask them to comment on what they did today was something they already knew how to do. (Confirmation)
3. 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)
4. Ask them to comment on something (if anything) they have learned today that was brand new to them.
