| Component | Math |
| :--- | :--- |
| Grade Level: | Kindergarten |
| Lesson Title: | Count Down \#1 |
| Focus: | Learning Each Math Lesson Segment |

## Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1.
White boards or paper and pencil

| Opening |
| :--- |
| State the objective |
| Today we are going to practice the different aspects of the math lesson plan. |
| Gain prior knowledge by asking students the following questions |
| What are some of the games that you know how to play? |
| What are some of the math vocabulary words that you know? |
| What do you think is meant by "Problem of the Day"? |

## Content (the "Meat")

## Problem of the Day

In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.
You have 4 squares and 3 triangles. How many shapes do you have altogether?
Math Facts
The Fact Practice activity will be the same every day for $1^{\text {st }}$ graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

## Fact Practice

## Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20 , help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.

For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.

First Grade-Fact Families (They will have different fact families each day)
*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 open-ended 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.

Fact Practice for $1^{\text {st }}$ grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)
They will write the problem in four ways.

$$
\begin{aligned}
& 1+2=3 \\
& 2+1=3 \\
& 3-2=1 \\
& 3-1=2
\end{aligned}
$$

After they have written the problem in all 4 ways they will find a partner and say, "If $1+2=3$, then $2+1=3$ ".
The other student will respond with "Yes, and since that is true, 3-1=2, and 3-2=1". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the $5^{\text {th }}$ day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.
Today you will introduce this activity and begin with the Fact Family of 2, 8 and 10.
Have students write the entire Fact Family on the white board.

$$
\begin{aligned}
& 2+8=10 \\
& 8+2=10 \\
& 10-2=8 \\
& 10-8=2
\end{aligned}
$$

Bring two students up to practice the conversation.
Try it again with several other pairs of students.
Then have children find a partner and practice the conversation. Do this at least 4 times.
Remember that today they are only doing the Fact Family of 2,8 and 10.

## Math Vocabulary

Each lesson will also have a vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days.

## Word for Today: hexagon

Description: A 6-sided flat shape.
Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.

## Vocabulary Notebook Sample:

| New Word <br> hexagon | My Description <br> A flat shape that has 6 sides and 6 angles |
| :--- | :--- |
| Personal Connection <br> What is shaped like a hexagon? | Drawing |

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).
Vocabulary Notebooks can be made from $1 / 2$ of a composition book. It is important to review academic math vocabulary often throughout the day.

## Math Activity

Each day students will have the opportunity to play different games to practice the skills that they need to work on. For the next several days you will want to help children practice different games. Here is how to introduce games to them and then an opportunity for them to practice different games and activities.

## Student Practice

## Step 1: Basic Information

- Tell the students the name of the game.
- Tell them the skill that they will be practicing.
- Tell them the materials they will need to play the game.
- Tell them how many people may play the game at one time.
- Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players).
- Tell them how they will know that the game is over.
- Remind them of how to choose who will be first.
- Remind them at the end of the game that they will need to do to clean-up.

Step 2: Demonstration

- Talk the students through the game.
- Give the rules (it is best if they can see these).
- Give a demonstration or a "for example"
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.

Step 3: Model

- Ask for 2-3 student volunteers to play a "teaching game" so the remainder of the class can see the game played from beginning to end.
- Ask other students to make a circle around the volunteers so they can see how the game is played.
- Go through the game step by step having the volunteers actually make the plays.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- After playing the game for several minutes, praise the first volunteers and ask for 2-3 more.
- Replay the game with the new volunteers, providing less direction but being very responsive if the players are stuck or playing the game incorrectly.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.
Step 4: Open Play
- Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)
- Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards during Open Play.
- Check for understanding by asking students to tell another student "how" to play the game from what they experienced.

Note: This is the last "practice" for the game. The majority of students will have a full understanding of the game by this point. There will be only minor tweaks and adjustments that need to be made.

## Step 5: Play

- Have students play the game.'
- Circulate and answer questions as needed.
- Debrief the game at the end asking students:
o What skill did you practice?
o What did you learn?
o What about the game was enjoyable? What makes you say that?
o How would you have taught the game differently?


## Game for the Day

## Count Down!

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

## Directions:

1. Shuffle the cards.
2. Make a $3 \times 3$ grid of cards, face up. (A grid that has 3 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.

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

## Review

Say:

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


## Debrief

## Three Whats

Ask the following three what questions:
What was your key learning for the day?
What opportunities might you have to do this same thing in the "real world"?
What advice would you give to a "new" student getting ready to do this activity?

## 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: | Count Down \#2 |
| Focus: | Learning Each Math Lesson Segment |

## Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1.
White boards or paper and pencil

| Opening |
| :--- |
| State the objective |
| Today we are going to practice the different aspects of the math lesson plan. |
| Gain prior knowledge by asking students the following questions |
| What are some of the games that you know how to play? |
| What are some of the math vocabulary words that you know? |
| What do you think is meant by "Problem of the Day"? |

## Content (the "Meat")

## Problem of the Day

In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.
You have 10 pennies and you are given 3 more. How many pennies do you have?

## Math Facts

The Fact Practice activity will be the same every day for $1^{\text {st }}$ graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

## Fact Practice

## Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20 , help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.

For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.

First Grade-Fact Families (They will have different fact families each day)
*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 open-ended 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.

Fact Practice for $1^{\text {st }}$ grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)
They will write the problem in four ways.

$$
\begin{aligned}
& 1+2=3 \\
& 2+1=3 \\
& 3-2=1 \\
& 3-1=2
\end{aligned}
$$

After they have written the problem in all 4 ways they will find a partner and say, "If $1+2=3$, then $2+1=3$ ".
The other student will respond with "Yes, and since that is true, 3-1=2, and 3-2=1". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the $5^{\text {th }}$ day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.
Today you will introduce this activity and begin with the Fact Family of 2, 8 and 10.
Have students write the entire Fact Family on the white board.

$$
\begin{aligned}
& 2+8=10 \\
& 8+2=10 \\
& 10-2=8 \\
& 10-8=2
\end{aligned}
$$

Bring two students up to practice the conversation.
Try it again with several other pairs of students.
Then have children find a partner and practice the conversation. Do this at least 4 times.
Remember that today they are only doing the Fact Family of 2, 8 and 10.

## Math Vocabulary

Each lesson will also have a vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days.

## Word for Today: triangle

Description: A 3-sided shape.
Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.

## Vocabulary Notebook Sample:

| New Word $\quad$ My Description |  |
| :--- | :--- |
| triangle | A flat shape with 3 sides and 3 angles |

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).
Vocabulary Notebooks can be made from $1 / 2$ of a composition book.
It is important to review academic math vocabulary often throughout the day.

## Math Activity

Each day students will have the opportunity to play different games to practice the skills that they need to work on. For the next several days you will want to help children practice different games. Here is how to introduce games to them and then an opportunity for them to practice different games and activities.

## Student Practice

## Step 1: Basic Information

- Tell the students the name of the game.
- Tell them the skill that they will be practicing.
- Tell them the materials they will need to play the game.
- Tell them how many people may play the game at one time.
- Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players).
- Tell them how they will know that the game is over.
- Remind them of how to choose who will be first.
- Remind them at the end of the game that they will need to do to clean-up.

Step 2: Demonstration

- Talk the students through the game.
- Give the rules (it is best if they can see these).
- Give a demonstration or a "for example"
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.

Step 3: Model

- Ask for 2-3 student volunteers to play a "teaching game" so the remainder of the class can see the game played from beginning to end.
- Ask other students to make a circle around the volunteers so they can see how the game is played.
- Go through the game step by step having the volunteers actually make the plays.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- After playing the game for several minutes, praise the first volunteers and ask for 2-3 more.
- Replay the game with the new volunteers, providing less direction but being very responsive if the players are stuck or playing the game incorrectly.
- Ask players to explain what they were thinking when they made a particular move.
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Step 4: Open Play
- Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)
- Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards during Open Play.
- Check for understanding by asking students to tell another student "how" to play the game from what they experienced.

Note: This is the last "practice" for the game. The majority of students will have a full understanding of the game by this point. There will be only minor tweaks and adjustments that need to be made.

## Step 5: Play

- Have students play the game.'
- Circulate and answer questions as needed.
- Debrief the game at the end asking students:
o What skill did you practice?
o What did you learn?
o What about the game was enjoyable? What makes you say that?
o How would you have taught the game differently?


## Game for the Day

## Count Down!

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

## Directions:

1. Shuffle the cards.
2. Make a $3 \times 3$ grid of cards, face up. (A grid that has 3 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.

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

## Review

Say:

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


## Debrief

## Three Whats

Ask the following three what questions:
What was your key learning for the day?
What opportunities might you have to do this same thing in the "real world"?
What advice would you give to a "new" student getting ready to do this activity?

## 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: | One More \#1 |
| Focus: | Learning Each Math Lesson Segment |

## Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1.
White boards or paper and pencil

| Opening |
| :--- |
| $\quad$ State the objective |
| Today we are going to practice the different aspects of the math lesson plan. |
| Gain prior knowledge by asking students the following questions |
| What are some of the games that you know how to play? |
| What are some of the math vocabulary words that you know? |
| What do you think is meant by "Problem of the Day"? |

## Content (the "Meat")

Problem of the Day
In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.
John has 8 pencils. Jill has 3 pencils. Jorge has 5 pencils. How many do they have altogether?

## Math Facts

The Fact Practice activity will be the same every day for $1^{\text {st }}$ graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

## Fact Practice

## Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20 , help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.
For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.
*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 open-ended 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.

First Grade—Fact Families (They will have different fact families each day)
Fact Practice for $1^{\text {st }}$ grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.

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\begin{aligned}
& 1+2=3 \\
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$$

After they have written the problem in all 4 ways they will find a partner and say, "If 1 + 2 = 3, then $2+1=3$ ".
The other student will respond with "Yes, and since that is true, $3-1=2$, and $3-2=1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the $5^{\text {th }}$ day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.
Today you will introduce this activity and begin with the Fact Family of 2, 8 and 10.
Have students write the entire Fact Family on the white board.

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Bring two students up to practice the conversation.
Try it again with several other pairs of students.
Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 2, 8 and 10.

## Math Vocabulary

Each lesson will also have a vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days.

## Word for Today: counting number

Description: A number that you can use to count things. It does not include 0 since 0 means nothing.
Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.

Vocabulary Notebook Sample:

| New Word | My Description <br> Counting number <br> Numbers used to count things like 1, 2, 3, 4, <br> and 5 |
| :--- | :--- |
| Personal Connection | Drawing |

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).
Vocabulary Notebooks can be made from $1 / 2$ of a composition book.
It is important to review academic math vocabulary often throughout the day.

In counting numbers, I am 6 years old.

| In counting numbers, I am 6 years old. | Math Activity |  |
| :--- | :--- | :---: |
|  |  |  |
| Each day students will have the opportunity to play different games to practice the skills that <br> they need to work on. For the next several days you will want to help children practice <br> different games. Here is how to introduce games to them and then an opportunity for them to <br> practice different games and activities. |  |  |

## Student Practice

Step 1: Basic Information

- Tell the students the name of the game.
- Tell them the skill that they will be practicing.
- Tell them the materials they will need to play the game.
- Tell them how many people may play the game at one time.
- Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players).
- Tell them how they will know that the game is over.
- Remind them of how to choose who will be first.
- Remind them at the end of the game that they will need to do to clean-up.


## Step 2: Demonstration

- Talk the students through the game.
- Give the rules (it is best if they can see these).
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- Ask for 2-3 student volunteers to play a "teaching game" so the remainder of the class can see the game played from beginning to end.
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- Go through the game step by step having the volunteers actually make the plays.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- After playing the game for several minutes, praise the first volunteers and ask for 2-3 more.
- Replay the game with the new volunteers, providing less direction but being very responsive if the players are stuck or playing the game incorrectly.
- Ask players to explain what they were thinking when they made a particular move.
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## Step 4: Open Play

- Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)
- Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards during Open Play.
- Check for understanding by asking students to tell another student "how" to play the game from what they experienced.

Note: This is the last "practice" for the game. The majority of students will have a full understanding of the game by this point. There will be only minor tweaks and adjustments that need to be made.

## Step 5: Play

Have students play the game.'

- Circulate and answer questions as needed.
- Debrief the game at the end asking students:
o What skill did you practice?
o What did you learn?
o What about the game was enjoyable? What makes you say that?
o How would you have taught the game differently?


## Game for the Day

One More
Materials: Deck of Cards (remove face cards and jokers)
Players: 2-4
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.

## Directions:

1. Shuffle the cards.
2. Deal 5 cards to each player.
3. Player 1 asks Player $2(3$ or 4$)$ 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 __ (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.

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. |  |
| $\bullet$ |  |

## Debrief

## Three Whats

Ask the following three what questions:
What was your key learning for the day?
What opportunities might you have to do this same thing in the "real world"?
What advice would you give to a "new" student getting ready to do this activity?

## 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: | One More \#2 |
| Focus: | Learning Each Math Lesson Segment |

## Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1.
White boards or paper and pencil

| Opening |
| :--- |
| State the objective |
| Today we are going to practice the different aspects of the math lesson plan. |
| Gain prior knowledge by asking students the following questions |
| What are some of the games that you know how to play? |
| What are some of the math vocabulary words that you know? |
| What do you think is meant by "Problem of the Day"? |

## Content (the "Meat")

## Problem of the Day

In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.
How many pennies are in a nickel? If you have that many pennies and 3 more, how many pennies do you have altogether?

## Math Facts

The Fact Practice activity will be the same every day for $1^{\text {st }}$ graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

## Fact Practice

## Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20 , help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.
For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.
*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 open-ended 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.

First Grade—Fact Families (They will have different fact families each day)
Fact Practice for $1^{\text {st }}$ grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.

$$
\begin{aligned}
& 1+2=3 \\
& 2+1=3 \\
& 3-2=1 \\
& 3-1=2
\end{aligned}
$$

After they have written the problem in all 4 ways they will find a partner and say, "If $1+2=3$, then $2+1=3$ ".
The other student will respond with "Yes, and since that is true, $3-1=2$, and $3-2=1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the $5^{\text {th }}$ day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.
Today you will introduce this activity and begin with the Fact Family of 2, 8 and 10.
Have students write the entire Fact Family on the white board.

$$
\begin{aligned}
& 2+8=10 \\
& 8+2=10 \\
& 10-2=8 \\
& 10-8=2
\end{aligned}
$$

Bring two students up to practice the conversation.
Try it again with several other pairs of students.
Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 2, 8 and 10.

## Math Vocabulary

Each lesson will also have a vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days.

## Word for Today: pattern

Description: A group that is organized in such a way that you know what comes next. Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.

Vocabulary Notebook Sample:

| New Word pattern | My Description <br> An order of different shapes or number <br> sequences |
| :--- | :--- |
| Personal Connection | Drawing |

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).
Vocabulary Notebooks can be made from $1 / 2$ of a composition book.
It is important to review academic math vocabulary often throughout the day.

What is the pattern on the wallpaper?

## Math Activity

Each day students will have the opportunity to play different games to practice the skills that they need to work on. For the next several days you will want to help children practice different games. Here is how to introduce games to them and then an opportunity for them to practice different games and activities.

## Student Practice

Step 1: Basic Information

- Tell the students the name of the game.
- Tell them the skill that they will be practicing.
- Tell them the materials they will need to play the game.
- Tell them how many people may play the game at one time.
- Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players).
- Tell them how they will know that the game is over.
- Remind them of how to choose who will be first.
- Remind them at the end of the game that they will need to do to clean-up.


## Step 2: Demonstration

- Talk the students through the game.
- Give the rules (it is best if they can see these).
- Give a demonstration or a "for example"
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.

Step 3: Model

- Ask for 2-3 student volunteers to play a "teaching game" so the remainder of the class can see the game played from beginning to end.
- Ask other students to make a circle around the volunteers so they can see how the game is played.
- Go through the game step by step having the volunteers actually make the plays.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- After playing the game for several minutes, praise the first volunteers and ask for 2-3 more.
- Replay the game with the new volunteers, providing less direction but being very responsive if the players are stuck or playing the game incorrectly.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.


## Step 4: Open Play

- Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)
- Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards during Open Play.
- Check for understanding by asking students to tell another student "how" to play the game from what they experienced.

Note: This is the last "practice" for the game. The majority of students will have a full understanding of the game by this point. There will be only minor tweaks and adjustments that need to be made.

## Step 5: Play

Have students play the game.'

- Circulate and answer questions as needed.
- Debrief the game at the end asking students:
o What skill did you practice?
o What did you learn?
o What about the game was enjoyable? What makes you say that?
o How would you have taught the game differently?


## Game for the Day

## One More

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

## Directions:

1. Shuffle the cards.
2. Deal 5 cards to each player.
3. Player 1 asks Player $2(3$ or 4$)$ 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 __ (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.

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. |  |
| $\bullet$ |  |

## Debrief

## Three Whats

Ask the following three what questions:
What was your key learning for the day?
What opportunities might you have to do this same thing in the "real world"?
What advice would you give to a "new" student getting ready to do this activity?

## 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: | Memory Match \#1 |
| Focus: | Learning Each Math Lesson Segment |

## Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1 . One deck for every two children.
White boards or paper and pencil

| $\quad$ Opening |
| :--- |
| $\quad$ State the objective |
| Today we are going to practice the different aspects of the math lesson plan. |
| Gaior knowledge by asking students the following questions |
| What are some of the games that you know how to play? |
| What are some of the math vocabulary words that you know? |
| What do you think is meant by "Problem of the Day"? |

## Content (the "Meat")

## Problem of the Day

In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.

## What is a pattern that you could make with 8 circles and 4 triangles? <br> Math Facts

The Fact Practice activity will be the same every day for $1^{\text {st }}$ graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

## Fact Practice

## Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20 , help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.

For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.

First Grade-Fact Families (They will have different fact families each day)

## *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.

Fact Practice for $1^{\text {st }}$ grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)
They will write the problem in four ways.

$$
\begin{aligned}
& 1+2=3 \\
& 2+1=3 \\
& 3-2=1 \\
& 3-1=2
\end{aligned}
$$

After they have written the problem in all 4 ways they will find a partner and say,
"If $1+2=3$, then $2+1=3$ ".
The other student will respond with "Yes, and since that is true, 3-1 = 2, and 3-2 = 1".
You should have them practice this conversation (exactly as it is written) with $3-5$ other students every day. On the $5^{\text {th }}$ day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.
Today you will introduce this activity and begin with the Fact Family of 2, 8 and 10.
Have students write the entire Fact Family on the white board.

$$
\begin{aligned}
& 2+8=10 \\
& 8+2=10 \\
& 10-2=8 \\
& 10-8=2
\end{aligned}
$$

Bring two students up to practice the conversation.
Try it again with several other pairs of students.
Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 2, 8 and 10.

## Math Vocabulary

Each lesson will also have a vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days.

## Word for Today: circle

Description: A shape that is flat and is a continuous curve until it joins itself.
Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2 , explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.

Vocabulary Notebook Sample

| New Word circle | My Description <br> A flat, round object, made from one <br> continuous line |
| :--- | :--- |
| Personal Connection <br> I have a clock shaped like a circle in my <br> room. | Drawing |

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).
Vocabulary Notebooks can be made from $1 / 2$ of a composition book.

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).

|  |
| :--- |
| Math Activity |

Each day students will have the opportunity to play different games to practice the skills that they need to work on. For the next several days you will want to help children practice different games. Here is how to introduce games to them and then an opportunity for them to practice different games and activities.

## Student Practice

## Step 1: Basic Information

- Tell the students the name of the game.
- Tell them the skill that they will be practicing.
- Tell them the materials they will need to play the game.
- Tell them how many people may play the game at one time.
- Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players).
- Tell them how they will know that the game is over.
- Remind them of how to choose who will be first.
- Remind them at the end of the game that they will need to do to clean-up.

Step 2: Demonstration

- Talk the students through the game.
- Give the rules (it is best if they can see these).
- Give a demonstration or a "for example"
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.


## Step 3: Model

- Ask for 2-3 student volunteers to play a "teaching game" so the remainder of the class can see the game played from beginning to end.
- Ask other students to make a circle around the volunteers so they can see how the game is played.
- Go through the game step by step having the volunteers actually make the plays.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- After playing the game for several minutes, praise the first volunteers and ask for 2-3 more.
- Replay the game with the new volunteers, providing less direction but being very responsive if the players are stuck or playing the game incorrectly.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.


## Step 4: Open Play

Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)

- Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards during Open Play.
- Check for understanding by asking students to tell another student "how" to play the game from what they experienced.

Note: This is the last "practice" for the game. The majority of students will have a full understanding of the game by this point. There will be only minor tweaks and adjustments that need to be made.

## Step 5: Play

- Have students play the game.'
- Circulate and answer questions as needed.
- Debrief the game at the end asking students:
o What skill did you practice?
o What did you learn?
o What about the game was enjoyable? What makes you say that?
o How would you have taught the game differently?


## Game for the Day

## Memory Match

Materials: Deck of Cards (remove face cards and jokers)
Players: 2
Purpose of the game: Practice recognizing the numbers between 1 and 10. 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.

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? |  |

## Debrief

## Three Whats

Ask the following three what questions:
What was your key learning for the day?
What opportunities might you have to do this same thing in the "real world"?
What advice would you give to a "new" student getting ready to do this activity?

## 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: | Memory Match \#2 |
| Focus: | Learning Each Math Lesson Segment |

## Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1 . One deck for every two children.
White boards or paper and pencil

| $\quad$ Opening |
| :--- |
| $\quad$ State the objective |
| Today we are going to practice the different aspects of the math lesson plan. |
| Gaior knowledge by asking students the following questions |
| What are some of the games that you know how to play? |
| What are some of the math vocabulary words that you know? |
| What do you think is meant by "Problem of the Day"? |

## Content (the "Meat")

## Problem of the Day

In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.
You walk 10 steps and stop. Then you walk 10 more steps. How many steps have you walked altogether?

## Math Facts

The Fact Practice activity will be the same every day for $1^{\text {st }}$ graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

## Fact Practice

## Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20 , help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.

For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.

## *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.

## First Grade-Fact Families (They will have different fact families each day)

Fact Practice for $1^{\text {st }}$ grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)
They will write the problem in four ways.

$$
\begin{aligned}
& 1+2=3 \\
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& 3-2=1 \\
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After they have written the problem in all 4 ways they will find a partner and say,
"If $1+2=3$, then $2+1=3$ ".
The other student will respond with "Yes, and since that is true, 3-1=2, and 3-2 =1".
You should have them practice this conversation (exactly as it is written) with $3-5$ other students every day. On the $5^{\text {th }}$ day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.
Today you will introduce this activity and begin with the Fact Family of 2, 8 and 10.
Have students write the entire Fact Family on the white board.

$$
\begin{aligned}
& 2+8=10 \\
& 8+2=10 \\
& 10-2=8 \\
& 10-8=2
\end{aligned}
$$

Bring two students up to practice the conversation.
Try it again with several other pairs of students.
Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 2, 8 and 10.

## Math Vocabulary

Each lesson will also have a vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days.

## Word for Today: square

Description: A shape that has four sides that are all equal in length.
Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.

Vocabulary Notebook Sample

| New Word | My Description |
| :--- | :--- |
| A four sided figure with all sides equal |  |

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).
Vocabulary Notebooks can be made from $1 / 2$ of a composition book.
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). |
| :--- | :--- |
| Math Activity |  |
| Each day students will have the opportunity to play different games to practice the skills that <br> they need to work on. For the next several days you will want to help children practice different <br> games. Here is how to introduce games to them and then an opportunity for them to practice <br> different games and activities. |  |

## Student Practice

## Step 1: Basic Information

- Tell the students the name of the game.
- Tell them the skill that they will be practicing.
- Tell them the materials they will need to play the game.
- Tell them how many people may play the game at one time.
- Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players).
- Tell them how they will know that the game is over.
- Remind them of how to choose who will be first.
- Remind them at the end of the game that they will need to do to clean-up.


## Step 2: Demonstration

- Talk the students through the game.
- Give the rules (it is best if they can see these).
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## Step 3: Model

- Ask for 2-3 student volunteers to play a "teaching game" so the remainder of the class can see the game played from beginning to end.
- Ask other students to make a circle around the volunteers so they can see how the game is played.
- Go through the game step by step having the volunteers actually make the plays.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- After playing the game for several minutes, praise the first volunteers and ask for 2-3 more.
- Replay the game with the new volunteers, providing less direction but being very responsive if the players are stuck or playing the game incorrectly.
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## Step 4: Open Play

Divide students into small groups (you might want to put a "volunteer" who played the
game in each of these small groups)

- Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards during Open Play.
- Check for understanding by asking students to tell another student "how" to play the game from what they experienced.

Note: This is the last "practice" for the game. The majority of students will have a full understanding of the game by this point. There will be only minor tweaks and adjustments that need to be made.

Step 5: Play

- Have students play the game.'
- Circulate and answer questions as needed.
- Debrief the game at the end asking students:
o What skill did you practice?
o What did you learn?
o What about the game was enjoyable? What makes you say that?
o How would you have taught the game differently?


## Game for the Day

## Memory Match

Materials: Deck of Cards (remove face cards and jokers)
Players: 2
Purpose of the game: Practice recognizing the numbers between 1 and 10.
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.

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? |  |

## Debrief

## Three Whats

Ask the following three what questions:
What was your key learning for the day?
What opportunities might you have to do this same thing in the "real world"?
What advice would you give to a "new" student getting ready to do this activity?

## 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: | Duel \#1 |
| Focus: | Learning Each Math Lesson Segment |

## Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1 . One deck for every two children.
White boards or paper and pencil

## Opening

## State the objective

Today we are going to practice the different aspects of the math lesson plan.

## Gain prior knowledge by asking students the following questions

What are some of the games that you know how to play?
What are some of the math vocabulary words that you know?
What do you think is meant by "Problem of the Day"?

## Content (the "Meat")

## Problem of the Day

In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.
If you have 5 dimes and you spend 3 of them, how many do you have left?

## Math Facts

The Fact Practice activity will be the same every day for $1^{\text {st }}$ graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

## Fact Practice

## Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20 , help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.

For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.

## First Grade-Fact Families (They will have different fact families each day)

Fact Practice for $1^{\text {st }}$ grade is looking at number families, so you are looking at both addition and
subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.)
They will write the problem in four ways.
$1+2=3$
$2+1=3$
$3-2=1$
$3-1=2$
After they have written the problem in all 4 ways they will find a partner and say,
"If 1 + $2=3$, then $2+1=3$ ".
The other student will respond with "Yes, and since that is true, 3-1=2, and 3-2=1".
You should have them practice this conversation (exactly as it is written) with $3-5$ other students every day. On the $5^{\text {th }}$ day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.
Today you will introduce this activity and begin with the Fact Family of 2,8 and 10.
Have students write the entire Fact Family on the white board.

$$
\begin{aligned}
& 2+8=10 \\
& 8+2=10 \\
& 10-2=8 \\
& 10-8=2
\end{aligned}
$$

Bring two students up to practice the conversation.
Try it again with several other pairs of students.
Then have children find a partner and practice the conversation. Do this at least 4 times.
Remember that today they are only doing the Fact Family of 2, 8 and 10.

## Math Vocabulary

Each lesson will also have a vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days.

## Word for Today: subtraction

Description: Reducing a total by a specific amount and then finding the difference between what you started with and what you have after removing some items.
Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.

## Vocabulary Notebook Sample

| New Word $\quad$ Subtraction | My Description <br> Reducing a total number and finding the <br> difference |
| :--- | :--- |
| Personal Connection <br> Do you know how to do subtraction <br> problems? |  |

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).
Vocabulary Notebooks can be made from $1 / 2$ of a composition book.
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).

## Math Activity

Each day students will have the opportunity to play different games to practice the skills that they need to work on. For the next several days you will want to help children practice different games. Here is how to introduce games to them and then an opportunity for them to practice different games and activities.

## Student Practice

## Step 1: Basic Information

- Tell the students the name of the game.
- Tell them the skill that they will be practicing.
- Tell them the materials they will need to play the game.
- Tell them how many people may play the game at one time.
- Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players).
- Tell them how they will know that the game is over.
- Remind them of how to choose who will be first.
- Remind them at the end of the game that they will need to do to clean-up.


## Step 2: Demonstration

- Talk the students through the game.
- Give the rules (it is best if they can see these).
- Give a demonstration or a "for example"
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.


## Step 3: Model

- Ask for 2-3 student volunteers to play a "teaching game" so the remainder of the class can see the game played from beginning to end.
- Ask other students to make a circle around the volunteers so they can see how the game is played.
- Go through the game step by step having the volunteers actually make the plays.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- After playing the game for several minutes, praise the first volunteers and ask for 2-3 more.
- Replay the game with the new volunteers, providing less direction but being very responsive if the players are stuck or playing the game incorrectly.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.


## Step 4: Open Play

- Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)
- Have the students play a practice game (no winners or losers) Note: If you are

| playing with cards you might want to have the students display their hand of cards |
| :--- |
| during Open Play. |
| - |
| Check for understanding by asking students to tell another student "how" to play the |
| game from what they experienced. |

Note: This is the last "practice" for the game. The majority of students will have a full
understanding of the game by this point. There will be only minor tweaks and adjustments that
need to be made.
Step 5: Play

- Have students play the game.'
- Circulate and answer questions as needed.
- Debrief the game at the end asking students:
o What skill did you practice?
o What did you learn?
o What about the game was enjoyable? What makes you say that?
o How would you have taught the game differently?


## Game for the Day

## Duel

Players: 2

## Directions:

1. Shuffle the cards and deal them out.
2. Each player puts their cards in a pile facing down.
3. Together players flip the top card over and place it in the center.
4. The first player to say the names of the numbers on both cards, wins the cards.
5. If a player calls an incorrect answer the cards are returned to the bottom of the pile.
6. When all cards have been drawn the winner is the player with the most cards.

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.

|  |  |
| :---: | :---: |
| Say: | Closing |
| - | Please recap what we did today. |
|  |  |

## Debrief

## Three Whats

Ask the following three what questions:
What was your key learning for the day?
What opportunities might you have to do this same thing in the "real world"?
What advice would you give to a "new" student getting ready to do this activity?

## 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: | Just the Facts \#1 |
| Focus: | Learning Each Math Lesson Segment |

## Materials:

Dominoes (attached)
White boards or paper and pencil

| Opening |
| :--- |
| $\quad$ State the objective |
| Today we are going to practice the different aspects of the math lesson plan. |
| Gain prior knowledge by asking students the following questions |
| What are some of the games that you know how to play? |
| What are some of the math vocabulary words that you know? |
| What do you think is meant by "Problem of the Day"? |

## Content (the "Meat")

Problem of the Day
In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.
If you have 5 marbles and your friend has 3 marbles, how many do you have altogether?

## Math Facts

The Fact Practice activity will be the same every day for $1^{\text {st }}$ graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

## Fact Practice

## Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20, help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.

For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.

## *Activity $\rightarrow$ Teachable <br> 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.

First Grade—Fact Families (They will have different fact families each day) Fact Practice for 1st grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.

$$
\begin{aligned}
& 1+2=3 \\
& 2+1=3 \\
& 3-2=1 \\
& 3-1=2
\end{aligned}
$$

After they have written the problem in all 4 ways they will find a partner and say, "If $1+2=3$, then $2+1=3$ ".
The other student will respond with "Yes, and since that is true, 3-1=2, and 3-2= 1 ".
You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the $5^{\text {th }}$ day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.
Today you will introduce this activity and begin with the Fact Family of 2, 8 and 10. Have students write the entire Fact Family on the white board.

$$
\begin{aligned}
& 2+8=10 \\
& 8+2=10 \\
& 10-2=8 \\
& 10-8=2
\end{aligned}
$$

Bring two students up to practice the conversation.
Try it again with several other pairs of students.
Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 2,8 and 10.

## Math Vocabulary

Each lesson will also have a vocabulary word that is appropriate for the grade level.
The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days.

## Word for Today: operations

Description: The word operation refers to a mathematical process. The four most common are addition, subtraction, multiplication, and division that are represented with these symbols:,,+- X , and $\div$.
Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.

## Vocabulary Notebook Sample:

 New Word[^0]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).
Vocabulary Notebooks can be made from $1 / 2$ of a composition book.
It is important to review academic math vocabulary often throughout the day.
Complete the Vocabulary

| operations | There 4 basic operations: addition, <br> subtraction, multiplication and division |
| :--- | :--- |
| Personal Connection <br> How many of the operations can you <br> complete? | Drawing |

notebook for each word. When possible, have students experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).
Vocabulary Notebooks can be made from $1 / 2$ of a composition book.

Each day students will have the opportunity to play different games to practice the skills that they need to work on. For the next several days you will want to help children practice different games. Here is how to introduce games to them and then an opportunity for them to practice different games and activities.

## Student Practice

## Step 1: Basic Information

- Tell the students the name of the game.
- Tell them the skill that they will be practicing.
- Tell them the materials they will need to play the game.
- Tell them how many people may play the game at one time.
- Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players).
- Tell them how they will know that the game is over.
- Remind them of how to choose who will be first.
- Remind them at the end of the game that they will need to do to clean-up.

Step 2: Demonstration

- Talk the students through the game.
- Give the rules (it is best if they can see these).
- Give a demonstration or a "for example"
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.

Step 3: Model

- Ask for 2-3 student volunteers to play a "teaching game" so the remainder of the class can see the game played from beginning to end.
- Ask other students to make a circle around the volunteers so they can see how the game is played.
- Go through the game step by step having the volunteers actually make the plays.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- After playing the game for several minutes, praise the first volunteers and ask for 2-3 more.
- Replay the game with the new volunteers, providing less direction but being very responsive if the players are stuck or playing the game incorrectly.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.


## Step 4: Open Play

- Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)
- Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards during Open Play.
- Check for understanding by asking students to tell another student "how" to play the game from what they experienced.

Note: This is the last "practice" for the game. The majority of students will have a full understanding of the game by this point. There will be only minor tweaks and adjustments that need to be made.

## Step 5: Play

- Have students play the game.'
- Circulate and answer questions as needed.
- Debrief the game at the end asking students:
o What skill did you practice?
o What did you learn?
o What about the game was enjoyable? What makes you say that?
o How would you have taught the game differently?


## Game for the Day

## Just the Facts

Players: 2-3

## Directions:

1. Dominoes are placed in the center of the table, face down.
2. After deciding who will go first, Player 1 draws a domino, turns it face up and places it down in front of him/her.
3. Kindergarten: Play 1 counts the pips on the dominoes and tells how many are on the domino
$1^{\text {st }}$ Grade: Player 1 totals the pips on the domino by saying (e.g. $2+4=6$ ). If the answer is correct, then player keeps the domino and play moves on to player 2.
4. If player does not say the correct total or sum, then the domino is returned to the pile
5. Play continues until all dominoes are taken.

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. |  |
| $\bullet$ |  |

## Debrief

## Three Whats

Ask the following three what questions:
What was your key learning for the day?
What opportunities might you have to do this same thing in the "real world"?
What advice would you give to a "new" student getting ready to do this activity?

## 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: | Just the Facts \#2 |
| Focus: | Learning Each Math Lesson Segment |

## Materials:

Dominoes (attached)
White boards or paper and pencil

| Opening |
| :--- |
| State the objective |
| Today we are going to practice the different aspects of the math lesson plan. |
| Gain prior knowledge by asking students the following questions |
| What are some of the games that you know how to play? |
| What are some of the math vocabulary words that you know? |
| What do you think is meant by "Problem of the Day"? |

## Content (the "Meat")

## Problem of the Day

In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.
If you have 2 chocolate chip cookies and 3 Oreos, how many cookies do you have altogether?

## Math Facts

The Fact Practice activity will be the same every day for $1^{\text {st }}$ graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

## Fact Practice

## Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20, help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting. For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.

## *Activity $\rightarrow$ Teachable <br> 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.

First Grade—Fact Families (They will have different fact families each day)
Fact Practice for $1^{\text {st }}$ grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day.
Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.

$$
\begin{aligned}
& 1+2=3 \\
& 2+1=3 \\
& 3-2=1 \\
& 3-1=2
\end{aligned}
$$

After they have written the problem in all 4 ways they will find a partner and say, "If $1+2=3$, then $2+1=3$ ".
The other student will respond with "Yes, and since that is true, 3-1=2, and 3-2=1". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the $5^{\text {th }}$ day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.
Today you will introduce this activity and begin with the Fact Family of 2, 8 and 10.
Have students write the entire Fact Family on the white board.

$$
\begin{aligned}
& 2+8=10 \\
& 8+2=10 \\
& 10-2=8 \\
& 10-8=2
\end{aligned}
$$

Bring two students up to practice the conversation.
Try it again with several other pairs of students.
Then have children find a partner and practice the conversation. Do this at least 4 times.
Remember that today they are only doing the Fact Family of 2, 8 and 10.

## Math Vocabulary

Each lesson will also have a vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Work with the children to create a Vocabulary entry on paper as a class (as $1^{\text {st }}$ grader mature they can do their own journals). The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days.

## Word for Today: math

Description: Math is the word we use that is short for mathematics. Math is the study of numbers, patterns, space, and change. In math we learn about operations, geometry, data and statistics, algebra, and mathematical reasoning.
Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2, explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.

## Vocabulary Notebook Sample:

| New Word $\quad$ My Description |  |
| :--- | :--- |
|  | A term that is short for mathematics and |

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).
Vocabulary Notebooks can be made from $1 / 2$ of a composition book.
It is important to review academic math vocabulary often throughout the day.
Complete the Vocabulary notebook for each word.
When possible, have students

|  | is about numbers and patterns |
| :--- | :--- |
| Personal Connection | Drawing |
| Math is one of my favorite subjects in |  |
| school. |  |

experience the word (Ex. 4 students creating a right angle, multiple students acting out an equation).
Vocabulary Notebooks can be made from $1 / 2$ of a composition book.

## Math Activity

Each day students will have the opportunity to play different games to practice the skills that they need to work on. For the next several days you will want to help children practice different games. Here is how to introduce games to them and then an opportunity for them to practice different games and activities.

## Student Practice

## Step 1: Basic Information

- Tell the students the name of the game.
- Tell them the skill that they will be practicing.
- Tell them the materials they will need to play the game.
- Tell them how many people may play the game at one time.
- Tell them if the game is cooperative (all students working together to defeat the game) or competitive (each student hopes to defeat the other players).
- Tell them how they will know that the game is over.
- Remind them of how to choose who will be first.
- Remind them at the end of the game that they will need to do to clean-up.


## Step 2: Demonstration

- Talk the students through the game.
- Give the rules (it is best if they can see these).
- Give a demonstration or a "for example"
- Check for understanding by asking students to tell another student "how" to play the game from what they observed.

Step 3: Model

- Ask for 2-3 student volunteers to play a "teaching game" so the remainder of the class can see the game played from beginning to end.
- Ask other students to make a circle around the volunteers so they can see how the game is played.
- Go through the game step by step having the volunteers actually make the plays.
- Ask players to explain what they were thinking when they made a particular move.
- Ask onlookers to make observations or ask questions.
- After playing the game for several minutes, praise the first volunteers and ask for 2-3 more.
- Replay the game with the new volunteers, providing less direction but being very responsive if the players are stuck or playing the game incorrectly.
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Step 4: Open Play
- Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)
- Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards during Open Play.
- Check for understanding by asking students to tell another student "how" to play the game from what they experienced.

Note: This is the last "practice" for the game. The majority of students will have a full understanding of the game by this point. There will be only minor tweaks and adjustments that need to be made.

Step 5: Play

- Have students play the game.'
- Circulate and answer questions as needed.
- Debrief the game at the end asking students:
o What skill did you practice?
o What did you learn?
o What about the game was enjoyable? What makes you say that?
o How would you have taught the game differently?


## Game for the Day

## Just the Facts

Players: 2-3

## Directions:

1. Dominoes are placed in the center of the table, face down.
2. After deciding who will go first, Player 1 draws a domino, turns it face up and places it down in front of him/her.
3. Kindergarten: Play 1 counts the pips on the dominoes and tells how many are on the domino
$1^{\text {st }}$ Grade: Player 1 totals the pips on the domino by saying (e.g. $2+4=6$ ). If the answer is correct, then player keeps the domino and play moves on to player 2.
4. If player does not say the correct total or sum, then the domino is returned to the pile
5. Play continues until all dominoes are taken.

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. |  |
| $\bullet$ |  |

## Debrief

## Three Whats

Ask the following three what questions:
What was your key learning for the day?
What opportunities might you have to do this same thing in the "real world"?
What advice would you give to a "new" student getting ready to do this activity?

## 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: | Duel \#2 |
| Focus: | Learning Each Math Lesson Segment |

## Materials:

Deck of cards with face cards and jokers removed. Share with children that the "Ace" counts as 1. One deck for every two children.
White boards or paper and pencil

## Opening

## State the objective

Today we are going to practice the different aspects of the math lesson plan.

## Gain prior knowledge by asking students the following questions

What are some of the games that you know how to play?
What are some of the math vocabulary words that you know?
What do you think is meant by "Problem of the Day"?

## Content (the "Meat")

## Problem of the Day

In this segment you will have a problem to work through with the students. You will want to draw a picture of the problem so they can see that the words are connected to the numbers which represent the story.
If you have 9 apple pieces and you eat 3 of them, how many do you have left?

## Math Facts

The Fact Practice activity will be the same every day for $1^{\text {st }}$ graders and Kindergartners. You may use dice, dominoes, cards, white board, or other items to practice the math facts that are appropriate for the grade level students are in.

## Fact Practice

## Kindergarten--Counting

During the month you will work with Kindergartners to reinforce the number sense of corresponding the numbers said with an actual number of objects. To help them do that you will create number book. After working with the Kindergartners, if they can verbally count from 11-20, then make the book that counts from 11-20. If they struggle counting to 20 , help them to learn those numbers by helping them with this book. You can always do more than one page of and single number if you need more time to reinforce counting.

For the next 10 days work together to create a page together so the Kindergartners will understand how to do this on their own. Use dice or cards to determine the number you will be making out of object. Create large pages out of butcher paper.

First Grade—Fact Families (They will have different fact families each day)
Fact Practice for $1^{\text {st }}$ grade is looking at number families, so you are looking at both addition and subtraction. The key is for children to learn that numbers have a relationship with one another in adding and subtracting. Fact practice will follow this pattern every day. Children will look at the math family. (We will begin with 1 more, then 2 more, etc.) They will write the problem in four ways.

$$
\begin{aligned}
& 1+2=3 \\
& 2+1=3 \\
& 3-2=1 \\
& 3-1=2
\end{aligned}
$$

After they have written the problem in all 4 ways they will find a partner and say, "If 1 + 2 = 3, then $2+1=3$ ".
The other student will respond with "Yes, and since that is true, $3-1=2$, and $3-2=1$ ". You should have them practice this conversation (exactly as it is written) with 3-5 other students every day. On the $5^{\text {th }}$ day, you will utilize all 4 problems from the days before, and the conversation will follow the pattern, but the second responder will need to quickly look through his/her cards (of course we hope they remember without looking) and gives the correct response.
Today you will introduce this activity and begin with the Fact Family of 2, 8 and 10.
Have students write the entire Fact Family on the white board.

$$
\begin{aligned}
& 2+8=10 \\
& 8+2=10 \\
& 10-2=8 \\
& 10-8=2
\end{aligned}
$$

Bring two students up to practice the conversation.
Try it again with several other pairs of students.
Then have children find a partner and practice the conversation. Do this at least 4 times. Remember that today they are only doing the Fact Family of 2, 8 and 10.

## Math Vocabulary

Each lesson will also have a vocabulary word that is appropriate for the grade level. The word may be reviewed more than one time. Youth need to complete the vocabulary entry in an Academic Vocabulary Notebook. The Vocabulary section will follow this pattern. We will practice working on this for the next 11 days.

## Word for Today: addition

Description: Combining two or more groups of things (usually representing by numerals) and finding a total.
Complete the journal entry in your Vocabulary Notebook. In space 1, write the word. In space 2 , explain the word in your own words. In space 3 use the word in a sentence. In space 4 demonstrate your understanding of the word by drawing a picture of the word.

Vocabulary Notebook Sample:

| New Word | My Description <br> Combining the values of two or more things <br> into a whole |
| :--- | :--- |
| Personal Connection | Drawing |

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).
Vocabulary Notebooks can be made from $1 / 2$ of a composition book. It is important to review academic math vocabulary often throughout the day. Complete the Vocabulary notebook for each word.
When possible, have

| Do you know how to do addition <br> problems? | students experience the <br> word (Ex. 4 students <br> creating a right angle, <br> multiple students acting out <br> an equation). <br> Vocabulary Notebooks can <br> be made from $1 / 2$ of a |
| :--- | :--- | :--- |
| composition book. |  |

from what they observed.

## Step 4: Open Play

- Divide students into small groups (you might want to put a "volunteer" who played the game in each of these small groups)
- Have the students play a practice game (no winners or losers) Note: If you are playing with cards you might want to have the students display their hand of cards during Open Play.
- Check for understanding by asking students to tell another student "how" to play the game from what they experienced.

Note: This is the last "practice" for the game. The majority of students will have a full understanding of the game by this point. There will be only minor tweaks and adjustments that need to be made.

## Step 5: Play

Have students play the game.'

- Circulate and answer questions as needed.
- Debrief the game at the end asking students:
o What skill did you practice?
o What did you learn?
o What about the game was enjoyable? What makes you say that?
o How would you have taught the game differently?


## Game for the Day

## Duel

Players: 2

## Directions:

1. Shuffle the cards and deal them out.
2. Each player puts their cards in a pile facing down.
3. Together players flip the top card over and place it in the center.
4. The first player to say the names of the numbers on both cards, wins the cards.
5. If a player calls an incorrect answer the cards are returned to the bottom of the pile.
6. When all cards have been drawn the winner is the player with the most cards.

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

## Review

Say:

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


## Debrief

## Three Whats

Ask the following three what questions:
What was your key learning for the day?
What opportunities might you have to do this same thing in the "real world"?
What advice would you give to a "new" student getting ready to do this activity?

## 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: | Student Activity Choice |
| Focus: | Review |

## 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
Using your fingers show each of these numbers: $6,3,2,8,9,7$
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 <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 graph below. Children had to pick a favorite color. There is one heart for each child's vote. Which color has the most hearts by it? <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 | *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 the group is thinking. |

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

Make the cover and the back 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. Once they have completed the book you will want to connect it with either staples or by punching a hole at the top and connecting the pages with a ring. You might want to consider making the cover out of colored card stock and then having the children decorate the front and back cover. If you pre-print the cover you can title it My Counting Book. Be sure that the child writes his/her name on the cover so you can send it home.
Double check all of the pages to be sure that the number of items corresponds to the number written by the child. It is important that they see the corresponding number and symbol done correctly or we are reinforcing a misconception/error.

## Math Vocabulary

## Word for Today: rectangle

Today you will review all of the words that the children have learned:
number
circle
square
triangle
rectangle
Have students draw on the white board as you say the word. Ask them to share with one another shat the word means.
Make the symbols and shapes on the board and ask students to identify them for you. Work with them to answer questions in complete sentences-for example, A square has 4 sides that are all the same rather than 4 sides.

## Activity <br> Student Choice

Review how to play the games One Less, One More, Count Down and Memory Match. Once you are sure that students know how to play each game, have them choose a partner and play the game that they most enjoy. This will be a good opportunity for you to be sure that these games can be placed in a center or in the "after homework is done" choice. It is important that children can play the game independently which you will know by the end of the session today. If they are not yet independent, then do not put the game out for them when you are not available to help and support the 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.

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 a rectangle?
What is another shape that looks like a rectangle only all of the sides are even?

## 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


[^0]:    My Description

