

| Component:    | Math                  |
|---------------|-----------------------|
| Grade Level:  | 2 <sup>nd</sup> Grade |
| Lesson Title: | What Time Is It?      |
| Focus:        | Time                  |

Materials:

White boards Vocabulary Notebooks

Crayolas Cards

Socks What Time Is It? (attached)

## **Opening**

# State the objective

Today we are going to practice using our math vocabulary and skills.

# Gain prior knowledge by asking students the following questions

What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

## Content (the "Meat")

## Problem of the Day

What is a triangle? Tell how you know using pictures, numbers, and words.

## **Fact Practice**

#### Fore-header

- 1. Divide students into trios. Give each trio a deck of cards without face cards and jokers.
- 2. Shuffle the deck and give all of the cards to the referee who will be "judging" the contest.
- 3. On go, players are each handed a card by the referee and WITHOUT looking, put the card face out on his/her forehead.
- 4. The referee adds the two numbers together and states the answer.
- 5. Each player looks at the other person's exposed number and names his/her own number.
- 6. Person who wins (accuracy and time), collects both cards.
- 7. Play continues until all cards are gone.
- **8.** Players can repeat play (if there is another time) with each other so each has an opportunity to be both a player and referee.

# \*Activity → 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.



## Math Vocabulary

Word for Today: addend

**Description**: The addends of an addition problem or the numbers that you are adding

together. In these examples: 13 288

<u>+54</u> <u>+746</u>

The addends of the first problem are 13 and 54, the addends of the second are 288 and 746. A problem must have at least two addends but can certainly have more than that. Review your Vocabulary Notebook. Discuss things with a partner. Make any changes that you need to in order to strengthen your entry.

Vocabulary Notebook Sample:

| New Word                   | My Description                                      |
|----------------------------|---|
| addend                     | The numbers you add together in an addition problem |
| Personal Connection        | Drawing   |
| The addends are 53 and 13. | 8 + 9 = 17  |

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 ½ of a composition book.

# Activity

# What Time Is It? Materials:

• Cards attached to this lesson plan

#### Directions:

- 1. Place cards face down in a grid like in the game Concentration.
- 2. Player turns over 2 cards. If the cards match the player takes both cards and gets another turn. If the cards do not match, the player turns the cards face down.
- 3. Second player repeats step 2.
- 4. Winner is the person 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?

- 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.



# What Time Is It?

| 11 12 1<br>10 2<br>9 3<br>8 4          | 11 12 1<br>10 2<br>9 3<br>4 7 6 5      | 11 12 1<br>10 2<br>9 3<br>8 4<br>7 6 5 | 11 12 1<br>10 2<br>9 3<br>4 7 6 5      |
|--|--|--|--|
| 11 12 1<br>10 2<br>9 3<br>8 4<br>7 6 5 | 11 12 1<br>10 2<br>9 3<br>8 4          | 11 12 1<br>10 2<br>9 3<br>8 7 6 5      | 11 12 1<br>10 2<br>9 3<br>8 4          |
| 10 12 1<br>10 2<br>9 3<br>8 4<br>7 6 5 | 11 A <sup>12</sup> 1 2 9 3 8 4 7 6 5   | 11 12 1<br>10 2<br>9 3<br>8 4<br>7 6 5 | 11 12 1<br>10 2<br>9 3<br>8 4<br>7 6 5 |
| 11 12 1<br>10 2<br>9 3<br>8 4<br>7 6 5 | 11 12 1<br>10                          | 11 12 1<br>10 2<br>9 3<br>8 4<br>7 6 5 | 11 12 2<br>9 3<br>8 4<br>7 6 5         |
| 11 12 1<br>10 2<br>9 3<br>8 4          | 11 12 1<br>10 2<br>9 3<br>8 4<br>7 6 5 | 11 12 1<br>10 2<br>9 3<br>8 4<br>7 6 5 | 11 12 1<br>10 2<br>9 3<br>8 4<br>7 6 5 |
| 9:25                                   | 11:40                                  | 6:55                                   | 8:20                                   |
| 2:30                                   | 8:30                                   | 4:35                                   | 10:25                                  |



| 1:40 | 5:00  | 7:30 | 9:10 |
|------|-------|------|------|
| 7:10 | 12:15 | 6:45 | 4:05 |
| 1:25 | 8:50  | 4:30 | 8:00 |



| Component:    | Math                  |
|---------------|-----------------------|
| Grade Level:  | 2 <sup>nd</sup> Grade |
| Lesson Title: | Time and Make 20      |
| Focus:        | Addition              |

Materials:

White boards

Vocabulary Notebooks

Crayolas

Playing cards

Socks

# **Opening**

# State the objective

Today we are going to practice using our math vocabulary and skills.

# Gain prior knowledge by asking students the following questions

What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

## Content (the "Meat")

## Problem of the Day

If Johnny goes to bed at 8:30 every night, is that in the a.m. or the p.m.? How do you know?

## **Fact Practice**

## **Target**

- 1. Divide students into trios.
- 2. Each trio needs a deck of cards without face cards and jokers.
- 3. Place the cards face up in a TicTac Toe Grid.
- 4. Turn up a 10<sup>th</sup> card which will be to the side and becomes the target number (aces count as 1).
- 5. Each player makes an equation with some or all of the numbers in the grid to equal the target number. Students may add or subtract.
- 6. Each card may be used only one time in the equation.
- 7. As the cards are being picked up, the player must say the equation aloud—for example if the target card is 10, then I could say 6 + 4 = 10, and pick up the 6 and the 4.
- 8. After one player finishes his/her turn, then the cards taken are replaced by cards from the remaining deck.
- 9. Player with the cards at the end of the game win.

# \*Activity → 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.



## Math Vocabulary

Word for Today: time

**Description:** Time is a word that to the space that occurs between one moment and another. Time can be measured in seconds, minutes, hours, days, months, and years. There are other measures of time, but these are the most common. Clocks and calendars are ways that we calculate time.

Students should complete the Vocabulary Notebook

Vocabulary Notebook Sample:

| New Word  | My Description                      |
|---|-------------------------------------|
| time  | Measure of the space between events |
| Personal Connection                               | Drawing                             |
| I can tell time on my watch and also my calendar. |                                     |

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 ½ of a composition book.

# Activity

Make 20!

**Materials:** Deck of Cards (remove face cards and jokers)

Players: 2-4

**Purpose of the game:** Practice addition facts to automaticity.

## **Directions:**

- 1. Shuffle the cards.
- 2. Deal 5 cards to each player and stack the remaining cards face-down in a pile in the center of the table.
- 3. Player 1 tries to use some or all of the five cards to create a sum of 20.
- 4. If the player creates a problem with the sum of 20, the player says, "Made 20!" and places the used cards in a separate pile.
- 5. If the player is unable to create a problem, he/she draws a card and the turn ends.
- 6. Player 2 takes a turn in the same way.
- 7. Play continues until all cards are used or until neither player can create a problem.
- 8. Player with the most cards wins.

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?

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



| Component:    | Math                         |
|---------------|------------------------------|
| Grade Level:  | 2 <sup>nd</sup> Grade        |
| Lesson Title: | Pattern and What Time Is It? |
| Focus:        | Time                         |

| Materials:   |                      |  |
|--------------|----------------------|--|
| White boards | Vocabulary Notebooks |  |
| Crayolas     |                      |  |
| Socks        |                      |  |

## Opening

# State the objective

Today we are going to practice using our math vocabulary and skills.

# Gain prior knowledge by asking students the following questions

What are some strategies that you use when you are trying to figure out how to solve a mathematics problem? How can you tell that you are on the right track for solving the problem? What are the basic operations that you need to utilize during math?

# Content (the "Meat")

## Problem of the Day

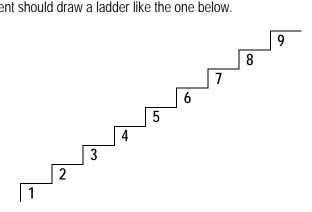
Look at the list of numbers below. What are the next three numbers?

4, 8, 12, 16, 20, 24, \_\_\_\_, \_\_\_\_

## **Fact Practice**

#### Addition Ladder

- 1. Give each student a white board (include marker or crayola).
- 2. Student should draw a ladder like the one below.



3. Have student roll 2 dice, total the pips and then add that number to each of the

# \*Activity → 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.



| numbers in the ladder, writing the sum   | to the right of the number. |   |  |
|--|-----------------------------|---|--|
| Math Vocabulary Word for Today: pattern Description: A pattern is an order that repeats itself. For example, the American flag repeats red and white stripes. You can also find patterns in animal's stripes or wall paper, or other things which intentionally repeat an order. Create an entry in your Vocabulary Notebook.  Vocabulary Notebook Sample:  New Word  My Description  An order that is organized and predictable |                             | 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 ½ of a |  |
| Personal Connection  The pattern she created is easy to understand.  Drawing  JJJJJ JJJ  |                             | composition book.   |  |
| Activity What Time Is It?  Play What Time Is It? again. Review with students how to play the game. Let them provide the information on the rules. Use the materials from yesterday.  |                             | 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?



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



| Component:    | Math                     |
|---------------|--------------------------|
| Grade Level:  | 2 <sup>nd</sup> Grade    |
| Lesson Title: | Largest Number           |
| Focus:        | Addition and Subtraction |

Materials:

White boards Vocabulary Notebooks

Crayolas Double 9 Dominoes (attached)

Socks decks of cards

## **Opening**

# State the objective

Today we are going to practice using our math vocabulary and skills.

# Gain prior knowledge by asking students the following questions

What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

# Content (the "Meat")

# Problem of the Day

Agustin has 31 Hershey kisses. He gives away 20 of them. How many does Agustin have left?

#### **Fact Practice**

### **Spots and Dots**

There is a master of Double 9 Dominos attached to this lesson plan. You will need 1 full set for each pair of students in your class. It is recommended that you duplicate on card stock and if possible, laminate for use again in the future.

Players sit across from each other.

Dominoes are between them, face (or spots) down.

Each student draws a domino and writes the addition problem on their white board, adding the numbers represented by the spots Example: Domino drawn is



Addition: 2 + 3 = 5

# \*Activity → 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.



## Math Vocabulary

Word for Today: difference

**Description:** Difference is the word that we use to describe the total that remains when we subtract. Subtraction means that you are taking something away. You begin with a certain amount, you remove a part of it, and what you have left is the difference.

Create an entry in your Vocabulary Notebook for the word "difference"

Vocabulary Notebook Sample:

| New Word                                     | My Description   |
|--|--|
| difference                                   | The amount that is left after you subtract some from the beginning total |
| Personal Connection                          | Drawing  |
| What is the difference in the problem 5 – 3? | 7-5-2  |

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 ½ of a composition book.

# Activity Largest Number

Materials: Four 6-sided dice

White board Vis-à-vis pens

Players: Whole class, students should be paired into partners

**Purpose of the game:** Practice adding and subtracting 2 digit numbers mentally.

### Directions:

- 1. Roll 4 dice.
- 2. Ask students to write the following numbers:
  - a. Largest 2-digit number
  - b. Smallest 2-digit number
  - c. Largest 3-digit number
  - d. Smallest 3-digit number
  - e. Largest 4-digit number
  - f. Smallest 4-digit number
- 3. Ask students to find another pair and compare numbers. If there is a discrepancy, then have students discuss and resolve.
- 4. Repeat, rolling the dice again and mixing up the guestions.

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:  |         |  |
| <ul> <li>Please recap what we did today.</li> </ul> |         |  |
| <ul> <li>Did we achieve our objectives?</li> </ul>  |         |  |
|   |         |  |
|   | 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"?

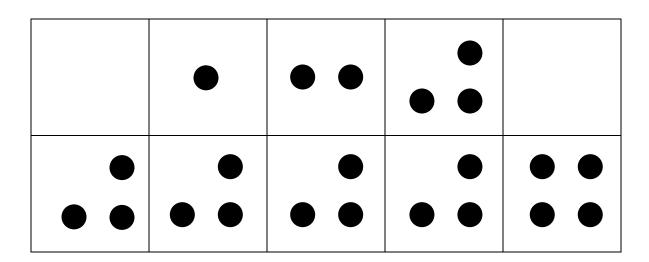
What advice would you give to a "new" student getting ready to do this activity?

- 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.



# **Double 9 Dominoes**

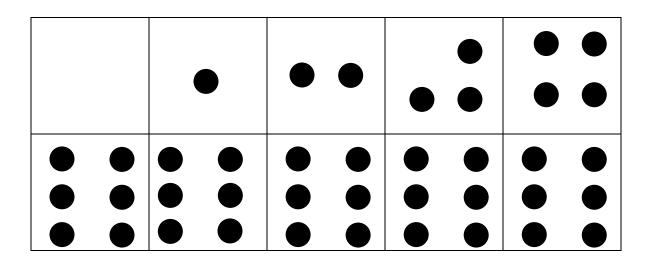
|  |  | • • |
|--|--|-----|



|     | • • | • • | • • |  |
|-----|-----|-----|-----|--|
| • • | • • | • • | • • |  |



| • • | • • | • • |  |
|-----|-----|-----|--|
|     |     |     |  |



|  | • | • • • |  |     |
|--|---|-------|--|-----|
|  | _ | •     |  | • • |
|  |   |       |  |     |



|     | • | • | • • | • • |
|-----|---|---|-----|-----|
| • • |   |   | • • |     |
|     |   |   |     |     |
|     |   |   |     |     |
|     |   |   |     |     |
|     |   |   |     |     |

| Do not use |  | • • |
|------------|--|-----|
| Do not use |  |     |

|   |              | •   | • • | • • | • • |
|---|--------------|-----|-----|-----|-----|
|   |              | • • |     |     |     |
| - |              |     |     |     |     |
|   | lacktriangle |     |     |     |     |
|   |              |     |     |     |     |



| • • |  |           |
|-----|--|-----------|
|     |  | $\bullet$ |
|     |  |           |
|     |  |           |
|     |  |           |
|     |  |           |

|  | •   | • • | • • |
|--|-----|-----|-----|
|  | • • |     |     |
|  |     | ••• | ••• |
|  |     |     |     |



# Make A Hundred Game Board

| 25 | 25 | 5  | 10 | 50 | 10 | 5  |
|----|----|----|----|----|----|----|
| 25 | 5  | 10 | 50 | 50 | 25 | 25 |
| 25 | 50 | 5  | 5  | 10 | 50 | 10 |
| 5  | 10 | 25 | 50 | 25 | 10 | 5  |
| 50 | 10 | 5  | 10 | 25 | 5  | 10 |
| 10 | 5  | 25 | 50 | 25 | 10 | 5  |
| 25 | 25 | 10 | 10 | 10 | 5  | 50 |
| 10 | 10 | 5  | 25 | 25 | 5  | 10 |
| 50 | 5  | 25 | 10 | 5  | 50 | 10 |
| 50 | 25 | 10 | 10 | 5  | 5  | 10 |
| 25 | 10 | 10 | 10 | 5  | 5  | 10 |
| 5  | 10 | 5  | 5  | 25 | 25 | 50 |
| 10 | 5  | 25 | 50 | 10 | 10 | 25 |
| 5  | 50 | 10 | 5  | 25 | 25 | 10 |
| 10 | 5  | 25 | 25 | 50 | 10 | 5  |
| 10 | 25 | 50 | 10 | 5  | 5  | 25 |
| 5  | 25 | 25 | 10 | 50 | 5  | 10 |



| Component:    | Math                  |
|---------------|-----------------------|
| Grade Level:  | 2 <sup>nd</sup> Grade |
| Lesson Title: | Power of 10           |
| Focus:        | Multiples of 10       |

Materials:

White boards

Vocabulary Notebooks

Crayolas

decks of cards

Socks

# **Opening**

# State the objective

Today we are going to practice using our math vocabulary and math skills.

# Gain prior knowledge by asking students the following questions

What are some strategies that you use when you are trying to figure out how to solve a mathematics problem? How can you tell that you are on the right track for solving the problem? What are the basic operations that you need to utilize during math?

|  | Content | (the "l | Meat" |
|--|---------|---------|-------|
|--|---------|---------|-------|

## Problem of the Day

Write the three numbers below from the least to the greatest.

36, 16, 28

# **Fact Practice**

### **Addition War**

- Divide students into pairs. Give each pair a deck of cards without face cards and jokers.
- Shuffle the deck and divide the cards evenly between the two players.
- On go, the players turn over the cards at the same time.
- Students add the 2 numbers that have been turned up.
- First person to give the answer either wins the cards because the answer is correct, or has to turn over 2 cards because he/she gave the wrong answer.
- At the end of round, students may reshuffle the pile of cards that they have.
- Play can continue until one player has all cards or time has called.

# \*Activity → 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.



## Math Vocabulary

Word for Today: least

**Description**: Least is a word that means something is smallest when compared to at least two other things. If you were looking at 3 items, a marble, a chocolate chip, and a grain of sand, the grain of sand would be the least big item. If I had a bowl of candy with 13 pieces in it and another bowl with 43 pieces in it, the bowl with 13 pieces would have the least. Create an entry in the Vocabulary Notebook to share your understanding of the word least.

Vocabulary Notebook Sample:

| New Word                                     | My Description                                   |
|--|--|
| least  | A smaller number when compared to another number |
| Personal Connection                          | Drawing  |
| Of the two numbers 8 and 10, 8 is the least. |  |

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 ½ of a composition book.

# **Activity**

# Power of Ten Materials:

- Deck of card (no jokers or face cards)
- White board or paper to record answers

#### Directions:

- 1. Using a deck of cards (discard the jokers and the face cards), each player in turn draws a card.
- 2. Player multiplies the card by 10. On the first play, the player simply writes the product of the value of the card Xs 10 in his/her calculation box.
- 3. When player draws his/her second card, he/she multiplies by 10, writes the second product under the first and totals them.
- 4. First player to 1,000 wins. (Note: Winner must total 1,000 exactly.)

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" player getting ready to play this game so he/she could get all the blocks are completed.

- 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.



| largest | smallest | in the middle |
|---------|----------|---------------|
| largest | smallest | in the middle |
| largest | smallest | in the middle |
| largest | smallest | in the middle |
| largest | smallest | in the middle |
| largest | smallest | in the middle |



| Component:    | Math                   |
|---------------|------------------------|
| Grade Level:  | 2 <sup>nd</sup> Grade  |
| Lesson Title: | Addend and Power of 10 |
| Focus:        | Multiples of 10        |

Materials:

White boards

Vocabulary Notebooks

Crayolas

Dice

Socks

# **Opening**

# State the objective

Today we are going to practice using our math vocabulary and skills.

# Gain prior knowledge by asking students the following questions

What are some strategies that you use when you are trying to figure out how to solve a mathematics problem? How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

| Content ( | 'the ' | 'Meat" |
|-----------|--------|--------|
|           |        |        |

# Problem of the Day

Show two different ways the Frankie can find the sum of 6 + 7. Explain your thinking.

#### Fact Practice

### Spokes on a Wheel

- 1. Divide students into pairs.
- 2. On a white board, student draws a small circle with 9 spokes coming out of it (should look like a bicycle tire).
- 3. Have students choose to put a 6, 7 or 8 in the center circle.
- 4. Student rolls two dice and adds the pips (dots).
- 5. Taking this total, student writes a math problem on one of the spokes (eg. 7 is in the circle and students rolls a 3 and 5 which totals 8. The spoke equation would look like 7 + 8 = 15.
- **6.** Process continues until all spokes have an equation.

# \*Activity → 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.



# Math Vocabulary

Word for Today: addend

**Description**: The addends of an addition problem or the numbers that you are adding

together. In these examples: 9 74

<u>+8</u> <u>+51</u>

The addends of the first problem are 9 and 8, the addends of the second are 74 and 51. A problem can have at least two addends but can also have more than three addends.

Students complete the Vocabulary Notebook

Vocabulary Notebook Sample:

| New Word  | My Description                                |
|---|---|
| addend  | Numbers added together are called the addends |
| Personal Connection                               | Drawing                                       |
| 9 and 7 are the addends in the problem 9 + 7 = 16 | 9+7=16  |

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 ½ of a composition book.

# **Activity**

You played this game yesterday. Be sure that students understand how to play before you let them form pairs to play the game

#### Power of Ten

## Materials:

- Deck of card (no jokers or face cards)
- White board or paper to record answers

#### Directions:

- 1. Using a deck of cards (discard the jokers and the face cards), each player in turn draws a card.
- 2. Player multiplies the card by 10. On the first play, the player simply writes the product of the value of the card Xs 10 in his/her calculation box.
- 3. When player draws his/her second card, he/she multiplies by 10, writes the second product under the first and totals them.
- 4. First player to 1,000 wins. (Note: Winner must total 1,000 exactly.)

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?

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



| Component:    | Math                   |
|---------------|------------------------|
| Grade Level:  | 2 <sup>nd</sup> Grade  |
| Lesson Title: | Make 20 Again          |
| Focus:        | Mathematical Reasoning |

Materials:

White boards Vocabulary Notebooks

Crayolas 12 sided dice (1 for each child)
Socks deck of cards for every 2 children

## Opening

# State the objective

Today we are going to practice using our math vocabulary and skills.

# Gain prior knowledge by asking students the following questions

What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

| Content | (tho " | Maat″  |
|---------|--------|--------|
| COLLCIL | (tite  | ivicat |

## Problem of the Day

One of the strategies that you can use to add is counting. Using that strategy, what is the sum of this number sentence:

34 + 7 =

How do you know?

## **Fact Practice**

### **Number Hunt**

- 1. Divide students into pairs.
- 2. Each pair needs a Number Hunt sheet (attached to this lesson plans).
- 3. Player rolls two, 12-sided dice.
- 4. Player adds or subtracts the two numbers.
- 5. If the number is not yet covered, then player may cover the number.
- 6. Next player repeats steps 1-3.
- 7. Winner is determined by who has the most numbers covered.

# \*Activity → 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.



## Math Vocabulary

Word for Today: number sentence

**Description:** A number sentence is a way to write a mathematical story in an equation. For example, in the following story: Judy has 15 trophies. Martin has 6 trophies. How many trophies do they have in all? would turn into the following number sentence:

# 5 + 6 = 21 trophies

Vocabulary Notebook Sample:

| New Word                          | My Description                  |
|-----------------------------------|---------------------------------|
| Number sentence                   | 6 + 4 = 10 is a number sentence |
| Personal Connection               | Drawing                         |
| I like to write number sentences. | <b>23 + 69 = 92</b>             |

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 ½ of a

composition book.

# Activity

Play the game, Make 20! again today.

Make 20!

**Materials:** Deck of Cards (remove face cards and jokers)

Players: 2-4

**Purpose of the game:** Practice addition facts to automaticity.

Directions:

1. Shuffle the cards.

- 2. Deal 5 cards to each player and stack the remaining cards face-down in a pile in the center of the table.
- 3. Player 1 tries to use some or all of the five cards to create a sum of 20.
- 4. If the player creates a problem with the sum of 20, the player says, "Made 20!" and places the used cards in a separate pile.
- 5. If the player is unable to create a problem, he/she draws a card and the turn ends.
- 6. Player 2 takes a turn in the same way.
- 7. Play continues until all cards are used or until neither player can create a problem.
- 8. Player with the most cards wins.

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?

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



| Component:    | Math                     |
|---------------|--------------------------|
| Grade Level:  | 2 <sup>nd</sup> Grade    |
| Lesson Title: | Double Dice Additoin     |
| Focus:        | Addition and Subtraction |

Materials:

White boards Vocabulary Notebooks

Crayolas decks of cards

Socks dice

# **Opening**

# State the objective

Today we are going to practice using our math vocabulary and skills.

# Gain prior knowledge by asking students the following questions

What are some strategies that you use when you are trying to figure out how to solve a mathematics problem? How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

| What is the value of the 7 in the number below?  Tas  Fact Practice Draw!  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 Student adds or subtracts the cards.  Student adds or subtracts the cards.  Students take turns drawing cards and creating problems.  *Activity → 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. |         | Content (the "Meat")  |                                       |
|---|---------|---|---------------------------------------|
| Fact Practice Draw!  Check in about what is happening and what they are thinking.  Take advantage of any teachable moments.  Shuffle the deck. Decide who will go first. Sizudent adds or subtracts the cards. Student writes his/her problem on the white board, writing a complete number sentence. Students take turns drawing cards and creating problems.  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.   | What is |   | ,                                     |
| Draw!  1. Divide students into pairs and give each pair a deck of cards 2. Remove the face cards and jokers from the deck of cards. 3. Shuffle the deck. 4. Decide who will go first. 5. First player draws two cards. 6. Student adds or subtracts the cards. 7. Student writes his/her problem on the white board, writing a complete number sentence. 8. Students take turns drawing cards and creating problems.  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.  |         | 73  |                                       |
| thinking.  1. Divide students into pairs and give each pair a deck of cards  2. Remove the face cards and jokers from the deck of cards.  3. Shuffle the deck.  4. Decide who will go first.  5. First player draws two cards.  6. Student adds or subtracts the cards.  7. Student writes his/her problem on the white board, writing a complete number sentence.  8. Students take turns drawing cards and creating problems.  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.   |         | Fact Practice   |                                       |
| 2. Remove the face cards and jokers from the deck of cards. 3. Shuffle the deck. 4. Decide who will go first. 5. First player draws two cards. 6. Student adds or subtracts the cards. 7. Student writes his/her problem on the white board, writing a complete number sentence. 8. Students take turns drawing cards and creating problems.  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.  |         | Draw!   | 1 9                                   |
| 3. Shuffle the deck. 4. Decide who will go first. 5. First player draws two cards. 6. Student adds or subtracts the cards. 7. Student writes his/her problem on the white board, writing a complete number sentence. 8. Students take turns drawing cards and creating problems.  Students take turns drawing cards and creating problems.  Students take turns drawing cards and creating problems.  | 1.      | Divide students into pairs and give each pair a deck of cards |                                       |
| <ol> <li>Decide who will go first.</li> <li>First player draws two cards.</li> <li>Student adds or subtracts the cards.</li> <li>Student writes his/her problem on the white board, writing a complete number sentence.</li> <li>Students take turns drawing cards and creating problems.</li> <li>student's key learning or understanding. Ask openended questions to determine what the rest of the group is thinking.</li> </ol>   | 2.      | Remove the face cards and jokers from the deck of cards.      | teachable moments.                    |
| <ul> <li>5. First player draws two cards.</li> <li>6. Student adds or subtracts the cards.</li> <li>7. Student writes his/her problem on the white board, writing a complete number sentence.</li> <li>8. Students take turns drawing cards and creating problems.</li> <li>Junderstanding. Ask openended questions to determine what the rest of the group is thinking.</li> </ul>   | 3.      | Shuffle the deck.   |                                       |
| <ul> <li>6. Student adds or subtracts the cards.</li> <li>7. Student writes his/her problem on the white board, writing a complete number sentence.</li> <li>8. Students take turns drawing cards and creating problems.</li> <li>ended questions to determine what the rest of the group is thinking.</li> </ul>   | 4.      | Decide who will go first.                                     |                                       |
| 7. Student writes his/her problem on the white board, writing a complete number sentence. 8. Students take turns drawing cards and creating problems.  determine what the rest of the group is thinking.  | 5.      |   |                                       |
| 8. Students take turns drawing cards and creating problems. the group is thinking.  | 6.      | Student adds or subtracts the cards.                          | • • • • • • • • • • • • • • • • • • • |
| o. Students take turns drawing eards and creating problems.   | 7.      | ·   |                                       |
|   | 8.      | Students take turns drawing cards and creating problems.      |                                       |
| When possible, engage   |         |   | 1 00                                  |
| students in a "teach to learn" opportunity and have the   |         |   |                                       |
| student become the teacher.   |         |   |                                       |
|   |         |   |                                       |



## Math Vocabulary

Word for Today: value

**Description:** The word value in math refers to the "worth" of something. For example, if the number is 4, you could find the value of the four by counting 4 items. In math, the value refers to the numerical quantity assigned to a particular mathematical symbol. In this case the number 4. Value can be calculated.

Create an entry for the word value in your Vocabulary Notebook.

Vocabulary Notebook Sample:

| New Word                              | My Description          |
|---------------------------------------|-------------------------|
| value                                 | What something is worth |
| Personal Connection                   | Drawing                 |
| That necklace has a value of \$1,000. | \$1,000                 |

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 ½ of a composition book.

# Activity

**Double Dice Addition** 

Materials: Dice (4 for each player)

White board Vis-à-vis pens

Players: 2-4

**Purpose of the game:** Practice adding and subtracting 2 digit numbers mentally.

### Directions:

- 1. Players roll 4 dice each.
- 2. Each player arranges the dice into 2, two-digit numbers (e.g. player rolls 4, 3, 5, 1, player can make 43 and 51, 34 and 15, 54 and 31, 13, and 45 and so on).
- 3. Player adds the total of his/her two-digit numbers (34 + 15 = 49). Player writes the total on his/her white board.
- 4. Players show the white board to one another, the player with the largest total wins the round and places a mark on the white board.
- 5. Play continues for 10 rounds.
- 6. Winner is the player who has the most marks on his/her white board.

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?

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



| Component:    | Math                                   |
|---------------|--|
| Grade Level:  | 2 <sup>nd</sup> Grade                  |
| Lesson Title: | Total Double Dice Addition             |
| Focus:        | Mental Math (Addition and Subtraction) |

Materials:

White boards Vocabulary Notebooks

Crayolas cards without tens, face cards and jokers

Socks

# **Opening**

## State the objective

Today we are going to practice using our math vocabulary and skills.

# Gain prior knowledge by asking students the following questions

What are some strategies that you use when you are trying to figure out how to solve a mathematics problem?

How can you tell that you are on the right track for solving the problem?

What are the basic operations that you need to utilize during math?

# Content (the "Meat")

# Problem of the Day

Joan has 23 stickers. Maria has 34 stickers. How many do they have all together? How do you know?

# Fact Practice Bump It Up! Add A Zero

- 1. Divide students into pairs.
- 2. Give each pair a white board and a deck of cards (without face cards, jokers, or 10s)
- 3. The object of this fact practice is to sum numbers until you reach 1,000.
- 4. Student draws 2 cards, adds the value of the cards together, multiplies by ten and writes the total on the sheet.
- 5. It is not the other person's turn to do the same.
- 6. When play returns to the first player, the process is repeated, although this time, the totals are added together.
- 7. First person to 1,000 wins.
- 8. Example: Player draws a 7 and a 4. Total is 11. Multiply by 10 (add the zero) equals 110. Next turn, player draws a 3 and a 2 which totals 5. Multiply by 10 and I now add 50 to 110 for a total of 160.

# \*Activity → 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.

9.



## Math Vocabulary

Word for Today: total

**Description:** Total is a word that is used to describe how many in all. Total is what happen when you add, subtract, multiply, or divide. Each of these operations have a special name for the word total. When you add the total is a sum. When you subtract the total is the difference. When you multiply the total is a product. When you divide, the total is the quotient.

Have students complete the Vocabulary Notebook.

Vocabulary Notebook Sample:

| New Word   | My Description  |  |
|--|---|--|
| total  | Means having it all—the answer in an addition problem |  |
| Personal Connection  | Drawing   |  |
| I have a total of 8 cookies: 5 in my left hand and 3 in my right hand. |   |  |

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 ½ of a composition book.

# Activity

Play the game Double Dice Addition for a second day.

**Double Dice Addition** 

Materials: Dice (4 for each player)

White board Vis-à-vis pens

Players: 2-4

**Purpose of the game:** Practice adding and subtracting 2 digit numbers mentally.

## **Directions:**

- 1. Players roll 4 dice each.
- 2. Each player arranges the dice into 2, two-digit numbers (e.g. player rolls 4, 3, 5, 1, player can make 43 and 51, 34 and 15, 54 and 31, 13, and 45 and so on).
- 3. Player adds the total of his/her two-digit numbers (34 + 15 = 49). Player writes the total on his/her white board.
- 4. Players show the white board to one another, the player with the largest total wins the round and places a mark on the white board.
- 5. Play continues for 10 rounds.
- 6. Winner is the player who has the most marks on his/her white board.

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.?

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



| Component:    | Math                    |
|---------------|-------------------------|
| Grade Level:  | 2 <sup>nd</sup> Grade   |
| Lesson Title: | Review With Tic Tac Toe |
| Focus:        | Review                  |

### Materials:

Enlarged Tic Tac Toe Boards—one for each pair of students (duplicate on 11" x 17" if you can

Prizes (these can be time, a leadership role, opportunities to be the "teacher"

If you finish Tic Tac To early, you can have students select a favorite game from the past few days and play that as well.

# **Opening**

State the objective

Today we are going to have fun playing a game.

| Content (the "Meat") |
|----------------------|
| Activity             |
| Tic Tac Toe          |

- 1. Divide students in groups of 2.
- 2. Give each pair a Tic Tac Toe Board (enlarge from this lesson plan).
- 3. In order to place an "X" or and "O" in a space, students must be able to complete the math problem in the space.
- 4. Students should apply "paper, rock, scissors" to determine who will go first (best 2 out of 3).
- 5. Winner receives a High Five.

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

## Reflection (Confirm, Tweak, Aha!)

Did we achieve our objectives?

- 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



# Tic Tac Toe Math—2<sup>nd</sup> Grade

| Order the numbers below from the largest to the smallest (place the largest number on top and the smallest number on bottom.  918  893  900  924 | 746 +583   | Separate these numbers into odds and evens:  487 714 388 901 755 914  |
|--|--|---|
| Complete this problem  718  -243   | Each of the numbers below has a 9 in it, either in the ones, tens or hundreds place. Match the 9 to the place value it represents.  971 ones 719 tens 497 hundreds | Write the following number in expanded notation: 5,316  |
| Write this number that is written in expanded notation in the standard form. $500 + 70 + 9$  | What are the next four figures in this pattern? Write them on the lines.   | Write a number sentence for this story problem. Frank had 13 baseball bats. Four of them were stolen? How many baseball bats does Frank have? |