

Title - Christmas Shopping Extravaganza

Subject – Mathematics, Art

Grade Level – 2nd

Objectives:

- Recognize the characteristics of common two-dimensional and three-dimensional shapes
- Count a collection of coins with a value up to \$1.00

Materials:

- one set of coin manipulatives for each student, or play money coins
- Christmas ornament worksheet
- glitter, glue, crayons, etc. for decorating

Activity:

Students are given coins.

Have students cut out 5 different Christmas ornament patterns prior to this lesson (examples: Christmas trees, gingerbread men, stars, Santa Clauses, circle ornaments)

Set up different stations around your room where children can come to decorate their ornaments. They have to pay one penny for everything they use to decorate an ornament.

Set a timer. Every 10 minutes, students must record on a worksheet how much money they have left and how much they have spent.

Example of worksheet.

Name _____ Date _____

I started with \$.15. After the first 10 minutes, I had _____ left. This means I have spent _____.

After 20 minutes, I had _____ left, this means I have spent _____.

Title - Birthday Card Quilt

Subjects - Art, Math

Grade Level – 2nd

Objectives:

-Recognize and extend patterns displayed in a variety of forms including numeric, visual, oral, kinesthetic, pictorial, tabular, graphical, or listing

-Create and explain a general rule for a growing and a repeating pattern, both verbally and in written form

-Recognize, sort and classify objects according to size, number and other characteristics

-Apply physical materials to perform geometric transformations, including flips

-Construct figures that are symmetrical across a line using a variety of physical materials

Materials:

- Old birthday cards no less than 12
- Yarn any colors
- Hole puncher
- Scissors

Activity:

1. First, have the children bring in old birthday cards.
2. Have the children write their name and birthday on the cards they brought.
3. You need to cut each one to the same size.
4. Then you punch holes around the sides.
5. Cut yarn in strips of 8 inches.
6. Let the children attach each card they brought together by using the yarn.
7. You should have some cards you brought too.
8. Then have them all get in a group and you and attach each of your sections together
9. Your finished creation is a big class birthday quilt.

This quilt project groups the class together as a whole like a family. It also hopes teach them to tie and helps them with patterns.

Title - Conversation Heart Fractions

Subject – Mathematics

Grade Level – 2nd

Objectives:

- Make comparisons of the unit fractions $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$
- Sort and classify objects based upon their characteristics and organize data about the objects

Materials:

Give each child a bag of 20 conversational hearts.

Activity:

Have the children sort the candies into like color piles.

Then have each child record the correct fraction that matches each pile. For example: If a child has 5 pinks, she would record $\frac{5}{20}$. Then continue recording the fractions until all the colors are recorded.

The children may then compare their findings with a neighbor to compare the fractions. Then show them how to add the fractions all together.

Talk about common denominators.

Then show how to combine 2 colors. For example: add the pinks and the yellows and write the new fraction. After the children have had practice adding the fractions they may enjoy their tasty treat.

Title: Dates

Subject: Mathematics

Grade level: 2nd

Objectives:

- Recognize, sort, and classify objects according to size, number and other characteristics
- Compare measurement units within a given system
- Gather and interpret data about objects and events in the environment
- Sort and classify objects based upon their characteristics and organize data about the objects
- Make representations and/or comparisons of data using various types of graphs (picture, graph, tally)

Materials:

*Pennies (one per child) - - variety of dates between 1 - 15 years

*Post - it notes

*Chart paper

Activity

The class will be shown a variety of coins such as half dollars, quarters, dimes, nickels, and pennies. What do all these coins have in common?

Explain to the class that every penny has a date on it that tells the year the penny was made. Demonstrate to the class how to find the date on a penny and then record it on a post - it note. Write the date large enough to see it from across the room. The students will all be given a penny so that they can look for the date and record it on the post - it note.

The students will then be given the task of arranging their pennies' dates in chronological order. With the post - it note, they will place their date under the corresponding year which is already posted on the chalk board. After discussing and analyzing the data on the board, the class will create a graph. Ask the students different questions concerning different aspects of the graph.

The teacher will observe the students to see if they can correctly locate the date on the penny, record and arrange in chronological order. The teacher will also make note of the students' participation in making the class graph and how they cooperated with one another.

Ask children why pennies have different dates on them? Have the children the students go home and have them find other objects that have dates on them. Example: food containers, dollar bills, etc.

This lesson can also be extended by having the students write their birth dates on post - it notes and make a class graph representing birth dates. Compare the two graphs.

Title - The Melting Snow

Subject - Science, Math

Grade Level - 2nd

Objectives:

-Use the appropriate measurement instrument (ruler, thermometer, etc.) when measuring a specific attribute

Materials:

A paper cup for each child or group (not Styrofoam)

A thermometer for each child or group

Snow (You have to do this when it is snowing.)

Activity:

Take the children outside and have them fill the cup with snow.

Place the thermometer in the cup and record what the temperature is.

Go back inside and have them sit in a circle. While they are sitting in the circle explain briefly about the melting and freezing point.

After about 5 minutes the snow should have melted. Let them observe how the snow has changed and the new temperature. They should record their observations.

If it is in the summer and you want to do this activity you can use crushed ice instead of snow. (Ice cubes take too long to melt)

Have a talk about how you can change different things into liquid by heating.

Title: Estimating With Pumpkin Seeds 

Subject: Mathematics

Grade Level: 2nd

Objectives:

- Gather and interpret data about objects and events in the environment
- Read, write, count, and model numbers through 100
- Skip count by twos, fives, and tens up to at least 100, beginning from any number
- Describe mental math methods that can be used to solve simple addition or subtraction problems

Materials:

- one pumpkin/group of students
- large spoon for scooping
- newspapers/garbage bags

Activity:

Do you know how many seeds are inside the pumpkin? Follow these steps to find out.

-Each member of the team will estimate the number of seeds inside the pumpkin. Write down the team member's name and their estimate.

Team Member	Estimate	Actual Count

-Lift the stem off the pumpkin. Begin taking the seeds out of the pumpkin. Your hands will get dirty, so be sure to pull your sleeves up! Be sure all seeds stay on the table.

-Next, count all of the seeds inside your pumpkin. Be sure you get them all. You may want to consider putting the seeds into groups of 5 or 10 to make counting easier for your team.

-Now, total the amount of seeds collected. Our pumpkin had this amount of seeds _____.

-The team member that had the closest estimate was _____.

Congratulations!!! You did a terrific job of estimating how many seeds were in the pumpkin.

Do you know how many seeds are inside the pumpkin? Follow these steps to find out.

1. Each member of the team will estimate the number of seeds inside the pumpkin.

NAME

GUESS

2. Lift the stem off the pumpkin. Begin taking the seeds out. Your hands will get dirty, so be sure to pull your sleeves up! Be sure all seeds stay on the table.

3. Next, count all of the seeds inside your pumpkin. Be sure you get them all. You may want to consider putting the seeds into groups of 5 or 10 to make counting easier for your team.

4. Now, total the amount of seeds collected. Use a calculator to double check your total.

5. Our pumpkin had this amount of seeds _____.

6. The team member that had the closest estimate was _____.

7. Congratulations!!! You did a terrific job of estimating how many seeds were inside the pumpkin.

Title: Salute

Subject: Mathematics

Grade Level: Second

Objectives:

-Use concrete objects, pictures, and/or symbols to represent addition and subtraction with whole numbers

-Apply various models to illustrate a comprehension of addition and subtraction of whole numbers

-Display verbal and written proficiency in elementary addition facts of sums to 12, as well as the corresponding subtraction facts

Materials:

- a deck of cards per three students

Activity:

1. Place students into groups of three students per group.
2. Have two students sit facing each other, while the third student sits so they can see the other two students (like in a triangle shape).
3. The two students who are facing each other are the guessers They both choose one card from the deck (excluding the face cards) without looking at the card.
4. Then the third student says "SALUTE" and the two guessers then put their card up to their ear/head so that their opponent can see, making sure that they cannot.
5. Now the two guessers can see each others' cards and the third student looks at both of the cards as well The third student tells the two guessers what the sum of the two cards is.
6. Since the players can see the other person's card but not their own, by knowing the sum - - they can figure out what the other card is by using subtraction.

Title - Shape Pictures

Subject – Mathematics

Grade Level – 2nd

Objectives:

- Recognize common geometric shapes, classify them by common characteristics, and explain their relative position or their location in space
- Sort and classify objects based upon their characteristics and organize data about the objects
- Make representations and/or comparisons of data using various types of graphs (picture, graph, tally)

Materials:

- worksheets containing various geometric shapes
- glue sticks
- poster board or construction paper
- chart paper

Activity:

Have several sheets of papers with many different shapes on them.
Have students look at the different shapes and cut them out.

After all the shapes are cut out have them put them together to make different objects or a whole picture scene.

Have the student keep track of how many of each shape they use. Give a prize to the student that uses the most shapes in their picture.

The children can also make a chart of how many of each shape they used. They can decide what type of chart they will use and explain their chart to the class.

Title - Twelve Days of Math (a Christmas song)

Subject – Math, Music

Grade Level – 2nd

Objectives:

- Order and compare whole numbers up to 100
- Read, write, count and model numbers through 100

Materials:

- copies of the song

Activity:

This is a fun way to teach ordinal numbers to students. The song can be adapted to your subject areas.

It is the Twelve days of Christmas with a few changes. Print a copy for every student in the class. You may also put the numbers in a different color than the regular text to highlight it more.

On the first day of Christmas my teacher gave to me a test on fact families.

On the second day of Christmas my teacher gave to me 2 ways to skip count and a test on fact families

On the third day of Christmas my teacher gave to me 3 subtraction questions, two ways to skip count and a test on fact families, etc.

- 4th day --- 4 adding doubles
- 5th day --- 5 pop quizzes
- 6th day --- 6 number sentences
- 7th day --- 7 math homeworks
- 8th day --- 8 odds and evens
- 9th day --- 9 word problems
- 10th day -- 10 snapping cubes
- 11th day -- 11 making money
- 12th day -- 12 counting chips

The class may enjoy "Christmas Caroling" for other classrooms.

Title - Valentine Hearts Graph

Subject - Valentine's Day, Mathematics

Grade Level - 2nd

Objectives:

-Describe mental math methods that can be used to solve simple addition or subtraction problems

-Recognize, sort, and classify objects according to size, number and other characteristics

-Make representations and/or comparisons of data using various types of graphs

Materials:

Large Sheet of chart paper

Valentine Candy Hearts (one small box or bag for each student)

Crayons

Activity:

On the chart paper, draw a large graph. Label the columns for each color of candy heart in the boxes you have.

1. Explain/review the concept of graphs with the class. Explain that everyone in the class is going to get a box of candy hearts, and we will graph how many there are of each color.
2. Give each child a box of candy hearts. Have the students make a prediction about which color there will be the most of and least of in the whole class. They can look at the box to make their guess.
3. Have each student open their box and group the hearts into colors (Remind them not to eat yet, or the count will not be accurate!!!)
4. Students count their candies and color the appropriate squares on the graph using the correct color crayon.
5. Talk about predictions and see which ones were correct.