Valentine's Math Activities Workbook

Welcome!
This workbook is filled with fun and festive math activities to help you celebrate Valentine's Day while learning. Get ready to dive into fractions, graphing, puzzles, and more!

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1. Heart Fractions
Objective: Learn about fractions using heart shapes!

- Materials Needed: Paper hearts, scissors, crayons or markers
- Instructions:
  1. Cut out a paper heart.
  2. Divide it into equal parts (halves, thirds, quarters) by folding or cutting.
  3. Color in parts of the heart to represent the fractions.
  4. Compare your hearts with your classmates and discuss how many parts of each heart are colored.

- Questions:
  1. How many parts are in each heart?
  2. Which fraction did you color the most?
  3. Can you find someone with a heart that has the same fraction as yours?

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2. Candy Heart Graphing
Objective: Practice sorting and graphing data using candy hearts!

- Materials Needed: Small bag of candy hearts (or any colorful candies)
- Instructions:
  1. Sort the candy hearts by color.
  2. Create a bar graph to display the number of candy hearts of each color.
  3. Answer the following questions based on the graph.

- Graphing Template:
  - X-Axis: Candy Heart Colors
  - Y-Axis: Number of Candies
  - Graph Example:
    - Red: 5
    - Pink: 8
    - Yellow: 4

- Questions:
  1. Which color has the most candy hearts?
  2. Which color has the least candy hearts?
  3. How many more red hearts than yellow hearts are there?

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3. Valentine's Day Math Puzzles
Objective: Solve Valentine's Day-themed math puzzles!

- Activity 1: Heart Sudoku
  Fill in the blanks with numbers (1-4) in a 4x4 grid, making sure no number repeats in any row or column.

- Activity 2: Word Problem Puzzles
  Read the following word problem and solve it:
  Sarah buys 3 bouquets of roses with 10 flowers in each bouquet. How many flowers does she have in total?"

- Activity 3: Flower Count Puzzle
  "Each chocolate box has 12 chocolates. If Emily buys 4 boxes, how many chocolates does she have?"

Bonus Puzzle:
https://www.pedagonet.com/Maths/ValentineMath1.html
https://www.pedagonet.com/Maths/PinkHearts.html
https://www.pedagonet.com/Maths/BrokenHearts.html
https://www.pedagonet.com/Maths/EightHearts.html

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4. Symmetry Hearts
Objective: Understand symmetry by creating heart patterns!

- Materials Needed: Paper, scissors, crayons
- Instructions:
  1. Fold a piece of paper in half.
  2. Cut out a heart shape (make sure it's symmetrical).
  3. Decorate one side and fold it over to transfer the design to the other side, creating symmetry.

- Questions:
  1. How does symmetry make your heart pattern look?
  2. Can you find another shape that is symmetrical?

Bonus Puzzle:
https://www.pedagonet.com/videos/brokenheart.htm

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5. Valentine's Day Math Bingo
Objective: Play Cupid Bingo

https://www.teacherspayteachers.com/Product/Cupidon-Math-1660312

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6. Heart-Shaped Array Building
Objective: Practice multiplication with heart arrays!

- Materials Needed: Heart-shaped stickers or cutouts
- Instructions:
  1. Arrange the heart stickers into rows and columns.
  2. Write the multiplication equation for your array.
     For example, if you have 3 rows with 4 hearts each, the equation is 3 x 4 = 12.

- Questions:
  1. How many hearts are in each row?
  2. How many rows do you have?
  3. Can you create a new array with a different multiplication equation?

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7. Cupid's Coordinate Plane
Objective: Plot points on a coordinate plane!

- Materials Needed: Grid paper, small paper hearts
- Instructions:
  1. Plot points on a coordinate plane (X and Y axis).
  2. Place paper hearts at the corresponding coordinates.
  3. Find the distance between two hearts using the grid.

- Example:
  - Heart 1: (3, 2)
  - Heart 2: (5, 6)
  How far apart are the hearts?

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8. Valentine's Day Word Problems
Objective: Solve word problems with a Valentine's Day twist!

- Problem 1:
  “Jack buys 5 boxes of chocolates. Each box has 12 pieces of chocolate. How many pieces of chocolate does Jack have in total?”

- Problem 2:
  “If Lily gives 3 chocolates to each of her 7 friends, how many chocolates does she give away?”

- Problem 3:
  “There are 24 roses in a garden. If half of them are red, how many red roses are there?”

Bonus activities:
https://www.pedagonet.com/Maths/ValentineMath.html
https://www.pedagonet.com/videos/ninegram.html
https://www.pedagonet.com/puzzles/heartsandstars.html
https://www.pedagonet.com/videos/brokenheart.htm

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9. Love Potion Measurement
Objective: Practice measuring ingredients to make a love potion!

- Materials Needed: Measuring cups, water, food coloring (or any safe liquid), paper and markers
- Instructions:
  1. Follow the "love potion" recipe, using measuring cups to measure each ingredient.
  2. Mix the ingredients together in a bowl.
  3. Write down the amounts of each ingredient you used.

- Love Potion Recipe Example:
  - 1 cup of water
  - 2 teaspoons of rose water
  - 3 drops of pink food coloring

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10. Valentine's Day Estimation Jar
Objective: Estimate the number of candies in a jar!

- Materials Needed: A jar filled with candy hearts (or any small objects)
- Instructions:
  1. Estimate how many candy hearts are in the jar.
  2. Count the hearts together and compare your guesses to the actual number.
  3. Discuss the strategies you used for estimating.

Bonus Reading Activities:

https://www.pedagonet.com/Reading/ValentineEpigrams.html
https://www.pedagonet.com/Reading/RosesAreRed.html
https://www.pedagonet.com/Reading/Villanelle.html
https://www.pedagonet.com/Themes/HalloweenVocabulary.htm
https://www.pedagonet.com/Vocabulary/SortingActivity.htm
https://www.pedagonet.com/Themes/Valentine.htm