

Daneilla's Double Delight & Half-Time Art!

Materials Needed:

- Paper (several sheets, plain white and colored if possible)
- Pencils
- Crayons, markers, or paint (washable tempera paint works well for blotto prints)
- Child-safe scissors
- Small objects for counting (e.g., buttons, beads, dried beans, small blocks - about 40)
- Optional: Glitter, stickers for art decoration, an old shirt or apron for painting

Introduction: The Magic of Twos! (10-15 minutes)

Hello Daneilla! Today, we're going to explore some really cool math ideas called 'doubles' and 'halves,' and then we'll use them to make some amazing art!

Let's talk about Doubles:

- When you 'double' something, it means you have two of it, or you add the same number to itself. Imagine you have 1 cookie, and I give you another 1 cookie. Now you have double the cookies! How many is that? (Answer: 2)
- If you have 3 favorite toys, and then you get another 3 exactly like them, you've doubled your toys! How many would you have? (Answer: 6)

Let's talk about Halves:

- When you find 'half' of something, it means you're splitting it into two equal parts. Imagine you have a chocolate bar with 4 squares, and you want to share half with a friend. How many squares would each of you get? (Answer: 2)
- If you have 8 drawing pencils and you want to put half in one box and half in another, how many go in each box? (Answer: 4)

We're going to be math magicians today!

Activity 1: Math Magician - Doubles and Halves Practice (20-25 minutes)

Let's use our counting objects first!

Doubling Fun:

1. Take 2 beads. Now, double that amount. How many beads do you have? ($2 + 2 = 4$)
2. Take 5 buttons. Double it! How many do you have? ($5 + 5 = 10$)
3. Try these on your own with objects, then we can write them down:
 - Double 3
 - Double 7
 - Double 10
 - Challenge: Double 12 (Count out 12, then another 12)

Halving Fun: (Remember, for halving, we usually start with an even number to make it easy to split into two equal groups!)

1. Take 6 beans. Can you split them into two equal groups to find half? How many in each group? (Half of 6 is 3)

2. Take 10 blocks. Find half. How many in each group? (Half of 10 is 5)
3. Try these on your own with objects, then we can write them down:
 - Half of 4
 - Half of 8
 - Half of 14
 - Challenge: Half of 20

Great job, Math Magician! You're getting the hang of it!

Activity 2: Symmetrical Art Adventure - Folding Fun! (30-40 minutes)

Now for the super fun art part! We're going to make art that is **symmetrical**. Symmetrical means if you fold it in half, both sides are exactly the same – like a mirror image! One side is 'half' of the whole design.

Option 1: Blotto Painting (Butterfly Wings)

1. Take a piece of paper. Fold it in half and then open it up again. You'll see a crease down the middle.
2. On ONE side of the crease, drop a few small blobs of different colored paint. Don't use too much!
3. Carefully fold the paper in half again along the crease, pressing down gently.
4. Open it up! What do you see? The paint should have spread to create a beautiful, symmetrical design. Notice how one side of the crease is like a mirror image of the other side. Each side is 'half' of the total butterfly pattern.
5. You can add details with markers or crayons once it's dry, like antennae or eyes if it looks like a butterfly or creature!

Option 2: Fold-and-Cut Surprises (Like Snowflakes or Hearts)

1. Take a piece of paper (colored paper can be fun for this!).
2. Fold it in half.
3. On the folded edge, draw half of a shape. For example, to make a heart, draw half a heart shape along the fold. To make a person, draw half a person. To make a random cool design, just draw some curvy or straight lines that start and end on the fold.
4. Keeping the paper folded, carefully cut along the lines you drew. (Be careful not to cut all the way along the fold itself, unless that's part of your design for separate pieces).
5. Unfold your paper. What do you see? A whole shape! The fold line was the line of symmetry, and each side is 'half' of the whole design.
6. You can make several of these and glue them onto another piece of paper to make a scene or pattern.

As you create your art, think about how 'doubling' the half-design (by unfolding it or pressing the paint) creates the whole picture!

Conclusion & Share (5-10 minutes)

Wow, Daneilla, your artwork looks amazing!

- Let's quickly review: What does it mean to 'double' a number? (To add it to itself, or have two of the same amount).
- What does it mean to find 'half' of something? (To split it into two equal parts).
- Show me your favorite piece of art you made today. Can you point to the line of symmetry (the fold line)? How does your art show the idea of 'halves'? (Each side of the fold is one half of the

whole design).

You did a fantastic job today being both a Math Magician and an Art Adventurer! You used your brain for numbers and your creativity for art, and you saw how they can connect!