



PAINT YOUR NUMBERS

Turn Your Photos Into Art!



The Master Class: The Ultimate Guide to Paint-by-Numbers

A Comprehensive 11-Page Guide to
Best Practices, Techniques, and
Preservation

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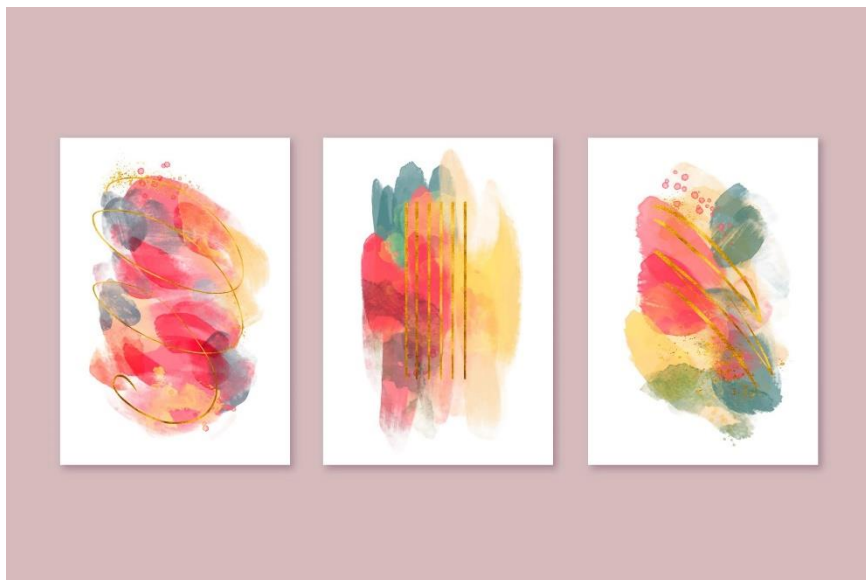
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Introduction: The Art of Joy and Reward

Welcome to the ultimate guide to paint-by-numbers! More than just a simple hobby, PBN has evolved into a deeply satisfying and sophisticated form of artistic expression for adults. While the foundational concept is delightfully straightforward—match the number on the pot to the number on the canvas—the *process* itself is where the magic lies.

Immersing yourself in a PBN project is a profoundly rewarding experience. It offers a meditative break from screens and stress, allowing you to enter a state of focused calm as you watch complex imagery unfold beneath your brush. There's immense fun in the systematic challenge of filling each tiny cell. And when you finally step back and view the finished piece—a work of art so detailed and professional it seems impossible you created it—the pride is unbeatable.



This guide is designed to take you through every stage of the process, from setup to final varnish, ensuring your journey is enjoyable and your final piece is truly gallery-worthy.

Part I: The Setup

Before you open a single pot of paint, you must prepare your environment. 80% of mistakes happen because of poor setup.

1. Workspace Ergonomics

Painting a detailed PBN can take 20 to 50 hours. Your body needs support.

- **The Angle:** Do not paint flat on a table for long periods; this causes "painter's neck." **The optimal position is vertical.** Use a tabletop easel or prop a drawing board up at a 30-45 degree angle.
- **Easel Selection:** For PBN, a **tabletop easel** is often best as it fits the small-to-medium canvas size and allows you to sit comfortably. Ensure it's stable and won't wobble when you apply pressure. A floor easel is fine if you prefer to stand.
- **Hand Support:** Unlike freehand painting, PBN requires resting your hand to steady it for tiny spaces. If your paint is wet, use a **Mahl Stick** (or a clean ruler) to bridge across the canvas without touching the wet paint.

2. Lighting Essentials

Poor lighting leads to eye strain and missed spots.

- **Color Temperature:** Use a "Daylight" bulb (5000K-6500K). Warm white bulbs (yellow tint) will distort your color perception, causing you to over-apply paint, while "cool" light minimizes color shift.
- **Magnification & Illumination:** Serious hobbyists invest in integrated tools. A **magnifying lamp with built-in LED lighting** is highly recommended. These tools combine high-fidelity, bright light with 2x or 3x magnification, which is crucial for distinguishing borders and numbers in the tiny "micro-cells" on high-detail kits.

3. Canvas Preparation

Most kits arrive folded or rolled tightly. You must fix the surface before painting.

- **Ironing:** If your canvas is creased, flip it face down onto a clean towel. Mist the *back* of the canvas lightly with water. Iron on a medium/high setting (no steam) until flat.
- **Mounting:** It is easier to paint a canvas that is already stretched on a frame or taped to a hardboard than a loose sheet of canvas.
- **Clear Gesso (The Pro Secret):** Standard PBN canvas is often slick, meaning the paint slides around. Apply a thin coat of **Clear Acrylic Gesso** over the entire canvas before you start. This gives the surface "tooth" (texture), allowing the paint to grab on immediately and cover better.

4. Storage and Organization

Maintaining a tidy workspace and organized materials is critical for long, detailed projects.

- **Paint Management:** Invest in a small, compartmentalized storage box (like a fishing tackle box) to keep your paint pots upright and secure when not in use. This prevents accidental spills and keeps the numbers visible.
- **Keep the Key:** Always keep the paper reference key separate from the canvas, preferably laminated or placed in a clear plastic sleeve. This ensures you can refer to the numbers even if you paint over them on the canvas.
- **Brush Storage:** Store clean brushes horizontally or upright with the bristles pointing up. Never store them bristle-down or pressed against other objects, which causes them to fray and lose their fine point.



5. Painting in Extreme Climates

Environmental factors significantly affect acrylic paint and drying time. Adjust your technique based on your climate.

- **High Humidity (Humid Climates):**
 - **Problem:** Paint stays wet too long, increasing the risk of smudging and accidentally blending colors.
 - **Solution:** Use a small desk fan pointed away from the canvas to keep air circulating (not directly on the paint, which can cause cracking). Do not use Flow Aid; thin paints only minimally with water. Work in smaller sections.
- **Dry Heat (Arid Climates):**
 - **Problem:** Paint dries almost instantly, often on the brush or even in the pot while the lid is open. This leads to brush drag and texture issues.
 - **Solution:** Use a wet palette (a shallow container with a damp sponge and parchment paper) to keep small amounts of active paint moist. Use Flow Aid liberally. Consider using a small humidifier near your workspace.
- **Cold Temperatures:**
 - **Problem:** Paint becomes thick, viscous, and difficult to apply smoothly,

leading to lumpy coverage.

- **Solution:** Work in a room that is at least 70°F (21°C). Place the paint pots in a sealed plastic bag and run them under warm tap water for a minute to gently warm and loosen the paint before mixing in Flow Aid.

Part II: Tools of the Trade

1. Brush Anatomy & Selection

The blue brushes included in most kits are "starters." They will fray quickly.

- **The Golden Trio:** You generally need three brushes:
 1. **#0 or #00 (The Detailer):** For the tiniest specks.
 2. **#1 or #2 (The Round):** For lines and medium shapes.
 3. **#4 or Flat Brush:** For large background areas.
- **Synthetic vs. Natural:** Always use synthetic (Taklon) brushes for acrylics. Natural hair brushes absorb too much water and become floppy.
- **Care:** Never leave a brush sitting bristles-down in a water cup. It bends the tip permanently.

2. Paint Consistency & Flow Aid

Acrylic paint in PBN kits is often thick and heavy, leading to texture buildup and drag.

- **Flow Improver:** Do not just use water to thin your paints. Water breaks down the binder, making the paint chalky. Buy a bottle of **Acrylic Flow Improver** (e.g., Liquitex). Add 1-2 drops to your paint pot.
- **The Consistency Goal:** You want the consistency of heavy cream. It should glide off the brush without you having to press down hard.



3. Optical Aids

- **The Reference Photo:** Most kits come with a small thumbnail. It's too small. Take a high-resolution photo of your blank canvas with your phone before you start. When you inevitably paint over a number by accident, you can zoom in on your phone to find out what it was.

4. Mixing Custom Colors (Advanced)

While PBN provides all necessary colors, knowing how to mix can save a painting if you run out of a certain shade or need a subtle transition.

- **The Palette:** Use a non-porous palette (ceramic plate, disposable wax paper palette) for mixing. Never mix directly in the small pots.
- **Matching:** To match an existing color, start with the dominant color (e.g., if it's dark green, start with the dark green base). Add a tiny amount of the secondary color (e.g., black to darken, white to lighten, or blue/yellow to shift the hue) one drop at a time until it matches the dried paint on the canvas.
- **Blending for Gradients:** To create a smooth transition between two numbered areas, mix a small amount of the two adjacent colors together to create a new, intermediate shade. Use this intermediate shade to paint the dividing line, effectively blurring the boundary.

5. In-Depth Brush Maintenance

Proper care extends the life of your brushes and ensures fine points for detail work.

- **Immediate Cleaning:** Never let acrylic paint dry on the brush. As soon as you finish a color, rinse the brush thoroughly in cool water. Hot water can set the acrylic binder into the bristles.
- **The Two-Cup Method:** Use one cup of water for initial rinsing (the dirty rinse cup) and a second cup of clean water for the final swish. This ensures all pigment is removed.
- **Soap and Conditioner:** At the end of a painting session, use a dedicated brush soap (or mild dish soap). Lather the brush and massage the bristles, working the lather up into the **ferrule** (the metal part).
- **Restoring the Point:** While wet with soap, gently reshape the brush head to its original point using your fingers. Store the brush upright, point side up, or lay it flat to dry completely. If bristles splay outwards, use the hot water trick (V.4) or re-condition with soap and allow to dry in a tight, sharp shape.

Part III: Strategy & Logistics

1. Directional Painting

- **Right-Handed Painters:** Start from the **Top Left** and work your way to the **Bottom Right**.
- **Left-Handed Painters:** Start from the **Top Right** and work to the **Bottom Left**.
- **Why?** This prevents the heel of your hand from smudging wet paint you just applied.



2. Number Hunting vs. Sectioning

There are two main schools of thought.

- **Method A: By Color (Number Hunting)**
 - *Technique:* Open Pot #1 and paint every #1 on the canvas. Then move to #2.
 - *Pros:* Less brush washing; faster paint application.
 - *Cons:* You miss spots easily; pots stay open longer (drying risk); difficult to see the "picture" emerging.
- **Method B: By Section (The Puzzle Method)**
 - *Technique:* Pick a 4-inch square and paint all colors within that square.
 - *Pros:* Very motivating as you finish "chunks" of the image; keeps the hand clean.
 - *Cons:* Constant brush washing (wear and tear); frequent opening/closing of pots.
- **Recommendation:** A hybrid approach. Work in large quadrants, but within that quadrant, complete one color at a time.

3. Dark vs. Light Logic

- **Dark to Light:** Professional artists usually paint darks first. It establishes the contrast and depth of the image. However, dark paint is hard to cover if you make a mistake.
- **Light to Dark:** Recommended for beginners. If you spill a dark color into a light area, it's a disaster. If you spill a light color into a dark area, the dark paint covers it easily later.

4. The "Dry Brush" Strategy

This technique is used to create texture, soften hard edges, or apply very subtle color changes, often for highlights or wispy details (like clouds or hair).

- **Execution:** Dip your brush lightly in the paint, then wipe almost all of the paint off on a paper towel. The brush should feel nearly dry.
- **Application:** Lightly drag the mostly-dry brush across the previously painted, *dry* surface. This leaves thin, broken streaks of color, allowing the base color to peek through.
- **Best Use:** Excellent for creating the fuzzy look of foliage on trees, soft sun rays in a sky, or a weathered look on stone/wood.

Part IV: Painting Techniques

1. The Basic Stroke

Do not "scrub" the paint in.

- **The Bead:** Pick up a generous amount of paint on the *tip* of the brush. You should be laying down a bead of paint that sits slightly on top of the canvas weave.
- **The Border First:** Outline the shape carefully, then fill in the middle.



2. Dealing with Tiny Cells

Some cells are smaller than a pinhead.

- **The Toothpick Trick:** For cells too small for a brush, dip a wooden toothpick into the paint and "dot" it into the cell.
- **Micro-Pens:** You can buy empty paint markers and fill them with thinned acrylic for straight lines, though this is messy to set up.

3. Softening Edges (Advanced)

PBNs can look "blocky" or like a mosaic. To make it look like a real painting:

- **Zig-Zag Blending:** When two colors meet (e.g., a sunset), paint both distinct colors. While they are still slightly tacky, wipe your brush dry and lightly zig-zag back and forth across the line where they meet to blur the hard edge.

4. Creating Texture (Impasto)

Impasto means applying paint thickly so that the brush strokes remain visible, adding dimension and a professional touch. This works best for highlights (like on water or eyes) or tactile objects (flowers, stone).

- **Load Heavy:** Use the paint straight from the pot, without thinning. Load the brush

with a large glob of paint.

- **The Dab:** Instead of brushing, gently dab or press the thick paint onto the canvas, letting it form a small peak or ridge.
- **Strategic Use:** Only use this technique for areas that naturally have texture or where you want light to catch, such as the peak of a wave, the petals of a flower, or a bright reflection.

5. The Wet Edge Technique

This technique ensures seamless coverage, especially in large areas, and prevents the paint from looking patchy or having visible "stop/start" lines.

- **Work Fast:** Acrylics dry quickly. When painting a large, single-colored section (like the sky or a body of water), you must work swiftly.
- **Overlap:** Start your stroke and lay down a bead of paint. When you start the next stroke, make sure it slightly overlaps the *wet* edge of the previous stroke.
- **Maintain the Moisture:** If the paint starts to dry before you reach the edge of the section, lightly mist the surrounding area with a water bottle to keep the canvas surface slightly damp, extending your working time.

6. Stippling and Dabbing

These non-brushing techniques are used to create specific visual effects, particularly for natural elements.

- **Stippling:** Use the tip of a fine brush (or a toothpick) to apply tiny, distinct dots of paint, leaving space between them.
 - *Best Use:* Creating the look of sand, fine dust, or speckles of light filtering through leaves.
- **Dabbing (Sponge or Foam):** Use a small piece of ripped sponge or foam brush to lightly tap the paint onto the canvas.
 - *Best Use:* Creating the uneven, organic look of dense foliage, moss, or rocky textures. This technique eliminates visible brush strokes for a more abstract texture.



7. Color Theory: Enhancing Shadows and Highlights

Take your painting to the next level by manually enhancing depth and light.

- **Deepening Shadows (Glazing):** Identify areas that look flat but should have depth (e.g., folds in clothing, deep background corners). Take the darkest color in that family (e.g., the darkest blue) and thin it significantly with Flow Aid (until it is watery and semi-transparent, like watercolor). Apply this "glaze" thinly over the area. This subtle wash deepens the color without fully obscuring the base layer, adding dramatic shadow.
- **Punching Highlights (Dry Brush):** Identify areas where light should strike (e.g., the top edge of a wave, a nose, a reflective metal surface). Use the lightest color in the kit (usually a white or pale yellow). Use the Dry Brush technique (III.4) to gently tap or drag this light color only onto the absolute highest points. This small addition of light dramatically improves the illusion of three-dimensionality.
- **Avoiding the "Muddy" Look:** Never attempt to deepen shadows by mixing colors from opposite sides of the color wheel (e.g., red and green) unless you are extremely experienced. This usually results in a flat, brownish-gray "mud." Stick to using a darker shade of the *same* color family for shadows.

Part V: Troubleshooting

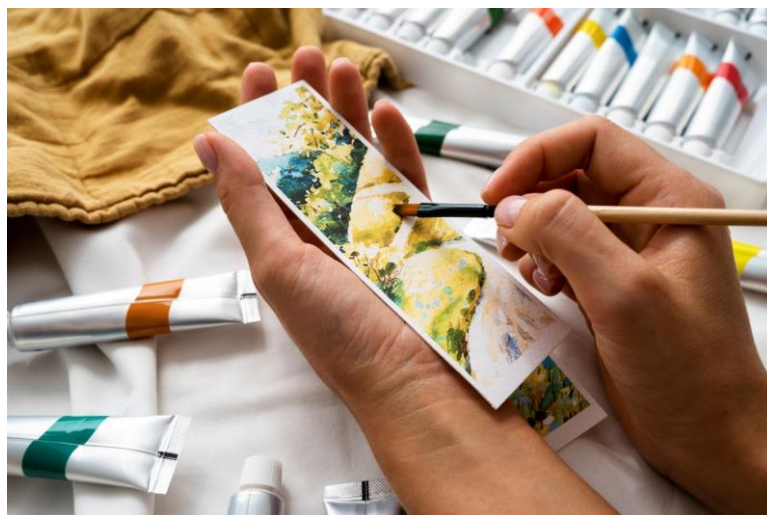
1. Lumpy or Dried Paint

- **The Revival:** If a pot is gummy, add 3-4 drops of warm water and a drop of Flow Aid. Stir with a toothpick (not your brush) for 60 seconds.
- **The "Dead" Pot:** If the paint is a hard rubber puck, it cannot be saved. You will need to contact the manufacturer or mix a color match using artist-grade acrylic tubes.

2. Covering Numbers & Ghost Lines

Light colors (yellow, cream, light pink) are notoriously transparent. The numbers often show through.

- **The White-Out Method:** Before painting a light cell, dot the number with a white paint pen or fluid correction fluid (White-Out). Let it dry, then paint over it.
- **The Double Coat:** Don't try to glob on one thick layer. Paint a thin layer, let it dry (10 mins), and paint a second layer.



3. "I Painted the Wrong Color!"

- **Don't Panic:** Wait for it to dry completely. Do not try to wipe it while wet; you will smear it into the canvas weave.
- **The Fix:** Once dry, paint over the mistake with white paint (to neutralize the color). Let the white dry. Then apply the correct color.

4. Frayed Brush Tips

Over time, or with poor washing, the fine tip of your detail brush may split or bend.

- **The Conditioning Trick:** After washing, dip the brush in a bit of brush soap (or dish soap) and gently shape the bristles back into a sharp point using your fingers. Let it dry in this shaped position. When you next use it, rinse out the soap first.

- **The Hot Water Reset:** For severely bent bristles, boil a cup of water, remove it from the heat, and dip just the brush tip in for 5-10 seconds. Immediately reshape the tip and let it cool.

5. Paint Bleeding (Wicking)

If the paint spreads outside the printed line, the canvas is too absorbent, or the paint is too thin.

- **The Thicker Layer Fix:** If you see bleeding, stop thinning that color immediately. Apply the paint in a slightly thicker consistency to the boundary of the shape. The increased viscosity helps the paint stay where you place it.
- **Gesso Prevention:** If you are catching this early, apply a small amount of clear gesso to the problem area around the lines to seal the canvas fibers, then continue painting.

6. Unlabeled Areas or Missing Numbers

Occasionally, a kit might have a section with no number or a number that doesn't correspond to a color pot.

- **Consult the Key:** Double-check your paper guide or color key to ensure the number wasn't just faint or partially covered by paint you've already applied.
- **Color Match:** If the surrounding colors are painted, try to identify the color that should logically belong to the area (e.g., if it's a highlight on a tree, it's likely the lightest green).
- **Reference the Photo:** Use your reference image (the box art or your phone photo) to see what color belongs in that area and choose the closest matching pot.

7. Dealing with Missing Paint (Color Shortage)

It is common to run out of high-use background colors (like sky blue or large areas of black/white).

- **Stretch It:** If you notice a color is running low, switch to only using that color for outlining the shapes, and use another, more abundant color for filling in the middle of the large area. This is a subtle difference that can save paint.
- **Substitute:** If a color is completely gone, use the *Custom Mixing* technique (Part II.4) to blend the nearest colors you have on hand. It's better to use a slightly off-mixed color than to leave the area blank.
- **Water vs. Medium:** If you absolutely must stretch the last drops, use an acrylic gloss or matte medium instead of water. The medium will extend the paint while maintaining the pigment's integrity and coverage, preventing the final coat from looking chalky or washed out.

Part VI: The Finish Line

1. Evaluating the Work

Step back 5 feet. PBNs are impressionist by nature; they are meant to be viewed from a distance, not 3 inches away. If it looks messy close up, step back before you try to "fix" it.

2. Sealing & Varnishing

Acrylic paint attracts dust and can fade. You must seal it.

- **Wait Time:** Wait at least 1 week after finishing to ensure all moisture has evaporated from the lower layers of paint.
- **Gloss Varnish:** Makes colors pop and look wet/vibrant. Good for landscapes and flowers.
- **Matte Varnish:** Removes glare. Good for portraits (glossy faces look sweaty).
- **Satin Varnish:** The happy medium.

3. Framing

- **Stretcher Bars:** If you painted on loose canvas, you can buy wooden stretcher bars. You will need a staple gun to pull the canvas tight around the bars.
- **Glass or No Glass?** Acrylic paintings generally do not need glass if they are varnished. Glass can cause glare that obscures the texture of your brushwork.

4. Maintenance and Cleaning (Post-Varnish)

Once sealed, your painting needs minimal care to last for years.

- **Dusting:** Dust the painting gently once every few months using a soft, lint-free cloth or a clean, soft-bristled brush (like a makeup brush).
- **Wiping:** Never use chemical cleaners on the painting. If a smudge or spot needs cleaning, use a cotton swab barely dampened with plain, cool water. Wipe very lightly and immediately dry the spot with a dry swab. The varnish should protect the paint underneath.
- **Avoid Sunlight:** Even with varnish, continuous exposure to direct sunlight will cause colors to fade over time. Display the painting in a location with indirect lighting to preserve its vibrancy.



5. Photographing Your Masterpiece

If you want to share your finished work online, good lighting is essential.

- **Avoid Direct Flash:** Flash creates harsh glare and highlights every tiny texture flaw. Turn it off.
- **Use Diffused Natural Light:** The best time to photograph is near a window on a slightly overcast day (or when the sun is not directly shining through). This provides even, soft lighting that shows colors accurately.
- **Minimize Shadows:** Stand directly above the painting if it is laid flat, or use two balanced light sources (like two desk lamps on opposite sides) if it's vertical on an easel. You want the light to be perfectly even across the surface.
- **Angle Matters:** If the painting is glossy, tilt it slightly away from the light source to avoid capturing reflections from the varnish or the light bulb itself.
- **Crop and Edit:** Crop the image to show only the painting (no messy edges or surrounding items). Adjust the white balance and brightness slightly on your phone's photo editor to make the colors match the real-life painting as closely as possible.

Appendix: The "Golden Rules"

Checklist

1. **Close the lid:** Acrylics dry in minutes. If the pot isn't in your hand, the lid should be snapped shut.
2. **Clean the ferrule:** Don't just clean the tip of the brush. Paint dried near the metal band (ferrule) spreads the bristles apart and ruins the point.
3. **Take Breaks:** Every hour, stand up and stretch. Eye fatigue leads to sloppy painting.
4. **Listen to Audiobooks:** PBN uses the visual part of your brain. Listening to a podcast or audiobook engages the language center, creating a perfect "flow state."
5. **Have Fun:** There is no "paint police." If you want to change the color of the flowers from blue to purple because you like it better—do it!

Created for the dedicated hobbyist.