

Lesson Plan: The Science of Pastel Colors - An Art Scientist's Guide

Materials Needed

- Acrylic Paints (at minimum: Red, Yellow, Blue, and a large tube of White)
- Black paint (optional, for extension)
- Paint brushes of various sizes
- Heavy paper, canvas board, or watercolor paper (at least 2-3 sheets per learner)
- A palette (a paper plate, plastic palette, or a piece of cardboard covered in foil works well)
- A cup of water for rinsing brushes
- Paper towels or a rag
- Pencil and eraser
- Optional: A color wheel for reference

Learning Objectives

By the end of this lesson, you will be able to:

- Explain that a pastel color, or a "tint," is created by adding white to a pure color (hue).
- Mix at least three different pastel colors from primary or secondary colors.
- Control the value (lightness) of a color by adding different amounts of white.
- Create an original piece of artwork using a custom-made pastel palette.

Introduction (10 minutes)

Hook: The Color Detective

"Have you ever noticed the soft, dreamy colors of a sunrise, a scoop of strawberry ice cream, or a fluffy cloud? Those are called pastel colors. They feel calm and gentle. But where do they come from? They aren't usually in a basic paint set. Today, we're going to be 'Art Scientists' and uncover the secret formula for creating any pastel color we can imagine! Our mission is to become masters of mixing light and airy colors."

Stating Objectives

"By the end of our experiment today, you'll be able to mix your own special pastel colors, understand the science behind them, and use them to paint a beautiful masterpiece. You'll know exactly how to turn a bright, loud red into a soft, quiet pink."

Body of the Lesson (35-45 minutes)

This is where we put on our Art Scientist lab coats! We will follow a process of 'I do, We do, You do' to learn our new skills.

Part 1: The Secret Formula Revealed (I Do - 10 mins)

Educator's Talking Points:

- "Every color has a secret name. The pure, bright color, like the red straight from the tube, is called the '**Hue**'. Think of it as the main ingredient."
- "Our first experiment is to change this hue. The secret to making a pastel color is incredibly simple: we just add white! In the art world, when you add white to a hue, you create a '**Tint**'. Pastel colors are just tints!"
- **Demonstration:** On your palette, put a dab of red paint. Next to it, put a much larger dab of white. Explain, "The key is to start with your white and slowly add tiny amounts of your color. It's much easier to make a color darker than it is to make it lighter again."
- Slowly pull a tiny speck of red into the white paint and mix it completely. "Wow, look at that! We made a light pink. This is a tint of red. The original red is the hue, and this pink is the tint."
- Add a little more red to the same pile. "See how we can create different shades of pink? The amount of white we add changes the '**Value**' of the color, which just means how light or dark it is. More white means a lighter value."

Formative Assessment (Quick Check): "What's the secret ingredient for making a pastel color? (White!) What is the science-y art name for a pastel color? (A tint!)"

Part 2: The Pastel Color Lab (We Do - 15 mins)

Activity: Creating a Custom Palette Card

Instructions:

1. "Now it's our turn to mix together! Take one of your pieces of heavy paper. This will be our 'Palette Card' where we record our color discoveries."
2. "Let's choose a new color to experiment with. How about blue? Put a big scoop of white on your palette, and a small dab of blue next to it."
3. "Guide the learner to pull a tiny bit of blue into the white and mix. Ask, 'What color did we make?' (Baby blue). Let's paint a little square of this color on our Palette Card."
4. "Now, let's create two more tints of blue. How would we make one that's a little darker, but still pastel? (Add a little more blue). How do we make one that's even lighter? (Add more white)."
5. Paint these new tints on the Palette Card next to the first one. Now you have a range of blue pastels!
6. Repeat this process with one more color, like yellow (to make pastel yellow) or green (to make mint). Encourage the learner to name their new colors, like 'Mint Chocolate Chip' or 'Sunny Morning'.

Success Criteria: The learner has successfully mixed at least two different colors into 3-5 different pastel tints on their Palette Card.

Part 3: Pastel Masterpiece (You Do - 15-20 mins)

Activity: Independent Painting

Instructions:

1. "You are now a certified Art Scientist of pastel colors! You've created your very own custom color palette."

2. "On a fresh sheet of paper, I want you to create a painting using **ONLY** the beautiful pastel colors you just mixed. You can paint anything you want, but here are some ideas that are perfect for pastels:"
 - A dreamy landscape with soft clouds and mountains.
 - A fantasy scene, like a unicorn or a magical castle.
 - A close-up of your favorite dessert, like a giant ice cream sundae or a cupcake.
3. "You can lightly sketch your idea with a pencil first. Remember to use the different tints you made to create light and dark areas in your painting."

The educator should be available for support, helping with brush techniques or mixing more of a color if needed, but allow the learner to take creative control.

Conclusion (5 minutes)

Show and Tell Recap

"Let's have a look at your amazing pastel masterpiece! Tell me about it."

- Ask the learner to show their painting and point out their favorite pastel color they created.
- Ask: "How did you make that color? What was the original hue, and what did you add to it?"
- Summarize the key takeaway: "So today we learned the big secret of pastel colors! They are all just tints, which we make by adding our secret ingredient, white, to any hue. You saw how you could control the value to make colors lighter or darker, and you used that skill to create a fantastic piece of art. You are officially an expert Art Scientist!"

Assessment

- **Formative:** Observing the learner's mixing process and their answers to questions during the "I Do" and "We Do" stages. Can they identify "hue" and "tint"?
- **Summative:** The final painting serves as the summative assessment. Success is evaluated by:
 1. Did the learner successfully create and use pastel colors (tints)?
 2. Did the artwork predominantly feature the mixed pastel palette?
 3. Can the learner verbally explain how they created one of their colors ("I added white to blue")?

Differentiation & Extension

- **For Scaffolding/Support:**
 - Provide a simple, pre-drawn outline (like a cupcake or a cloud) for the learner to paint inside.
 - Pre-mix the initial white and color dabs on the palette to help with paint management.
 - Focus on making tints from just one or two primary colors to keep it simple.
- **For Extension/Challenge:**
 - Introduce the concept of "**Shades**" (adding black to a hue) and "**Tones**" (adding grey to a hue). Challenge the learner to create a small palette of tones by first mixing grey (white + a tiny speck of black) and then adding that to a color. These create more muted, sophisticated colors.
 - Challenge them to create a monochromatic painting, using only the tints, tones, and shades

of a single color (e.g., a whole painting using just different blues, from baby blue to navy).