

## YOUR GUIDE TO EVALUATING PAPER

# ALL PAPERS

are manufactured for an intended use based on specific paper characteristics. The best way to see which paper is best for your medium of choice is to make your own marks with your favorite mediums on a selection of different types of papers. All papers have limitations, evaluating a surface will familiarize you with those limitations.

### PAPER CHARACTERISTICS

When handling a sheet of paper certain visual characteristics are apparent such as the color, texture, weight, and thickness, but there are also other non-visual characteristics that need to be considered, such as, acidity, paper grain and sizing.

## SIZING

Sizing is one of the most important characteristics of paper because it controls the absorbency of the paper. Sizing is water soluble, proprietary mixture of either gelatin or starch. All the fine art papers included in this paper sampler are internally and externally sized with a starch based sizing. Each paper has a specific amount of sizing for optimal performance for the intended use of the paper. For example, a watercolor paper will have the optimum amount of sizing resulting in intense colors, good wet and dry lifting, yet allow for multiple layers of color. On the other hand, Bristol will have more sizing, since it is generally used in graphic design and illustration with markers, ink and gouache.

## TEXTURE

As your fingers come in contact and feel the paper, the texture becomes very apparent. Texture is often a personal choice, but it is often chosen for a specific medium. For example, smoother texture is the preferred choice for pen and ink and a more textured paper is often the choice for charcoal or pastels.

## GRAIN

The speed at which papers are made creates a direction in the paper fibers called grain. The result is apparent when a paper is folded. Paper folds easier with the grain than against the grain.

## **PAPER WEIGHT**

Paper weight is often equated to the thickness of the paper but that is a misnomer. There are two measurements for paper, pounds (lbs. or #) and grams per square meter (GSM or G). The weight in pounds is derived from weighing 500 standard-size sheets. Unfortunately, different grades of paper have a different standardsize sheet measurement making it difficult to select a paper based on weight. The more reliable measurement is grams per square meter or GSM especially when looking at different grades of papers. The paper weight in both measurements is always found on the pad cover or label.

## PAPER EVALUATION TECHNIQUES

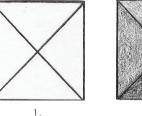
The following are some suggestions for evaluating these paper samples as you render with a variety of mediums. As you work through this exercise observe how each medium feels and works on the surface. Analyze the results and look for the limitations.

1.

#### Tools: Sharp 4B graphite pencil & white vinyl eraser.

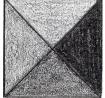
- 1. Draw a square and divide it into four quarters. **Observation:** How did the texture affect the line quality?
- 2. Starting at the top, shade in the first quarter with a light value, continue to shade in the quarters with four values.
  - **Observation:** How did the graphite lay down on the surface?
- 3. Using vinyl eraser, erase through the shaded square from left to right.

**Observation:** Did it erase cleanly? Did the surface and sizing affect the ability to erase?



**GRAPHITE PENCII** 

**CHARGOA** 



2.



SUGGESTED PRODUCTS: KON-I-NOOR® GRAPHITE, TOISON D'OR PENCILS, TRIOGRAPH PENCILS, PROGRESSO WOODLESS PENCILS, MAGNUM BLACK STAR PENCILS, MEPHISTO MECHANICAL PENCILS, GRAPHITE ARTIST BLOCKS, DRAWING LEADS.

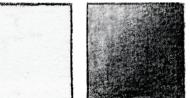
Tools: 6B or extra soft charcoal pencil, & a blending stump. This evaluation can also be done using Pastels or Pastel Pencils.

1. Draw a square.

**Observation:** How did the texture affect the line quality?

2. Starting at the bottom right corner, laydown some charcoal and begin shading with a light value with the blending stump. Continue adding charcoal and shade the remainder of the square creating a value gradation from the bottom right to the top left as shown.

Observation: How did the charcoal lay down and blend on the different surface textures? What was the comparison between using a smooth paper and a textured paper?



SUGGESTED PRODUCTS: KON-I-NOOR® GIOCONDA PENCILS AND CHARCOAL ARTIST BLOCKS. GRUMBACHER® VINE AND WILLOW CHARCOAL STICKS.

#### Tools: Fine Line Permanent Ink Artists Pens, Rapidograph Pen, Crow Quill Pens, or Permanent Ink Roller Ball Pen.

- 1. Draw a line with the ink pen a few inches long across the paper. **Observations:** How did the texture affect the line quality? Was there any feathering along the edges of the line?
- 2. Without picking up the pen from the surface, draw another line, stop for a few seconds, continue drawing. Repeat this process twice.

**Observation:** When you stopped did the mark expand? This is an indication that the paper has insufficient sizing for good ink rendering.

GOOD SIZING

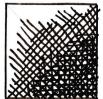
NOT ENOUGH SIZING/TOO ABSORBENT

3. A simple test for checking if a paper has enough sizing for ink is the dot test. Touch the pen to the paper and create a dot. Next to it, touch the pen to the paper and hold it there for a count of 15.

**Observation:** Are the dots the same? If the second dot grew as shown in the illustration below, then that paper is absorbent and is not a good choice for ink drawings.

GOOD SIZING TOO ABSORBENT

4. Next draw three squares and render a value drawing per the examples using cross hatching, scribbling and dots (pointillism). **Observation:** Again, how did the texture affect the marks?







CROSS HATCHING

SCRIBBLING

POINTILLISM

RAPIDOSKETCH® PENS. PELIKAN® TECHNOLINERS AND FINELINERS SUGGESTED PRODUCTS: KON-I-NOOR® RAPIDOGRAPH® AND ALCOHOL AD<sup>®</sup> MARKERS -ORIGINAL XYLENE / SPECTRA AND AQUA INK MARKERS **PRODUCTS:** AD® MARKERS -MOLOTOW® LIQUID CHROME MARKERS SUGGESTED

Tools: Several colors of Alcohol or Xylene based markers, MARKFR & a colorless blender. (For this evaluation, it is best to use a chisel tip or brush tip marker.) Line Quality:

- 1. Draw a line with the marker a few inches long across the paper.
  - **Observations:** How did the texture affect the line quality? Was there any feathering along the edges of the line or dumbelling at the start or finish of the line?

#### Saturation:

1. Draw a several lines with bright color marker next to one another a few inches long across the paper to create color field. Repeat this with another color.

**Observation:** How quickly did the paper absorb the marker ink? Compare the intensity of the color from one paper to another?

#### **Blending**:

- 1. Repeat the above rendering, using the papers which performed best in the above evaluation, but this time, use two marker colors of the same hue but with different values or a color and a 50% gray. Lay down the darker color then next laydown the lighter color overlapping the darker color and using it to blend the area between the two colors.
- 2. After the two-color fields are rendered, try blending the two using a colorless blender.

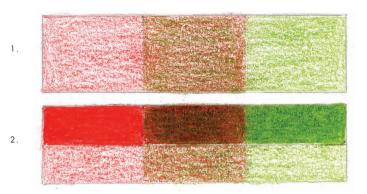
**Observation:** How well were you able to blend the colors?



#### Tools: Two color pencils, a white color pencil, a colorless blender pencil and a colorless blender marker.

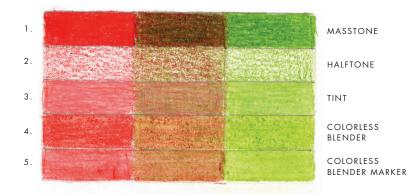
- 1. Create a long rectangle and lightly fill it with the two-color pencils overlapping the colors in the middle as shown.
- 2. At the top, apply a heavy saturation of the same two colors overlapping.

**Observation:** How did the texture affect the application of color? Which surface(s) worked or looked best for you?



- 3. After selecting which papers work best for color pencil, continue to add to the existing rectangle; lightly filling it with the twocolor pencils overlapping the colors in the middle as shown.
- 4. Burnish with white to create a tint.
- 5. Burnish with the colorless blending pencil.
- 6. Burnish with the colorless blender marker.

**Observation:** Notice how each tool affects the color pencil. How is the paper holding up to the rigors of these tools? Are you noticing any difference in the intensity of the colors?



WOODLESS PENCILS, TRI-TONE PENCILS, TRIOCOLOR PENCILS, MONDELUZ PENCILS SUGGESTED PRODUCTS: KON-I-NOOR® POLYCOLOR PENCILS, PROGRESSO

SUG GESTED PRODUCTS: KOH-I-NOOR® MONDELUZ AQUARELLE PENCILS.

#### Tools: Two watercolor pencils, a brush and a cup of water.

 Create a long rectangle and shade the top half with the twocolor pencils overlapping the colors in the middle as shown. Apply a heavier application of color at the top and go lighter as you move downward.

**Observation:** How did the texture affect the application of color?

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2. With your wet brush apply water to the bottom of the rectangle and brush upwards toward the color.

**Observation:** How did the texture affect the application of color and the dispersion of pigment on the surface? Which surface(s) worked best for you?

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**Note:** Since paper is made with natural fibers it has the tendency to warp and buckle when water is applied. You can use a hair dryer on the front and the back of the paper to speed the drying and reduce the buckling.

#### Additional evaluation using a colorless blender marker

1. Create a long rectangle and fill-in with the two-color pencils overlapping the colors in the middle as shown.



2. Using the colorless blender marker blend the bottom half as shown.

**Observation:** How did the texture affect the application of color and the dispersion of pigment on the surface? How does blending with a alcohol marker differ from blending with water? How did it affect the paper surface?



Tools: Two watercolor (tubes or pans), a brush and a cup of water.

#### Wet in Wet Technique

- 1. Create a square and wet with water.
- 2. Add one color to the top and the other color on the bottom, blending in the middle.

**Observations:** How did the texture affect the application of color? What did the color look like on each surface?



#### SUGGESTED PRODUCTS:

GRUMBACHER FINEST® WATERCOLOR, ACADEMY® WATERCOLOR, AND WATERCOLOR PAN SETS. SCHMINCKE® HORADAM WATERCOLOR, GOUACHE, HKS® DESIGNERS GOUACHE, AND CALLIGRAPHY GOUACHE.

#### Dry Brush Technique & Layering

- 1. Create a square and fill the area with one of the colors.
- 2. After it is dry, brush a transparent layer of the other color in one stroke, over the top of the first as shown. Do not overbrush. This technique is known as glazing or layering of color.

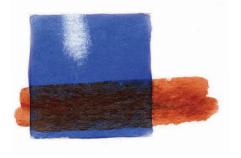
**Observations:** What did the color look like on each surface? What happens when layering colors? Did it mix with the first color? If it did this is an indication that the paper has too much sizing.



#### Lifting Test

- 1. Use the Dry Brush Technique example above.
- 2. For lifting, take your wet brush and brush back and forth over the dry color 5 times and dab with a dry paper towel.

**Observations:** How much color came off? This will vary depending on the color you have chosen. Staining color such as Thalo<sup>®</sup> Blue and Green do not lift well because they stain the paper. Compare the lifting test on all the papers. Also try this with other colors.



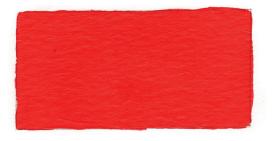
## SUGGESTED PRODUCTS:

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#### **Absorption and Paper Weight Test**

1. Create a rectangle and brush on a generous amount of color. Alternate between horizontal and vertical strokes, letting each layer dry in between.

**Observations:** How did the texture affect the application of color? What did the color look like on each surface? How did the paper react to the application of several layers of acrylic?



Draw some lines with several colors of Acrylic Markers.
Observations: How did the texture affect the application of color? What did the color look like on each surface?



#### SUGGESTED PRODUCTS:

GRUMBACHER ACADEMY® ACRYLICS, MOLOTOW ONE4ALL®, ACRYLIC MARKERS.

For more art material tips and techniques, visit Thalo.com

These are but a few of the many techniques that you can use to evaluate paper of other surfaces. There are also other mediums. For example, evaluate the papers using Gouache, Ink Wash, Stamping, Collage and even Mix Media techniques. It will become obvious as to which paper or papers work best for your favorite mediums and techniques.

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