


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← 4-COLOR DOTS?!

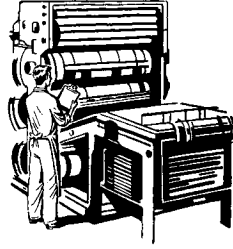


BOOK TWO: AN OVERVIEW { Welcome to the second of three textbooks in the Paper University curriculum. Now that you've completed the prepress "prep" work in Book One, you're ready for a detailed discussion on the physics of putting ink on paper. We'll begin by studying the fundamentals and history of the printing process. From there, you'll have a chance to get your hands dirty as we discuss printing ink and its properties. And in a later chapter, we'll focus on Cougar® Opaque, a #1 premium uncoated paper whose specific characteristics are designed with printability in mind. The ultimate goal of Book Two, however, is to prepare you for the experience of printing your final project. So in Chapter Three, we'll cover the most critical stage in the printing process — the press check.

GO TO BOOKSTORE.

(HITTING THE)
BOOKS



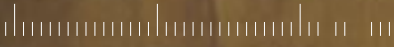
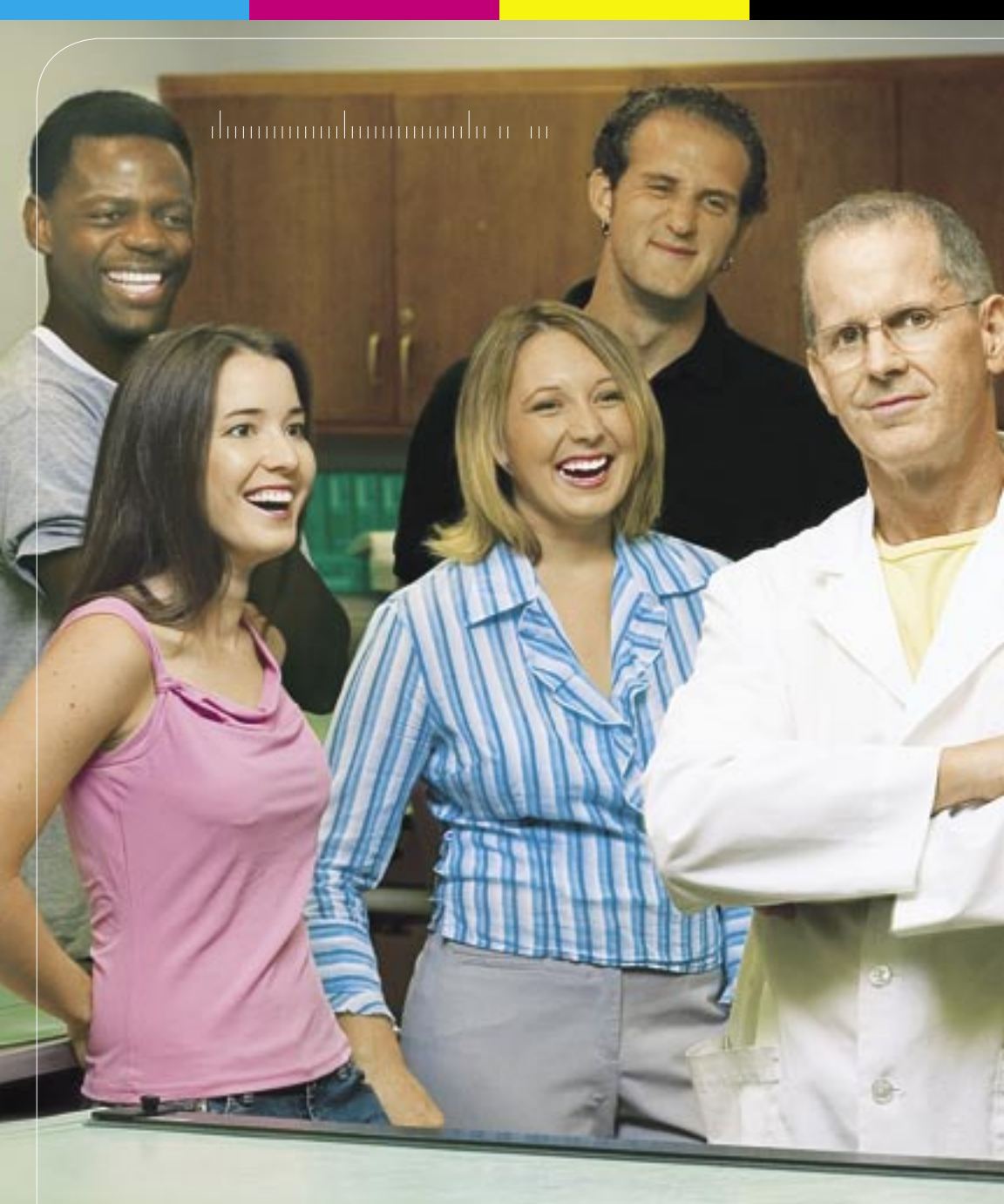


CONVENTIONAL PRINTING ON UNCOATED PAPER: THE BASICS

DEFINING OFFSET PRINTING { In its purest form, printing is a process by which multiple copies of an image are made from a single original. In offset printing, this original is usually a **metal plate** — onto which a designer’s artwork has been imprinted. The image on the plate is made to attract oil-based ink. So when the plate is flooded with a water-based solution and ink is applied, the principle that oil and water don’t mix takes over — and ink adheres to the plate in the desired image areas. Historically, the inked plate would then be rolled over paper to form an **“impression.”** **Offset printing gets its name from the fact that there is an intermediate step between the plate and the page.** In most cases, the ink is “offset” from the plate to a rubber “blanket,” which then makes contact with the paper to create the final impression.

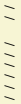
PRINTING ON UNCOATED PAPER { Uncoated paper presents the designer and pressman with unique opportunities and specific challenges. The key themes that will be covered in the Paper University curriculum are **controlling dot gain and ink density.** But in the hands of qualified individuals, a well-formed uncoated paper like Cougar Opaque can definitely make a good impression.

IMPORTANT
STUFF



PRINTING PRESSES 101

OFFSET LITHOGRAPHY:
SHEETED PRESS
WEB PRESS
DIGITAL PRESS

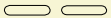


Book Two includes a practical training element to be detailed later in the text. In order to improve your working knowledge of printing and ink science, you will be required to evaluate an actual printed press form in a timed press check situation. Your performance will be graded on a number of criteria.

BE PREPARED; YOU WILL BE QUIZZED LATER!

LAB

LOCATION: Williamson Printing, Dallas, Texas



THREE CREDIT HOURS

WPU



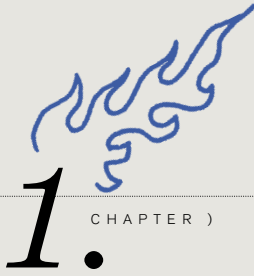
CLASS CODE: WPU009_05



WELCOME BACK



This spread is printed with UV inks.



A BRIEF HISTORY OF MODERN PRINTING

A BRIEF HISTORY OF PRINTING { The art and science of printing was born out of the desire to disseminate words and images — while reducing the labor involved in writing or drawing them by hand. In essence, it is mass production applied to human communication.

The “father of modern printing” is Johannes Gutenberg, who perfected his printing press in Europe in the 1400s. Adapting Chinese technology invented centuries earlier, Gutenberg developed a system by which carved wooden type was laid out onto a printing bed, inked, and then forced against paper to make an impression. He later added woodcut illustrations to complement the text. And soon, he began experimenting with printing multiple colors on the same sheet — either by inking different areas of the bed with different colors, or by putting a printed sheet back on the press using a new bed inked with a new color. Now, words and images could be mechanically duplicated in virtually unlimited quantities on a single press. And in the process, the written word — from political documents to literature to the Bible — was made accessible to the masses.

- SILK SCREEN
- LITHOGRAPHY
- WOOD BLOCK
- METAL
- ENGRAVING
- DIGITAL

MOST COMMON METHOD

LITHO = "STONE"?

GUTENBERG'S DA MAN!

(A)

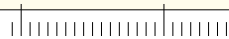


(C)



P R E - I N D U S T R I A L R E V O L U T I O N P R I N T I N G

A: Portrait of Johannes Gutenberg (ca. 1397 – 1468). Gutenberg pioneered the use of movable type in Europe, and is regarded as the “father of modern printing.” B: Printing technology (ca. 1700), including a type case (from which the terms “upper case” and “lower case” were derived). C: A typical printing operation (ca. 1800).



(A .



I'm HAVING FUN NOW



(B .



(C .



TYPESETTER



(D .



(E .



A: Pressman operates a typical letterpress (ca. 1950s). **B:** Typesetter uses a Linotype machine to set hot metal type. Linotype technology was introduced in the late 1890s, and remained basically unchanged until its virtual extinction in the 1960s. **C:** The Ludlow System was based on type built from wood and cast metal. **D:** A modern web press. **E:** Computers control and monitor nearly every variable on today's sheetfed presses.



Basic categories of PRINTING PRESSES:



The SHEETFEED PRESS

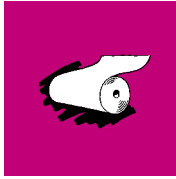
Prints individual pieces of paper one at a time.* Presses vary based on sheet size, and the number of colors that can be applied in a single run.

Standard types include:

- 1 color
- 2 color
- 4 color
- 5 color
- 6 color
- 8 color
- 10 color
- 12 color

Sheet size ranges from: 8.5" x 11" to 28" x 40"

*New developments include a press that automatically cuts sheets from an economical bulk roll.

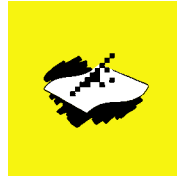


The WEB PRESS

Runs a continuous stream of paper from rolls that are available in various sizes. Used for high-speed, high-quantity jobs that require greater efficiency and (generally) less attention to detail. Newspapers, direct mail, and other large print jobs can be run economically on web presses.

Two basic categories: Full & half size

Example roll dimensions:
11"
17.5"
18"
35"



The DIGITAL PRESS

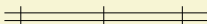
Digital printing is continuously evolving. The biggest differences lie in the ways that plates are created, modified during the press run, or even eliminated. Examples of digital processes include "computer to plate," where a traditional plate is made from electronic artwork; "direct imaging," which creates plates at the press itself; and "dynamic" digital printing, which allows the plate to be updated on every single impression. As opposed to traditional inks, many of these new processes rely on toner — which can affect the look and feel of the printed surface.

COUGAR HAS ALL OF THESE COVERED.

PRINTING TODAY { Since the advent of modern printing, there have been only a few variations on Gutenberg's technology — but those changes have been significant. Computers have virtually replaced wood type, cast-metal type, typesetters, and in some cases even printing presses. Other advances have increased speed and accuracy. At the same time, we've also seen major innovations in paper — including uncoated. Consistency and surface texture have improved, and designers now have more options than ever. But even as technology forges ahead, there remains at the heart of this ever-changing craft the idea of communication — and the unmistakable feeling that can only be achieved with ink on paper.

(2. CHAPTER)

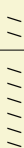
INK



WHAT YOU SEE IS NOT ALWAYS WHAT YOU GET { Any study of printing on uncoated paper begins with ink. After all, ink behaves differently on every paper, whether coated or uncoated. That's why Cougar Opaque has been designed with a consistent surface that can actually help inks perform at their peak.

The industry standard for producing "full color" images is 4-color process, or CMYK. Using combinations of cyan (C), magenta (M), yellow (Y), and black (K), it's possible to achieve a wide spectrum of colors. In recent years, the 4-color process has been modified by the addition of two more ink colors: orange and green. This Hexachrome® (or "six color") method can reproduce a broader color range, and works well in situations where images need some extra "punch." Hexachrome printing typically produces cleaner, less "muddy" photography. In Book Three, we'll discuss ultraviolet (UV) printing, which runs even cleaner. Finally, spot colors such as PMS and Japanese Toyo inks are single hues used for solid coverage and half-tone photo reproduction.

Ultimately, there are as many ways to print on uncoated paper as there are ink combinations. So to see what's possible on Cougar Opaque, it just takes knowing how to apply the right ink — and a little common sense.



4-COLOR PROCESS

HEXACHROME

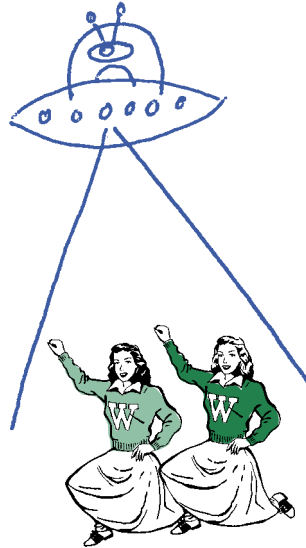
SPOT:

PANTONE

TOYO

DO THE COLORS CHANGE ON UNCOATED PAPER?

WITH COUGAR,
BEING DENSE
IS A
BRIGHT IDEA



low density high density

HIGHER INK DENSITY MEANS RICHER COLOR {

Controlling ink density is critical on uncoated paper, which needs more ink to keep images from looking dull as the ink is absorbed. Too much ink, however, can result in loss of shadow detail, and can cause type to “plug up.”

details

details

details

A smooth, well-formed uncoated surface “holds out” details, resists dot gain, and allows a thicker ink film for richer colors. But don't forget: for maximum control, good prepress image preparation (see *Book One, Chapter 3*) is key.

Even ink coverage



Smooth surface

Uneven ink coverage



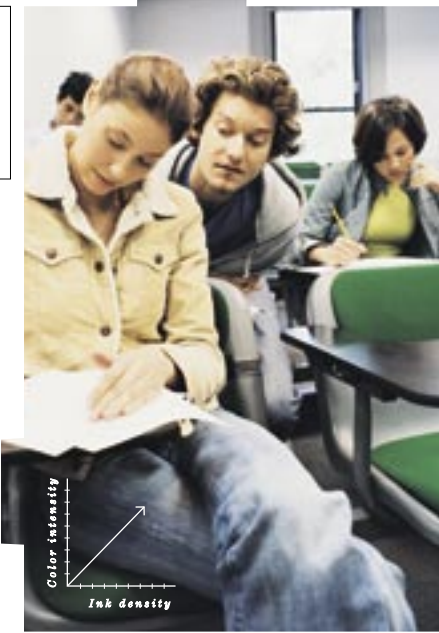
Rough surface

NOT
COUGAR



(A .

(B .



[WET INK :]

Increase density after approval to compensate for dryback

[DRY INK :]

Take densitometer readings wet and dry — note difference

DRYBACK COMPENSATION { “Dryback” describes the visible results that occur when ink is absorbed into an uncoated sheet as it dries. Unless ink density is properly managed, images that may appear to be rich and vibrant during a press check will fade and lose intensity once the ink is no longer wet. When proofing images on press, there are two methods you can use to compensate for dryback (see above). Talk with your printer to choose the best option.



[Q :] *Which image was properly compensated for dryback?*





GET BETTER INK COVERAGE, COVER TO COVER

DOUBLE BUMPS, RICH BLACKS, AND MORE {

Less experienced students of uncoated paper might avoid specifying large areas of solids, or images with deep tonal values. After all, getting the ink density just right — so that the “peaks and valleys” in the sheet are filled without saturating the paper — can be daunting. Worse still, poorly formed paper can produce either a “mottled” or a “galvanized” look. But the well-read pupil knows there are several techniques for getting smooth, rich coverage on uncoated.

INK SEQUENCE VARIATIONS



[C M Y K :]

Most commonly used ink sequence.



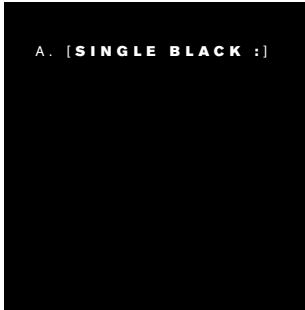
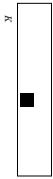
[K C M Y :]

Altering ink sequence may increase contrast or otherwise improve images.

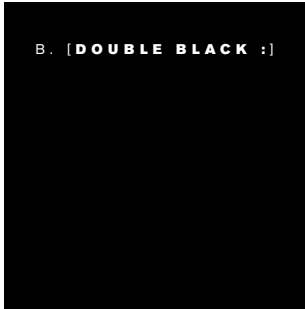
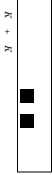


Dull Varnish

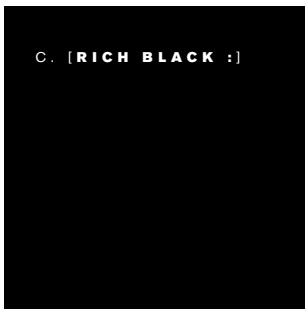
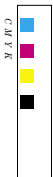
Dull Varnish



Apply as heavy a film of ink as conditions allow for even coverage in dark solid areas. Also, use a coat of dull varnish to smooth over dense areas.



Two hits of black on a large solid area ensure dark, even coverage. Using two blacks to print grayscale (halftone) images adds contrast and makes shadows more striking.



Mix 100% black with process colors to improve ink density and coverage, or use CMYK quadtones to "warm up" a black-and-white image.

Dull Varnish

Dull Varnish



[Q:] Which black do you like best?

(A .) (B .) (C .)

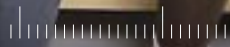


(IT'S TIME TO MAKE A)

DECISION



C M Y K



MID-TERMS!

SURVIVING YOUR FIRST PRESS CHECK

(AND EVERY ONE AFTER THAT)

WHAT TO LOOK FOR AND WHO TO WATCH {

This is your **first final exam at Paper University**. The assignment: *Create an art project*. Then, applying what you've learned about printing on uncoated paper, prepare that artwork for reproduction on press. Finally, present your finished project before a panel of peers, mentors, and industry professionals during an actual press check. Ask anyone who's been there — it can be intimidating. Even those who take tests well still flinch at the idea. This is on-the-job training at its best — and worst. It's trial by fire in the "school of hard knocks." **And the only thing between success and failure is your signature on that piece of paper.** So ask questions. Let the experts advise you on what's possible, and what's practical. But don't be afraid to challenge the establishment or to push some boundaries. And while no amount of book knowledge can prepare you, there are a few tips you can remember. Paper University has equipped you with a **step-by-step guide** that covers the basics of press checking. Aside from using Cougar Opaque on your project, it's the next best thing to having all the answers.

LEARN
THIS
PAGE.

C H E C K L I S T



for
P R E S S C H E C K S

- Say **HELLO** to the Press Operator, and greet him or her **by NAME**. This is a knowledgeable, professional technician who will help you get the most from your project — provided you remain on his or her good side.
- Verify your **PAPER STOCK** by requesting the carton label. Accidents can happen, and it is often hard to distinguish between sheets once the job is on press. To avoid potential confusion and embarrassment, simply specify **Cougar Opaque** on every project.
- Compare the **TEXT** on the press sheet to that in your approved proof. **Stranger things have happened**. Trust us.
- Look for accurate **REGISTRATION** by examining images and “targets” carefully. Utilize a **toupe** if necessary to get a closer look.
- Using your proof and/or a color guidebook, check your **IMAGES AND SOLID COLORS** for accuracy. Discuss any inconsistencies with the Press Operator and printer’s rep.
- Look for **INK CONSISTENCY** within solids across the sheet. For large solids, or those that appear in multiple locations on the press form, try folding the sheet together or cutting a small swatch so that you can match colors side by side.
- Identify **TRASH** or **HICKEYS** on the sheet and mark them to be deleted. On a clean-running paper like **Cougar Opaque**, such anomalies should be minimally present. Try not to giggle when you say “hickeys.”
- SIGN** and **DATE** your approved press sheet, and be sure to take a duplicate sheet back to your office to compare to the finished product. If you press checked an annual report, for example, and you receive a carton of door-knob catalogs from your printer, it’s time to pick up the phone.

TRIM MARKS AND TARGETS

Trim marks show where the form will be cut into finished pages. Targets help pressmen align (register) colors.

COLOR BARS

Used to monitor color consistency and ink in different places on the form.

GRIPPER

A press "grips" each sheet by its edge(s) to guide it through. Where the gripper holds the sheet, ink cannot be applied (varies from .375 to .75 inches, depending upon press model).



PANTONE® COLOR FORMULA GUIDE

Used to verify specific spot colors, and to match hue and coverage with the designer's original intentions.



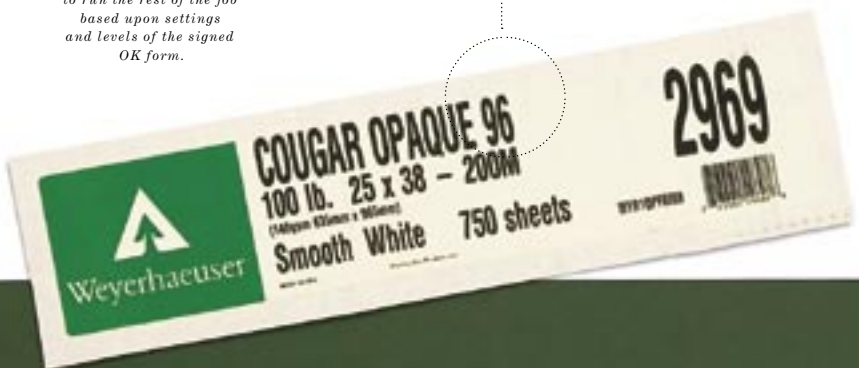
CARTON LABEL

Used to verify that the paper specified for the job matches the paper that is being fed into the press.

SIGNED "OK"

After making adjustments on press, the designer or production manager approves the press sheet, authorizing the printer to run the rest of the job based upon settings and levels of the signed OK form.

*OK
N.S.P.
10/15*






GO
COUGARS



LOUPE
A magnifying lens used to check for registration, printing inconsistencies, and other critical details.



PAPER SWATCH BOOK
The designer may use a paper swatch to tell the printer which sheet to use for the job, and as a quick reference guide on press to compare to the printed form.





(MEET THE)

PRESS



4.

**CASE
STUDIES
ON PAPER**

*EXPLORING IMAGERY
ON DIFFERENT PAPER
SURFACES, COLORS,
AND WEIGHTS {*

In Book One's "Intro to Paper Psych" (Chapter 1), we learned that uncoated paper has both tangible and intangible properties that make it ideal for conveying lifelike images, rich color, and natural skin tones. A well-formed sheet like Cougar Opaque makes it easy to achieve even the most subtle of printing nuances. This high level of detail was previously thought only possible with a coated surface. In this section, you'll discover how choosing from a variety of colors and textures can help you expand those possibilities even further.

?

?



[Q :] What paper is the best one for your job?
Check all that apply.

(A . <input type="checkbox"/>)	(B . <input type="checkbox"/>)	(C . <input type="checkbox"/>)	(D . <input type="checkbox"/>)
Uncoated	Coated	White	Natural
(E . <input type="checkbox"/>)	(F . <input type="checkbox"/>)	(G . <input type="checkbox"/>)	(H . <input type="checkbox"/>)
Smooth	Vellum	Text	Cover

FOR IMAGES
WITH TEXTURE,
UNCOATED
JUST FEELS RIGHT



SURFACE QUALITY YOU CAN SEE, IMAGE QUALITY

YOU CAN FEEL { Here's an opportunity to apply your knowledge of Cougar Opaque, a #1 premium uncoated paper. It's also where we've applied a sample of a coated sheet for the sake of comparison. In this particular case study, note that Cougar Opaque achieves ink coverage and holdout that stand up against coated. Then, observe how Cougar Opaque's finely crafted texture truly enhances the subject matter, while still delivering sharp detail that leaves the coated sheet looking dull. In the illustrations on the facing page, test images containing "natural" elements such as trees and argyle sweaters were used to make the case for printing "textural" images on uncoated paper. However, it is important to consider that not every uncoated sheet can handle ink this well and still maintain crisp, bright images. Only Cougar Opaque is engineered for scenarios where both factors are essential to producing the desired effect. In fact, in numerous "real world" trials such as the one presented here — using actual paper on actual presses with actual ink — Cougar Opaque proved time and again to produce consistently good image reproduction with impressive tactile characteristics.

UNCOATED
RULES!



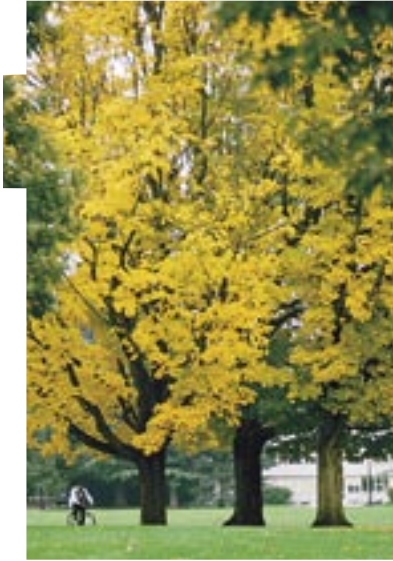
(A .



(B .



(C .



(D .



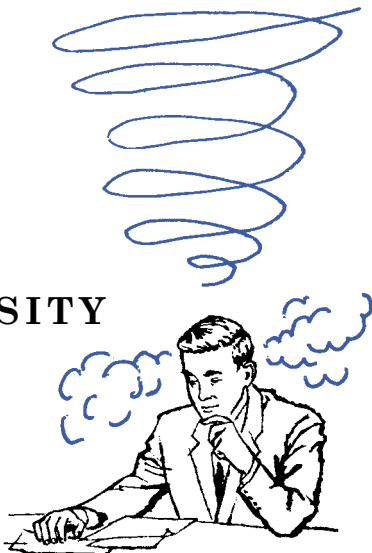
NICE SWEATER
↙



[Q :] Which images better portray texture?

(A . (B . (C . (D . -----

**PAPER UNIVERSITY
ENCOURAGES
STUDENTS
TO EXPLORE
THEIR OPTIONS**



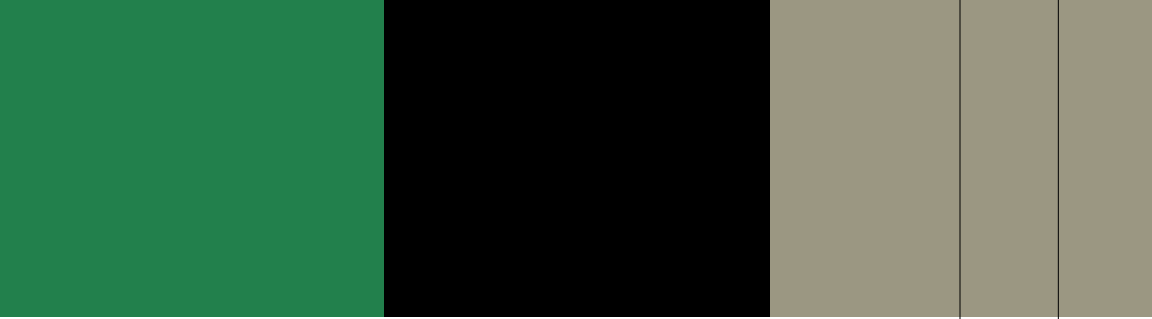
ESPECIALLY WHEN IT COMES TO PAPER {

Your time spent at Weyerhaeuser Paper University will be among your most cherished memories. So you should do everything you can to make the most of your experience. After all, no other place gives you more freedom to express yourself. Take in the variety of finishes and colors offered by Cougar Opaque. Experiment with smooth or vellum surfaces. Question your preference for bright white or natural colors. See how skin tones print on natural — or see how vellum elevates textures. Paper University believes in balance and diversity, so we've provided a safe, welcoming environment where you can learn, grow, and define your individual tastes. And to make sure you can't stray too far away from what brought you here in the first place, we've made every Cougar Opaque sheet to the same exacting standards — so you'll always feel good coming back to what you know. There is so much to see and learn. Expand your horizons — and discover how colorful life can be (even on bright white).

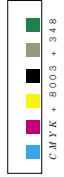
STUDY - 6:30
PARTY - 6:45



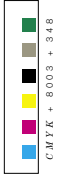
cougar



80 LB. COUGAR OPAQUE, VELLUM FINISH



80 LB. COUGAR NATURAL OPAQUE, VELLUM FINISH



100 LB. COUGAR OPAQUE, SMOOTH FINISH

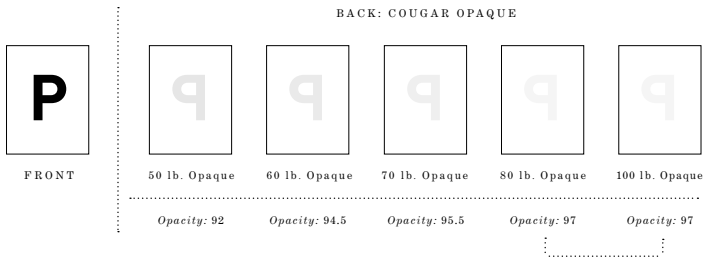
WHAT'S YOUR MAJOR?



SEEING HOW OPACITY IS AFFECTED BY WEIGHT

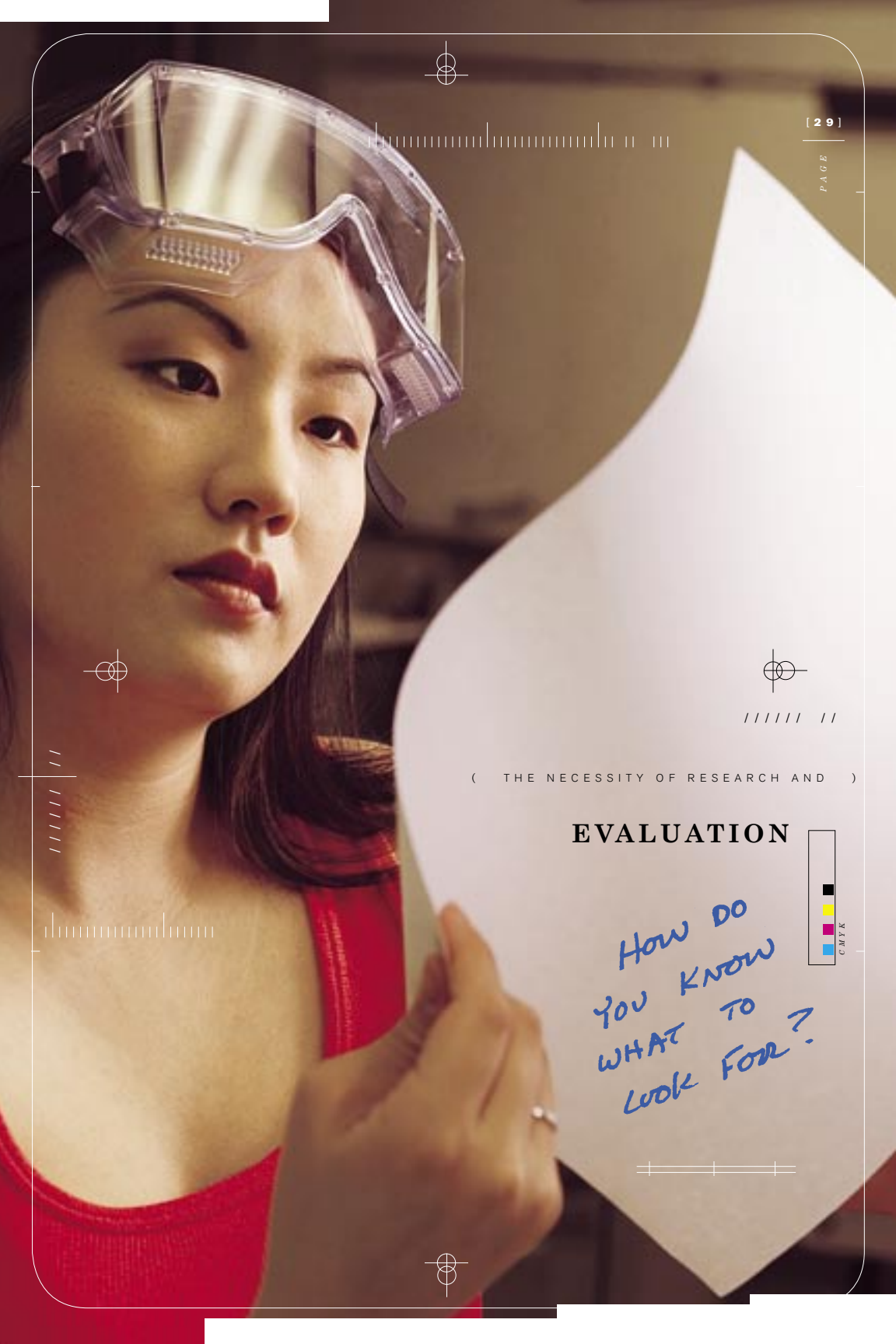
A RELATIVELY TRANSPARENT ILLUSTRATION {

For heavy coverage on one or both sides of a sheet, an opaque stock will help minimize show-through. As its name implies, Cougar Opaque is an effective paper for this situation. But surprisingly, one needn't always choose a heavier paper for better opacity. Cougar Opaque is made with high-quality fiber that maximizes opacity without significantly impacting the weight. This phenomenon is illustrated below — for visual people less inclined to read text.



[OPACITY :]

The characteristic of paper that helps prevent printing on one side from showing through to the other.

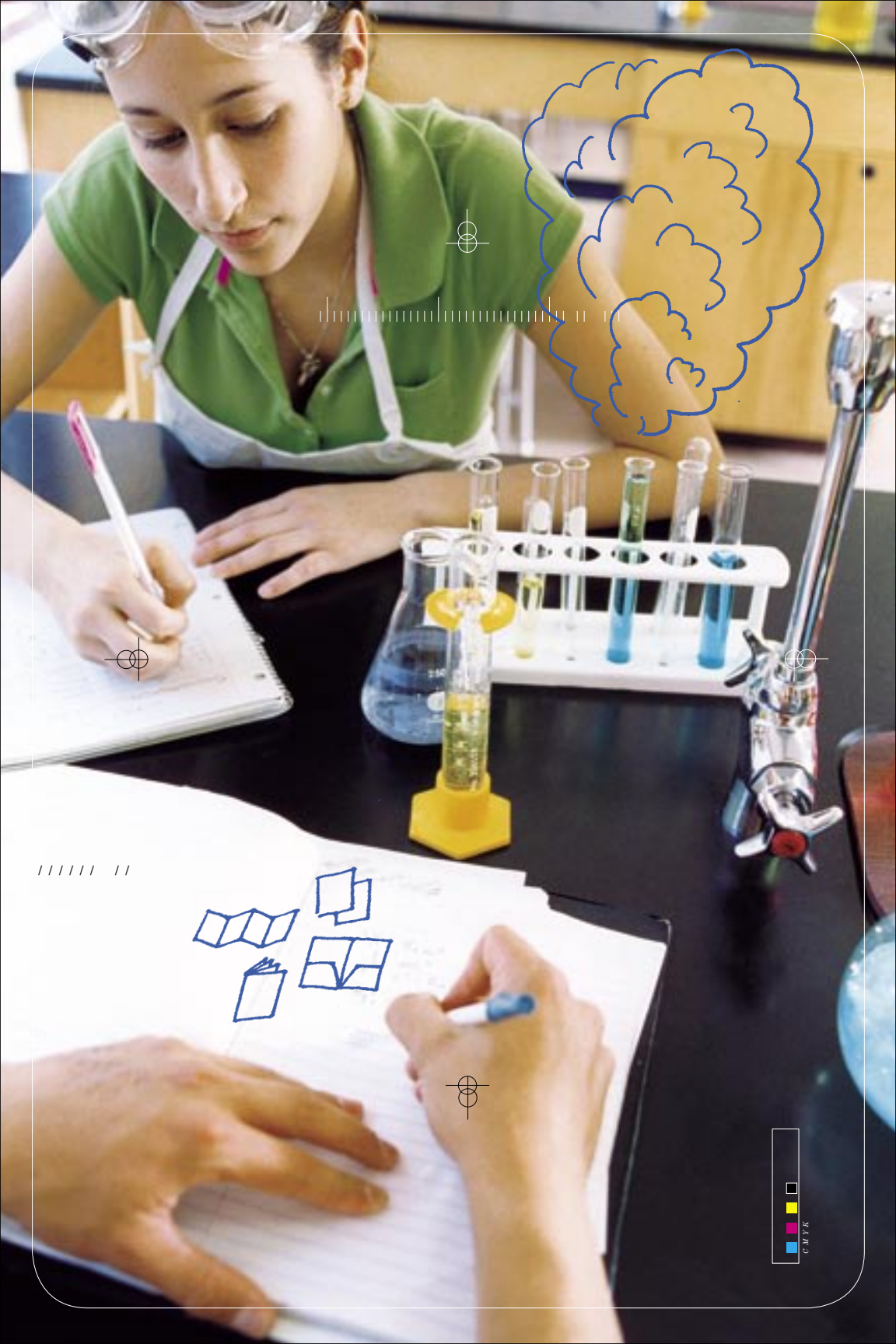


(THE NECESSITY OF RESEARCH AND)

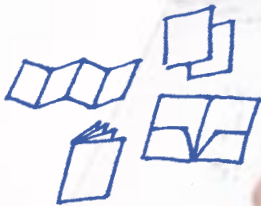
EVALUATION

How do
you know
what to
look for?





///// //



PERIODIC TABLE of PAPER
(WEIGHTS AND APPLICATIONS)

application	COUGAR OPAQUE					COUGAR COVER			
	50	60	70	80	100	65	80	100	130
STATIONERY:									
LETTERHEAD		•	•	•					
BUSINESS CARD							•	•	•
ENVELOPE		•	•	•					
POCKET FOLDER:									
SINGLE POCKET							•	•	•
DOUBLE POCKET						•	•	•	•
BROCHURE: (COVER)									
						•	•	•	•
BROCHURE: (STITCHED)									
8 PAGE SELF-COVER					•	•	•	•	
12 PAGE SELF-COVER					•	•	•	•	
16 PAGE SELF-COVER					•	•	•		
20 PAGE SELF-COVER				•	•	•	•		
24 PAGE SELF-COVER				•	•	•			
28 PAGE SELF-COVER			•	•	•				
BROCHURE: (FOLDED)									
4 PAGE FOLD-OVER						•	•	•	•
8 PAGE GATE FOLD					•	•	•	•	
3 PANEL ACCORDION FOLD				•	•	•	•	•	
5 PANEL ACCORDION FOLD				•	•	•	•	•	
5 PANEL ROLL FOLD			•	•	•	•	•		
BROCHURE: (NARRATIVE)									
8 PAGE NARRATIVE				•	•	•	•		
12 PAGE NARRATIVE			•	•	•	•	•		
16 PAGE NARRATIVE			•	•	•	•			
20 PAGE NARRATIVE			•	•	•	•			
24 PAGE NARRATIVE		•	•	•	•				
28 PAGE NARRATIVE		•	•	•	•				
32 PAGE NARRATIVE		•	•	•					
36 PAGE NARRATIVE		•	•	•					
40 PAGE NARRATIVE		•	•	•					
44 PAGE NARRATIVE		•	•	•					
48 PAGE NARRATIVE	•	•	•						
52 PAGE NARRATIVE	•	•	•						
56 PAGE NARRATIVE	•	•	•						
60 PAGE NARRATIVE	•	•							
64 PAGE NARRATIVE	•	•	•						
68 PAGE NARRATIVE	•	•							
72 PAGE NARRATIVE	•	•							
76 PAGE NARRATIVE	•	•							
80 PAGE NARRATIVE	•	•							
84 PAGE NARRATIVE	•	•							

TEST: BOOK 2

[1 :] *Offset printing gets its name from the fact that...*

- A. sheets are printed, then set off to the side to dry
- B. images can easily offset or go out of register
- C. there is an intermediate step between plate and paper
- D. it's an unusual and rarely used method

[2 :] *When printing on uncoated paper, the two key issues are...*

- A. identifying the front and back of the sheet
- B. temperature and humidity
- C. dot gain and ink density
- D. gravity and centrifugal force

[3 :] *Who is credited with inventing modern printing?*

- A. Martin Luther
- B. Johannes Gutenberg
- C. Steve Guttenberg
- D. Steve Martin

[4 :] *New sheetfed presses can cut their own custom sheets from a roll.*

- A. true
- B. false

[5 :] *Which of the following is not a common offset printing ink?*

- A. Toyo
- B. PMS
- C. Hexachrome®
- D. Latex

[6 :] *Which of the following does not influence ink density?*

- A. the surface quality of the paper
- B. good image preparation
- C. line screen
- D. ink color

[7 :] *Some methods for achieving richer solids on uncoated are...*

- A. double bumps
- B. triple ollies
- C. pleading with the pressman
- D. all of the above

[8 :] *Some things you should do on a press check include...*

- A. picking up trash
- B. signing the sheet before doing anything else
- C. avoiding eye contact with the pressman
- D. none of the above

[9 :] *Cougar Opaque is available in which finishes?*

- A. vellum and natural vellum
- B. smooth and natural smooth
- C. metallic and uncoated
- D. A and B

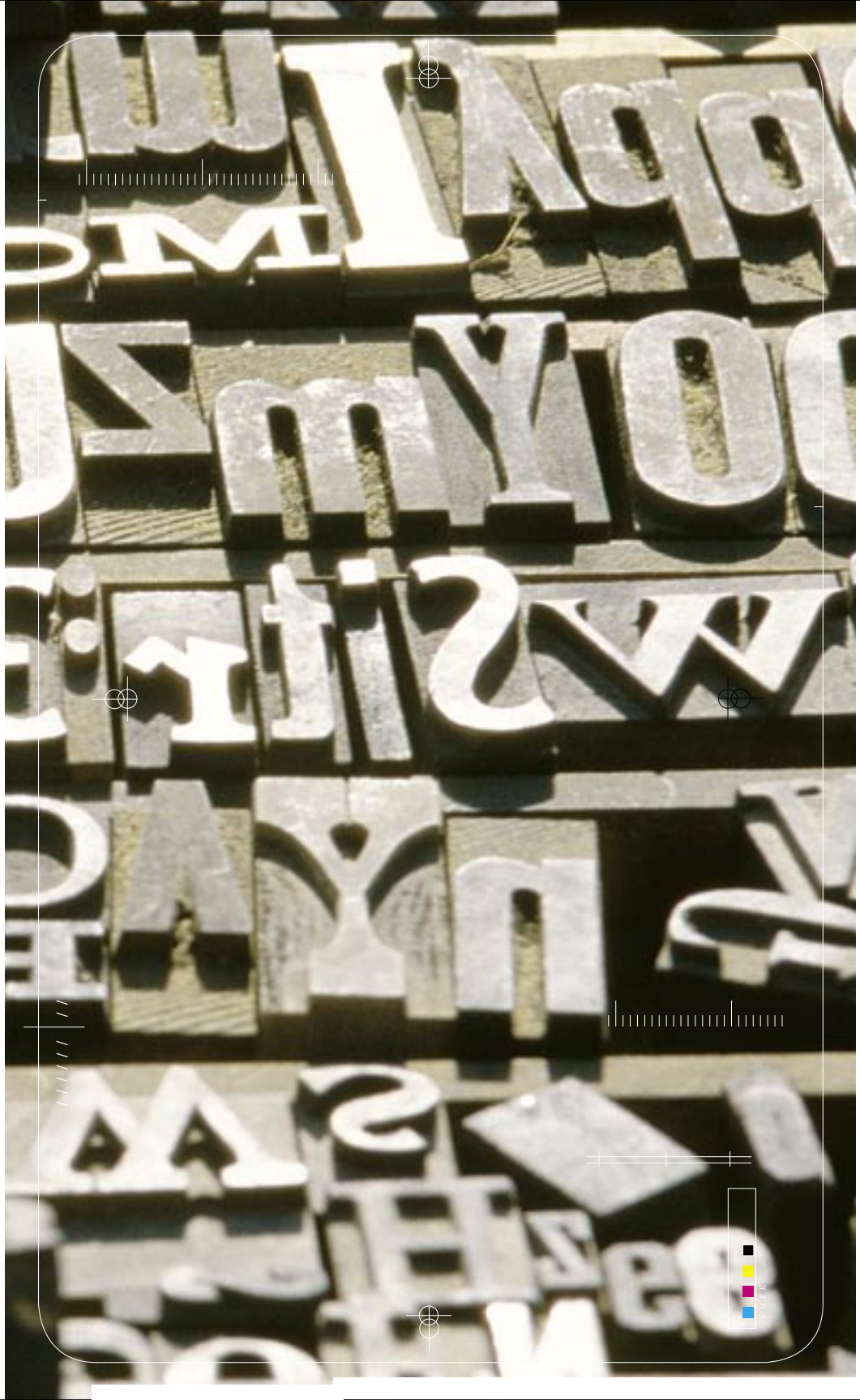
[10 :] *The heavier the paper, the more opaque it will be.*

- A. true
- B. false

WHY ARE THE LETTERS ALL BACKWARDS?

ANSWER KEY:

1. C, 2. C, 3. B, 4. A, 5. D, 6. D, 7. A, 8. D, 9. D, 10. B



XXXXXXXXXXXXXXXXXXXX



XXXXXXXXXXXXXXXXXXXX



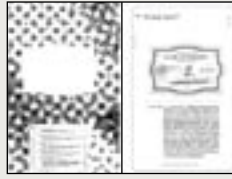
CMYK



NOTES



FRONT COVER:
130 lb. Cougar Double Thick Cover,
Smooth Finish.
Printed Four-Color Process +
Double Bump Process Black + 348 Green.



INSIDE COVER & PAGE 1:
130 lb. Cougar Double Thick Cover,
Smooth Finish.
Printed Four-Color Process.

100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process +
8003 Metallic + 348 Green.



PAGES 2 & 3:
100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process.
Photography by Veer.



PAGES 4 & 5:
100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process + 614 Natural.
Photography by Neill Whitlock.



PAGES 6 & 7:
100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process + 8003 Metallic.
Photography by Corbis.



PAGES 8 & 9:
100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process + 614 Natural.
Photography by Neill Whitlock and Corbis.



PAGES 10 & 11:
100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process + 614 Natural.
Photography by Corbis.



PAGES 12 & 13:
100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process + 348 Green +
614 Natural.
Photography by Getty Images.



PAGES 14 & 15:
100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process +
Double Bump Process Black + 614 Natural.
Photography by Getty Images.



PAGES 16 & 17:
100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process.
Photography by Neill Whitlock.



PAGES 18, 19, 20, & 21:
100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process.
Photography by Neill Whitlock and David Zaitz.

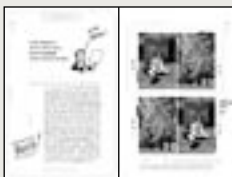


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PAGES 22 & 23:

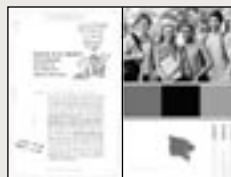
100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process + 614 Natural.
Photography by Neill Whitlock.



PAGES 24 & 25:

100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process + 614 Natural.

Tip-On: Premium #1 Coated White.
Printed Four-Color Process.
Photography by Getty Images.



PAGES 26 & 27:

80 lb. Cougar Opaque, Vellum Finish.
80 lb. Cougar Natural Opaque, Vellum Finish.
100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process + 348 Green +
8003 Metallic + 614 Natural.
Photography by Getty Images.



PAGES 28 & 29:

100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process + 614 Natural.
Photography by Neill Whitlock.



PAGES 30 & 31:

100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process +
348 Green + 614 Natural.
Photography by Photonica.



PAGE 32

& INSIDE BACK COVER:
100 lb. Cougar Opaque, Smooth Finish.
Printed Four-Color Process.

130 lb. Cougar Double Thick Cover,
Smooth Finish.
Printed Four-Color Process.
Photography by Corbis.



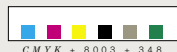
BACK COVER:

130 lb. Cougar Double Thick Cover,
Smooth Finish.
Printed Four-Color Process +
Double Bump Process Black + 348 Green.
Photography by David Zaitz.



LETTERHEAD:

80 lb. Cougar Natural Opaque, Smooth Finish.
Printed Four-Color Process + 348 Green.
Photography by David Zaitz.



CONCEPT + DESIGN) Squires & Company

PHOTOGRAPHY) Neill Whitlock, David Zaitz,
Photonica, Corbis, Getty Images, Veer

COPYWRITING) Wayne Geyer

PRINTING) Williamson Printing Corporation

PRESS) 40" Heidelberg 12 color press using
conventional inks, overall dot for dot dull varnish

SPECIAL THANKS) To the University of North Texas
School of Visual Arts, Denton, Texas.

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