



Graphic Arts

Scouts BSA · Arts

Name

Started

Completed

Graphic Arts is about how designs go from an idea to something printed in your hands. You'll learn about printing processes, create your own design, and produce it. It's a great mix of art and technology.

Requirements

Every official requirement, in plain language. Check the official wording when you sign off (scouting.org/merit-badges/graphic-arts/). Tips and examples are ideas, not extra requirements.

- ☐ **1** Go over with your counselor how printed materials are made by each of these processes: screen printing, offset lithography, relief, gravure, and electronic/digital. Collect 3 samples made by 3 different processes, or draw diagrams to help explain them

Tip: Look closely at a magazine, a T-shirt, and a cereal box. Think about how each one might have been printed.

Example: Compare processes with things you own: a T-shirt was likely screen printed, a magazine was printed on a big offset press, a mailing label came from a digital printer, and a rubber stamp is relief printing. Explain how ink gets onto the surface in each.

- ☐ **2** Explain how line, halftone, and continuous tone artwork differ. Describe how digital images can be made and stored on a computer

Tip: Collect examples of photos, drawings, and logos, and learn the difference between common digital file types.

Example: Show the difference: a logo saved as a vector file stays sharp at any size, while a photo is made of pixels and gets blurry when you blow it up. Bring a JPEG and a PNG or PDF to show when you'd use each.

- ☐ **3** Design a printed piece such as a flyer, T-shirt, program, or form. Explain your typeface choices and layout, and which printing process suits it best. If desktop publishing is available, name the hardware and software you'd use to output it

Tip: Design something useful, like a troop flyer or event poster. Be ready to explain your choices of fonts, colors, and layout.

Example: Design a flyer for your troop's food drive: one big headline, a clear date and place, a simple image, and two colors that stand out. Be ready to explain why you chose a bold sans-serif font and put the date near the top.

4 Print your design: Choose 1 of 4

Tips for this section: Pick a printing process you can do yourself, like screen printing or a stamp, or work with a local print shop.

Example for this section: Produce your flyer by screen printing it on poster board with a counselor or adult helping, carving a simple linoleum block, or working with a print shop to run it digitally. Keep a sample from each step.

- ☐ **4a** Offset lithography: make a layout, make a plate using a counselor-approved method, and run at least 50 copies of your requirement 3 design

- ☐ **4b** Screen printing: cut a stencil by hand or make one photographically, attach it to a screen you've prepared, then mask the screen and make at least 20 prints of your requirement 3 design

- ☐ **4c** Electronic/digital printing: create your requirement 3 layout electronically, send the file to the press or printer, and print 50 copies. If there's no electronic link to the press or printer, you may print a paper copy and scan it

- ☐ **4d** Relief printing: create your requirement 3 layout electronically, send the file to the press or printer, and print 50 copies. If there's no electronic link to the press or printer, you may print a paper copy and scan it

5 Finishing and binding

Tips for this section: Look for folds, trims, binding, and other finishing touches on printed things around your house.

Example for this section: Find finishing in a stack of mail and books: a brochure folded in thirds, a booklet held with staples (saddle stitching), a hardcover book with a glued spine, and a business card trimmed to size.

- ☐ **5a** Discuss with your counselor these finishing steps: padding, drilling, cutting, and trimming

- ☐ **5b** Collect, describe, or identify examples of these bindings: saddle stitch, spiral, plastic comb, perfect, and case

6 Graphic arts visit: Choose 1 of 4

Tips for this section: Ask a print shop, sign maker, or school graphic arts program if you can see their equipment in action.

- ☐ **6a** Visit a newspaper printing plant and trace one story's path from editor to press. Then describe the highlights of your visit

- ☐ **6b** Visit a retail, commercial, or in-plant print shop and follow one job from start to finish. Then describe the highlights of your visit

- ☐ **6c** Visit a school's graphic arts program and learn what courses it offers and what you need to take them first. Then describe the highlights of your visit

- ☐ **6d** With a parent's or guardian's permission, visit 3 websites of graphic arts professional groups or printing-related companies (suppliers, makers, printers). Print or download product or service information from 2 of them, then describe the highlights

- ☐ **7** Learn about 3 careers in graphic arts. Choose one and research the education, training, and experience it takes. Discuss it with your counselor and explain why it might interest you

Tip: Talk with a designer or printer about their job and the skills they use every day.