



Graphic Arts

Merit Badge Workbook

This workbook can help you but you still need to read the merit badge pamphlet (book). No one can add or subtract from the Boy Scout Requirements #33216. Each Scout must do each requirement. Merit Badge Workbooks and more: [Online Resources](http://OnlineResources.com). Send comments to the workbook developer: craig@craiglincoln.com. Requirements revised: 01/1/10, Workbook updated: 02/10.

Scout's Name: _____ Unit: _____

Counselor's Name: _____ Counselor's Ph #: _____

1. Review with your counselor the processes for producing printed communications:

offset lithography, _____

screen printing, _____

electronic/digital, _____

relief, _____

and gravure. _____

Collect samples of three products, each one produced using a different printing process, or draw diagrams to help with your description. _____

2. Explain the difference between continuous-tone, _____

line, _____

and halftone artwork. _____

Describe how it can be created and/or stored in a computer. _____

3. Design a printed piece (flier, T-shirt, program, form, etc.) and produce it. _____

Explain your decisions for the typeface or typefaces you use _____

and the way you arrange the elements in your design. _____

Explain which printing process is best suited for printing your design. _____

If desktop publishing is available, identify what hardware and software would be appropriate for outputting your design.

4. Produce the design you created for requirement 3 using ONE of the following printing processes:

☐ a. Offset lithography _____

Make a layout and produce a plate using a process approved by your counselor. Run the plate and print at least 50 copies.

☐ b. Screen process printing _____

Make a hand-cut or photographic stencil and attach it to a screen that you have prepared. Mask the screen and print at least 20 copies.

☐ c. Electronic/digital printing _____

Create a layout in electronic form, download it to the press or printer, and run 50 copies. If no electronic interface to the press or printer is available, you may print and scan a paper copy of the layout.

☐ d. Relief printing _____

Prepare a layout or set the necessary type. Make a plate or lock up the form. Use this to print 50 copies.

5. Review the following postpress operations with your counselor:

a. Discuss the finishing operations of padding, _____

drilling, _____

cutting, _____

and trimming. _____

b. Collect, describe, or identify examples of the following types of binding:

perfect, _____

spiral, _____

plastic comb, _____

saddle stitched, _____

and case. _____

6. Do ONE of the following, then describe the highlights of your visit:

- ☐ a. Visit a newspaper printing plant: Follow a story from the editor to the press.
- ☐ b. Visit a retail, commercial, or in-plant printing facility: Follow a project from beginning to end.
- ☐ c. Visit a school's graphic arts program: Find out what courses are available and what the prerequisites are.
- ☐ d. Visit three Web sites (with your parent's permission) that belong to graphic arts professional organizations and/or printing-related companies (suppliers, manufacturers, printers): With permission of our parent or counselor, print out or download product or service information from two of the sites.

7. Find out about three career opportunities in graphic arts. _____

Pick one _____

and find out the education, training, and experience required for this profession. _____

Discuss this with your counselor, and explain why this profession might interest you. _____

Online Resources (Use any Internet resource with caution and only with your parent's or guardian's permission.)

Boy Scouts of America: ► scouting.org ► [Guide to Safe Scouting](#) ► [Age-Appropriate Guidelines](#) ► [Safe Swim Defense](#)
► [Scout](#) ► [Tenderfoot](#) ► [Second Class](#) ► [First Class](#) ► [Rank Videos](#) ► [Safety Afloat](#)

Boy Scout Merit Badge Workbooks: usscouts.org -or- meritbadge.org **Merit Badge Books:** www.scoutstuff.org

Graphic Comm Central: <http://www.TechEd.vt.edu/gcc>

My Design Primer Printing Topics: <http://www.mydesignprimer.com/printing/50000.html>

Print and Graphics Scholarship Foundation: <http://www.gain.net/employment/scholarships.html>

Vocational Information Center: <http://www.khake.com/page27.html>