



# Graphic Arts

## Merit Badge Workbook



This workbook can help you but you still need to read the merit badge pamphlet.

This Workbook can help you organize your thoughts as you prepare to meet with your merit badge counselor.

You still must satisfy your counselor that you can demonstrate each skill and have learned the information.

You should use the work space provided for each requirement to keep track of which requirements have been completed, and to make notes for discussing the item with your counselor, not for providing full and complete answers.

If a requirement says that you must take an action using words such as "discuss", "show", "tell", "explain", "demonstrate", "identify", etc, that is what you must do.

**Merit Badge Counselors may not require the use of this or any similar workbooks.**

No one may add or subtract from the official requirements found in Boy Scout Requirements (Pub. 33216 – SKU 637685).

The requirements were last issued or revised in 2012 • This workbook was updated in June 2017.

Scout's Name: \_\_\_\_\_ Unit: \_\_\_\_\_

Counselor's Name: \_\_\_\_\_ Counselor's Phone No.: \_\_\_\_\_

<http://www.USScouts.Org> • <http://www.MeritBadge.Org>

Please submit errors, omissions, comments or suggestions about this **workbook** to: [Workbooks@USScouts.Org](mailto:Workbooks@USScouts.Org)  
 Comments or suggestions for changes to the **requirements** for the **merit badge** should be sent to: [Merit.Badge@Scouting.Org](mailto:Merit.Badge@Scouting.Org)

1. Review with your counselor the processes for producing printed communications: offset lithography, screen printing, electronic/digital, relief, and gravure.

Offset lithography:


Screen printing:


Electronic/digital:


Relief:


**Workbook © Copyright 2017 - U.S. Scouting Service Project, Inc. - All Rights Reserved  
 Requirements © Copyright, Boy Scouts of America (Used with permission.)**

**This workbook may be reproduced and used locally by Scouts and Scouters for purposes consistent with the programs of the Boy Scouts of America (BSA), the World Organization of the Scout Movement (WOSM) or other Scouting and Guiding Organizations. However it may NOT be used or reproduced for electronic redistribution or for commercial or other non-Scouting purposes without the express permission of the U. S. Scouting Service Project, Inc. (USSSP).**

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

	Product	Process
<input type="checkbox"/> 1.		
<input type="checkbox"/> 2.		
<input type="checkbox"/> 3.		


2. Explain the difference between continuous-tone, line, and halftone artwork.

Continuous-tone:


Line:


Halftone artwork:


Describe how digital images 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.

Typeface(s)


Arrangement:


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.

Padding:


Drilling:


Cutting:


Trimming:


b. Collect, describe, or identify examples of the following types of binding: perfect, spiral, plastic comb, saddle stitched, and case.

- Perfect:
- Spiral:
- Plastic comb:
- Saddle stitched:
- 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 websites (with your parent's permission) that belong to graphic arts professional organizations and/or printing-related companies (suppliers, manufacturers, printers): With permission of your parent or counselor, print out or download product or service information from two of the sites.

<input type="checkbox"/>	1.	
<input type="checkbox"/>	2.	
<input type="checkbox"/>	3.	

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

1.	
2.	
3.	

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

Career:	
Education:	
Training:	
Experience:	

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


**When working on merit badges, Scouts and Scouters should be aware of some vital information in the current edition of the *Guide to Advancement* (BSA publication 33088). Important excerpts from that publication can be downloaded from <http://usscouts.org/advance/docs/GTA-Excerpts-meritbadges.pdf>. You can download a complete copy of the *Guide to Advancement* from <http://www.scouting.org/filestore/pdf/33088.pdf>.**