



Pulp and Paper

Scouts BSA · Trades

Name

Started

Completed

Paper is everywhere, from books to boxes to tissues. You'll learn how it's made, how forests are managed, and how paper is recycled. You'll even make your own paper by hand.

Requirements

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

- ☐ **1** Tell how papermaking developed through history, and describe the role paper products play in society and the economy

Tip: Look up how paper was made long ago and how it changed the way people share ideas.

Example: Tell the story in a few steps: Egyptian papyrus, the Chinese invention of paper from plant fibers, papermaking spreading to the Middle East and Europe, and the printing press making books affordable. Then explain how cheap paper changed schools and news.

2 The pulp and paper industry

Tips for this section: Find out how paper companies plant and care for trees so forests keep growing.

- ☐ **2a** Describe how the industry plants, grows, and harvests trees

- ☐ **2b** Explain how the industry manages its forests so the tree supply keeps up with demand

- ☐ **2c** Tell how the industry uses the ideas of sustainable forest management (SFM)

- ☐ **2d** Describe two ways the paper industry has dealt with pollution

- ☐ **3** Name at least four kinds of trees that supply much of the fiber used to make paper, then do 3a-3c

Tip: Learn which trees are used for paper, and draw the steps of turning wood into pulp.

Example: Name trees like southern pine, spruce, and aspen, and explain the difference between softwood's long fibers and hardwood's short ones. Then draw how wood chips become pulp by grinding (mechanical) or cooking with chemicals (chemical).

- ☐ **3a** Discuss other ways the industry uses its trees and forestland

- ☐ **3b** Describe two methods for getting fibers out of wood and explain how they mainly differ

- ☐ **3c** Tell why some pulp is bleached and describe how it's done

- ☐ **4** Describe the papermaking process and discuss how paper gets recycled. Then make your own sheet of paper by hand

Tip: Make paper at home using scrap paper, water, a blender, and a screen, with an adult's help.

Example: With an adult, tear scrap paper into a blender with water, pour the pulp into a tub, lift it on a screen frame, press out the water with a towel, and let it dry. Add flower petals or seeds for a personal touch.

- ☐ **5** Explain what coated paper is and why it's coated, and describe the main uses for different coated papers. Describe one other chemical or mechanical change to paper that opens up new uses

Tip: Compare glossy magazine pages to plain printer paper, and talk about where each is used.

Example: Compare a glossy magazine page with copy paper: the coating of clay or other minerals makes the surface smooth so ink sits on top and photos look sharp. Explain where each kind of paper gets used.

- ☐ **6** List 15 pulp or paper products in your home, and show your counselor examples of 10 of them

Tip: Walk through your house and list every paper product you find.

7 Visit or research: Choose 1 of 5

Tips for this section: Ask your counselor about a mill, box plant, or recycling center you could visit.

Example for this section: On a recycling center visit with your troop, follow a bale of cardboard from the sorting line to the baler, and ask where it ships next. Write down three things that make paper hard to recycle, like food grease or plastic coatings.

- ☐ **7a** With your parent's and counselor's OK, visit a pulp mill and describe how it turns wood into cellulose fibers

- ☐ **7b** With your parent's and counselor's OK, tour a paper mill and bring home a sample of its paper. Describe how that paper is made and how it will be used

- ☐ **7c** With your parent's and counselor's OK, visit a container or box plant and describe how its products are made

- ☐ **7d** With your parent's and counselor's OK, visit a recycled-paper collection or sorting center and describe how it works

- ☐ **7e** With your parent's and counselor's OK, research how paper products are developed and what role research and development plays in the industry, then share what you learn with your counselor

- ☐ **8** Learn about three papermaking careers that interest you. Choose one, find out its education, training, and experience needs, and discuss with your counselor why it might interest you

Tip: Look into jobs like forester, engineer, or chemist in the paper industry.