

2010

PULP and PAPER  
PROGRAM OVERVIEW  
& WORKBOOK



TBA

MERIT BADGE UNIVERSITY

OVERLAND TRAILS COUNCIL

7/31/2010

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FEBRUARY 2010

Information in this booklet was accurate at the time of publishing.  
Boy Scouts Requirements 2010, Copyrighted Boy Scouts of America  
Program Overview & Workbook was reviewed by  
MBU Staff/Committee.

## **PULP and PAPER PROGRAM OVERVIEW**

**COUNSELOR:** tba

C/O: Overland Trails Council  
PO Box 1361  
Grand Island, NE 68802-1361

**LOCATION:** tba

**TRANSPORTATION:** Transportation is provided

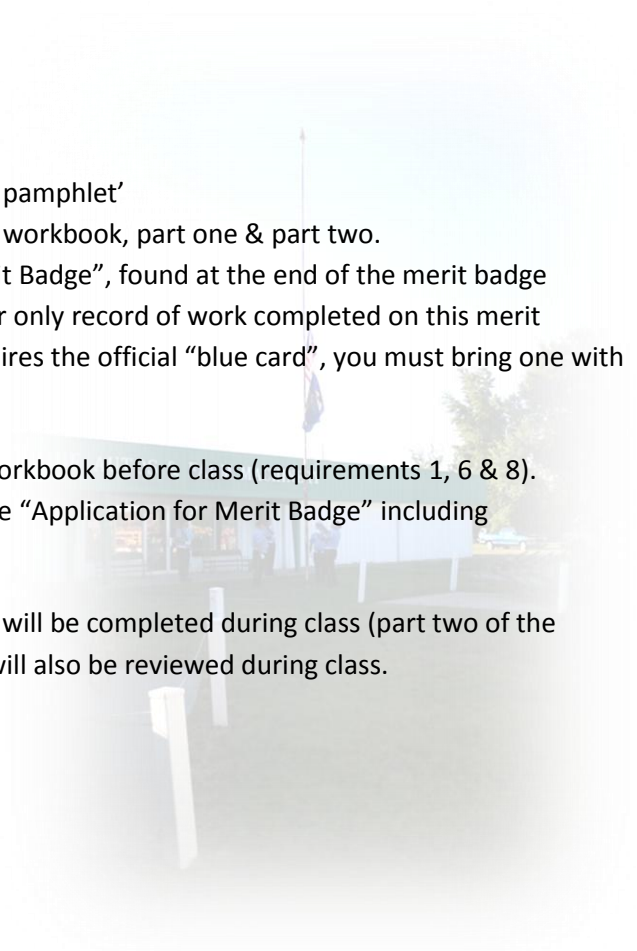
**ADDITIONAL COSTS:** None

**CLASS SIZE:** 10

**BRING TO CLASS:** Pulp and Paper merit badge pamphlet'  
Pulp and Paper merit badge workbook, part one & part two.  
Signed "Application for Merit Badge", found at the end of the merit badge workbook. (This will be your only record of work completed on this merit badge.) If your Council requires the official "blue card", you must bring one with you to class.

**PRE-REQUISITES:** Complete Part One of the workbook before class (requirements 1, 6 & 8).  
Complete information on the "Application for Merit Badge" including Scoutmasters signature.

**CURRICULUM:** Requirements 2, 3, 4, 5, & 7 will be completed during class (part two of the workbook). Pre-requisites will also be reviewed during class.





## PULP and PAPER

Boy Scouts Requirements 2010

PRE-REQUISITE REQUIREMENTS ARE PRINTED IN **ITALICS** &  
MUST BE COMPLETED BEFORE CLASS.

1. **Tell the history of papermaking. Describe the part paper products play in our society and economy.**
2. List the trees that are major sources of papermaking fibers. Then discuss what other uses are made of the trees and of the forestland owned by the pulp and paper industry. Describe the ways the industry plants, grows, and harvests trees. Explain how the industry manages its forests so that the supply of trees keeps pace with the demand, and tell about one way the industry has incorporated a sustainable forestry concept. Give two ways the papermaking industry has addressed pollution.
3. Describe two ways of getting fibers from wood, and explain the major differences. Tell why some pulps are bleached, and describe this process.
4. Describe how paper is made. Discuss how paper is recycled. Make a sheet of paper by hand.
5. Explain what coated paper is and why it is coated. Describe the major uses for different kinds of coated papers. Describe one other way that paper is changed by chemical or mechanical means to make new uses possible.
6. **Make a list of 15 pulp or paper products found in your home. Share examples of 10 such products with your counselor.**
7. With your parent's and counselor's approval, do ONE of the following:
  - a) Visit a pulp mill. Describe how the mill converts wood to cellulose fibers.
  - b) Visit a paper mill and get a sample of the paper made there. Describe the processes used for making this paper. Tell how it will be used.
  - c) Visit a container plant or box plant. Describe how the plant's products are made.
  - d) Visit a recycled paper collection or sorting facility. Describe the operations there.
  - e) Using books, magazines, your local library, the Internet (with your parent's permission), and any other suitable research tool, find out how paper products are developed. Find out what role research and development play in the papermaking industry. Share what you learn with your counselor.
8. **Find out about three career opportunities in the papermaking industry that interest you. 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.**

# PULP and PAPER WORKBOOK

## PART ONE, PRE-REQUISITIES



Name \_\_\_\_\_  
 Unit # \_\_\_\_\_ District \_\_\_\_\_  
 Council \_\_\_\_\_

*Part One of the workbook must be completed before class.*

*Bring the entire workbook (part one and part two) with you to class.*

*Also bring the "Application for Merit Badge" signed by your scoutmaster (included at the end of the workbook).*

<input type="checkbox"/> 1. Tell the history of papermaking. Describe the part paper products play in our society and economy.
<p><i>Tell the history of papermaking:</i></p> <div style="border: 1px solid black; height: 100px; width: 100%;"></div>
<p><i>Describe the part paper products play in our society and economy:</i></p> <div style="border: 1px solid black; height: 100px; width: 100%;"></div>

<input type="checkbox"/> 6. Make a list of 15 pulp or paper products found in your home. Share examples of 10 such products with your counselor.												
<p><i>List pulp or paper products found in your home:</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 33%; height: 20px;"></td><td style="width: 33%; height: 20px;"></td><td style="width: 33%; height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td><td style="height: 20px;"></td><td style="height: 20px;"></td></tr> </table>												
<p><i>Share examples of 10 products:</i></p> <div style="border: 1px solid black; height: 100px; width: 100%;"></div>												

Name \_\_\_\_\_

- 8. Find out about three career opportunities in the papermaking industry that interest you. 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.

*Career opportunities in the papermaking industry:*

1.

2.

3.

*Pick one career:*

*Career:*

*Education:*

*Training:*

*Experience:*

*Why this profession interest's you:*




## PULP and PAPER WORKBOOK PART TWO, CLASS CURRICULUM

Name \_\_\_\_\_  
Unit # \_\_\_\_\_ District \_\_\_\_\_  
Council \_\_\_\_\_

**Part Two of the workbook will be completed during class.**

2. List the trees that are major sources of papermaking fibers. Then discuss what other uses are made of the trees and of the forestland owned by the pulp and paper industry. Describe the ways the industry plants, grows, and harvests trees. Explain how the industry manages its forests so that the supply of trees keeps pace with the demand, and tell about one way the industry has incorporated a sustainable forestry concept. Give two ways the papermaking industry has addressed pollution.

*List the trees that are major sources of papermaking fibers:*


*Discuss other uses made of the trees and of the forestland:*


*Describe the ways the industry plants, grows, and harvests trees:*


*Explain how the industry manages its forests so supply of trees keeps pace with demand:*


*Tell about one way the industry has incorporated a sustainable forestry concept:*


*Give two ways the papermaking industry has addressed pollution:*

1
2

Name \_\_\_\_\_

- 3. Describe two ways of getting fibers from wood, and explain the major differences. Tell why some pulps are bleached, and describe this process.

*Describe two ways of getting fibers from wood:*

1

2

*Explain the major differences:*

*Tell why some pulps are bleached:*

*Describe this process:*

- 4. Describe how paper is made. Discuss how paper is recycled. Make a sheet of paper by hand.

*Describe how paper is made:*

*Discuss how paper is recycled:*

*Make a sheet of paper by hand:*





Name \_\_\_\_\_

7. continued

**OR**

- d) Visit a recycled paper collection or sorting facility. Describe the operations there.

*Visit a recycled paper collection or sorting facility:*

--

*Describe the operations there:*


**OR**

- e) Using books, magazines, your local library, the Internet (with your parent's permission), and any other suitable research tool, find out how paper products are developed. Find out what role research and development play in the papermaking industry. Share what you learn with your counselor.

*Using suitable research tools, find out how paper products are developed:*


*What role research and development play:*


*Share what you learn:*


## **ORGANIZATIONS and WEB SITES**

*(Whenever you go online, be sure you have your parent's permission first.)*

American Forest and Paper Association

<http://www.afandpa.org>

Robert C. Williams Paper Museum

<http://www.ipst.gatech.edu/amp>

Society of American Foresters

<http://www.safnet.org>

Society of Wood Science and Technology

<http://www1.fpl.fs.fed.us/swst/index.html>

Technical Association of the Pulp and Paper Industry

<http://www.tappi.org/paperu>

Wisconsin Paper Council

<http://www.wipapercouncil.org>

# PULP and PAPER WORKBOOK

Notes



**APPLICATION FOR MERIT BADGE**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Is a registered \_\_\_\_\_ Boy Scout,  
 \_\_\_\_\_ Varsity Scout,  
 \_\_\_\_\_ Venturer,

of \_\_\_\_\_ No. \_\_\_\_\_  
Troop, team, crew, ship

District: \_\_\_\_\_

Council: \_\_\_\_\_

**MERIT BADGE UNIVERISTY**

Merit Badge: **Pulp and Paper**

Counselor: \_\_\_\_\_

Address: Overland Trails Council

PO Box 1361

2808 O'Flannagan

Grand Island, NE 68802-1361

Phone: 308-382-3717

email: mbuotc@yahoo.com

***and is qualified to begin working for this merit badge and has completed the following pre-requisite requirements:***

**SECTION A PRE-REQUISITE REQUIREMENTS**

Requirement No. and letter	Date of Approval	Counselor Initial	Requirement No. and letter	Date of Approval	Counselor Initial
1					
6					
8					

***The applicant has personally appeared before me and demonstrated to my satisfaction that he has met all pre-requisites requirements for the above stated merit badge and is ready to attend his assigned MBU class.***

Signature of Unit Leader \_\_\_\_\_ Date \_\_\_\_\_

**SECTION B APPLICANTS RECORD**

Requirement No. and letter	Date of Approval	Counselor Initial	Requirement No. and letter	Date of Approval	Counselor Initial
2					
3					
4					
5					
7					

The applicant has personally appeared before me and demonstrated to my satisfaction that he has completed all requirements in **SECTION B** above for the

Merit Badge: **Pulp and Paper**

Name of Counselor: \_\_\_\_\_

Signature of Counselor \_\_\_\_\_ Date \_\_\_\_\_

### SCOUT INSTRUCTIONS

- Complete your name, address, city, unit type & number, district, & council on the Application for Merit Badge.
- Your unit leader must sign the Application for Merit Badge before attending class.
- All other information is already printed on the Application for Merit Badge; please make sure all information is correct.
- The merit badge counselor is registered & approved for this merit badge and is on the MBU Counselor's List.
- Read the merit badge pamphlet.
- Attend the merit badge class.
- Always meet with your counselor along with a buddy (a Scout, friend, or parent)
- Have your merit badge worksheet with you when you attend class.
- **If the merit badge pre-requisites are not completed before class, you will not be able to complete the merit badge during this weekend event, you will have to follow up with your Unit's Advancement Chair when you return home**
- **PLEASE BE AWARE THAT SOME COUNSELORS WILL NOT ALLOW YOU TO ATTEND THEIR CLASS WITHOUT PRE-REQUISITES COMPLETED—CLASS CURRICULUM IS DEPENDENT ON PRE-REQUISITE WORK BEING COMPLETED!**

### COUNSELOR INSTRUCTIONS

- Never meet alone with a Scout.
- Verify all information & merit badge name on Application for Merit Badge is correct.
- Sign your name on the line at the bottom of **"SECTION B APPLICANTS RECORD"**.