

Material Processing Reading

Title of Article: The Nature of Wood and Manufacture of Lumber

Step 1—Read/Review Article

Read the article. It may be beneficial to review the article with a small group. In this group you can discuss key concepts and any confusing information. Use some paper or the back of this page to organize key ideas for your individual reflection. The written reflection needs to be your own work, but you can discuss ideas with your classmates.

Some main points to focus on are:

Structure of wood; Moisture content and effects; Sawing techniques; Drying; Defects; Softwood vs. Hardwood; and Board Foot

Step 2—Individual Written Reflection (typed)

Write a one page reflection of the article. You are welcome to summarize ideas from the article, but do not copy directly from the text. Please reflect on the topics below, how the information applies to your class work, how it relates to your experiences and knowledge, and how you plan to incorporate the information throughout the class.

Please include the following topics in your reflection:

- How the structure of wood applies to your clock project and machining of parts
 - the grain pattern, summerwood and springwood (growth rings)
- The lumber we use in class is kiln dried (or dried in an oven). Why is this important? What would happen to our clock parts if the lumber was green?
- Describe the difference between quartersawn and plainsawn lumber? Why would someone use quartersawn lumber instead of plainsawn lumber?
- Describe some common defects and warping that occurs in lumber, and what they are caused from.
- Describe what a board foot is. Why is this important?
- VOCUABULARY from the article must be included in your reflection

Technology Education Departmental Writing Rubric

	10	7	4	0
Topics	<ul style="list-style-type: none"> • All topics are covered in detail 	<ul style="list-style-type: none"> • Most topics are covered 	<ul style="list-style-type: none"> • Some topics are covered 	<ul style="list-style-type: none"> • No topics are covered
Organization	<ul style="list-style-type: none"> • Complete and proper organization of components • Logical progression of ideas • Appropriate transitions between contents 	<ul style="list-style-type: none"> • Vague organization of introduction, body, and conclusion • May require re-reading to follow ideas • Some use of transitions 	<ul style="list-style-type: none"> • Poor attempts of organization • Connections between contents are confusing or missing • No transitions 	<ul style="list-style-type: none"> • No organization • Difficult to follow • Poor continuity
Style and grammar	<ul style="list-style-type: none"> • Control of writing grammar enhances readability • Masterful sentence structure • No spelling errors, capitalization, punctuation, and usage • Excellent word choice 	<ul style="list-style-type: none"> • Few errors appropriate grammar • Correct sentence structure • Few errors in spelling, capitalization, punctuation, and usage • Appropriate word choice 	<ul style="list-style-type: none"> • Some errors in grammar • Simplistic sentence structure • Some errors in spelling, capitalization, punctuation, and usage • Poor word choice 	<ul style="list-style-type: none"> • Many errors in grammar • Incorrect sentence structure • Many errors in spelling, capitalization, punctuation, and usage • Faulty or incorrect word choice
Content	<ul style="list-style-type: none"> • Superior understanding of the topics • Ideas fully developed • Substantial examples or supporting ideas • Accurate information 	<ul style="list-style-type: none"> • Good understanding • Ideas mostly developed • Good development of examples or supporting ideas • Good information 	<ul style="list-style-type: none"> • Limited understanding • Ideas sufficiently developed • Poor development of examples or supporting ideas • Limited information 	<ul style="list-style-type: none"> • Absence of understanding • Absence of ideas development • No development of examples or ideas • Absence of information

