

The Ink Factory

Interesting News for Kids
An Edmonton Journal Raise-A-Reader Creation.

The Lumber Process

We have been using trees for building materials for many centuries. Over this time, the process used to manufacture building materials has evolved into a high-tech industry. Raw logs were once used to build with, but now we have machines to make smooth boards of various sizes and several types of wood products from wood shavings and wood strands. For example, computers and lasers are now used to determine how many boards can be cut from a log and giant machines can press wood strands into sheets of Oriented Strand Board (OSB).

At the mill, logs are unloaded and stacked outside. Logs are then pulled into the mill on conveyer belts, sorted according to size and scanned by a computer to determine how many and what size of boards can be cut from each log. The log then moves along the conveyer belt to the debarker and then through the saws. Once the boards are cut they are sorted again into piles according to size and then they are stacked. Stacks are moved to large kilns for drying. Once dried, the boards are planed, graded, sorted and stacked again. The last step in the process is wrapping and shipping.

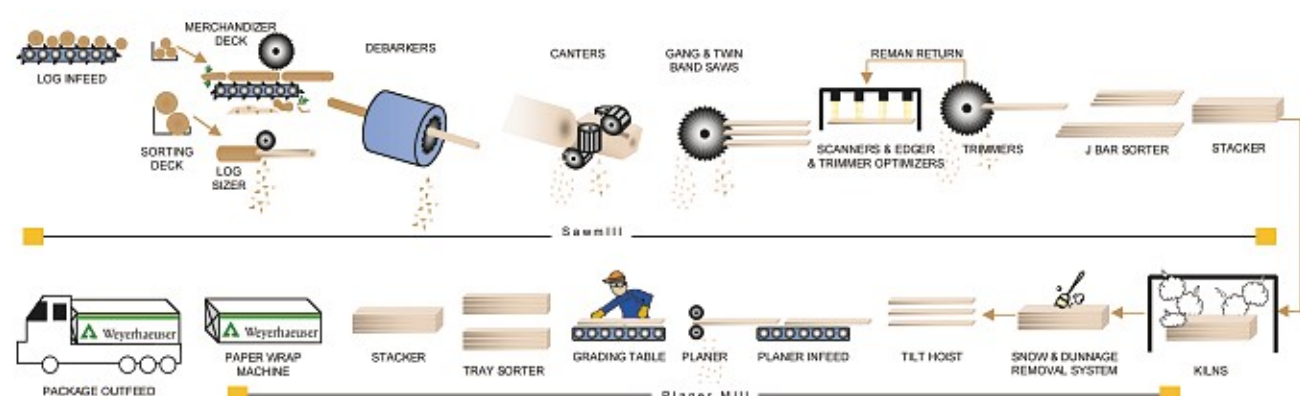
It's a long journey for a tree to be processed into lumber to be used in building homes, decks, treehouses, garages, businesses, and many other items. A lot of planning goes into deciding in which area of the forest the trees will be harvested. Environmental, scientific and forest management specialists all work together to determine which trees to harvest, keeping in mind what will best meet the needs of all forest users and the ecosystem. This includes streams, wildlife, birds, and soil. Some trees are selected for harvest, while some are left as protection and habitat for wildlife and also to protect the water supply.

No part of the tree is wasted. Bark and sawdust gathered during sawing and planing of boards are burned to produce steam and power to operate the mills.

The job is not fully completed though, until new tree seedlings are replanted in the forest area where the trees were harvested from—usually within a year of harvesting. This way we ensure forests are always there for wildlife and birds; for our recreation and a small percentage for wood to build all the things we need.

Selected trees are cut down with a machine called a *Fellerbuncher*, the limbs are removed with a *Delimber* and then the logs are moved to the roadside with a *Skidder*. From there they are loaded on a logging truck and delivered to a saw mill.

Inside the sawmill



Merchandizer Deck cuts full length stems into logs of 20 feet or less.
Log Sizer reduces large logs to less than 28 inches in diameter.
Debarkers removes bark from logs.
Canters chips off four sides of the log to make it a rectangular shape.
Edger Optimizer electronically scans boards and edges them.
Trimmer Optimizer Scanner electronically scans boards for trim decisions.
Trimmer trims boards using decision from Optimizer.
Reman Return returns defective boards to be remanufactured.
J-Bar Sorter sorts boards by width and length into bins.
Stacker stacks boards into packages to take to the Kilns.
Kilns high temperature ovens that dry the wood.
Snow & Dunnage Removal cleans the top of the package before entering the Planer Building.
Tilt Hoist loads lumber onto the Infeed Table and removes stickers between the board layers.
Planer Infeed Table brings rough boards into the Planer mill.
Planer planes boards to make them smooth.
Grading Table boards are graded into separate lumber grades.
Tray Sorter sorts finished lumber by grades for stacking.
Stacker & Strapper stacks finished lumber and straps it.
Paper Wrap Machine wraps the lumber package.
Package Outfeed packages go out to the yard for shipment.

WIN ME



What can you make with 1 tonne of wood?

- | | |
|--|---|
| Toothpicks
<input type="radio"/> 12,000
<input type="radio"/> 7,500,000
<input type="radio"/> 10,000,000 | Hockey sticks
<input type="radio"/> 1,689
<input type="radio"/> 2,350
<input type="radio"/> 3,200 |
| Dining room tables
<input type="radio"/> 1
<input type="radio"/> 25
<input type="radio"/> 12 | Baseball bats
<input type="radio"/> 500
<input type="radio"/> 900
<input type="radio"/> 1200 |

Choose the correct answers. The first 5 correct entries will receive a stuffed Weyerhaeuser bear. Mail to Weyerhaeuser Contest, Edmonton Journal, Box 2421, Edmonton, AB T5J 2S6 or send your answers email to wanda.dennelly@weyerhaeuser.com. Deadline to enter Wednesday, July 7th by 4:00 pm. Winners will be contacted by phone.

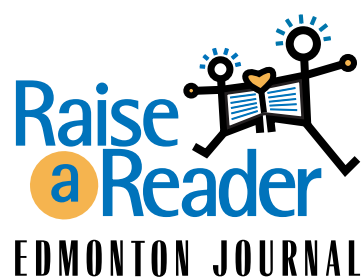
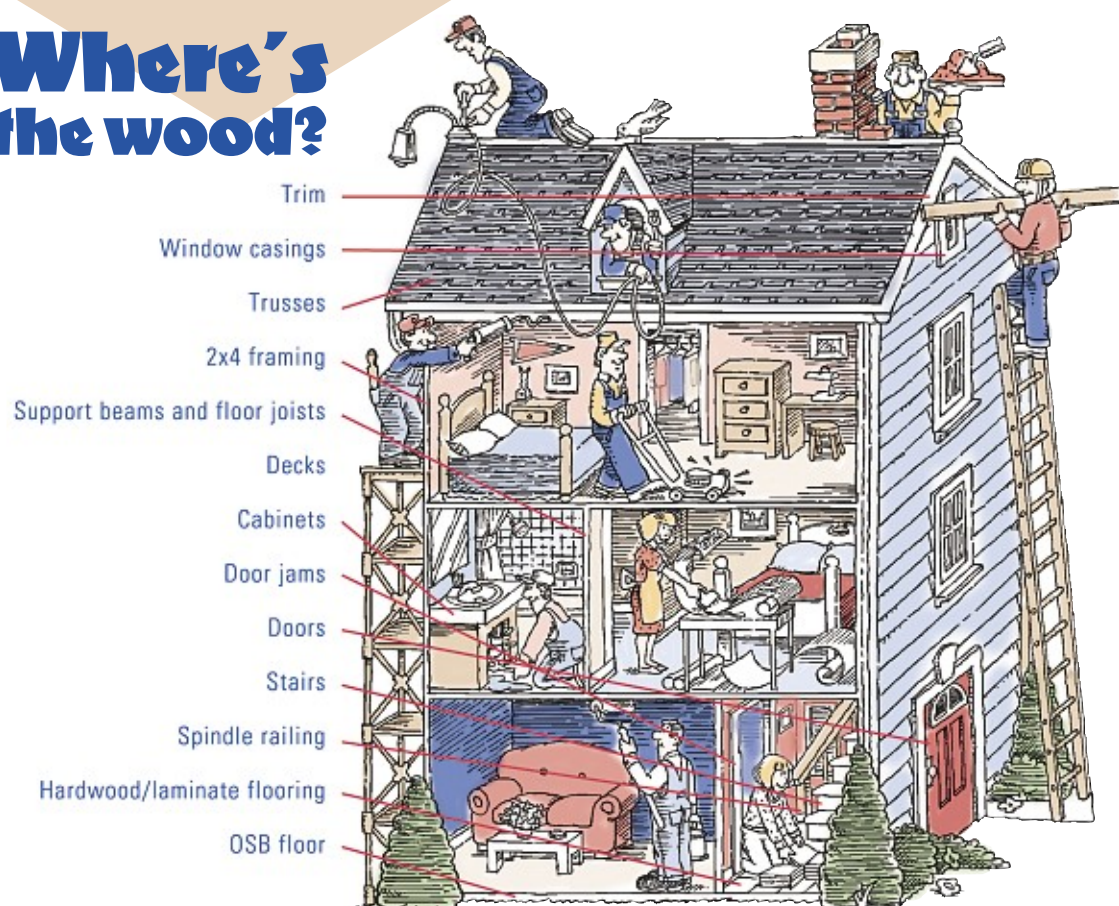
Complete the following

Name: _____
 Address: _____
 City/Town: _____
 Postal Code: _____
 Phone: _____ Age: _____

Benefits of building with wood

- Wood homes cost less to insulate and use less energy to heat and cool
- Engineered wood products (I-beams, etc.) have created new, ultra strong building materials that are sturdier than the original log
- Wood features in a home increase its selling value
- Comparing prices of wood, steel and concrete for construction-wood is better value
- Much less energy is used to produce wood building materials than other types of building materials
 - Wood is a renewable resource

Where's the wood?



Raise-a-Reader is a national CanWest Global initiative to increase awareness of and funds for children's literacy. In Edmonton the campaign supports the Edmonton Public Library, Centre for Family Literacy, the Edmonton Oilers Community Foundation and the Canadian National Institute for the Blind. For more information visit www.raise-a-reader.com

Thanks

This Ink Factory page is brought to you by Weyerhaeuser. Thanks to the Alberta Forest Products Association, Inside Education and Alberta Sustainable Resource Development for assistance with facts.



Weyerhaeuser
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