

## **Wood Products PPT Teachers notes**

This presentation will help students differentiate terms used in wood manufacturing and provides insight into the manufacturing processes.

**#2** Whole logs need minimal milling prior to use. Bark is removed in almost all uses.

**#3** Lumber – solid wood, 6 min. video of lumber mill. Here are some things you might want to know:

- Band Saw is a continuous loop of metal a few inches wide with teeth on both side edges - saws wood going either direction
- Gang Saw – ridged saw blades with teeth on one edge fixed together in groups (or gangs), moving up and down in this case. Gangs cut several boards at one time while log is being pushed through and can be set for different thicknesses.
- Planer – evenly shaves both surfaces of boards to preset thickness with relative smoothness.
- Kiln – Oven like room or building where excess moisture is “baked” from stacks of boards to reduce warping and twisting. Standard result is 10-12% moisture for lumber yard sales.

**#4, #5** – Some common wood products made in specialty milling operations. Toothpick manufacturing video ~5 min (video links page has others like clothespins if time allows later)

**#6** - 6 min video of manufacturing Oriented Strand Board. This video repeats several of the terms used in other lessons like “debarking” and “bucking” and shows the steps of the process. “Orienting” the stands means the wood fibers in each layer lay in the same direction. By layering with strands that are cross-wise or perpendicular, the strength of the final product is increased. It also mentions again that trees are a renewable resource.

**#7** Compares the appearance of “remanufactured” wood products used for construction and furniture and describes differences.

**#8** Paper products are made with the smallest wood fibers that are “pulped” with water then pressed and dried. Sometimes other fibers such as cotton, linen, or even onion skins are added to make the finest grade of papers.

**#9** Students will move on to examining classroom for wood products.