

WEEK: SEVEN (7)

DATE:

CLASS: JSS 2

TOPIC: PRODUCTION AND PROCESSING OF MATERIALS (WOOD)

PRODUCTION AND PROCESSING OF MATERIALS (WOOD)

Forest provides trees, and trees provide timbers or woods. Timber or wood is a solid fibrous material obtained from the trunk of trees.

KEY TERMS RELATED TO WOOD PROCESSING

1. **Growth:** this means the gradual increase in size of a tree per time. Trees grow from when they are planted to their harvestable size for wood or timber.
2. **Felling:** This is the process of bringing down (harvesting) timber trees, usually with axe or chain saw machines.
3. **Processing:** This involves the removal of the branches of a tree and its' other unwanted parts.
4. **Conversion:** This means turning a log (wood) into timber brands and planks. This is usually done in a saw mill.
5. **Seasoning:** This means drying the harvested timber to reduce its' moisture content. Seasoning also prevents warping and rotting in timbers.

PROPERTIES OF A GOOD TIMBER

The properties of a good timber includes that;

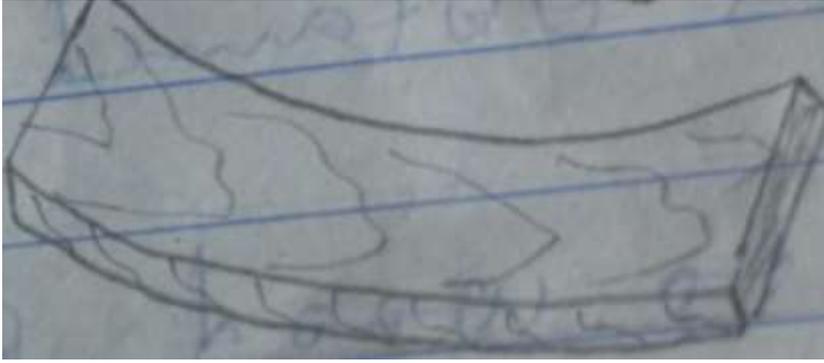
1. It must be hard and well-seasoned.
2. It must be durable.
3. It must have low moisture content.
4. It must have no cracks, knots or any other defects.
5. It must have uniform color and grains (the patterns on the timber).

COMMON TIMBER DEFECTS

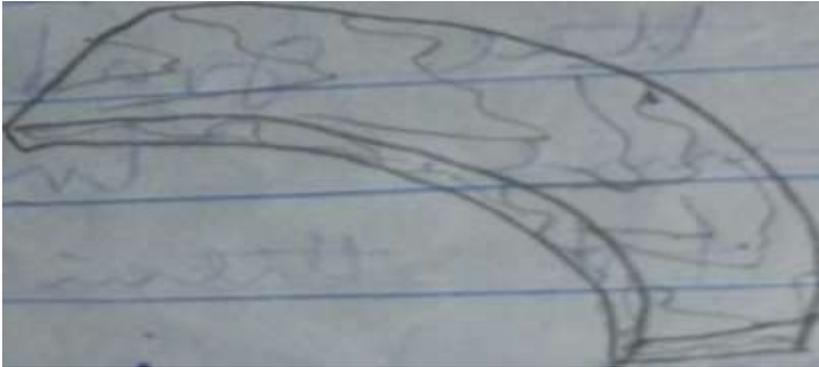
1. Cupping



2. Bowing



3. Crooking



4. Twisting



5. Knot and crack.



TIMBER TREATMENT AND PRESERVATION METHOD

Timbers are treated to preserve them and make them last longer. Some timber treatment materials include:

1. **Creosote tar:** This is a dark, strong-smelling liquid that is used on outside timbers, such as fences and poles, to prevent rotting. It is made from coal or petroleum.
2. **Oil:** Furniture oil is a special thin oil that is made for use on wood. It is used on inside timber and furniture to prevent drying out and cracking and splitting.
3. **Vanishing:** This is a form of protection coating on the outside of wood, and it stops moisture from getting into the timber.
4. **Paint:** This is used to hide any timber defects and to change its color.

IMPORTANCE OF TIMBER TREATMENT

Timbers are treated to;

1. Stop them from warping and splitting.
2. Prevent them from rotting.
3. Prevent moisture from getting into them.
4. Keep insects, pest (wood borers) away or kill them when they are already in the wood.
5. Make the finished timber look more attractive.
6. Change the colour or appearance by staining or painting them.
7. Increase their market value etc.

Assignment

1. **What is an ore?**
2. **Define smelting.**