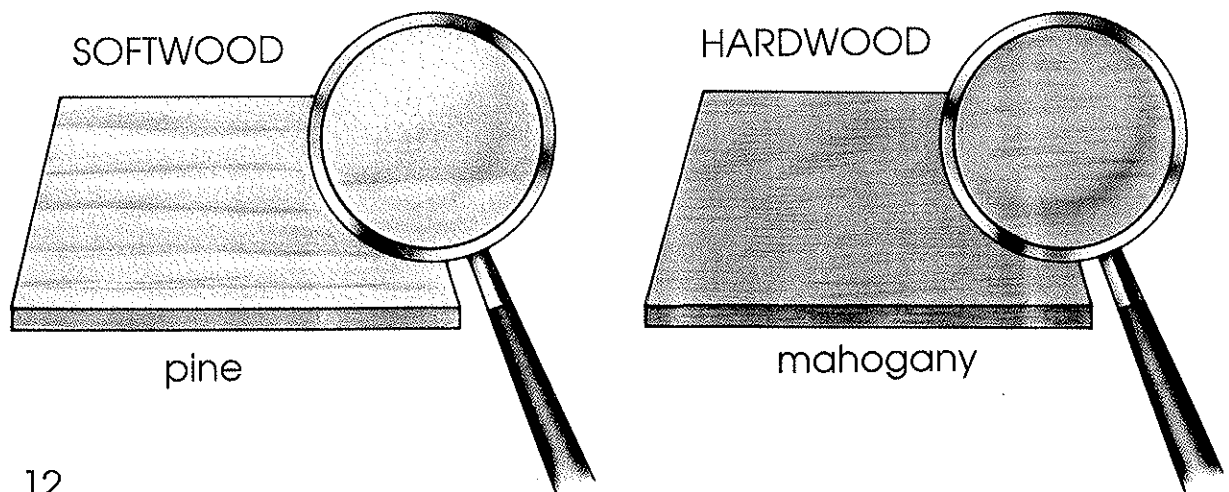



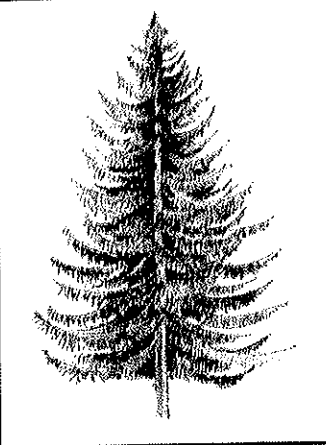
# Different kinds of wood

You can tell different kinds of wood from their grain. The grain is the pattern of tiny parallel lines you can see on a piece of wood. If the lines are close together, the wood is "close-grained." If they are wider apart, it is "open-grained."

Different types of wood are used for different jobs. Many softwoods, like pine and spruce, are open-grained. They are cheaper to buy and are more common than close-grained hardwoods. Softwoods are used to make everyday objects like kitchen furniture, shelves, and flooring.

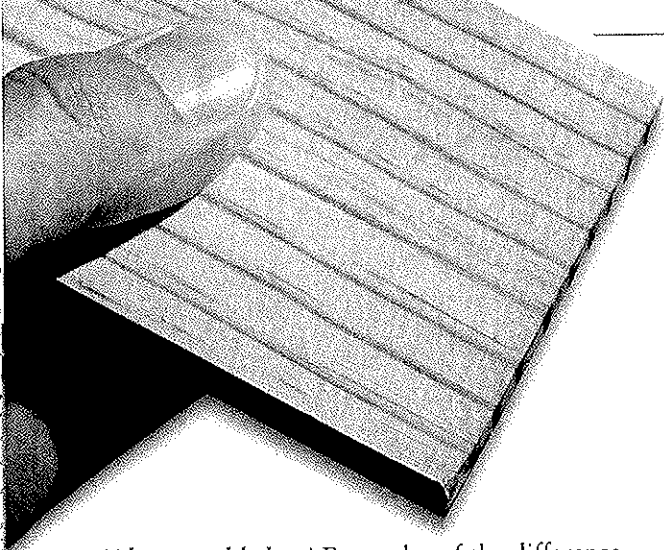
*A close-up view of a hardwood and a softwood. What differences can you see?*



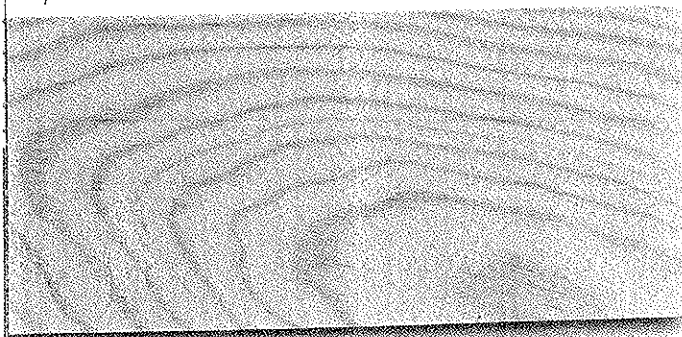
HARDWOODS	Typical appearance
<p>Balsa: A lightweight wood that is used for insulation and model making.</p> <p>Beech: Strong, easy to work with, and used for tools, furniture, gym equipment, and flooring.</p> <p>Oak: Hard and strong and used for furniture, paneling, shipbuilding, and fences.</p> <p>Teak: A hard-wearing wood used for furniture, chests and boxes, and shipbuilding.</p> <p>Walnut: Polishes well and used for cabinetmaking, paneling, and furniture.</p>	
SOFTWOODS	
<p>Cedar: Lightweight and used for paneling, fences, and roof coverings.</p> <p>Cypress: Does not easily decay and used for flooring and building.</p> <p>Larch: Strong and heavy and used for boat building and fences.</p> <p>Pine: Easy to work with and carve and used for furniture, paneling, boxes, buildings, and fences.</p> <p>Spruce: Easy to work with and used for ladders, oars, kitchen cabinets, musical instruments, and buildings.</p>	

Many hardwoods, like mahogany and ebony, are close-grained. Some hardwoods take hundreds of years to grow and are very expensive. They can be made into furniture that will last for many years. Furniture is also made from cheaper woods like pine, and is covered with a sheet of expensive wood called a veneer.

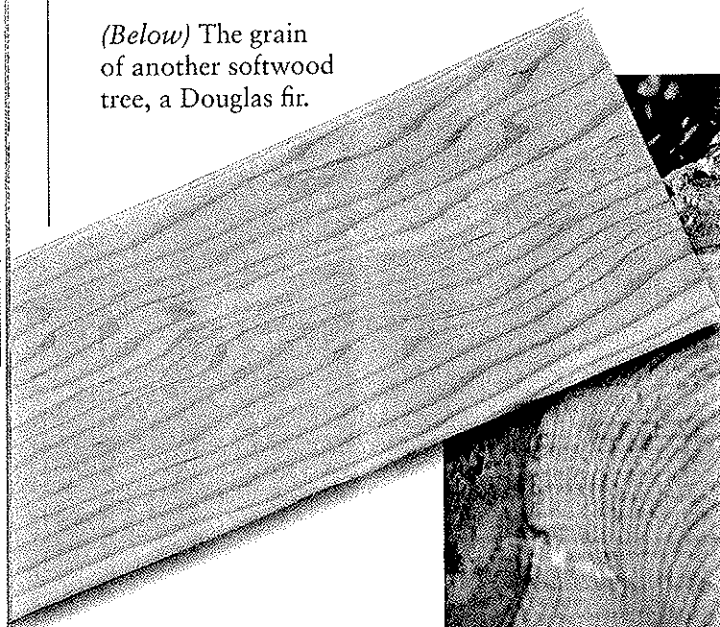
*Some common hardwood and softwood trees and their uses.*



*(Above and below)* Examples of the difference in appearance of a white pine when cut in two different directions and showing different grain patterns. White pine is a softwood.



*(Below)* The grain of another softwood tree, a Douglas fir.



## Kinds of wood

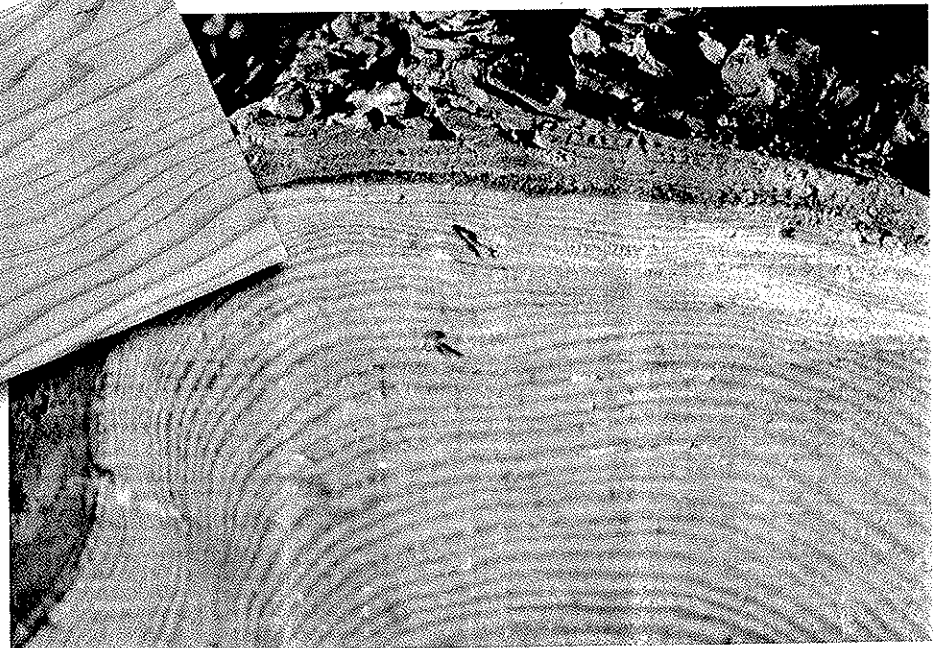
Each kind of tree produces its own characteristic kind of wood. However, trees can be broadly classified into just two groups: **SOFTWOODS** and **HARDWOODS**.

### Softwood

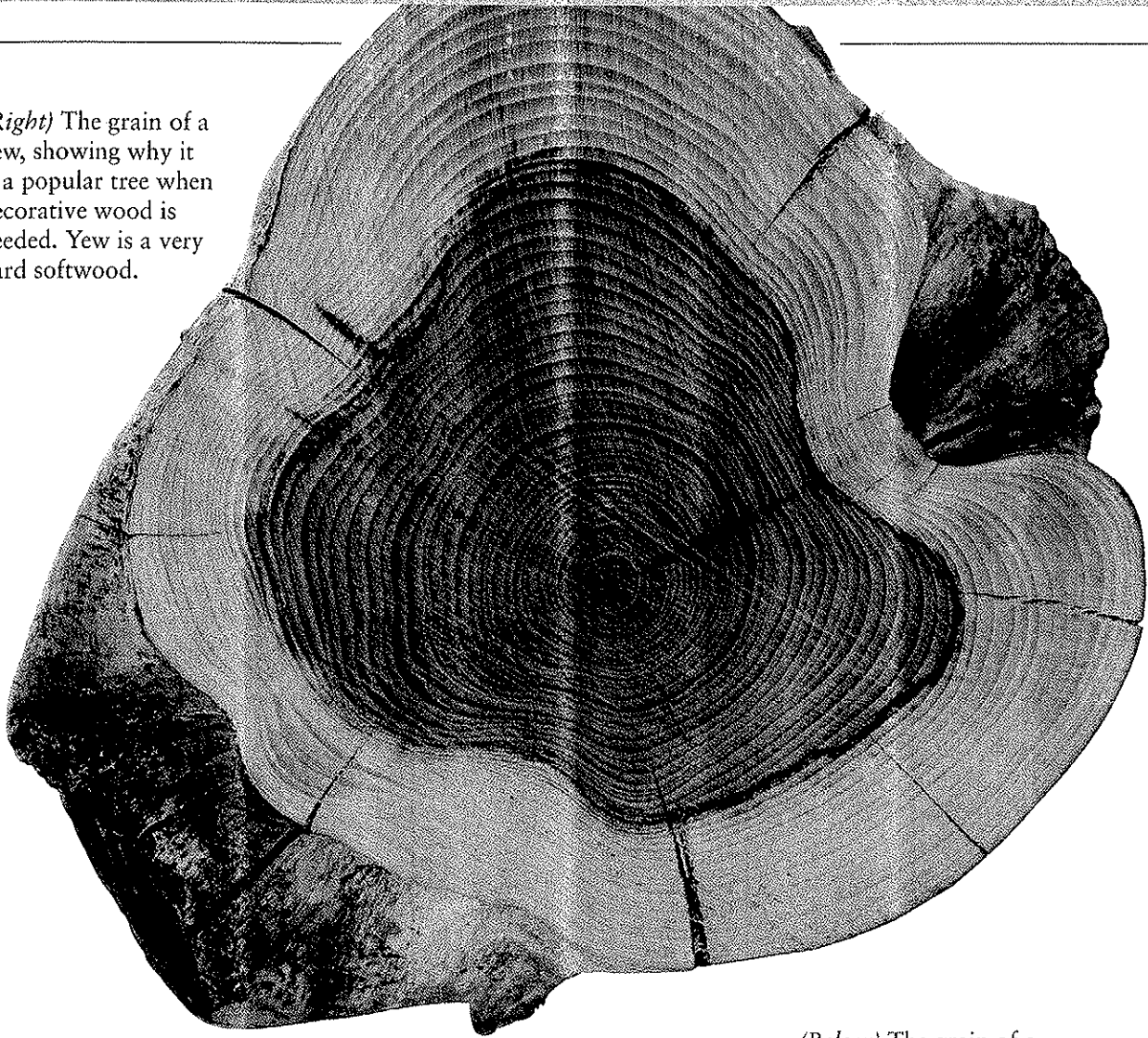
Softwood is the name for timber that comes from a coniferous (cone-bearing) tree. The main conifers are pine, spruce, fir, cedar, and redwood. In fact, the word does not really refer to the softness of the wood—even though many softwoods are indeed soft—since some softwoods, for example, yew, are hard.

Softwoods are used for about four-fifths of the world's building timber. They mainly grow either in cooler regions or warm, dry parts of the world.

*(Below)* This is a section through the trunk of a softwood tree. Notice the widely spaced rings and the "coarse" grain. They are produced by the large wood cells and rapid growth associated with most softwoods.



*(Right)* The grain of a yew, showing why it is a popular tree when decorative wood is needed. Yew is a very hard softwood.



*(Below)* The grain of a poplar—a hardwood tree.

## Hardwood

Hardwood is the name for timber from flowering trees—those with broad leaves. Many broad-leaved trees are found in the midlatitudes and the tropics, especially those areas with rainfall throughout much of the year.

Many hardwoods grow much more slowly than softwoods, and so their wood is more dense than softwoods. Trees such as oak and beech are typical hardwoods of the midlatitudes, while teak is a hardwood from tropical forests. Some hardwoods, for example, balsa, are softer than softwoods. The grain of many hardwoods makes them prized for quality furniture.

