



TREE SCHOOL

Intermediate - Introduction

AN INTRODUCTION TO WOOD PRODUCTS AND FORESTRY

WHY WOOD?

Before we explore forestry - let's consider why we use wood at all.

The following intermediate lessons explore forest products and their connection to our lives. The curriculum connections range from science , socials and CAPP.

This is a partial list of new words found in the next five lessons. Some of the more difficult scientific words may be of limited value to the students but are here for the teacher's interest.

VOCABULARY LIST:

bark:	outer "skin" of the tree. The bark is composed of two layers: outer bark, which protects the tree from insects, disease and injuries as well as cold and heat; inner bark or "phloem", which transports sap made by the leaves down the tree.
biodegradable:	capable of being broken down especially into innocuous products by the action of living things (as micro-organisms).
carbon dioxide:	atmospheric gas. Produced by animal respiration. Also a by-product of combustion and decomposition.
cellulose:	chief constituent of the cell walls of all plants. Cellulose is by far the most abundant organic substance found in nature. Used in making paper, cloth and other fibrous products. The length of these cells (or wood fibres) in trees make them very valuable in paper making.
distillation:	a lab technique used to purify a substance, to remove a solvent (a liquid that a substance is dissolved in) from the substance, or to separate two or more components in a liquid mixture.
economic:	of, relating to, or based on the production, distribution, and consumption of goods and services
environmental:	the complex of physical, chemical, and biotic factors (as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival
fermentation:	the chemical decomposition of a substance, usually a carbohydrate, due to the action of enzymes produced by bacteria, yeasts or molds. Fermentation usually occurs in an oxygen-free environment, and typically involves the conversion of starch or sugar into ethyl alcohol.
Forest Practices Code:	in British Columbia the Forest Practices Code is a term commonly used to refer to the Forest Practices Code of British Columbia Act; the regulations made by Cabinet under the act and the standards established by the chief forester.



TREE SCHOOL

Intermediate - Introduction

lignin:	occurs with cellulose in plant material, and which is considered to be largely responsible for the strength of the wood. Helps to bind wood fibres together. Dark colouring - usually removed from pulp or paper by various bleaching processes to improve papers brightness.
lignosulphates:	a group of chemicals that are formed when lignin reacts with sulfite pulping liquors.
photosynthesis:	formation of carbohydrates from carbon dioxide and a source of hydrogen (as water) in the chlorophyll-containing tissues of green plants exposed to light.
protected area:	areas such as provincial parks, federal parks, wilderness areas, ecological reserves, and recreation areas that have protected designations according to federal and provincial statutes. Protected areas are land and freshwater or marine areas set aside to protect the province's diverse natural and cultural heritage. (Ministry of Forests glossary)
recycle:	waste material is converted into usable products.
renewable:	capable of being replaced by natural ecological cycles.
sap:	the product of photosynthesis in green plants. Food or sugar that the plant makes in the leaves and uses to grow.
tall oil:	by-product of kraft pulp. (The swedish word for "pine" is "tall".)
toxic:	poisonous
wood alcohol:	methyl alcohol or methanol - produced from distillation of wood. Used as a solvent and raw material for making other chemicals.
wood sugar:	these carbohydrates are produced in the wood pulping process.
working forest:	where forest companies or the Ministry of Forests manage the forest for many values including timber. (Logging is part of the plan.)

From the Web:

WWW.Websters dictionary ;

Bookbinding and the Conservation of Books - A Dictionary of Descriptive Terminology ;

Ministry of Forests Web Glossary; Biotech Life Sciences dictionary