

Rubber



Getting Latex From a Rubber Tree

The tires on a bicycle or a car are made of natural rubber. Natural rubber is a plant product. It comes from rubber trees that grow in hot, moist climates.

Natural rubber is made from a milky liquid called **latex**. When slits are made in the bark of a rubber tree, latex oozes out. Then the liquid can be collected. A rubber tree can produce latex for up to 30 years.

Rubber has many properties that make it a very useful material. Rubber is elastic. An elastic material can stretch and go back to its original shape. It can bounce and absorb shocks. Rubber tires can roll over holes and bumps in a road without being damaged. Because rubber lasts a long time, rubber products do not wear out quickly. Because rubber is waterproof, it is used to make boots, raincoats, gloves, and hats.

Finally, rubber does not let electricity pass through it. So it is used to cover, or insulate, wires in electric appliances. This protects people from electric shock and prevents fires.

Answer True or False.

1. Natural rubber comes from a tree. _____
2. Rubber is not an elastic material. _____
3. Rubber trees grow in hot, moist climates. _____
4. Rubber lets electricity pass through it. _____
5. Rubber is made from a milky liquid called latex. _____

Review

Part A

Use the words below to complete the sentences.

| | | | |
|------------|---------|-----------|---------|
| aspirin | cotton | latex | quinine |
| cellophane | elastic | medicines | Rayon |
| conifers | homes | oak | wood |

1. Today, wood is mostly used to build _____.
2. Most paper is made from _____.
3. Softwood comes from trees called _____.
4. A common kind of hardwood is _____.
5. Natural rubber is made from a milky liquid called _____.
6. The natural plant fiber used most in the United States is _____.
7. A drug that was used to treat malaria is _____.
8. Because rubber is _____, it can stretch and go back to its original shape.
9. Wood pulp is used to make a thin, clear material called _____.
10. Most _____ today are made from chemicals in laboratories.
11. _____ can be made from wood or from cotton.

Part B

Draw lines to match the plant products with their uses.

- | | |
|--------------|---------------------------|
| 1. aspirin | make cloth |
| 2. cotton | relieve pain and fever |
| 3. wood | make heart beat regularly |
| 4. digitalis | build homes |
| 5. wood pulp | make paper |

* Cloth



Cotton Plant



Flax Plant

The label inside a shirt tells what material the shirt is made of. Materials such as cotton and linen are natural plant products.

Cotton is the natural fiber used most in the United States. Cotton plants grow in warm, moist climates in the United States and many other countries. Cotton fibers form inside a boll, or pod, after the flowers of the plant die. The boll takes about two months to mature. Then it bursts open. The white cotton fibers are tangled with seeds. To make cotton cloth, the seeds must first be removed from the fibers. Then the fibers are spun into thread. Finally, the thread is woven into cloth.

Linen is a natural fiber made from the flax plant. Flax grows in cool climates where summers are rainy. The flax fibers grow under the woody part of the plant stem. To make linen from flax, the fibers are separated from the stems. Then they are spun into linen thread. Linen is often used to make tablecloths and napkins.

Rayon is another material made from plant parts. It can be made from wood or from cotton. Wood pulp or short cotton fibers are treated with chemicals to make a thick liquid. This liquid is made into rayon threads that are woven into cloth.

A Fill in the missing words.

1. Materials such as cotton and linen are _____ (artificial, natural)
2. _____ is the natural fiber used most in the United States. (Cotton, flax)
3. Linen is a natural fiber made from the _____ plant. (cotton, flax)
4. Flax grows in cool climates where summers are _____. (rainy, hot)
5. Wood pulp or short cotton fibers can be treated with chemicals to make _____. (linen, rayon)

B Answer True or False.

1. Materials such as cotton and linen are plant products. _____
2. Cotton grows in cold climates. _____
3. Cotton fibers form inside a boll after the flowers of the plant die. _____
4. Flax fibers grow under the woody part of the plant stem. _____
5. Rayon is made from flax stems. _____
6. Flax grows in cool climates where summers are rainy. _____
7. Linen is made from wood pulp or short cotton fibers. _____

C The steps below describe how cotton is made. Number the steps in the correct order. The first one is done for you.

- _____ Then the fibers are spun into thread.
- _____ The seeds are removed from the fibers.
- 1 Cotton fibers form inside a boll.
- _____ The thread is woven into cloth.
- _____ The boll matures and bursts open.