Name: Date:		Date:	
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Ginseng, The Elixir of Life

Ginseng is a root of mythical powers used in oriental countries, particularly China, as a remedy for many diseases. People claim it can relieve stress and fatigue, both mental and physical. Called the "elixir of life," ginseng is also used to alleviate joint stiffness and improve athletic performance.

Ginseng is used in soups, as a seasoning for various dishes, and as a condiment (like salt and pepper). The flavor is said to be similar to licorice.

White settlers first discovered wild ginseng near Montreal, Canada in 1716. In colonial times, wild ginseng could be found in southern Canada, across the northern United States, and even as far south as Kentucky and West Virginia.

Native Americans knew the plant by many names and used the root for medicinal purposes. To the Cherokee medicine man, ginseng was known as "little man" because its root resembles the human form. The Chippewa, Creeks, Pawnees, Iroquois, and Sioux also used ginseng as medicine.

The greater the resemblance to the human figure, the more valuable the root. If the two "legs" are of equal length, the root is considered male. If unequal—female.

After the Revolutionary War, a ship, "The Empress of China," left New York for Canton loaded entirely with wild ginseng. Between 1820 and 1903, nearly 17 million pounds of wild

American ginseng was exported to China. The U.S. is currently the third largest exporter of ginseng in the world.

Most of the ginseng grown in the United States is exported to China. Ninety-five percent of the ginseng raised in the U.S. is grown in Wisconsin.

Ginseng is a deciduous perennial (like a maple tree). The leaves begin to turn a reddish color in fall which indicates the plant is going dormant for the year. In the wild, the leafy stalk dies back each year and a "scar" is left on the neck of the plant. The number of scars indicates the age of the plant. The more scars, the older the plant, and the more valuable the root. Cultivated ginseng does not have the scars characteristic of wild ginseng.



Nar	me: Date:	
G	inseng, The Elixir of Life (cont'd)	
sma red	After the first year, ginseng seedlings are two to three inches tall and have only a few all leaves. Plants must be at least three years old before the pale green flowers and berries appear. The berries, which contain the seeds, are hand-picked in fall and storlap bags for future planting.	bright
is red dry gins	It takes between four and six years before ginseng roots can be harvested. When give eady to harvest, the roots are removed from the ground, cleaned, and hung on racks in heated sheds. One hundred pounds of fresh roots yields about 25 pounds of dried seng. The plants are harvested in mid- to late-September after a good hard frost which sup the roots.	to d
gins	On a good acre, about 2,000 pounds of ginseng can be harvested. The price of culti- seng can vary greatly depending on many factors: the quality of the ginseng, the amailable on the market in any given year, and the demand by consumers.	
	Once land is used to grow ginseng it cannot be used for that purpose again. Other cold do fine, but ginseng will not grow.	rops
	Although cultivated American ginseng has been a valuable export crop for farmers in ited States, its value is considered to be far less than that of wild Oriental ginseng.	the
1.	Give an example of a condiment not listed in the article.	
2.	What do people do with ginseng?	
3.	What characteristics make the root more valuable?	
4.	Give two reasons listed in the article why it would be expensive to raise ginseng.	
5.	Give an example of a deciduous perennial not listed in the article.	
6.	Where is most of the ginseng grown in the United States and where is it sold?	

Nan	ne: Date:
Na	ature Provided the Idea
faste	We take the invention known technically as "hook and loop eners" for granted, but this marvelous fastener hasn't been und forever.
idea woo trou exar	n 1948, a Swiss engineer and inventor, George De Mestral, got the for making a new type of fastener after taking a walk in the ds. Frustrated with picking burrs from his dog and his wool sers, he wondered what made the burrs stick so tightly. When he mined them under a microscope, he discovered they were made of dreds of tiny hooks that latched onto anything loopy.
Mes and tight	Realizing there might be a way to use this idea to make a new type of fastener, De stral worked with weavers experimenting with ways to weave strips of nylon into hooks loops. By forming thousands of tiny hooks on one piece, he discovered it would attach by to thousands of minute loops on another piece. To name his new product, De Mestral bined the French words "velvet" and "crochet" and came up with the word V elcro.
of co	To show the strength of Velcro [™] , David Letterman, host of a late night TV show, had a pair overalls make of hooks. Then he jumped from a trampoline onto a wall covered with s. Guess what happened when he landed on the wall!
work	Not only has it replaced buttons, zippers, and shoestrings, V elcro [™] has helped astronauts king in weightlessness. Apollo astronauts wore shoes with strips of V elcro [™] that stuck to strops on a carpeted floor.
1.	Explain how De Mestral's walk in the woods led to the development of V elcro™.
2.	In this article, what does "minute" mean?
3.	List five or more products that use Velcro™.
	Suggest one new use for Velcro [™] . Explain what it would replace and why it would work better.