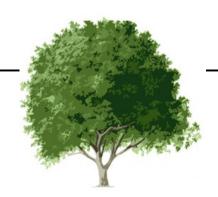
Name:



## Walnut Wondering



by Cindy Breedlove

Take some cold weather. Add some water. Use a squirrel to get it all started. What will you get? A tender young tree from a very hard nut.

The squirrel started it by burying the nut. The walnut spends the cold season underground. Moisture begins to seep through a seam in the walnut's shell. The seed leaf, or cotyledon, (kot' a leed' en) soaks up the moisture.

Spring rains bring more moisture for the walnut to soak up. The cotyledon starts to expand. This swelling of the seed leaf pops the nutshell open. The primary root, or radicle (rad' i cal) then begins to grow down into the soil.

A shoot bearing true leaves is next to grow. It pushes up through the soil and is called the plumule (ploom' yool.) The plumule breaks through

the soil. The true leaves open to the sunshine and a tree begins to grow.

Why is it important for people to know how a walnut grows? People value the walnut tree. It provides nuts and lumber. The nuts are used for home baking and by the food industry. The lumber is a prized hardwood, used for furniture, paneling and many other items.

Tree farms grow the walnut tree to harvest the nuts, or to sell the lumber. They buy seedlings from plant nurseries. The nurseries must have enough seedlings to sell to all the growers. The nurseries need to know the best way to plant the nuts so that most of them will sprout and grow. For them, it is very important to know how a walnut grows.

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## **Walnut Wondering**

by Cindy Breedlove

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1.	What is the author's purpose for writing this article?  a. To entertain you with a story about squirrels and walnuts
	b. To explain where lumber comes from
	c. To teach us how walnut trees grow and why they're important
	d. To persuade you to plant a walnut tree
2.	Which sentence is written correctly?
	<b>a.</b> First a walnut has a cotyledon, then it grows a plumule, and finally it grows a radicle.
	<b>b.</b> First a walnut has a radicle, then it grows a cotyledon, and finally it grows a plumule.
	<b>c.</b> First a walnut has a plumule, then it grows a radicle, and finally it grows a cotyledon.
	<b>d.</b> First a walnut has a cotyledon, then it grows a radicle, and finally it grows a plumule.
3.	According to the article, what do walnut trees provide for people?
4.	Define plumule,

## **ANSWER KEY**



## **Walnut Wondering**

by Cindy Breedlove

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- **3.** According to the article, what do walnut trees provide for people?

Walnut trees provide lumber and nuts.

**4.** Define plumule,

A plumule is a shoot that grows out of the soil bearing true leaves.