

FOR 100 Worksheet: Chapter 4 – Tree Physiology

On the blank line in front of each term or phrase, indicate the matching item by placing the appropriate letter from the list below. (Each matching item is used exactly once.)

- _____ Primary growth
- _____ Secondary growth
- _____ Photosynthesis
- _____ Cork cambium
- _____ Phloem
- _____ Leaves
- _____ Physiology
- _____ Xylem
- _____ Vascular cambium
- _____ Nitrogen fixation

- A. Dead cells in vascular tissue of this type conduct water and nutrients upward through a tree
- B. Living cells in vascular tissue of this type conduct carbohydrates and other chemicals downward through a tree
- C. This type of growth increases the length of shoots
- D. This type of growth increases the diameter of trees
- E. Name of the chemical reaction that enables plants to capture energy from the sun
- F. This lateral meristem produces a tree's xylem and phloem
- G. Conversion of atmospheric nitrogen to forms usable by plants; occurs in root nodules
- H. Study of essential & characteristic life processes, activities, and functions
- I. These organs are responsible for most photosynthesis in trees
- J. This lateral meristem produces a tree's outer bark

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| T | F | Root length is increased by the type of growth termed "primary growth." |
| T | F | Mycorrhizae in trees contain tree and fungal tissues and are important for root uptake of water and nutrients. |