October 13, 2016

WHAT IS A TREE?

Criteria:

1. It must be **perennial** (long lasting).
2. It must have a **self-supporting trunk**.
3. The trunk must be made of **woody material**.
4. Usually **five to seven meters high**.

Anything else is a shrub. A **young tree** which has not yet reached adult height is called a **sapling**.

Tree	Plant
Perennial	Perennial, annual (yearly), or biennial (every second year)
Trunk	Stem
Woody material	Woody or non-woody material
Leaves or needles	Leaves
Flowers, fruit, seeds	Flowers, fruit, seeds

Parts of a Tree:

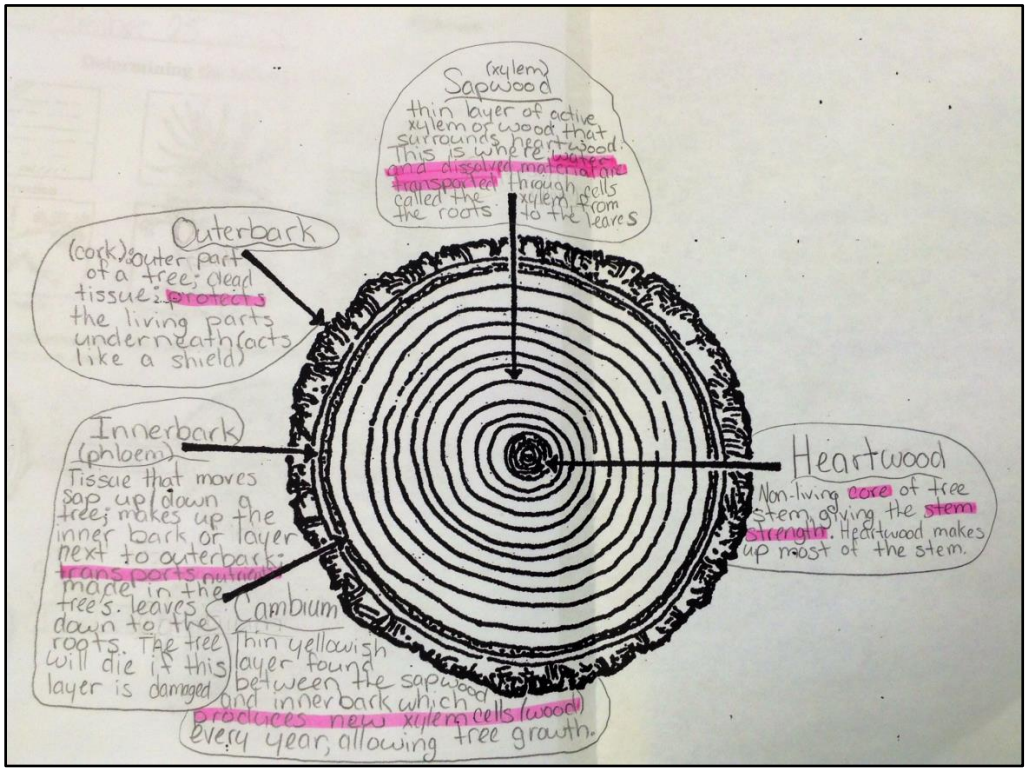
Outer bark (cork): outer part of a tree; dead tissue; **protects** the living parts underneath (acts like a shield).

Phloem: tissue that moves sap up/down a tree; makes up the inner bark or layer next to outer bark; **transports nutrients** made in the tree's leaves down to the roots. The tree will die if this layer is damaged.

Cambium: thin yellowish layer found between the sapwood and inner bark which **produces new xylem cells (wood)** every year, allowing tree growth.

Sapwood: thin layer of active xylem or wood that surrounds heartwood. This is where **water and dissolved material are transported** through cells called the xylem, from the roots to the leaves.

Heartwood: non-living **core** of tree stem, giving the **stem strength**. Heartwood makes up most the stem.



Picture courtesy of Caitlin S.