Nashua River Watershed Investigations for Grades K-8

Lesson # 4-3

Lesson 4-3 Treemendous Trees 4th grade (internal and external structures)

Grade Level & Standard: Grade 4
4-LS1-1 Construct an argument that animals and plants have internal and external structures that support their survival, growth, behavior and reproduction. (Examples: leaves, stems, bark, branches, flowers, fruit and seeds).

Objective: Students will work with a model tree (poster or fabricated tree) and assign parts and functions of a tree to the appropriate location. Then students will use tree part examples or a living tree to complete the data sheet.

Procedure:

1. Create a tree model on paper or using craft materials.
2. Hand out structure and functions cards to students. (see attached)
3. Have students put cards in appropriate locations and explain reasoning.
4. Take students outside to choose a living tree to investigate using Data Sheet 4-3 (attached) or indoors use examples of seeds, bark, leaves and roots.

Materials:

- One tree model made of brown felt or construction paper including roots, trunk with hole, branches. (students could make this prior to lesson)
- Tree label cards
- Example trees labeled (below).
- Examples of seeds, bark, leaves, roots for students to observe and draw.
- Living tree

Data Sheet: Treemendous Trees Grade 4 (attached)

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Treemendous Trees Grade 4 **4-3 Data Sheet**

Name_____

Tree structure	Draw the tree part below.	How does the tree part help the tree grow and survive?
leaf		
stem		
bark		
flowers		
seeds		
roots		

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Roots

Absorbs nutrients and water

Crown

Trunk

Bark

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Photosynthesis

Sunlight turns
water & carbon dioxide
into sugar & oxygen

Leaves

Make food for tree & provide shade

Buds

Next year's flower & fruit

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Shelter

Birds, mammals, & insects

Seeds & Nuts

Heartwood

Supports tree

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Xylem

Carries nutrients & water up

Phloem

Delivers food made in leaves to all other parts of the tree

Leaves

Provide food for animals

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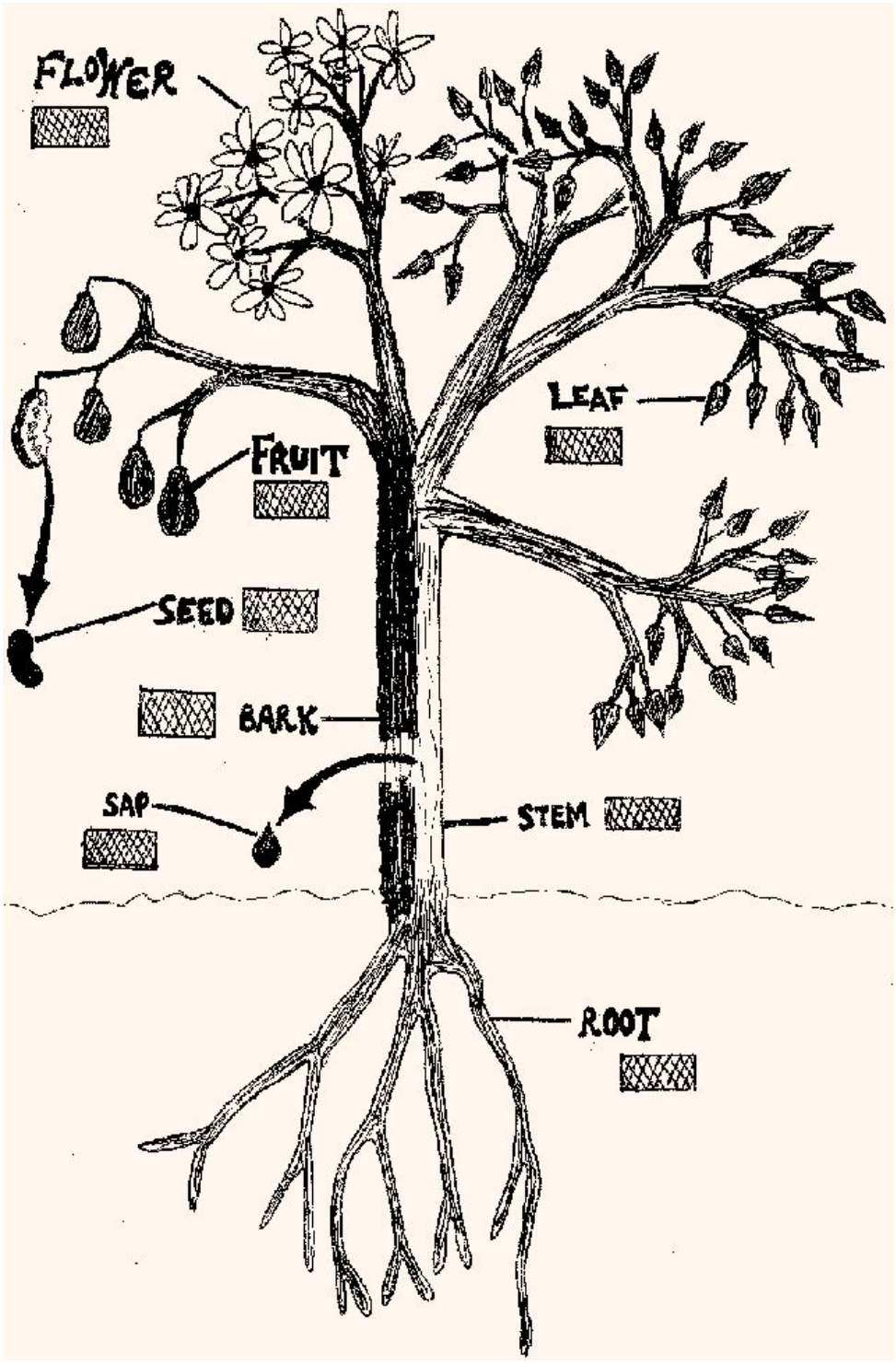
Examples of Trees with Labels



(www.angelfire.com)

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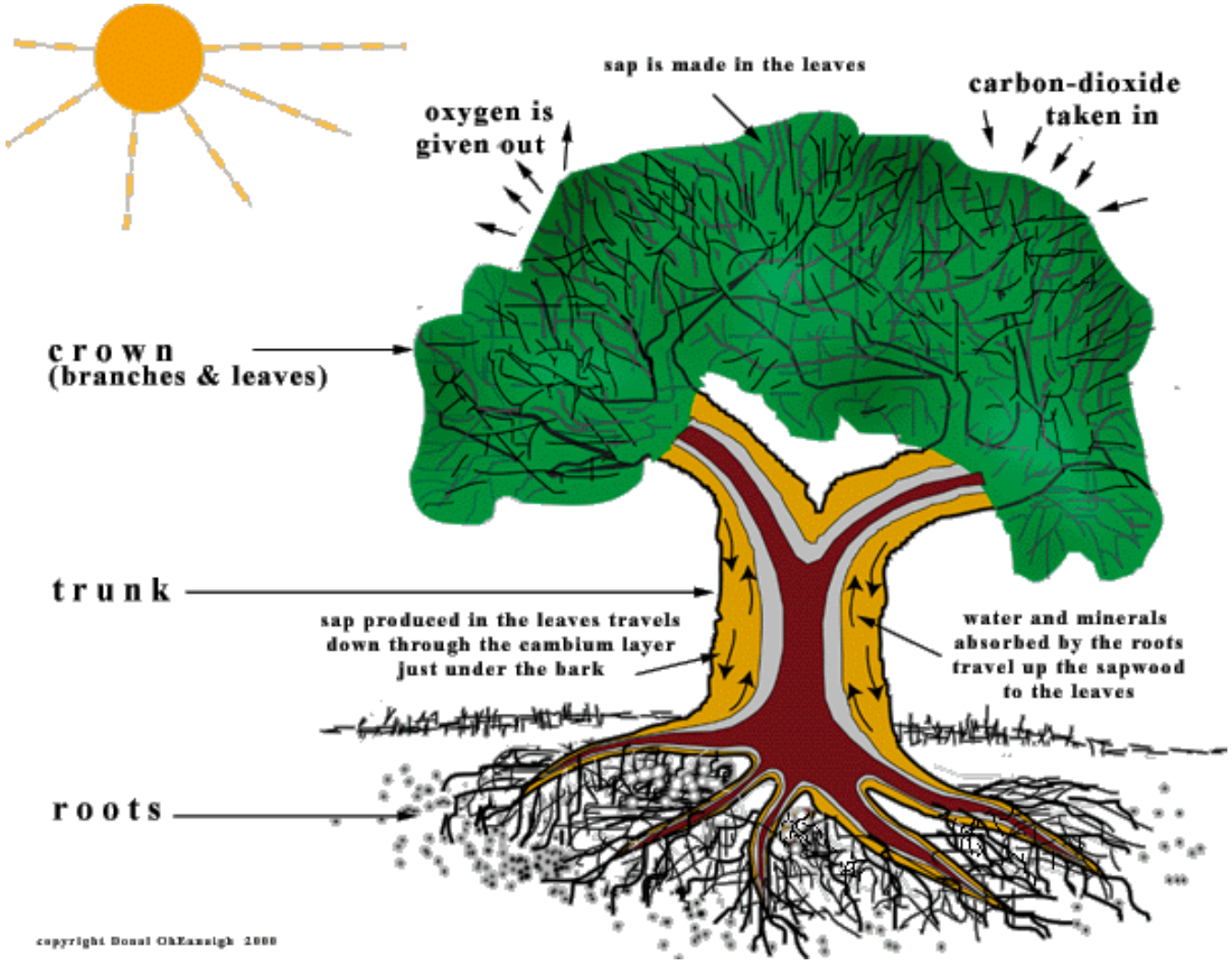

In this image, *xylem* is called sapwood. Water and minerals travel through *phloem* which is located under bark.

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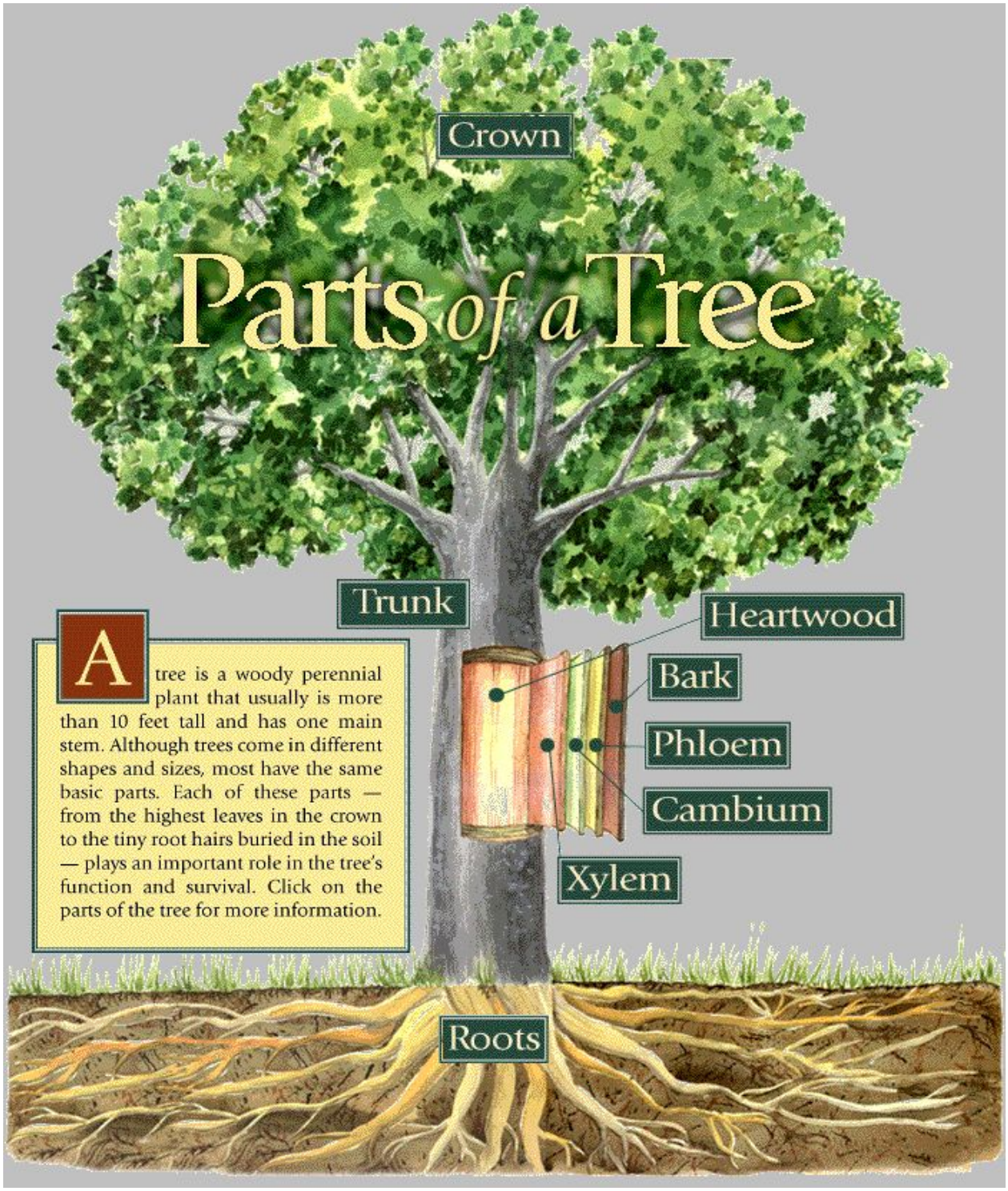

(https://www.ncforestry.org/media/Parts-of-Tree-Image.gif)

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