

Name:

Date:

Tree Pre-lesson:

Vocabulary

Trunk- The main stem of a tree

Bark- The protective “skin” of the tree

Roots- The structural support system of the tree. Absorbs the water and nutrients the trees require to sustain its life.

Branches- Extending from the trunk, the branches support and transport nutrients & water to and from the leaves to the rest of the plant.

Leaf- The organ that holds the chlorophyll which carries out photosynthesis, and the stomata that control the amount of water leaving the plant at a given time.

Photosynthesis- The process which plants absorb sunlight, water, and carbon dioxide through the chlorophyll to store energy in the form of glucose, releasing oxygen.

Transpiration- Crucial to the process of photosynthesis, plants carry water from the soil, through their roots, up through the stem and out the leaves where much water interacts with carbon dioxide to form glucose, and oxygen, or is evaporated, leaving the leaf as water vapor through the stoma.

Xylem- One way channels within the stems that carry water up the stem to the leaves.

Phloem- Two way channels that carry water and nutrients throughout the plant

Tree-ring- a ring that forms within the stem each year that marks its growth. The light portion being from the spring (a time of rapid growth) and the dark ring from the fall & winter where there is little to no new growth happening.

Bud- the formation of new growth of stems or leaves.

Stoma- tissue facilitates gas exchange- allows the movement of water vapor out of the leaf, and oxygen into the leaf.

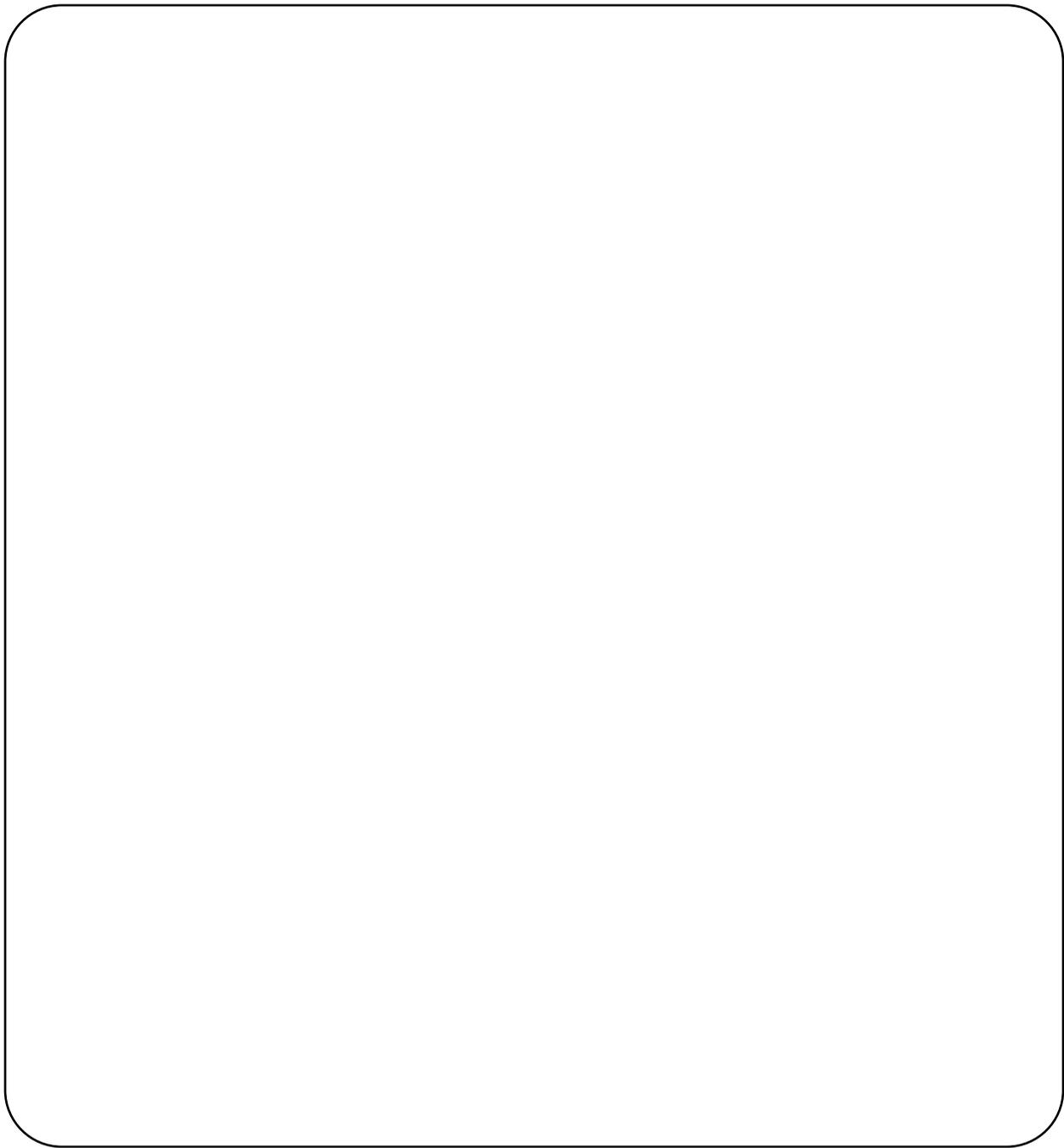
Evergreen- Trees that keep their leaves all year round, like pine trees.

Deciduous- Trees that drop their leaves in the fall, like a maple tree.

Glucose (C₆H₁₂O₆)- The molecule that stores energy for most living things on the planet.

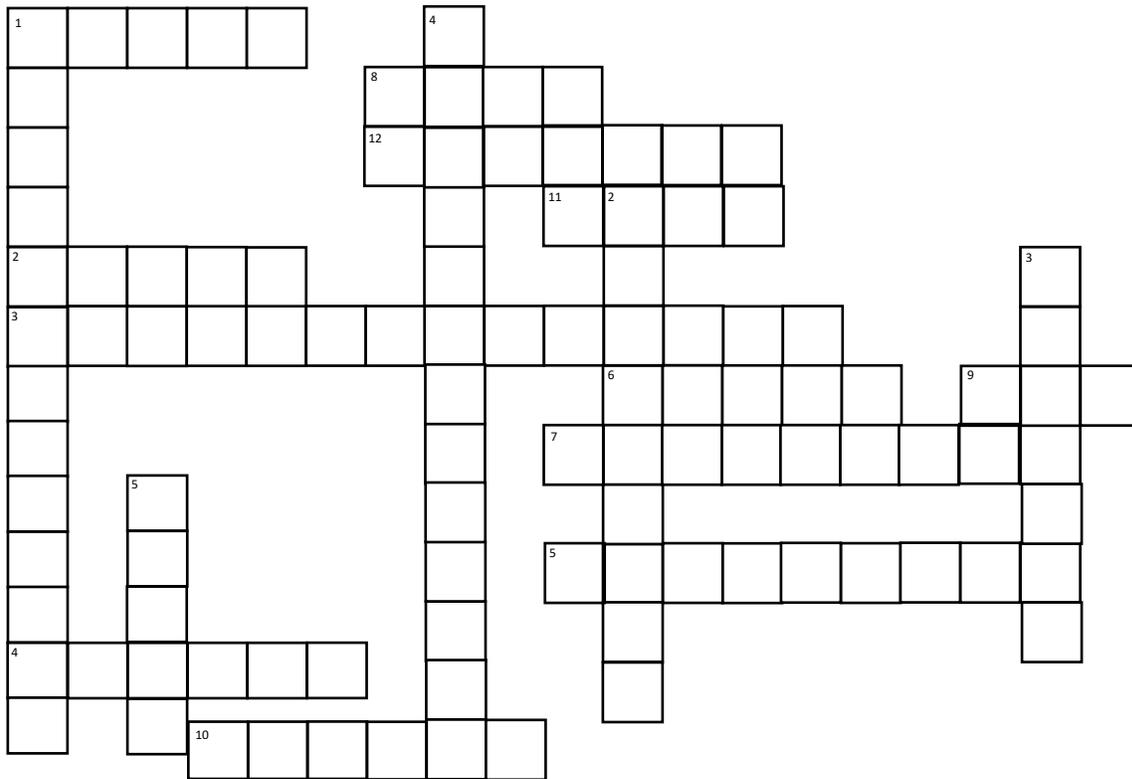
Carbon Dioxide (CO₂)- A molecule that trees absorb in order to transpire. Human’s release it.

Oxygen (O₂)- A molecule trees release as a result of transpiration. Human’s breath it.



Draw yourself with a tree 😊

Tree Cross-Word



Word list: tree ring, bud, deciduous, evergreen, glucose, carbon dioxide, oxygen, roots, trunk, stoma, xylem, phloem, transpiration, leaf, photosynthesis, branches, bark

Across:

1. The main stem of a tree
2. The tissue trees use to take in CO₂ and release H₂O and O₂- gas exchange.
3. The process trees use to absorb and store energy from sunlight.
4. Trees breathe this out and humans breathe it in.
5. This type of tree drops its leaves every fall.
6. This takes up water and nutrients from soil, and also supports the rest of plant's structure.
7. Extending from the trunk, the _____ hold all the leaves on the tree.
8. The protective "skin" of the tree.
9. The new growth of a tree starts as a ____.
10. This tissue carries water and nutrients throughout the plant.
11. This organ holds the chlorophyll which carry out photosynthesis.
12. Each of these represents a different year the tree has been alive.

Down:

1. If humans use respiration, trees use trans_____.
2. This type of tree never loses its leaves.
3. The molecule that trees and humans use to store energy.
4. The molecule Humans breathe out and trees breath in.
5. This tissue brings water up the tree from the roots to the leaves.