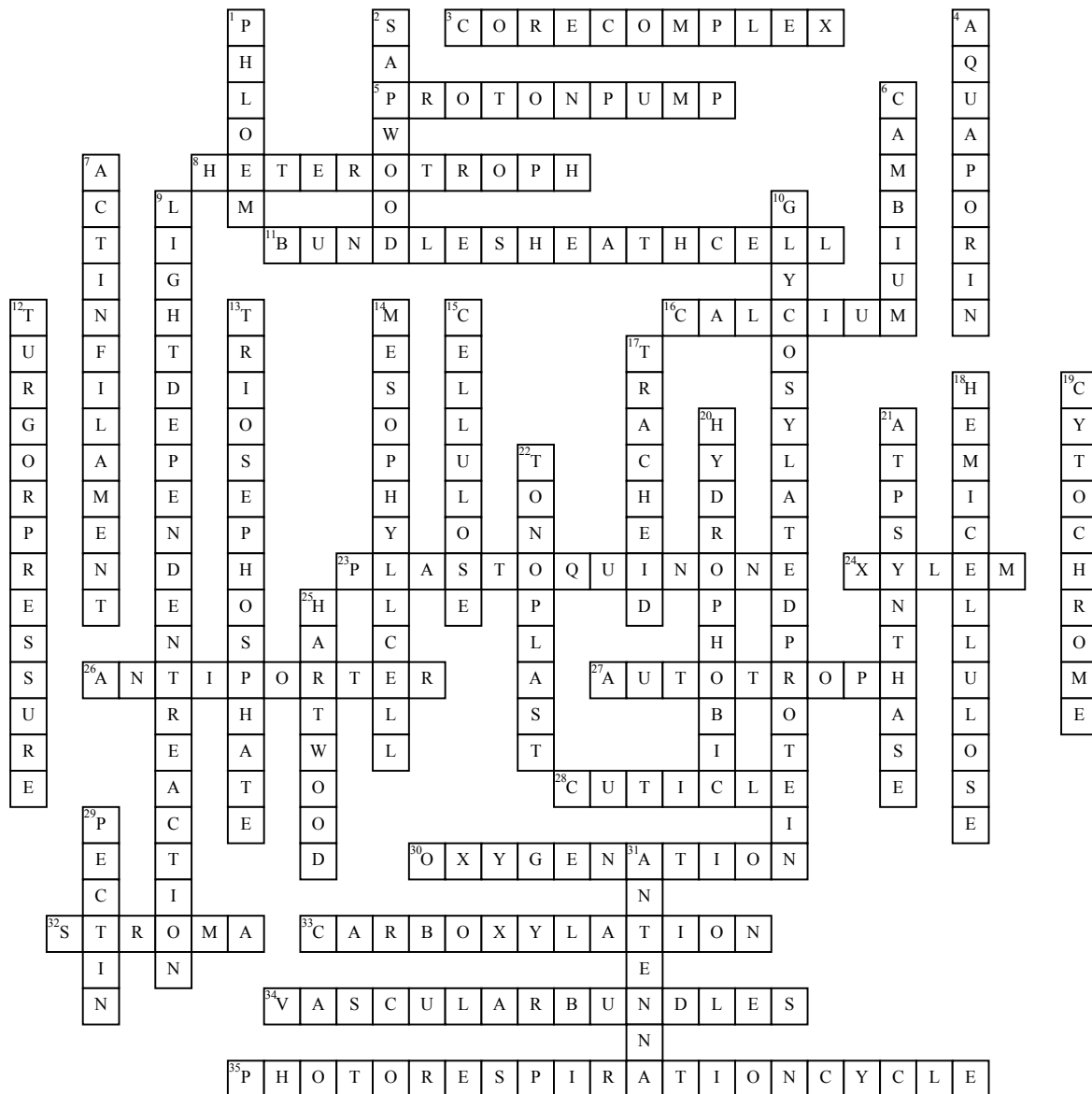


Name: _____

Date: _____

Plant Physiology



Across

3. transformation of light energy into chemical energy via losing of electron from chlorophyll absorption to electron transfer chain
 5. is a form of Active Transport
 8. derives food from other organisms
 11. surrounds the phloem and xylem
 16. ion that is used for polarized cell growth Ex: Rot hair growth
 23. has big lipid tail that keeps it in the membrane and takes electron from PSII to cytochrome
 24. moves minerals and water from roots to leaves
 26. A protein that helps move ions against Concentration gradient
 27. makes their own food from ions and simple molecules
 28. has hydrophobic barrier and exists on leaves to prevent water loss
 30. is the wasteful reaction takes 5C --> 5C
 32. is the site of the Calvin Cycle in Chloroplast

33. is the useful reaction takes 5C --> 6C

34. Phloem and Xylem are these

35. takes place in Chloroplast, Peroxisome, and Mitochondria and back again

Down

1. moves sugars from leaves to roots
 2. layer of wood that contains vascular living tissue that moves water to leaves
 4. Protein that helps water move in/out of plasma membrane
 6. can form secondary xylem and phloem as plant matures in growth
 7. orientation of this is kept up w/ help of Calcium gradient
 9. main goal is to create NADPH and ATP
 10. are outside proteins that protect the cell
 12. provides mechanical stability of non-lignified plant tissues by adding force to cell wall
 13. is the main goal of Calvin Cycle

14. Cells in leaves that do a lot of photosynthesis processes

15. localized in cellular membrane and made of B1-4 Glucose units

17. water conducting and supportive pt. of Xylem that are long and hardened w/ lignin

18. Reduces the ability of cell wall to stretch by crosslinking cell microfibrils

19. a protein that accepts electrons from Plastocyanin and releases electrons to Plastocyanin

20. interaction that avoids water and affects conformation of cell

21. moves protons across thylakoid membrane

22. the membrane of the large vacuole

25. structural support of tree

29. fills space between cellulose microfibrils and prevents cell wall compression

31. complex near the edge of photosystem that absorbs photons of light by Chlorophyll and makes way to core complex the remaining energy