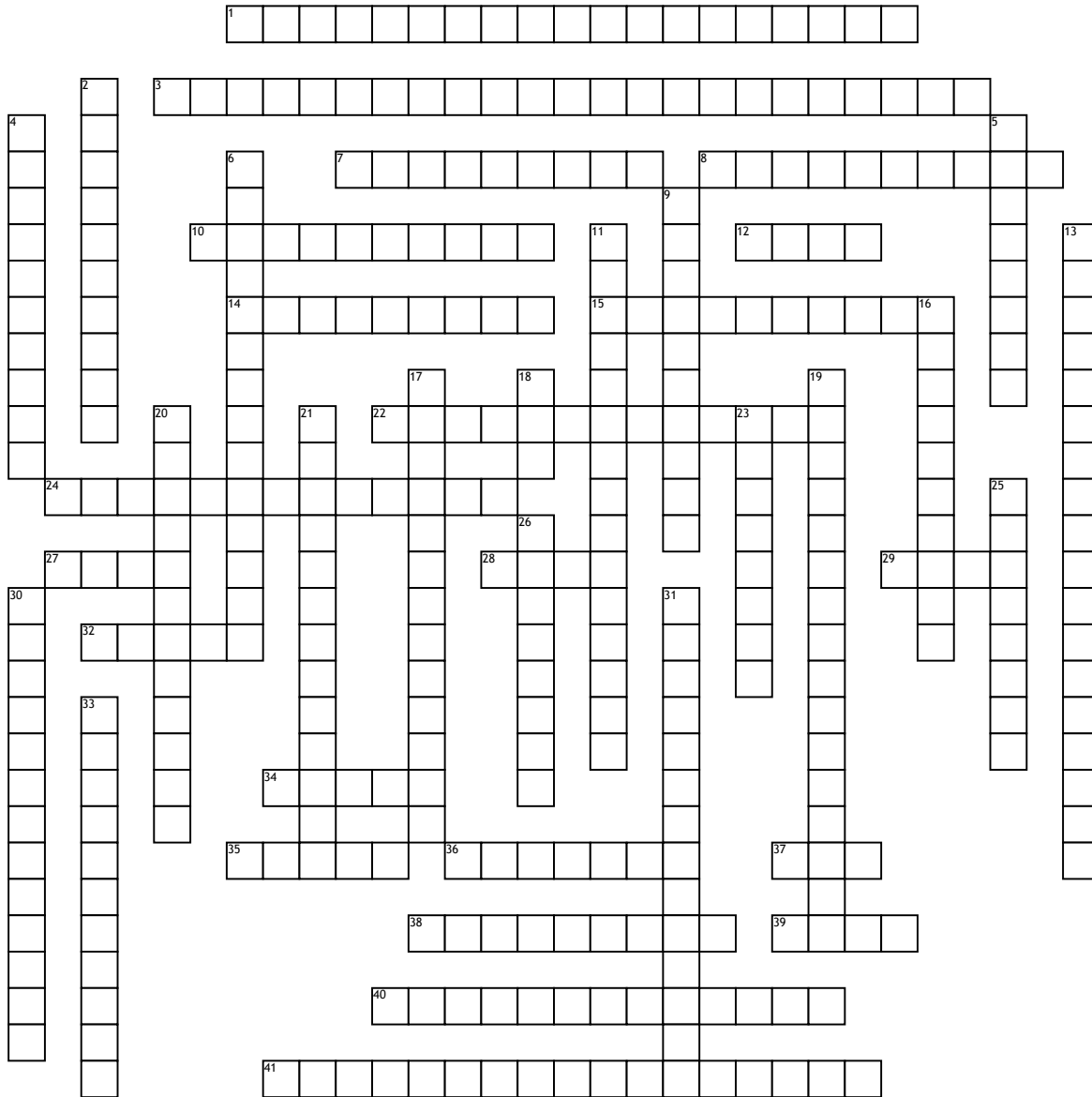


Name: _____

Date: _____

Streptococcus Species



Across

1. _____ causes pathogenesis to humans only.
3. Commonly colonizes human nasopharynx
7. The first pneumococcal _____ vaccine was licensed in 2000.
8. Serotype replacement, capsular switching, and HGT are all causes of _____ resistance genes.
10. Pneumococci can incorporate exogenous DNA into the genome by _____ recombination.
12. A molecular method that distinguishes strains based on the digestion of their genomic DNA.
14. Obtaining _____ is difficult in GAS colonization.
15. _____ sequencing involves occupying separate localizations on the bacterial chromosome.
22. Most of the _____ pyogenic species can induce infection in several mammals
24. There are 14 different streptococcal _____.
27. Bacteria included in the genus *Streptococcus* are _____-positive cocci.
28. An exotoxin secreted by pyogenes.
29. Determining optochin susceptibility and solubility is an important test for phenotypic identification of *S. pneumoniae*
32. GAS must transfer through a _____ layer to attach to the epithelial layers.

34. _____ streptococci are typically non-pathogenic colonizers of the human nasopharynx.
 35. The _____ is associated with the binding of pneumococci to cells.
 36. _____ methods have provided knowledge towards the biology and epidemiology of bacterial pathogens.
 37. The _____ gene was one of the first DNA targets used for the detection of pneumococci.
 38. _____ methods are important in pneumococcal epidemiology.
 39. The _____ gene is a major pneumococcal autolysin.
 40. Breaks down the hyaluronic acid component of connective tissue in mammals.
 41. Superantigens function in a locally _____ manner.
- Down**
2. The misidentification of streptococcal species is due to a _____ gene transfer.
 4. *Streptococcus pneumoniae* has developed its own positive _____ mechanism.
 5. A protein complex that aids in bacterial cell division.
 6. _____ tools are being used for species identification
 9. The mobility of a microorganism through mucus is supported by _____ capsule.
 11. The presence of the polysaccharide capsule prevents the binding of iC3b and the Fc of _____.
 13. logFS-originated isolates have a tendency of _____.

16. _____ is one step to confirm the identity of a pneumococcal isolate.
17. _____ is an effector that causes the degradation of fibrin clots in the presence of GAS.
18. The polysaccharide capsule is specified by the _____ locus.
19. GAS can be carried _____.
20. The most common pathogen
21. The development of resistance to commonly used _____ makes it hard to treat pneumococcal infections
23. The pilus stimulates proinflammatory _____ production.
25. The _____ reaction is considered the "gold standard" for serotyping pneumococci.
26. The identification of *S. pneumoniae* relies on susceptibility to _____.
30. The different types of capsule found in pneumococcus can be exchanged by genetic _____.
31. The _____ capsule is an important virulence factor of pneumococci.
33. _____ fasciitis is an invasive GAS illness.