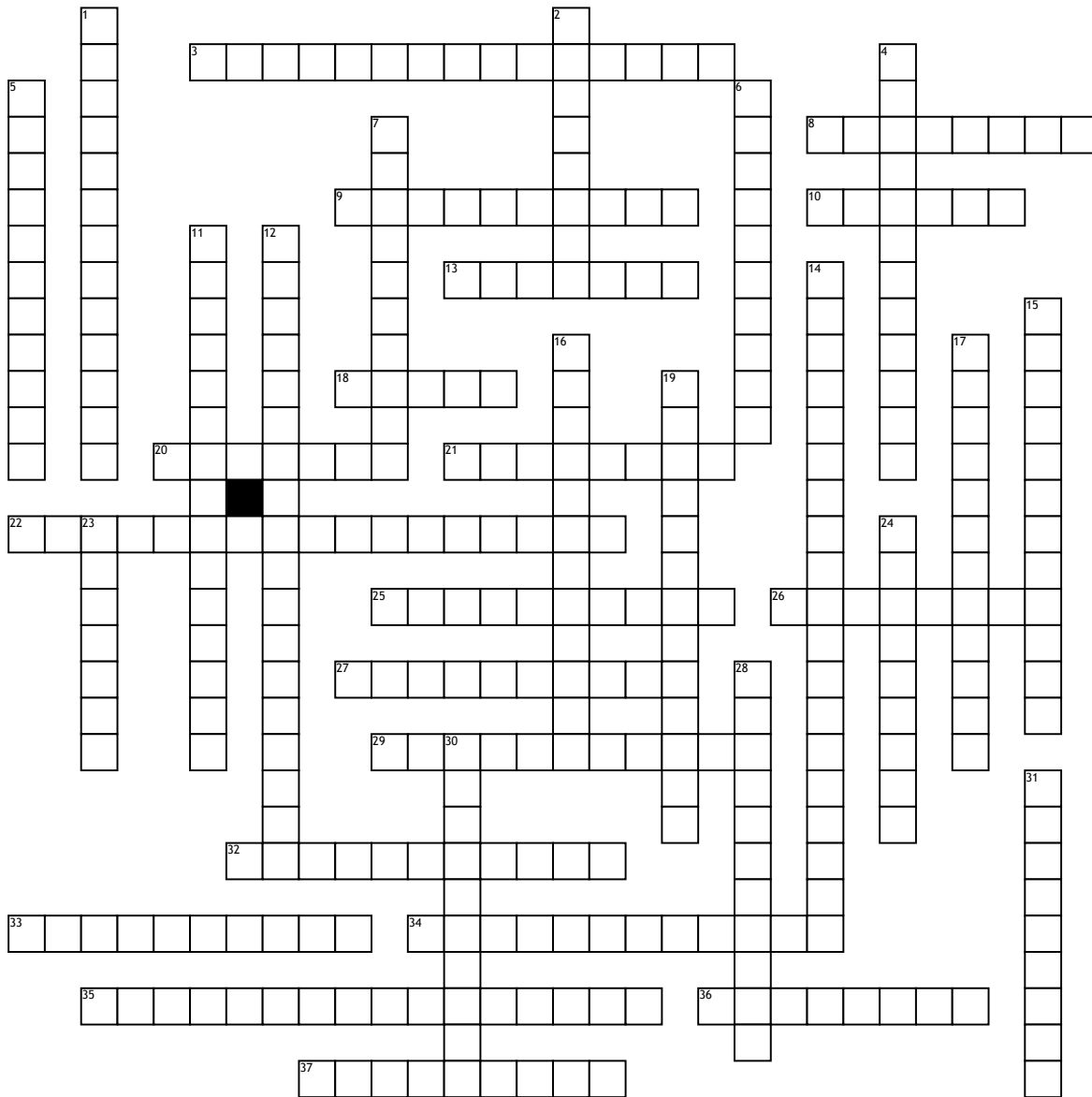


Exam 1 Vocabulary



- Across**
- 3. Classified and named different biological organisms
 - 8. A small circular DNA molecule that replicates independently of the chromosome
 - 9. The theory that living cells arise only from preexisting cells
 - 10. contains unicellular organisms with a prokaryotic cell organization
 - 13. An outer, viscous covering on some bacteria composed of a polysaccharide or polypeptide
 - 18. A submicroscopic parasitic filterable agent consisting of a nucleic acid surrounded by a protein coat
 - 20. An organism requiring molecular oxygen for growth
 - 21. composed of multicellular eukaryotes lacking cell walls
 - 22. lower concentration of solutes
 - 25. enzyme that destroys hydrogen peroxide; $H_2O_2 + 2H^+ \rightarrow 2H_2O$
 - 26. enzyme that breaks down hydrogen peroxide; $2H_2O_2 \rightarrow 2H_2O + O_2$
 - 27. organism that requires a high salt concentration for growth
 - 29. for visualization of morphological shape (cocci, bacilli, and spirilli) and arrangement (chains, clusters, pairs, and tetrads)
 - 32. An antimicrobial agent, usually produced naturally, by a bacterium or fungus
 - 33. chloride or sulfate salts of colored bases ionize to give positively charged chromogen
 - 34. optimum growth temperature is between 50 degrees C and 60 degrees C
 - 35. osmotic pressure is equal across the cell's membrane
 - 36. A protein produced by the body in response to an antigen and capable of combining specifically with that antigen
 - 37. A staining technique for the primary identification for bacteria
- Down**
- 1. complex lipid composed of glycerol, two fatty acids, and a phosphate group
 - 2. Any substance that causes antibody formation
 - 4. Bacteria that lose the crystal violet color after decolorizing by alcohol
 - 5. Theory of spontaneous generation
 - 6. sodium potassium, calcium, or ammonium salts of colored acids ionize to give a negatively charged chromogen
 - 7. An organic acid containing an amino group and a carboxyl group
 - 11. An organism that grows best in an environment with less molecular oxygen than is normally found in the air
 - 12. higher concentration of solutes
 - 14. complex molecule containing both lipid and polysaccharide parts
 - 15. soluble proteins that combine with and transport fat and lipids in the blood plasma
 - 16. Bacteria that retain the crystal violet color after decolorizing by alcohol
 - 17. Gives contrast between inside and outside of cells
 - 19. A differential stain used to identify bacteria that are not decolorized by acid-alcohol
 - 23. composed of multicellular eukaryotes with cellulose cell walls
 - 24. An organism that does not require molecular oxygen for growth
 - 28. group of antibiotics produced either by natural penicillin or by adding side chains
 - 30. An organism that grows between about 10 degrees C and 50 degrees C
 - 31. protects bacterium's DNA