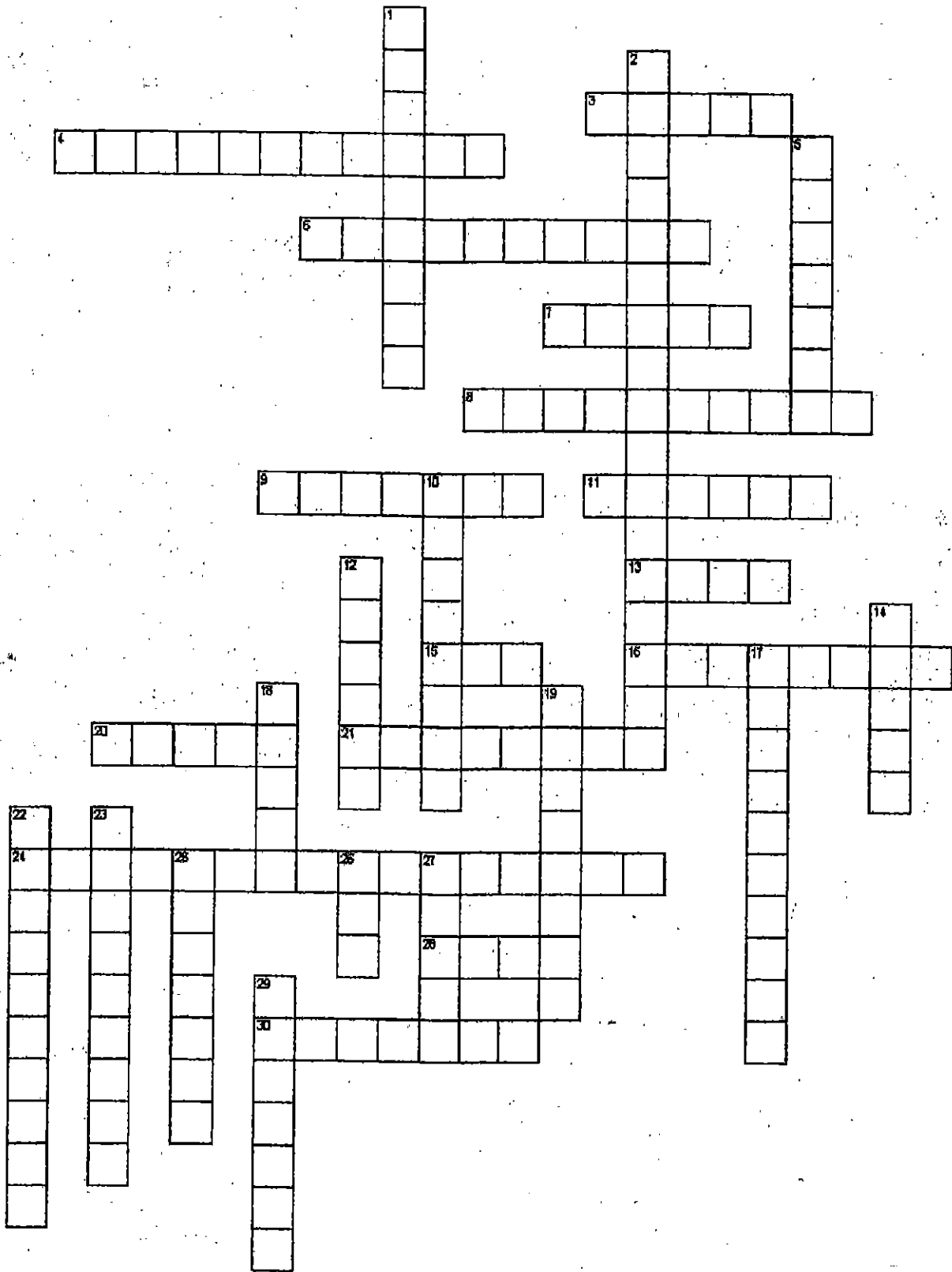


3a



36

Across

3. helium nucleus
4. higher frequency than violet
6. crest to crest (or trough to trough)
7. A cathode ray moves toward the _____
8. "Atoms are mostly empty space."
9. light quanta
11. atomic theory of matter (the guy)
13. differ in the number of electrons
15. maximum number of electrons per orbital
16. differ in the number of neutrons
20. λ in picometers
21. What constant is three point zero zero times ten to the eighth meters per second?
24. magnetic and electric fields oscillating perpendicularly
28. high-speed electron
30. most of the mass of the atom

Down

1. Examples are 4s, 4p, 4d, and 4f.
2. tendency to attract electrons in a chemical bond
5. Scandinavian visible spectrum
10. Examples are s, p_x , d_{yz} .
12. Whose constant is six point six two, six two times ten to the negative thirty-fourth joule-seconds?
14. cycles per second
17. d-block metals
18. wavelengths on the order of 10s of meters
19. determined the mass of an electron
22. semimetals
23. father of the periodic table
25. cathode ray tube
26. atomic mass unit
27. AKA inert gases
29. relationship between frequency and wavelength