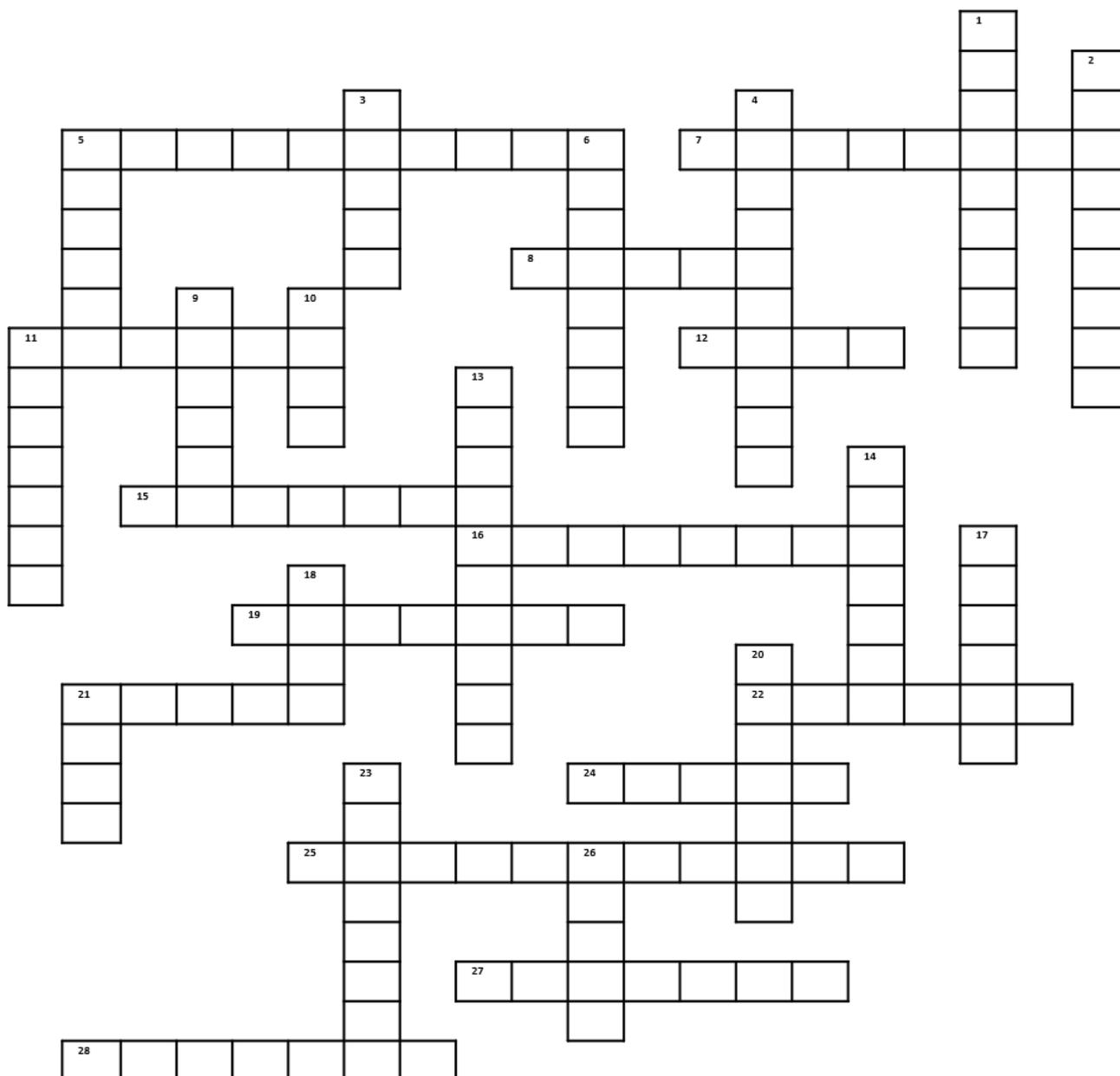


## 25th Anniversary Crossword



**Down**

1. The collective name of Group 16 elements
2. A reaction discovered in 1884 that is used to make aryl halides from aryl diazonium salts with the help of copper salts
3. An reduction reaction to convert arenes to cyclohexadienes using ammonia and sodium
4. The chemist whose name is another way of describing keto-enol tautomerism as well as a very common piece of laboratory glassware
5. A cross-coupling reaction first published in 1979 and later led to a Nobel Prize for the discoverer
6. A mechanically interlocked structure resembling a piece of sports equipment
9. Precious and as good at killing werewolves as it is bacteria
10. In simple terms, the chemical opposite of an acid
11. Term describing a substance that dissolve a solute
13. Before a night out, Dr. \*C.R.-Four looks into the mirror. What kind of structure do they see?
14. This chemist, born in 1942 in New York, discovered a reaction for the cross-coupling of two aldehyde or ketone groups using titanium(III) chloride
17. A solution used to maintain pH at a constant value
18. An organic [3,3]-sigmatropic rearrangement reaction or dienes
20. A British chemist who won a Nobel Prize for her work developing protein crystallography
21. The first American woman to win a Nobel Prize in science for her role in the discovery of glycogen metabolism
23. An organometallic reaction in which alkyl-, vinyl-, or aryl-magnesium reagents react with aldehyde or ketone carbonyl groups
26. An organic reaction with fruity notes that converts an alcohol to an alkyl chloride using triphenylphosphine and carbon tetrachloride.

**Across**

5. A Nobel Prize winning chemist who has been named as the Father of Polymer Chemistry
7. Born in 1920, this chemist is known for her work in X-ray diffraction images of DNA
8. An organic redox reaction closely related to the Baeyer-Villiger oxidation
11. The amorphous form of silicon dioxide, the stationary medium that can lead to long nights in the lab if you're not lucky
12. Won the Nobel Prize in Chemistry for the development of electrospray ionization
15. A large biomacromolecule made up of amino acid residues
16. David Guetta and Sia took it out of the periodic table and made it a star
19. A mixture of microscopically dispersed particles suspended throughout another substance
21. The only woman to win two Nobel Prizes
22. An element that boils at 90 K
24. This law allows the calculation of scattering angles in a crystal lattice
25. The bending of waves as they pass the edge of an object
27. A liquid crystalline phase type in which the molecules are oriented in well-defined planes
28. The anion of hydrogen