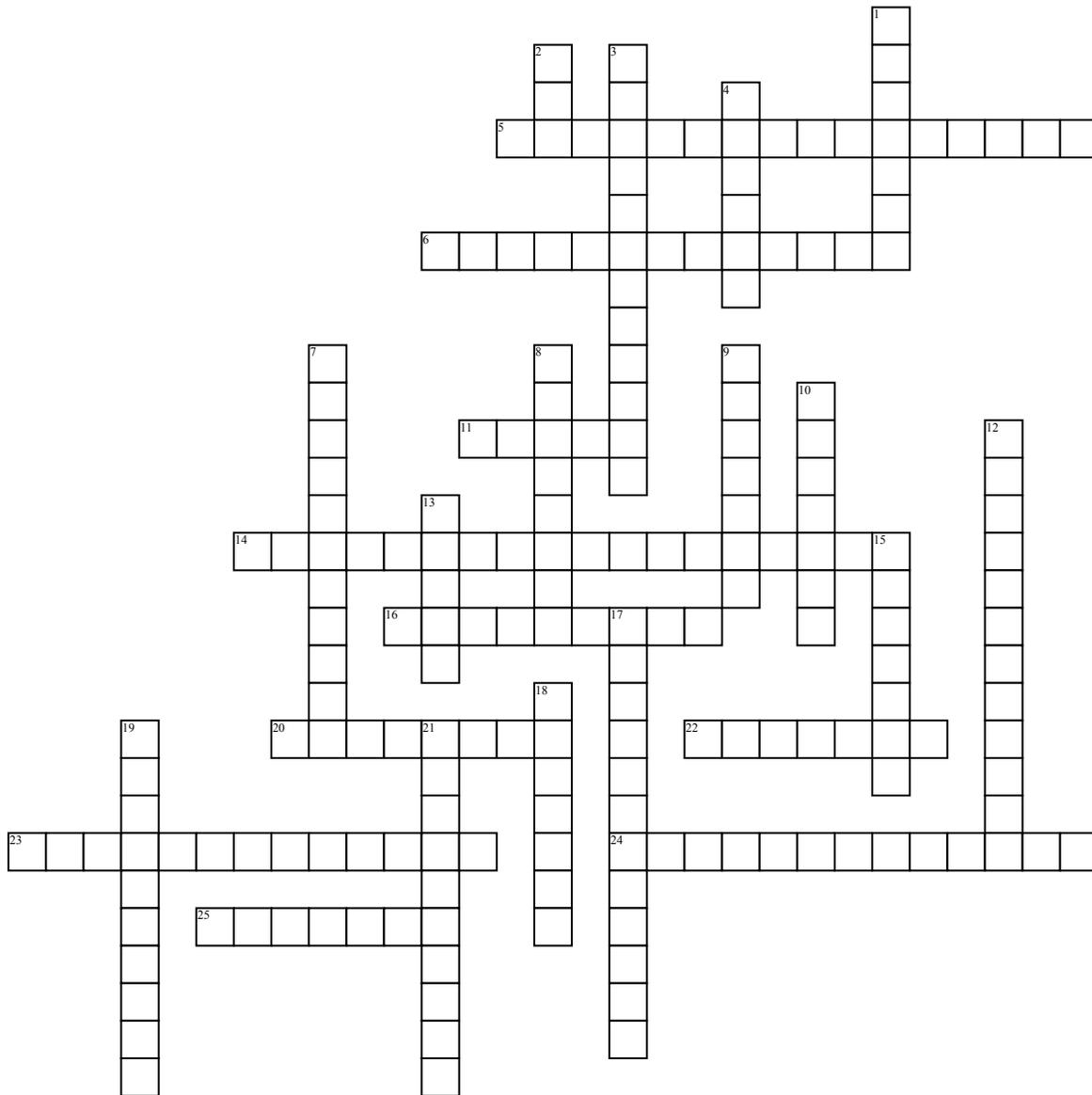


Hair and Fiber



Across

5. DNA present in small structures outside the nucleus of a cell
 6. molecule with a high molecular mass
 11. exceptionally strong, supple, resists damage from oil and chemicals
 14. fibers derived from either natural or synthetic polymers
 16. strong, resistant to stretching and shrinking, crisp when wet or dry
 20. white, dyeable, flame resistant, low thermal conductivity
 22. substance composed of a large number of atoms that are usually arranged in repeating units
 23. Translucent piece of tissue surrounding the hair shaft near the root that contains the richest source of DNA associated with the hair

24. fibers derive from animal or plant sources
 25. basic unit of structure from which a polymer is constructed

Down

1. Scale structure covering exterior of the hair
 2. extremely flame resistant, will not burn or melt
 3. thermal bonding, self bulking, unique cross sections
 4. Main body of the hair shaft
 7. Initial growth phase during which the hair follicle actively produces hair
 8. two or more atoms held together by chemical bonds
 9. soft, warm, wool-like, quick drying, retains shape
 10. strong, soft, absorbent, good dyeability
 12. Transition stage between the anagen and telogen phases of hair growth
 13. highly absorbent, versatile, good drapability
 15. can be stretched 500% without breaking
 17. The final growth stage in which hair naturally falls out of the skin
 18. Cell column running through the center of the hair
 19. DNA that is present in the nucleus of a cell and that is inherited from both parents
 21. soft, abrasion and flame resistant, resists acids