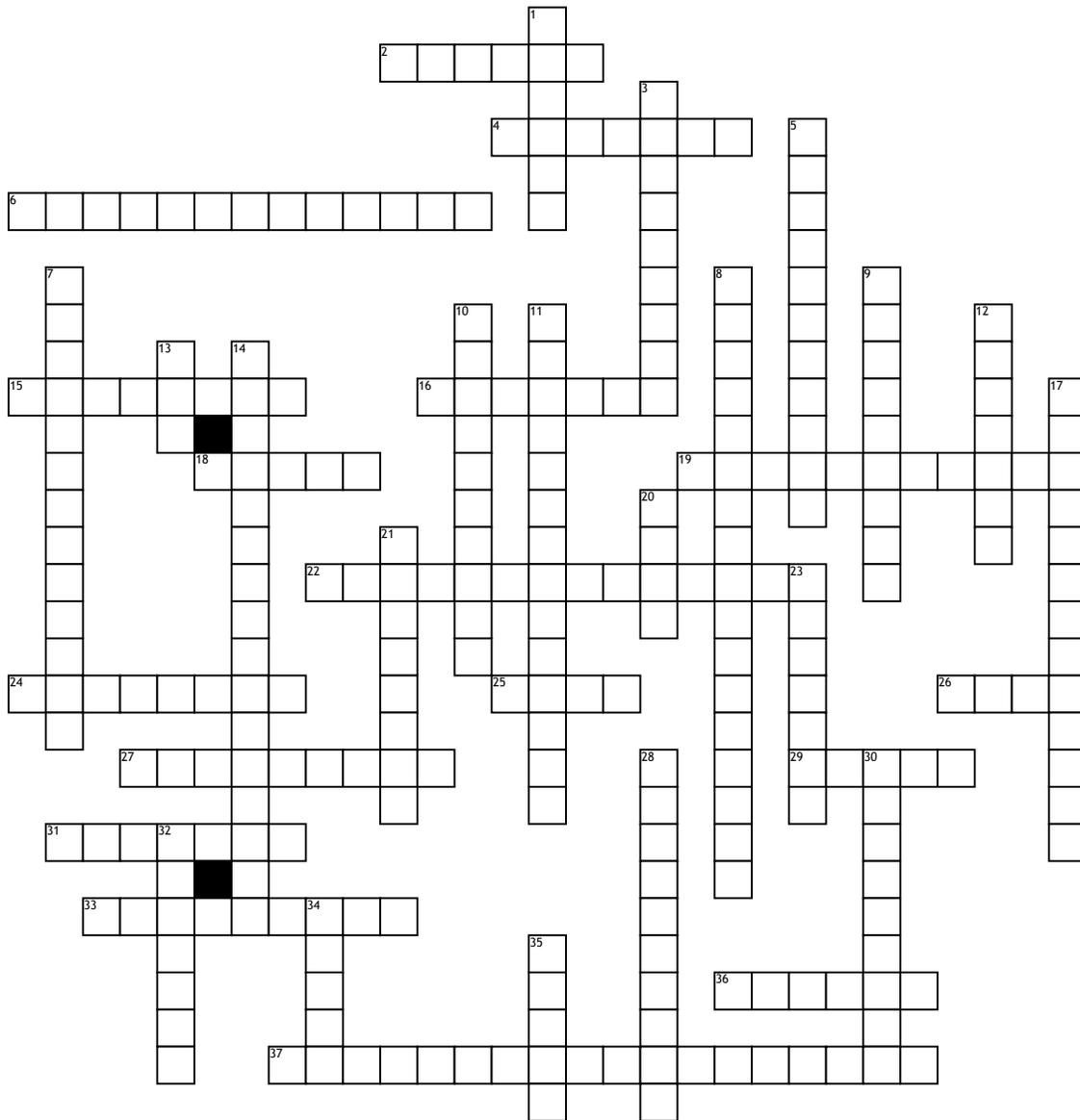


Materials and processes



Across

2. Small block of metal prior to processing
 4. Metals containing mostly iron and carbon
 6. Improved tensile strength and hardness in the localised area when a metal is cold worked
 15. Rare metals such as gold, silver and platinum
 16. Type of strength, withstand stretching or pulling forces
 18. A metal made of two or more metals, or combining two or more elements
 19. Applying a protective layer of zinc to an iron or steel surface
 22. Wood has all sides and edges that are planed square, straight and level
 24. The ability to resist abrasive wear such as scratching, surface indentation or cutting
 25. A paste which stops oxygen from affecting metals when heated and allows solder or brazing to flow
 26. Production of large amounts of a product
 27. The process used extensively for plastics and metals as it forms uniform cross-sections
 29. Machine used to create cylindrical profiles in metal or wood
 31. Shaping stock form material through processes such as bending, rolling, press forming and steam bending
 33. Capable of being deformed by compression without tearing or cracking
 36. Wood bending along its length

37. Properties that refer to the actual matter that forms the material (eg insulation, conductivity, fusibility).

Down

1. A very thin sheet of wood shaved from large pieces of wood
 3. A material composed of two or more different materials, resulting in a material with enhanced properties.
 5. Type of strength, withstand being crushed or shortened by pushing forces
 7. A material whose physical properties change in response to an input or change in environment, such as electricity, pressure, temperature or light.
 8. A man-made, wood-based composite material
 9. The ability to absorb impact force without fracture
 10. Plastics that, after being heated and softened during manufacture, cannot be changed or softened by heating again
 11. Meeting present day needs without compromising the needs of future generations
 12. High temperature join using bronze and flux
 13. A device to hold workpieces or guide tools for a specific task
 14. The maintenance of a desired level of quality in a service or product through effective planning
 17. A liquid to coat metals before marking out
 20. Resin with carbon threads in it
 21. Deciduous timber

23. Capable of being drawn or stretched into thinner, smaller sections
 28. Gluing together thin strips of material to make a thicker one
 30. The minimum and maximum measurements that can be accepted when manufacturing.
 32. Machine used to cut slots or grooves in metal blocks
 34. Producing a small number of a product
 35. A cavity into which molten or thermosetting material is poured or compressed in order to establish the material's final shape