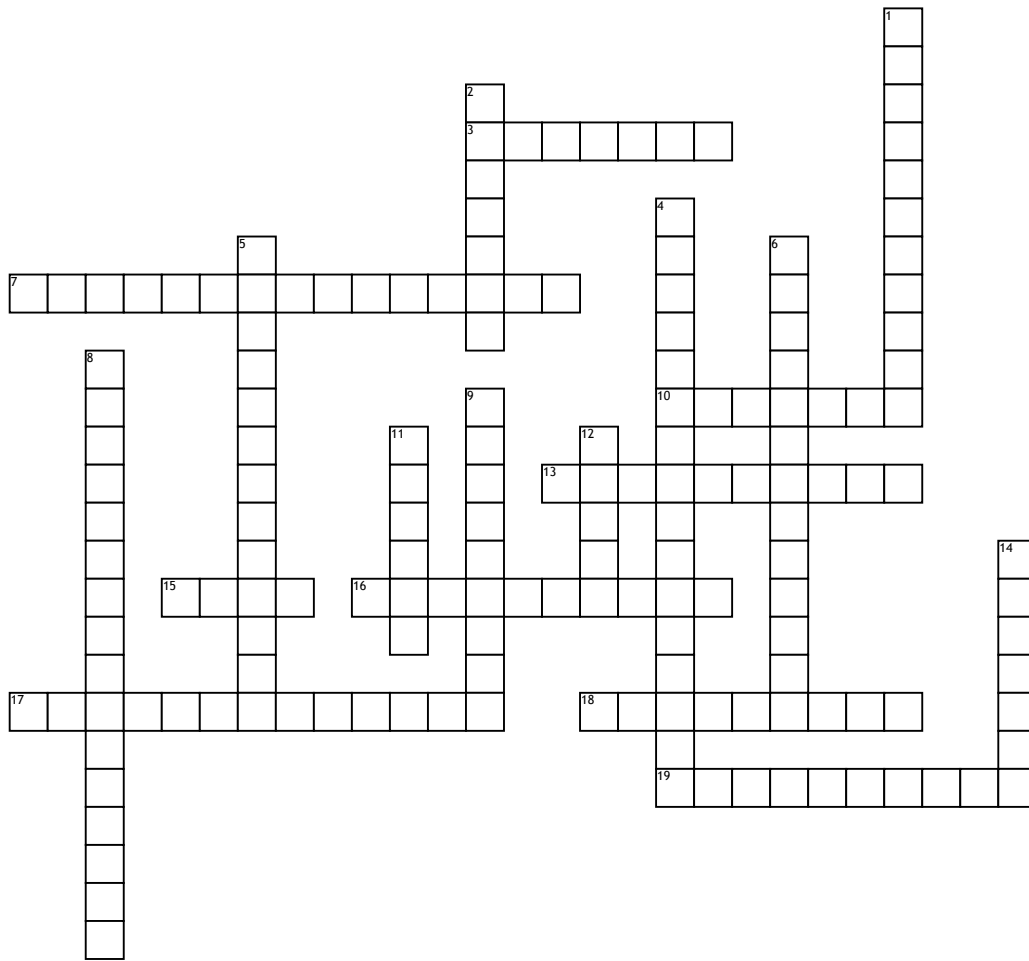


# Metals Creative Summary Crossword



## Across

3. The most widely used deformation process

7. Highly resistant to corrosion in a variety of environments, especially the ambient atmosphere

10. Mechanically working or deforming a single piece of a usually hot metal

13. Liquid metal is forced into a mould under pressure and at a relatively high velocity and allowed to solidify with the pressure maintained

15. Noble metal that some integrated circuit electrical contacts are made of

16. Name of the group of metals that have extremely high melting temperatures

17. Among the least expensive of all metallic materials

18. Element with density of  $1.7 \text{ g/cm}^3$

19. forming operation used when deformation is achieved at a temperature above that at which recrystallisation occurs

## Down

1. Probably the most common casting method

2. The most common copper alloys

4. An important characteristic of these materials, which is quantified by the tensile strength-specific gravity ratio

5. Alloys in which iron is the prime constituent

6. Alloys that are amenable to mechanical deformation

8. Casting process that uses powdered metal compressed into a denser piece

9. Generically a class of ferrous alloys with carbon contents above 2.14 wt%

11. one of the principle alloying elements in stainless steels and one of the major constituents in the superalloys

12. Number of noble metals on the periodic table

14. Fabrication technique where two or more metal parts are joined to form one piece

## Word Bank

stainless steels

hot working

Forging

Rolling

specific strength

Powder Metallurgy

Gray cast irons

Die casting

Ferrous Alloys

nickel

wrought alloys

welding

Brasses

cast irons

gold

eight

Sand casting

Refractory

Magnesium