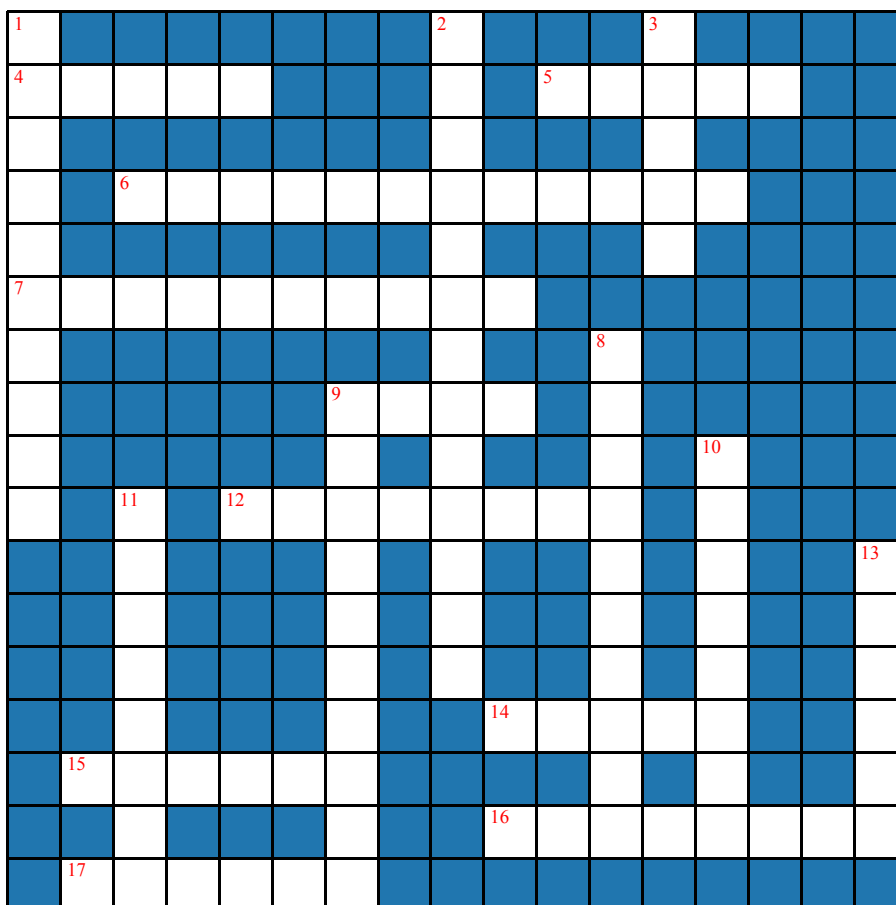


## Chemical families



### Across

- 4 The type of bonding in compounds of group 1 and group 7 elements (5)
- 5 Unusually for metals, lithium, sodium and potassium do this on water (5)
- 6 The common name for group 1 (6,6)
- 7 Chlorine does this to damp litmus paper (8,2)
- 9 The melting points of transition metals are this (4)
- 12 Flammable gas produced when sodium reacts with water (8)
- 14 A common name for concentrated sodium chloride solution (5)
- 15 The physical state of bromine at room temperature (6)
- 16 The charge on halide ions such as chloride ions (5,3)
- 17 Group 7 elements are non- (6)

### Down

- 1 Argon, krypton and xenon are used in these bright things (5,5)
- 2 Chlorine is used to kill bacteria in these watery things (8,5)
- 3 The group 0 gases are described as this because they are inert (5)
- 8 These metals in the middle part of the periodic table usually form coloured compounds (10)
- 9 Alkaline metal compounds formed when group 1 elements react with water (10)
- 10 Salt-formers found in a group (8)
- 11 Are you sure? Chlorine forms at this electrode during the electrolysis of concentrated sodium chloride solution (8)
- 13 The colour of iodine vapour (6)