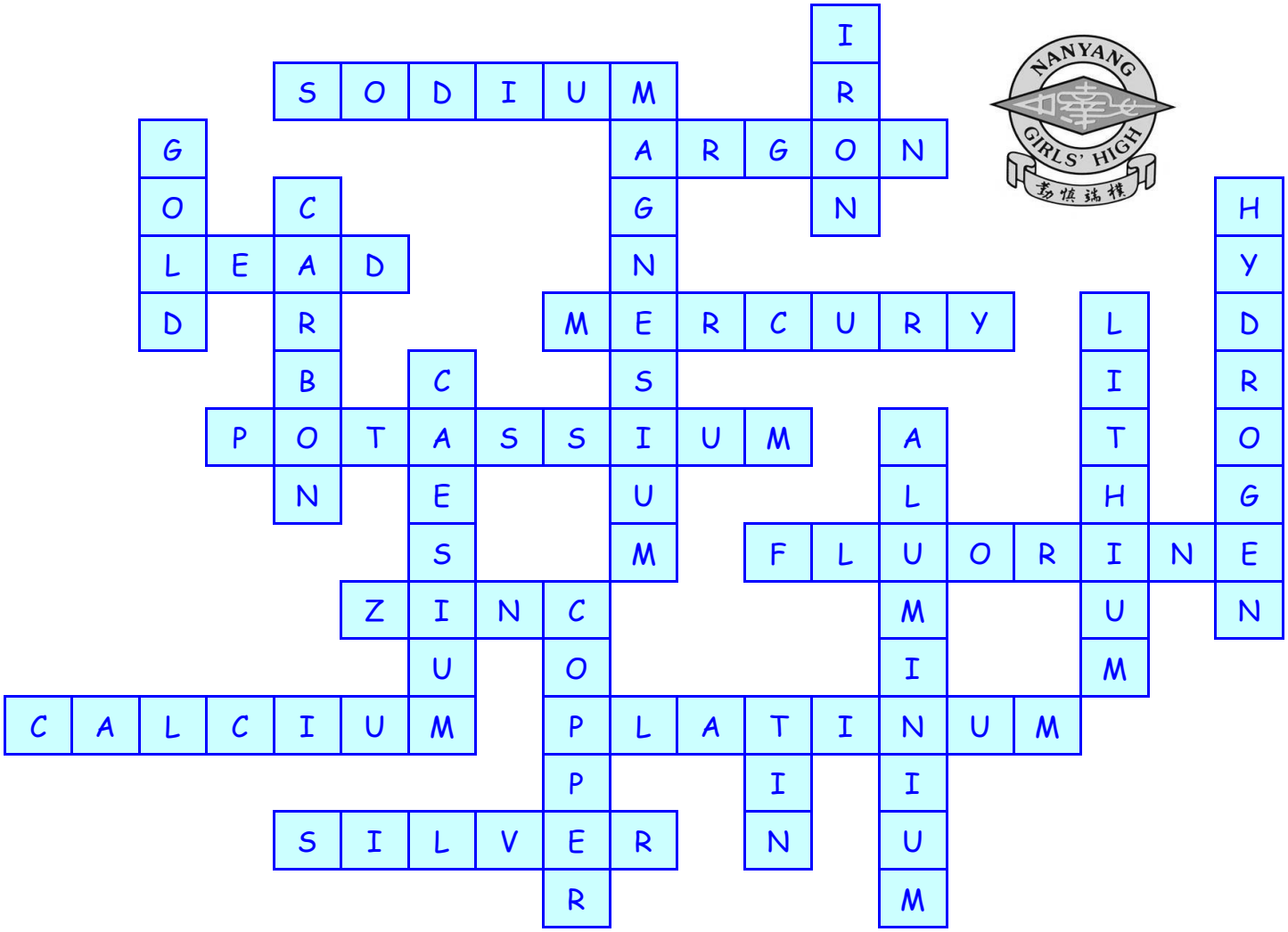
Crossword – The Reactivity Series



Clues Across:

1) When this metal reacts with cold water, the hydrogen gas that is produced burns with a yellow flame (6).
2) This element, which takes its name from the Greek word meaning *inactive*, is difficult to place in the reactivity series (5).
3) This metallic element is able to displace copper from its compounds, but is unable to displace tin (4).
4) This relatively unreactive metallic element is a liquid at room temperature and pressure (7).
5) When this metal reacts with cold water, the hydrogen gas that is produced burns with a lilac flame (9).
6) The most reactive non-metallic element (8).
7) This metallic element is able to displace iron from its compounds, but is unable to displace aluminium (4).
8) This metallic element is less reactive than potassium due to the extra proton that it contains in its nucleus (7).
9) This precious metal is so unreactive that it is used to make inert electrodes, flame test wires and crucibles (8).
10) This precious metal can displace gold from its compounds, but cannot displace mercury (6).

Clues Down:

1) This precious metal can be found to exist naturally as the pure element (4).
2) This non-metallic element can reduce iron(III) oxide to iron, but cannot reduce aluminium oxide to aluminium (6).
3) This is the most reactive metallic element whose reaction with cold water can be observed in the laboratory (7).
4) The extraction of this metal from its ore using charcoal thousands of years ago gave rise to the Bronze Age (6).
5) This metallic element from Group 2 of the Periodic Table reacts very slowly with cold water, but rapidly with steam (9).
6) This element is found in nature as the ore cassiterite (3).
7) This metallic element is found in nature as the ore haematite (4).
8) The Emperor Napoleon III used cutlery made from this metallic element when he entertained the King of Siam (9).
9) This metallic element in Group 1 of the Periodic Table is less reactive than sodium (7).
10) This diatomic gas can reduce copper(II) oxide to elemental copper (8).