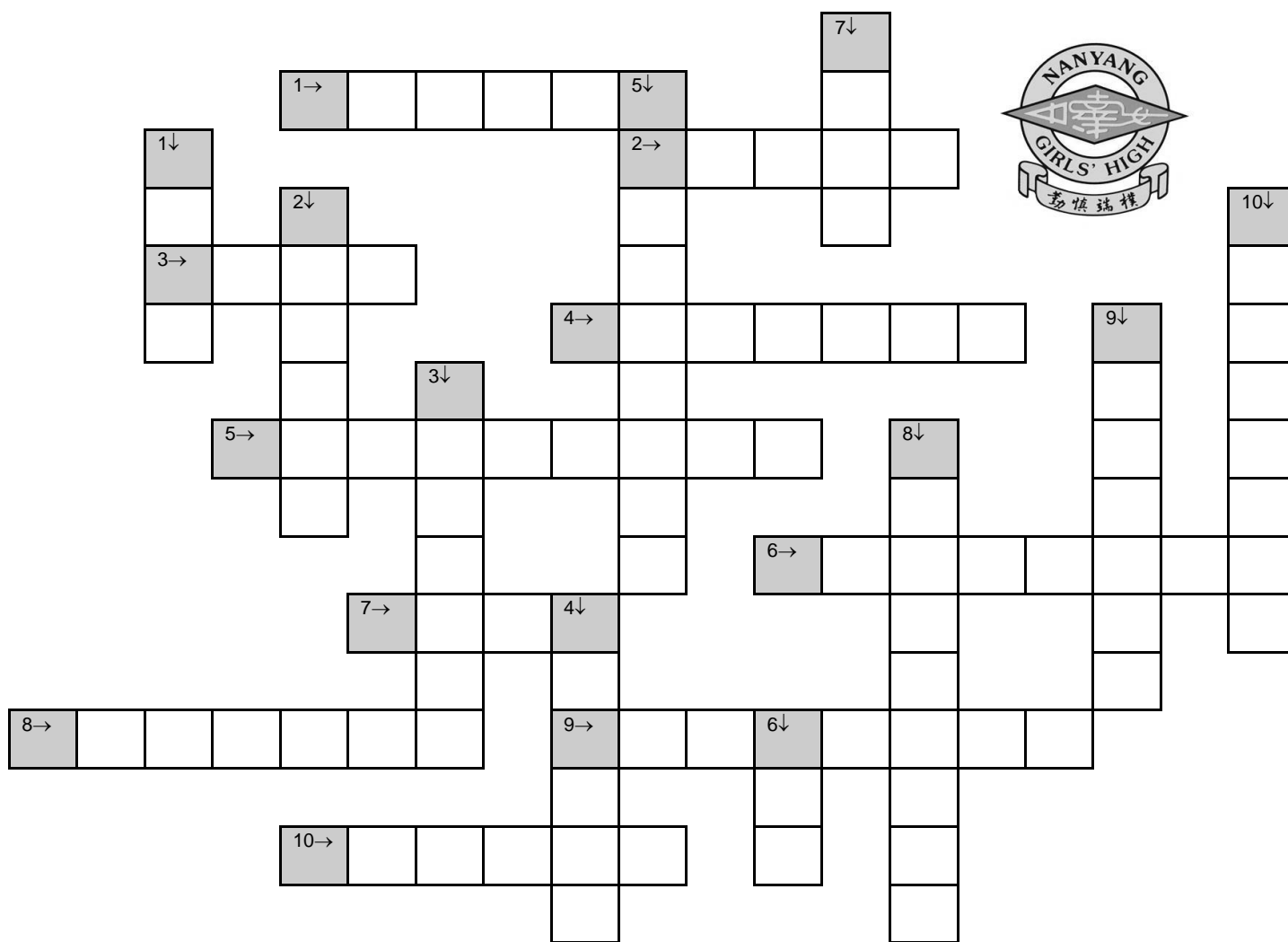


## Crossword – The Reactivity Series



### 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).

- Scan the QR code given below to view the answers to this assignment.



[http://www.chemist.sg/metals/reactivity\\_series\\_crossword\\_ans.pdf](http://www.chemist.sg/metals/reactivity_series_crossword_ans.pdf)