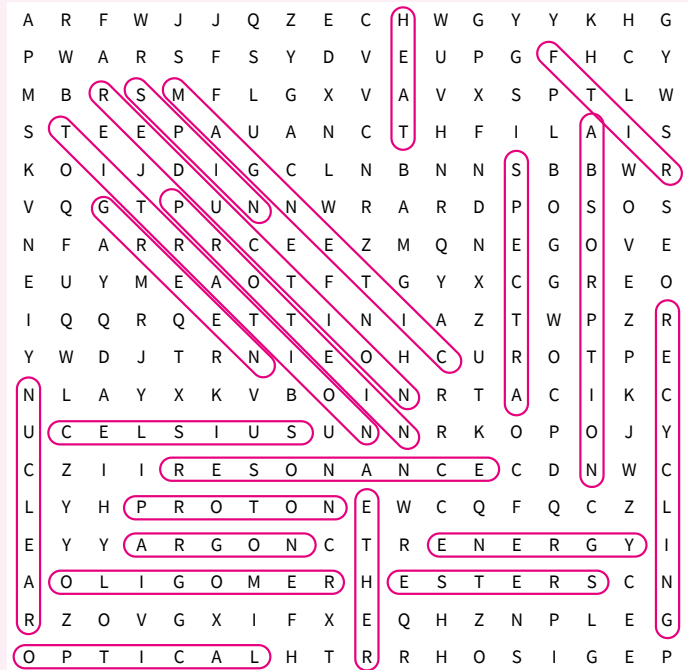
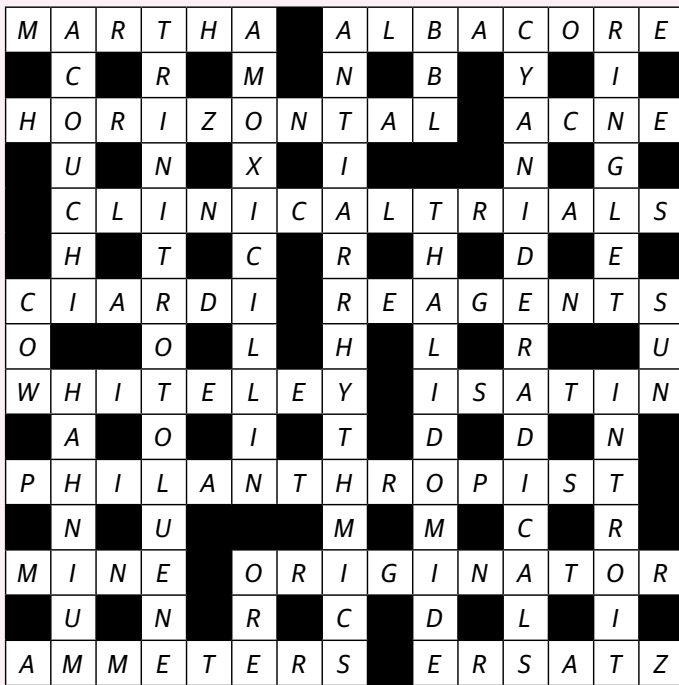


MAY 2021 SOLUTIONS



Brainteaser

It was around this time that old-style erasable pens were beginning to lose market share in school pencil cases to Frixion-style pens. It was at this point that I realised that the technology behind both types of pens were likely to be based on leuco dyes, such as phenolphthalein, which have at least one form in which they are colourless. While older styles of erasable pens required a separate eraser (presumably containing an acidic or basic ink), the clue to the functionality of this relatively new type of pen was in its name: this ink was thermochromic and following the thermal decomposition experiment, the boiling tube was still warm enough to trigger the colour change.



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