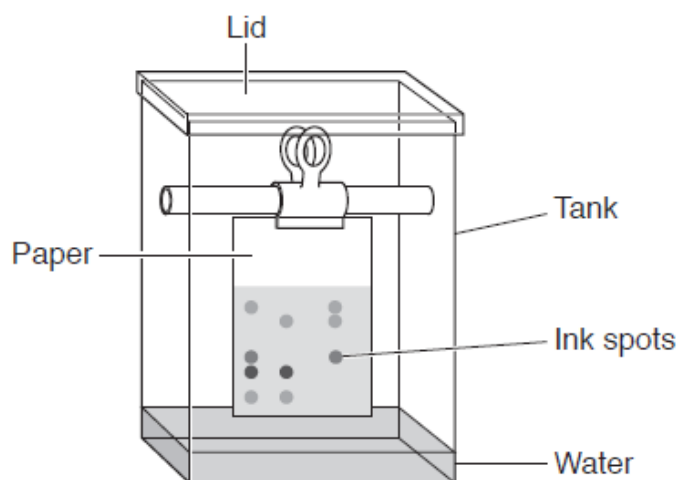


GCSE Chemistry A (Gateway Science)

J248/01 Chemistry A C1-C3 and C7 (Foundation Tier)

Question Set 21

- 1 A forensic scientist is investigating the ink that has been used to forge the signature on a cheque. She separates the colours in some inks using paper chromatography. Look at the diagram of her apparatus.



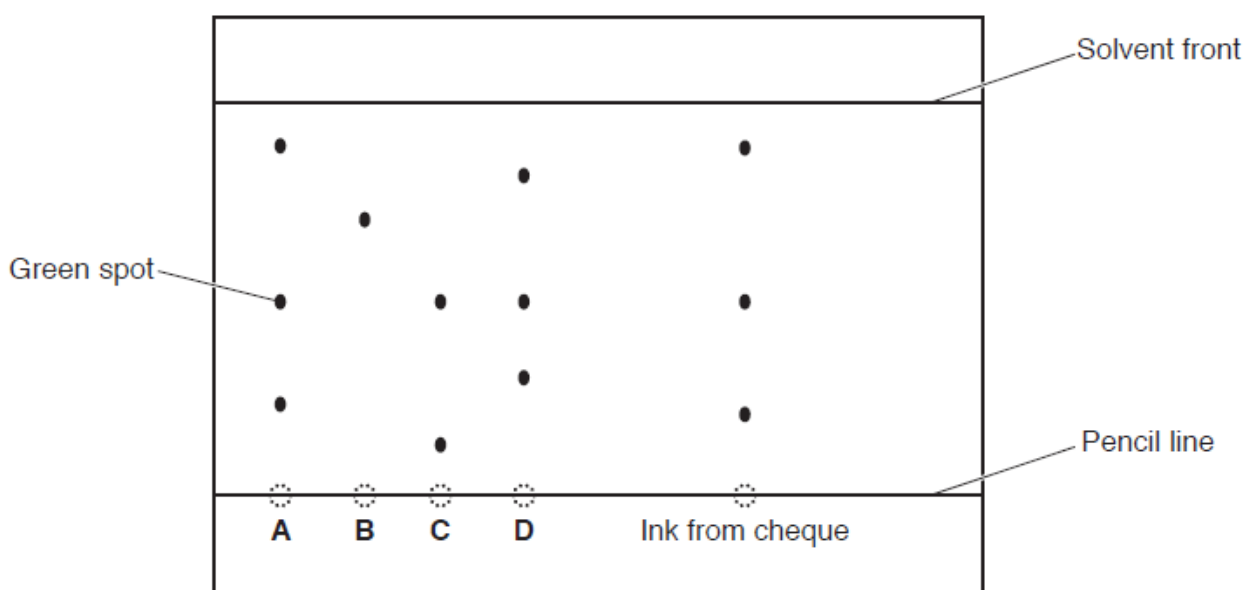
(a) What is the **mobile phase** in this experiment?

[1]

(b) Explain how paper chromatography separates the colours in ink.

[1]

(c) Look at the results of the scientist's experiment.



(i) Look at the green spot for ink **A**.

Calculate the R_f value for the green spot.

Answer = [2]

(ii) Which ink was used to forge the signature on the cheque?

Explain how you can tell.

[2]

Total Marks for Question Set 21: 6

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