

Some reactions of carbon dioxide

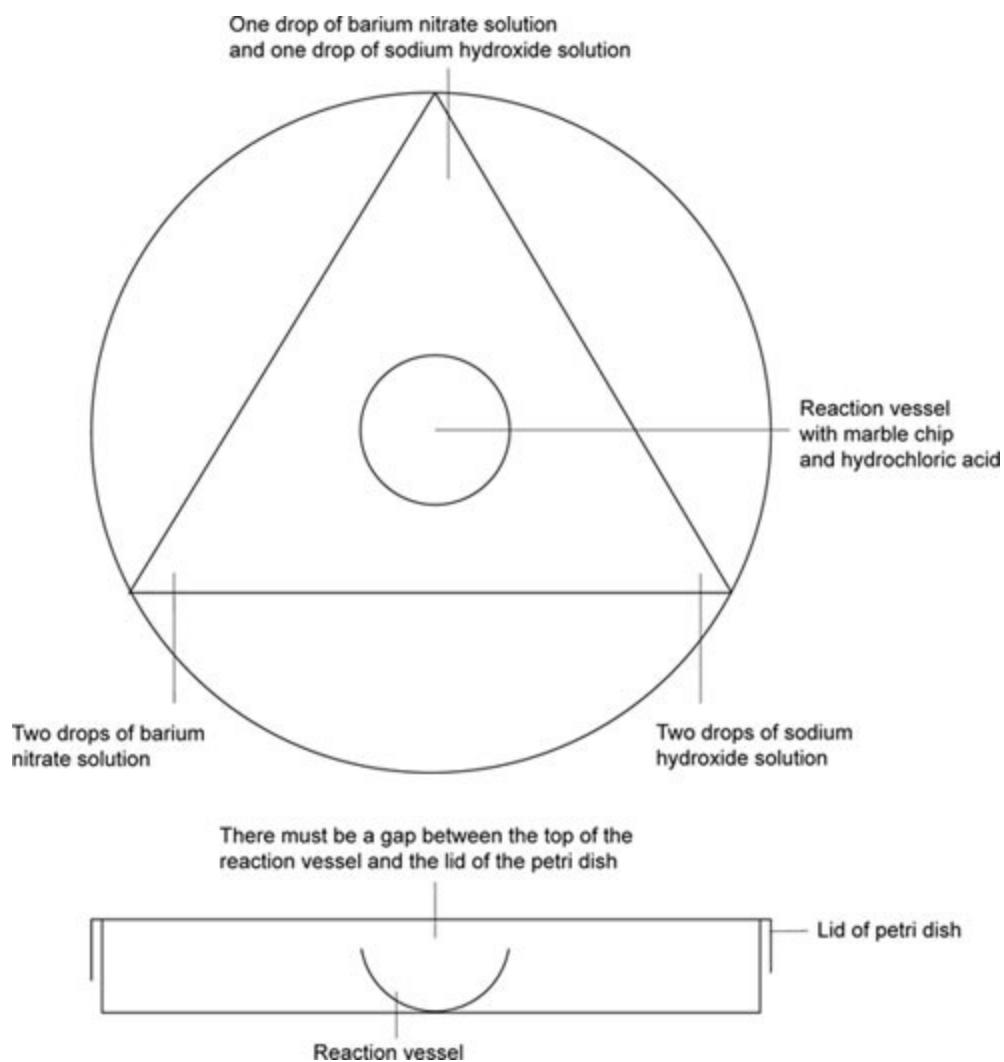
Instructions

You must wear eye protection.

1. Cover the worksheet with a clear plastic sheet.
2. Place the base of the petri dish directly over the circle below. Place the reaction vessel in the centre.
3. At the corners of the triangle add drops of the test solutions as indicated below (Care: barium nitrate is toxic).
4. Put a small marble chip in the reaction vessel and add three drops of hydrochloric acid. Quickly replace the lid on the petri dish.
5. Record all your observations over the next 15 min.

Question

1. What explanations can you give for your observations?



Health & Safety

Students must wear suitable eye protection (Splash resistant goggles to BS EN166 3).

Hydrochloric acid, $1 \text{ mol dm}^{-3} \text{ HCl (aq)}$ is of low hazard.

Sodium hydroxide, $0.5 \text{ mol dm}^{-3} \text{ NaOH}$ is corrosive. (Reducing the concentration to 0.4 mol dm^{-3} means it is irritant with less of a requirement for goggles)

Barium nitrate, $0.2 \text{ mol dm}^{-3} \text{ Ba(NO}_3)_2 \text{ (s)}$ is a skin/eye irritant.

Credits

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Health & safety checked May 2018

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