Worksheet 2

Name Class Date

**1** 25.0 cm3 of 0.300  mol/dm3 of sodium hydroxide reacted fully with 21.4 cm3 of ethanoic acid. Determine the concentration of the ethanoic acid used.

NaOH(aq) + CH3COOH(aq) → CH3COONa(aq) + H2O(l)

Follow the suggested steps below:

**i** Determine the moles of sodium hydroxide.

**ii** Use the molar ratio to determine the moles of ethanoic acid.

**iii** Calculate the concentration of ethanoic acid.

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**2** What volume of 2.00  mol/dm3 sodium hydroxide would react fully with 75.0 cm3 of   
1.50  mol/dm3 phosphoric acid, H3PO4?

3NaOH(aq) + H3PO4(aq) →Na3PO4(aq) + 3H2O(l)

Follow the suggested steps below:

**i** Determine the moles of phosphoric acid.

**ii** Use the molar ratio to determine the moles of sodium hydroxide.

**iii** Calculate the volume of sodium hydroxide.

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