Activity 1: Using a SOP

**Standard operating procedure for:  
Producing drug X**

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| Purpose: |
| To produce drug X: an antacid liquid used in the treatment of indigestion. The drug is made by reacting sodium hydroxide (NaOH)and ethanoic acid (CH3COOH). |
| Scope: |
| To be used by pharmacists, drug preparation laboratory technicians and for quality control in the manufacture of drug X. |
| Responsibilities: |
| Technician |
| Safety notes: |
| Eye protection must be worn |

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| Equipment: | |
| Sodium hydroxide (0.1mol dm-3)  Ethanoic acid (0.1mol dm-3)  Pipette  Conical flask | Beaker  Burette  Clamp stand  Eye protection  pH meter |
| Procedure: | |
| 1. Measure 10cm3 of 0.1mol dm-3 sodium hydroxide. 2. Add to a 50cm3 conical flask. 3. Using a funnel to avoid spillages, fill burette with 0.1mol dm-3 ethanoic acid. 4. Place conical flask containing sodium hydroxide under burette. 5. Use the burette to add 25cm3 of ethanoic acid to the sodium hydroxide. 6. Agitate solution for 5 seconds. | |
| Links to Other Policies: | |
| CLEAPSS – Student safety sheet 23 Ethanoic acid  CLEAPSS – Student safety sheet 31 Sodium hydroxide  CLEAPSS – Guidance Leaflet 320 Filling and using a burette | |