**Table 1**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Solution #** | **Temp (oC)** | **A Water**  **(mL)** | **B 0.0500M**  **Buffer (mL)** | **C 0.300 *M* HC2H3O2**  **(mL)** | **D 0.0500 M KI**  **(mL)** | **E 1% Starch**  **(mL)** | **F  0.0500 M Na2S2O3  (mL)** | **G 0.0100 M Mo(VI) Catalyst (mL)** | **H 0.800 M H2O2**  **(mL)** |
|  |  | *100 mL grad cylinder* | 50 mL grad cylinder | @ buffer station | 25 mL grad cylinder | 5 mL grad cylinder | 5 mL volumetric pipette | @ catalyst station | 10 mL grad cylinder |
| **1** | R.T. | 75 | 30 | 0 | 25 | 5 | 5 | 0 | 10 |
| **2** | R.T. | 80 | 30 | 0 | 25 | 5 | 5 | 0 | 5 |
| **3** | R.T. | 50 | 30 | 0 | 50 | 5 | 5 | 0 | 10 |
| **4** | R.T. | 30 | 30 | 45 | 25 | 5 | 5 | 0 | 10 |
| **5** | R.T. | 70 | 30 | 0 | 25 | 5 | 5 | 5 | 10 |
| **6** | R.T. + 10 | 75 | 30 | 0 | 25 | 5 | 5 | 0 | 10 |

**Table 2**

|  |  |  |  |
| --- | --- | --- | --- |
| **Bottle Concentrations  (*BEFORE dilution)*** | | | |
|  | **[I-]** | **[H2O2]** |  |
|  |  |  |  |
| **Final Concentrations  (*AFTER dilution*)  *Use excess significant figures at all times unless asked to round.*** | | | |
|  |  |  |  |
| **Solution #** | **[I-]** | **[H+]** | **[H2O2]** |
| **1** |  | **1.8 × 10-5** |  |
| **2** |  | **1.8 × 10-5** |  |
| **3** |  | **1.8 × 10-5** |  |
| **4** |  | **1.8 × 10-4** |  |
| **5** |  | **1.8 × 10-5** |  |
| **6** |  | **1.8 × 10-5** |  |

**Table 3**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Trial 1** | | **Trial 2** | |
| **Solution#** | **Temperature (oC)** | **Time (seconds)** | **Temperature (oC)** | **Time (seconds)** |
| **1** |  |  |  |  |
| **2** |  |  |  |  |
| **3** |  |  |  |  |
| **4** |  |  |  |  |
| **5** |  |  |  |  |
| **6** |  |  |  |  |