**Making Distance-time Graphs**

**Aim:** To construct distance-time graphs of a student’s run.

**Equipment:**

* Trundle wheel
* Stopwatch
* Meter ruler

**Diagram:**

**Procedure:**

1. Measure out 20 meters with 5 meter checkpoints in between using the trundle wheel.
2. Measure and record the time taken for the runner to run 5, 10, 15 and then 20 meters in one run.
3. Repeat two more times for that runner.

**Results**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Time taken to run** | | | |
| **5 m** | **10 m** | **15 m** | **20 m** |
| **Run 1** |  |  |  |  |
| **Run 2** |  |  |  |  |
| **Run 3** |  |  |  |  |
| **Average** |  |  |  |  |

**Discussion**

Create a distance-time graph using your average time and distance checkpoints on graph paper.

Create a distance-time graph using Excel:

1. Enter data collected into a spreadsheet (average time in one column, distance in another column.
2. Plot the data by highlighting the columns and selecting Insert > Scatter > Straight Lines and Markers.
3. Give your graph the title ‘Distance-time graph of [name]’ and label the axes (vertical – distance, horizontal – time).