Physics 100 Names: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Spool Tractor Activity 1

**Part 1:**

Calculate your spool tractor’s average velocity over **three different distances**. For this activity, you will be calculating velocity in feet per second (ft/s). Then you will convert that velocity to m/s and mph.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Trial** | **Distance Traveled (feet; floor tiles)** | **Time (s)** | **Velocity (ft/s)** | **Velocity (m/s)***[multiply ft/s by 0.305]* | **Velocity (mph)***[multiply m/s by 2.24]* |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |
| **3** |  |  |  |  |  |

**Part 2:** Have the teacher take a slow motion video of your spool tractor. You will be analyzing the video at a later date. Ask your teacher for the time at which the video was taken, and write that time here. This may help you find the right video file later on.

Time at which video was created: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Physics 100 Names: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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