

**Objective:** Model the relationship between mass of a pendulum bob ( $m$ ) and time it takes to fall from its highest to lowest points ( $t$ ). Phet pendulum lab found at [https://phet.colorado.edu/sims/html/pendulum-lab/latest/pendulum-lab\\_en.html](https://phet.colorado.edu/sims/html/pendulum-lab/latest/pendulum-lab_en.html). Choose “Lab” from the home screen. Feel free to use the Graphical Analysis app from Vernier on you Chromebook or use the Logger Pro app from Vernier on another device (download instructions are in your class shared folder) to complete your graphical analysis. Be sure to explain in your word model why you think the relationship is what it is.

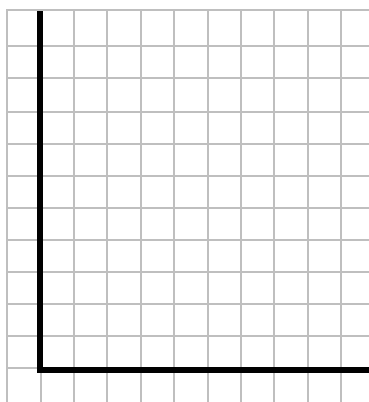
**Diagrammatical Model:**

**Experimental Design:**

**Data Collection:**

$m$ (kg)	$t$ (s)

**Graphical Model**



**Mathematical Model:**

**Word Model:**