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My original hypothesis was that the amplitude of the spring would change correlate with the change in period of the spring's motion. However, this hypothesis was refuted by the data collected from the lab. In the lab, we placed a mass of 100 grams on spring 1 and measured the average period for 3 different amplitudes, 2 cm, 5 cm, and 7cm. The average period for the 3 trials were 1.13, 1.10, and 1.10 seconds. From this data you can conclude that the amplitude does not affect the period of the spring because there is no correlation; for the different amplitudes, the period were very similar and showed no pattern. This data is supported by the accepted equation of  $T = 2\pi\sqrt{\frac{m}{k}}$  because there is no amplitude in this equation, meaning that the amplitude of the spring has no effect on the period. Nevertheless, the data was not perfect, because for the results to have been perfect, the period should have been exactly the same for all 3 amplitudes. The 0.03 seconds of variation between the trials could come from human error such as not pulling the springs vertically and instead pulling them sideways a bit, as well as human reaction time