

SPRING CONSTANT

Name: _____ Date: _____ Section: _____

Partner (s): _____

Part I: Determination of the spring constant by Hooke's law. $x_0 =$ _____ m.

| m (kg) | F (N) | x_i (m) | Δx (m) |
|--------|-------|-----------|----------------|
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Part II: Determination of the spring constant by its period of oscillation in response to different masses. $m_{\text{spring}} =$ _____ kg.

| m (kg) | Time for 20 cycles | | | | T (s) | T^2 (s ²) |
|--------|--------------------|-----------|-----------|----------------------|-------|-------------------------|
| | t_1 (s) | t_2 (s) | t_3 (s) | t_{avg} (s) | | |
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