

Centripetal Force

Name _____ Date _____

Source Notes:

This lab was modeled after the “Centripetal Force” lab #12
“Laboratory Physics”, Murphy Doyle, Merrill, 1990.
ISBN 0-675-02477-3

Jim Haine - Wissahickon High School, Ambler PA.
1997(?)
Modified 2010

Teacher Notes:

Modifications:

This lab was specifically designed to match the lab equipment purchased by our district.
as of 2011, this is still available
<http://sargentwelch.com/spring-scale-centripetal-force-apparatus/p/IG0037951/>

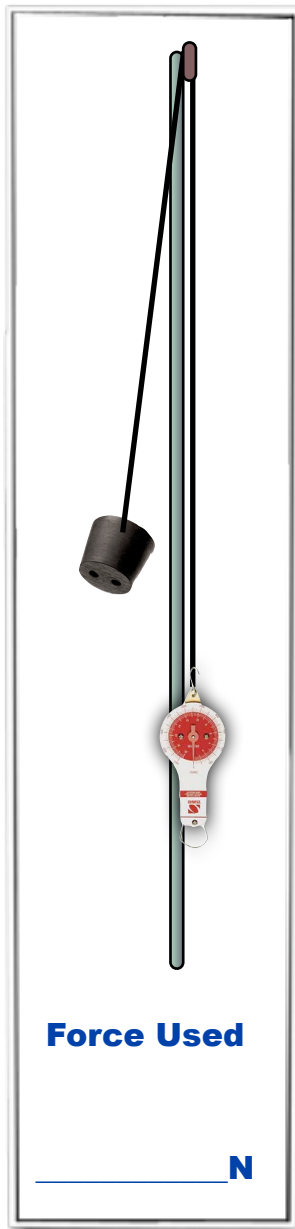
Grade

Centripetal Force

Name _____ Date _____

Measurements - radius and velocity:

Use a stopwatch to find the time for 20 revolutions of the rubber stopper. You must be sure to maintain a constant force for **each** of the trials.

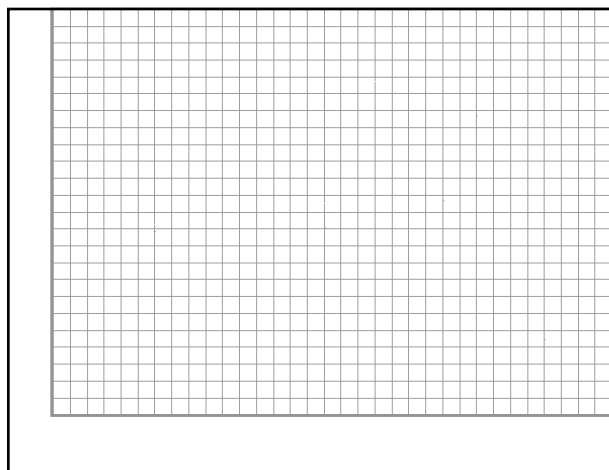


	radius	Time (20 rev)	velocity	v ²
1				
2				
3				
4				
5				

Graph the results:

Plot the radius on the Y axis and the square of the velocity on the x axis.

Use the slope of the line to calculate the mass of the rubber stopper



Mass = _____

Grade

Centripetal Force

Name _____ Date _____

Measurements - Force and velocity:

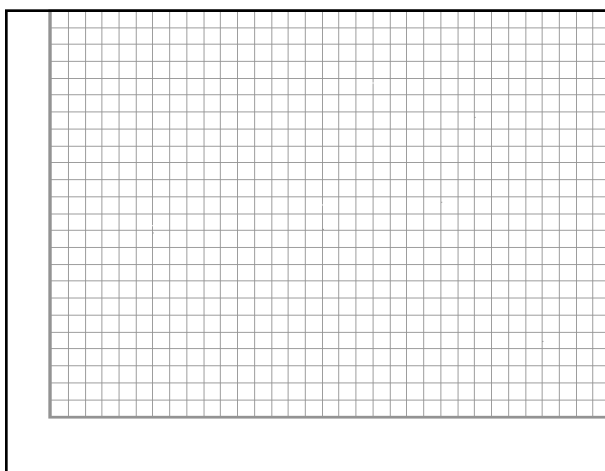
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