

Computer games affects the academic performance of adamson university

[People](#), [Patch Adams](#)



It also helps the researchers to determine the factors that affect the centripetal force acting on a body in uniform-circular-motion. Introduction: Objectives: 1 . To study the forces involved in the motion of a body traveling with constant speed in a circular path. 2. To determine the factors that affects the centripetal force acting on a body in uniform circular motion. Uniform Circular Motion describes the motion of a body traversing a circular path at constant speed. The distance of the body from the axis of rotation remains constant at all times.

An object moving in a circle with uniform speed is said to move with uniform circular motion. Although the speed of the object is constant, its velocity is changing notational, for the direction of motion is always changing. The object has acceleration, but this acceleration produces a change only In the direction of velocity. Figure 1: Centripetal Force Apparatus Centripetal Force Apparatus (Figure 1) allows to investigate the relationship between centripetal force, radius, mass and velocity for an object undergoing uniform circular motion.

Theory: After the radius and mass was given, the computation for the force, centripetal force, centripetal acceleration, and percentage error of the wooden ball was gathered. First, the computation for the frequency of the wooden ball: here N = number of revolution $f = N/t$ t = time of the wooden ball FCC m = hanging mass where f = frequency r = radius $FCC =$ Centripetal Force Third, the computation for the true value of Centripetal force of the wooden ball $FCC = MGM$ where M = hanging mass g = standard gravity in CM/so Lastly, for the computation of the percentage error using

this formula $\%error = \left(\frac{| \text{stud vial.} - \text{Expect vial.} |}{\text{stud vial.}} \right) * 100\%$

Methodology: The experiment needed this following material: Centripetal force apparatus, meter stick, hooked masses, beam balanced and stop watch
The researcher first get the ass of the wooden ball that is attached unto the centripetal force apparatus, then hang a egg mass into the other end of the string that is also attached unto the centripetal force apparatus. (Constant mass and variable radius) The first radius of the string that has the wooden ball should be CACM.

One researcher should whirl the ball while another records the rate of revolution of the ball and its time. The researcher will repeat the first step while changing the radius of the string attached to the wooden ball from CACM to CACM and then CACM. In each trial, the mass in the other end of the string should be equal. (Constant radius and variable mass) The radius of the string attached to the wooden ball should be set to CACM. The mass on the other end of the string should be egg.

If r is the radius of the path, and we define the period as the time it takes to make a complete circle then the speed is given by the circumference over the period. A similar equation relates the magnitude of the acceleration to the speed. Centripetal Force motion in a curved path represents accelerated motion, and requires a force directed toward the center of curvature of the path. This force is called the centripetal force which means "center seeking" force. Conclusion: The researchers concluded that uniform circular motion describes an object that is revealing at constant speed in a circular pathway.

Though the speed which is the magnitude of the velocity remains the same, the direction of velocity is constantly changing as the object curves along the edge of the circle. A changing velocity implies a nonzero acceleration, and thus net force is acting on the object.