

Chapter 7 – Circular and Orbital Motion

Learning Grid

Circular and Orbital Motion	Questions	Answers
	What is angular velocity?	
	State an equation for the linear velocity of an object moving in a circular path.	
	What is the circumference of a circle? Using this information, write an equation for linear velocity in terms of the radius of a circle.	
	Define centripetal force, including its equation and unit.	
	Derive an equation for the linear velocity of an orbiting body, given the mass of the planet and the radius of orbit.	

Circular and Orbital Motion	Questions	Answers
	Derive an equation for the period of a body in orbital motion, in terms of its orbital radius and linear velocity.	
	State Kepler's third law and derive an equation for it.	
	Explain, with the use of a diagram, what a geostationary orbit is.	