Biomechanics of Sports

# Biomechanical Terms and Concepts

## Inertia

April 20, 2020

Lesson: April 20, 2020

**Objective/Learning Target: Identify and apply the concept of inertia in the assessment of biomechanics.**

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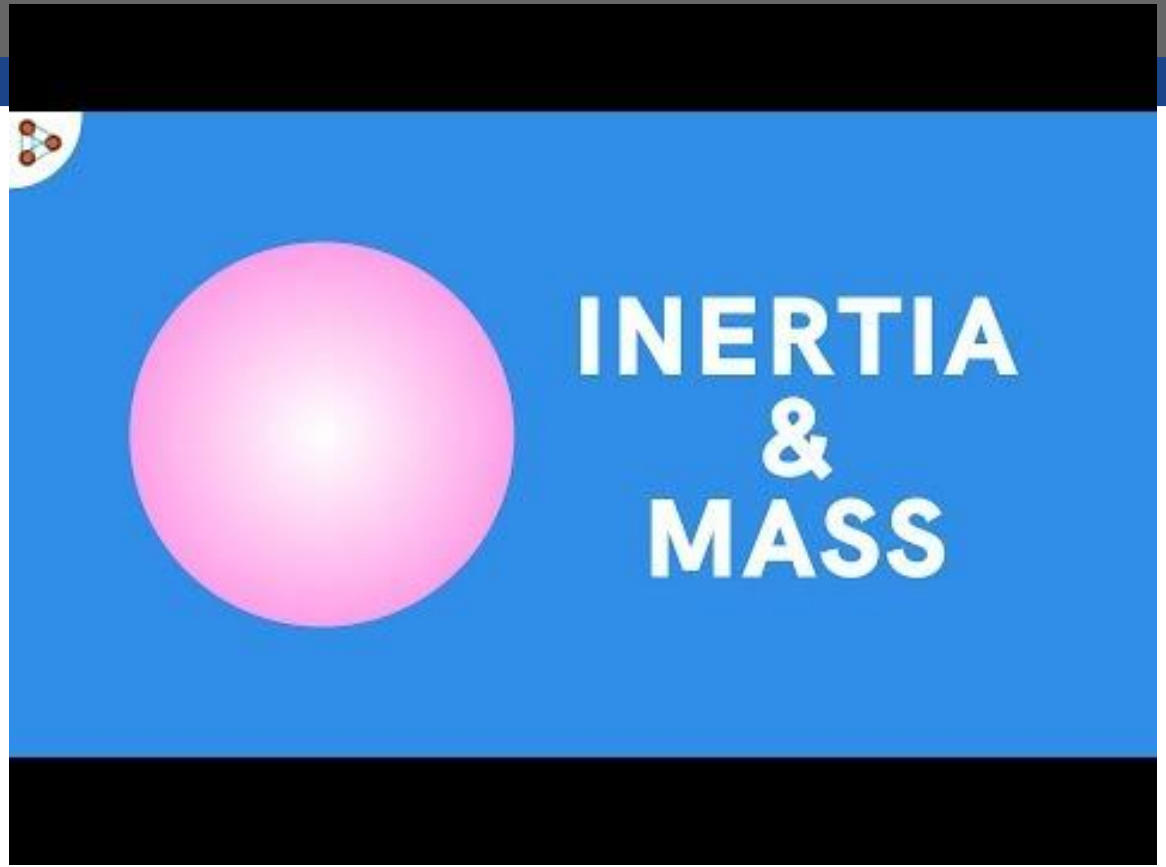
**Instructions: Watch the video and then answer the follow-up questions.**


INERTIA
&
MASS

This is an important concept in sports, as events measured by projecting a body at speed (rather than an object) rely on what we call ‘power to weight ratio’. An athlete with more mass will have more resistance to a change in motion, and so will need to be stronger to get moving than an athlete with less mass.

This is where excess body fat is undesirable in speed-power sports, as it is contributing to mass which needs to be moved, but not force or energy production.

# Questions

1. What is the natural tendency of every object?

2. What role does Mass play in relationship to Inertia?

3. Give one example showing your understanding of Newton's First Law of Inertia.

Email your discussion questions to the following instructors:

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