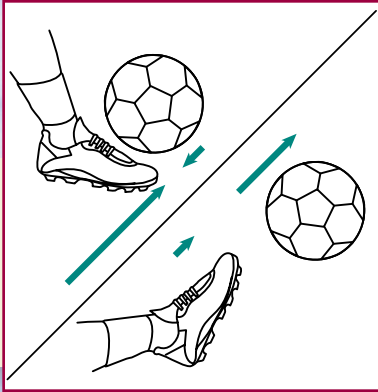


Momentum and Collisions



Soccer players must consider much information about the ball and their own bodies in order to play effectively. The player in the photograph determines what force to exert on the ball in order to send the ball where he wants it to go.

WHAT TO EXPECT

In this chapter, you will analyze momentum and collisions between two or more objects. You will consider the mass and velocity of one or more objects and the conservation of momentum and energy.

Why It Matters

Collisions and other transfers of momentum occur frequently in everyday life. Examples in sports include the motion of balls against rackets in tennis and the motion of human bodies against each other in football.

CHAPTER PREVIEW

- 1 Momentum and Impulse**
Linear Momentum
- 2 Conservation of Momentum**
Momentum Is Conserved
- 3 Elastic and Inelastic Collisions**
Collisions
Elastic Collisions