

MARBLE MOTION

Materials

Cafeteria Tray Marbles of Different Sizes Straw

What To Do

Observe and describe the motion of a small marble rolling across the cafeteria tray. Does the marble accelerate (does it change speed or direction)? If so, why? If not, why not? Record your observations on the answer sheet.

Does the mass of the marble affect how it moves? In other words, do marbles of different masses act differently as they roll? Why or why not? Record your observations on the answer sheet.

Apply a force to the marbles by blowing on it through a straw. What happens to its motion? Make a diagram showing the direction of motion of the marble and the direction of the force. Also show any changes in the motion of the marble on the diagram. Use your answer sheet to record your observations.