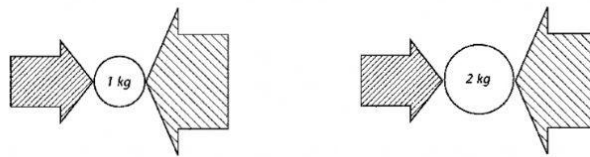


Chapter Ten Test

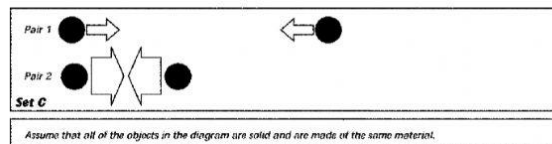
Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

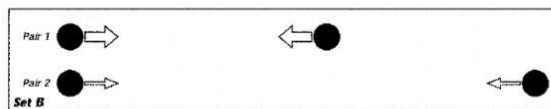
Forces on Two Objects



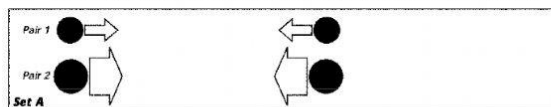
- The width of each arrow indicates
 - that the force is balanced.
 - the size of the force.
 - how sharply the forces push on the ball.
 - the direction of the force.
- Compare the acceleration of the 1-kg object with that of the 2-kg object.
 - the acceleration of both objects will be the same.
 - the 1-kg object will have twice the acceleration of the 2-kg object.
 - the 1-kg object will have less acceleration than the 2-kg object.
 - neither object will accelerate.
- In what direction is the net force acting on the 1-kg object?
 - the forces are balanced.
 - to the right.
 - upward.
 - to the left.



- In Set C, the difference in the magnitudes of the gravitational forces between the two pairs of objects is because
 - There is no difference between in the forces between Pair 1 and 2.
 - Pair 1 and 2 have the same mass, but Pair 2 is closer, so they exert more gravity on each other.
 - Pair 2 has more mass than Pair 1
 - Pair 1 represents planets with no atmosphere.



- In Set B, the difference in the magnitudes of the gravitational forces between the two pairs of objects is because
 - Pair 2 has less mass than Pair 1
 - Pair 1 and 2 have the same mass, but Pair 1 is closer, so they exert more gravity on each other.
 - Pair 1 represents planets with an atmosphere
 - There is no difference in the forces between Pair 1 and 2.



- In Set A, what would you have to do to the objects to make the gravitational forces between the objects in Pair 1 the same as the forces between the objects in Pair 2?
 - Move the objects in Pair 2 farther apart.
 - There is no way to change the gravitational forces.
 - Move the objects in Pair 2 closer together.
 - Move the objects in Pair 1 farther apart.
- In Set A the gravitational forces between Pair 2 are greater than between Pair 1 because
 - Pair 1 represents planets with no atmosphere
 - Pair 2 has less mass than Pair 1
 - Pair 2 represents planets with an atmosphere
 - Pair 1 has less mass than Pair 2
- Two figure skaters who push off of each other will move at the same speed if
 - they have the same mass.
 - they push with the same force.
 - the ice does not cause any friction.
 - there is no air resistance.
- Which of the following is an example of increasing friction intentionally?
 - throwing sand on an icy driveway
 - oiling a squeaky door
 - adding grease to gears on a bike
 - waxing skis
- The amount of matter in an object is called its
 - force.
 - weight.
 - mass.
 - balance.