

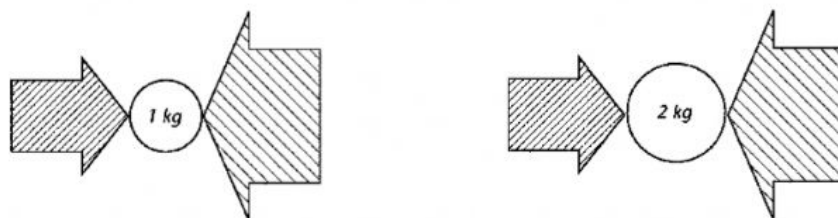


## Chapter Ten Test

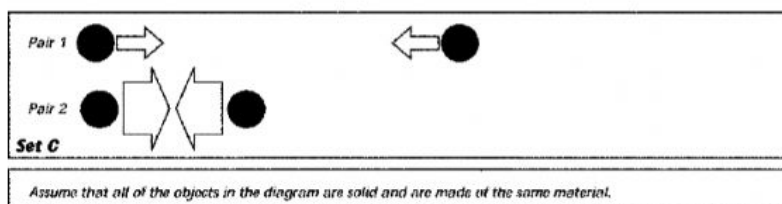
### Multiple Choice

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

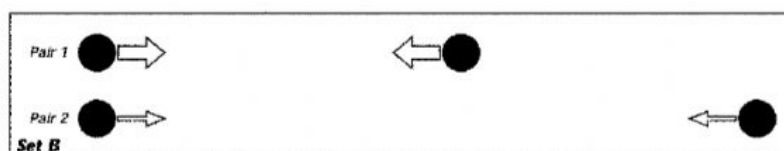
#### Forces on Two Objects



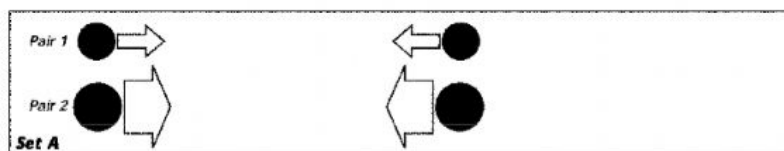
- The width of each arrow indicates
  - that the force is balanced.
  - the size of the force.
  - how sharply the forces push on the ball.
  - the direction of the force.
- Compare the acceleration of the 1-kg object with that of the 2-kg object.
  - the acceleration of both objects will be the same.
  - 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