LAWS OF MOTION

6. Newton's third law states that any action will have an _____ and _____ reaction ( )

a) Equal and similar b) Equal and opposite c) Equal and different d) Greater and opposite

7. Which of the following is not an example of Newton's 3rd law ( )

a) Swimming of fish b) Flying of birds

c) Striking of carom coins with a striker d) Moving of a rocket

7. Identify the parts in the following diagram. ( )

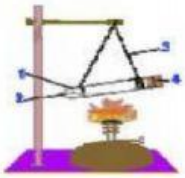
(In which you did the lab activity for action and reaction forces)

a) 1.Test tube, 2. Cork, 3. String, 4. Water

b) 1. Water, 2. Test tube, 3. Cork, 4. String

c) 1. Test tube, 2. Water, 3. String, 4. Cork

d) 1. Cork, 2. Water, 3. String, 4. Test tube



5. You hit a nail with a hammer. During the collision, there is a force ( )

a. on the hammer but not on the nail.

b. on the nail but not on the hammer.

c. on the nail and also on the hammer.

4. Rocket works on the Law of conservation of …….. ( )

a) Mass b) Momentum c) Energy d) Impulse

5. The Law of conservation of momentum holds for …….. ( )

a) Individual particles b) only for two particles

c) A system of particles d) only for three particles

6. The momentum of a body of given mass is proportional to…….. ( )

a) It's colour b) it's velocity c) it's volume d) It's shape

7. A heavy rock and a small ball roll down a hill. Neglecting friction, at the bottom of the hill,the ball will likely have ( )

a) less momentum b) about the same momentum c) more momentum d) no momentum

6. The force on a dropped apple hitting the ground depends upon ( )

A) the speed of the apple just before it hits.

B) the time of contact with the ground.

C) whether or not the apple bounces.

D) all of the above

7. It is correct to say that impulse is equal to ( )

A) momentum.

B) a change in momentum.

C) force multiplied by the distance it acts.

D) velocity multiplied by time.

8. Whether a car comes to a stop by crashing into a haystack or a brick wall, the stopping force is ( )

A) greater with the haystack.

B) greater with the brick wall.

C) both the same

D) not defined .

9. What is the SI unit of impulse? ( )

a) N/m

b) N/m2

c) N.s

d) Kg.m