Worksheet: Day 2.1

Test in DAY 2 - IN CLASS

4
FEB

STATUS

1

*****Please note that you must finish this assignment before you leave today in order to receive full credit for attendance.*****

Please use the following equation sheet for reference:

Test1Equationsheet.pdf (https://assethub.fso.fullsail.edu/assethub/Test1Equationsheet_426ce67a-3564-4078-b8d4-ed93a5a765d5.pdf)

Select "Yes." below.

0 Points

- (•) Yes.
- ( ) Do not select this one.

2

Look at your laptop sitting still on the desk. Newton's First Law (the Law of Inertia) states that:

10 Points

- (•) your laptop will not move until an outside force pushes it.
- ( ) your laptop will have less mass when an outside force pushes it.
- ( ) your laptop will move without an outside force.

3

Newton's Third Law (Law of Action/Reaction) states that:

10 Points

- ( ) if you push your laptop with 10 N of force, it will continue to move in that direction forever.
- ( ) if you push your laptop with 10 N of force, you will increase the laptop's mass.
- (•) if you push your laptop with 10 N of force, the laptop pushes back on you with 10 N of force.

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4 A man leans against a wall pushing it with a force of 42 N. How much force does the wall push back with against the man?

10 Points

- (•) 42 N
- ( ) 5 N
- ( ) 80 N
- ( ) 400 N

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5 What is the relationship between acceleration and mass if force is held constant?

10 Points

- ( ) Acceleration is directly proportional to mass.
- (•) Acceleration is inversely proportional to mass.
- ( ) There is no relationship between acceleration and mass.

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6 Inertia is:

10 Points

- ( ) how quickly an object speeds up.
- (•) an object's natural resistance to changes in motion based on its mass.
- ( ) a push or a pull.

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7 Newton's Second Law (Law of Acceleration) states that the acceleration produced by a net force on an object is:

10 Points

- ( ) directly proportional to the net force.
- ( ) in the same direction of the net force.
- ( ) inversely proportional to the mass of the object.
- (•) all of these.

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8 An object moves through a vacuum at a speed of 5 m/s. If no outside forces influence the object, what will its speed be after 5 s?

10 Points

- (•) 5 m/s
- ( ) 1 m/s
- ( ) 20 m/s
- ( ) 15 m/s

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9 If the acceleration of an object doubles with no change to mass, what happens to the force?

10 Points

- ( ) The force is halved.
- (•) The force is doubled.
- ( ) The force is quadrupled.
- ( ) There is no change to the force.

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10 A boxer punches a sand bag. The sandbag experiences a force of 3500 N. How much force does the sand bag exert on the boxer's hand?

10 Points

- ( ) less than 3500 N
- (•) 3500 N
- ( ) more than 3500 N

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11 Newton's Second Law (Law of Acceleration) states that:

10 Points

- ( ) if you push your laptop with double the force, it will half the acceleration.
- (•) if your push your laptop with double the force, it will double the acceleration.
- ( ) if you push your laptop with double the force it will half the mass.
- ( ) if you push your laptop with double the force it will double the mass.

Submit

Comments