Worksheet: Day 2.2

Test in DAY 2 - IN CLASS

4
FEB

B+
GRADE

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.

0pts

2 A box is pushed with a force of 50 N across a distance of 3 m. How much work is done on the box?

3 How much kinetic energy does a skater have before he starts to skate?

5pts

- 9.8 J
- 0 J — Correct Answer
- 300 J
- Not enough information to answer.

4 How much momentum does a biker with a mass of 72 kg have when moving at a velocity of 13.4 m/s?

5 A car with a mass of 1500 kg is traveling at a velocity of 7 m/s when it hits a stationary car with a mas…

6 What is the relationship between potential energy and height?

7 How much potential energy does a skater with a mass of 20 kg have when he starts to skate at a hei…

8 How much work does an engine do with a power of 13 W for a time of 5 s?

9 Two ice skaters stand in the center of an ice rink. They push off of each other and move in opposite directions. The conservation of momentum tells us that:

5pts

- the momentum of both skaters combined is greater before the collision.
- the momentum of both skaters combined is greater after the collision.
- the momentum of both skaters combined is the same before and after the collision. Correct Answer

10 A worker uses a pulley to lift a crate with a mass of 20 kg to a height of 3.5 m. How much work is do…

11 A ball of clay is thrown at a bottle. The clay collides with the bottle and wraps around it. This is an e…

12 Using the Conservation of Energy, if a skater with a mass of 75 kg starts to skate on a half pipe at a h…

13 A skater has a momentum of 140 kgm/s and is traveling at a velocity of 2 m/s. What is the skater's m…

14 A ball with a momentum of 1000 kgm/s collides with a stationary toy truck. If the ball immediately comes to rest, how much momentum does the toy truck have?

5pts

0 kgm/s

1000 kgm/s — Correct Answer

There is not enough information.

15 How much force does a conveyer belt apply to an object if it does 140 J of work to move the object a …

16 How much kinetic energy does a skater with a mass of 70 kg have when he moves at a velocity of 7 …

17 What is the power of a conveyer belt that does 700 J of work in a time of 5 seconds?

18 A skater with a mass of 80 kg rolls down a half pipe from rest. At the bottom of the ramp, he has a v…

19 At what height will an object with a mass of 14.9 kg have a potential energy of 949.13 J?

20 How much distance was covered by an object that did 317.52 J of work using a force of 12.96 N?

21 How much potential energy does an object have at a height of 0 m?

You submitted this activity 5 days ago.

Comments

Donald Johnson This test has been automatically graded.