

Cumulative Worksheet 1

Test in DAY 2 - HOMEWORK

7

FEB

A

GRADE

1 ✓

What is the acceleration of a runner who accelerates from rest to a final velocity of 3.4 m/s in a time ...

2 ✓

What is the kinetic energy of a skater with a mass of 75 kg traveling at a constant velocity of 3 m/s?

3 ✓

Two things are directly proportional if:

4 ✓

What is the relationship between acceleration and time?

5 ✓

A box sits at rest on the floor. This is an example of:

6 ✓

In a vacuum with no outside forces, a ball is set in motion at a velocity of 6 m/s. How fast is it going ...

7 ✕

What is the relationship between weight and mass?

4pts

☐ Weight is directly proportional to mass.

☒ Weight is inversely proportional to mass.

☐ There is no relationship between weight and mass.

☐ Weight and mass are the same thing.

Correct Answer

8 ✓

What is the force applied to an object with a mass of 38.2 kg that accelerates at 7.5 m/s²

9



What is the acceleration of a car that slows from an initial velocity of 12 m/s to a final velocity of 3 m/...

10



What is the mass of a car with a momentum of 13,850 kgm/s and a velocity of 10 m/s?

11



A box is pushed with a force of 2.2 N for a distance of 8.3 m. How much work was done on the box?

12



How much power does an object have that does 483.8 J of work in a time of 2 s?

13



What is the mass of an object that has a weight of 758.52 N?

14



What is the velocity of a skater with a mass of 67 kg and a momentum of 589.6 kgm/s?

15



How much work is done to an object with a weight of 56.4 N that is raised to a height of 9.1 m?

4pts

- ☐ 52.37 J
- ☐ 5029.752 J
- ☒ 6.198 J

☐ 513.24 J

Correct Answer

16



An object falls in free fall for 2.5 seconds. How far does it fall?

17



What is the acceleration of a car with a mass of 1500 kg while the engine is producing 9750 N of force?

18



What is the potential energy of an apple with a mass of 0.6 kg hanging from a tree branch 2 m high?

19



What is the average speed of a bicyclist who travels a distance of 6 m in a time of 2.5 s?

20



What is the difference between scalars and vectors?

21



An orange with a mass of 0.4 kg hangs from a tree with a height of 3.5 m. If it falls, how much kinetic...

22



How is the inertia of an object determined?

23



What is it called when an object accelerates because of gravity and nothing else?

24



Jill and Max need to move a heavy desk across the room. Jill pushes with a force of 150 N and Max h...

25



Two pool balls collide and then move away from each other. This is an example of:

You submitted this activity 6 days ago.

Comments

Donald Johnson

This test has been automatically graded.