QUIZIZZ

NAME : _____

CLASS : _____

mechanical advantage
16 Questions

DATE : _____

1. How much work is produced when 350 N is used to move a car 5 m (W=Fd)?

70 J

1750 J

355 J

175 J

2. What is effort (input) force?

the force one exerts on a machine

the force which an effort force must overcome in order to do work on an object via a simple machine.

the force the machine exerts on a object

the output work times the input distance

3. How is work defined?

the amount of energy

the transfer of force over a distance

rate of work in a given time

the change in distance in a given time

4. What is the equation for mechanical advantage?

MA=input force*output force

MA=output force/input force

MA=input force/output force

MA= output force - input force

5. if a load of a lever is 100 newtons and the force you apply is 20 newtons, what is your mechanical advantage?

120 N

5 N

2000 N

80 N

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6. The amount by which a machine multiplies input force is known as the

work. power.

output force. mechanical advantage.

7. the percentage of the input work that is converted to output work

mechanical advantage efficiency

joule machine

8. How much work is done in holding a 15 N sack of potatoes while waiting in line at the grocery store for 3 minutes?

15 J 45 J

0 J 5 J

9. How much work is done in holding a 15 N sack of potatoes while waiting in line at the grocery store for 3 minutes?

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10. Work done = Force x _____

a. distance b. acceleration

c. velocity d. speed

11. The efficiency of a machine can be increased by reducing _____.

effort resistance friction

fulcrum friction

12. Force is a ____ or _____

simple complex push pull

up down in out

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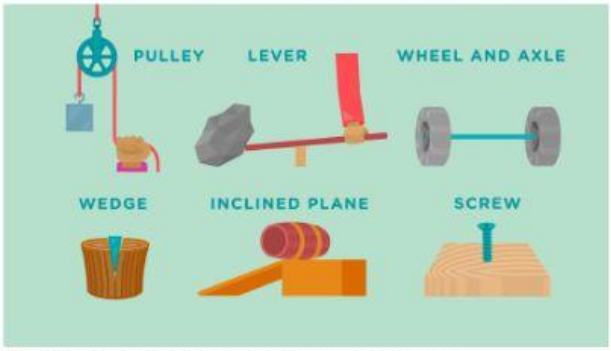
13. The _____ of a machine is always less than 100%.

mechanical advantage

friction

force

efficiency

14. 

All simple machines help make work _____.

harder

smaller

lighter

easier

15. What is the unit of measurement for work?

Newtons

Joules

Watts

Metres

16. What is mechanical advantage?

The advantage a machine has over a bicycle

A measure of how much a simple machine reduces work

A measure of when is the best time to use a simple machine

the number of times a machine increases input force

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