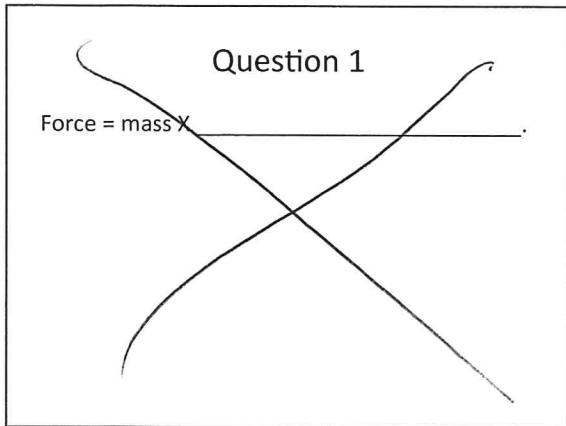


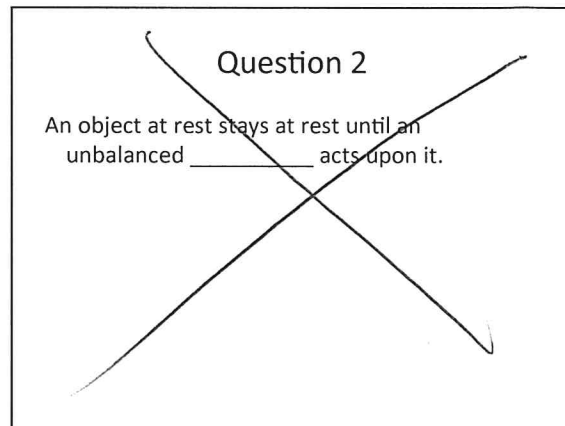
Question 1

Force = mass \times _____



Question 2

An object at rest stays at rest until an unbalanced _____ acts upon it.

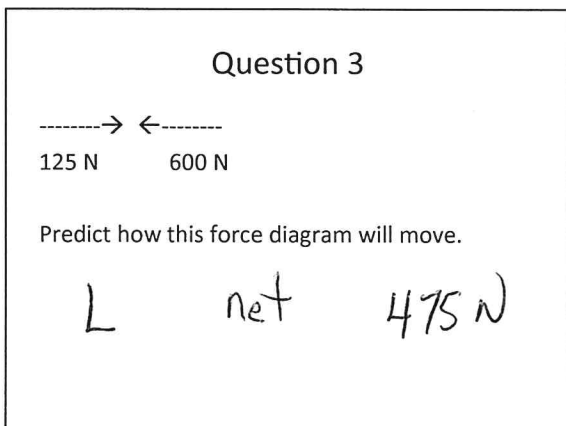


Question 3

-----> <-----
125 N 600 N

Predict how this force diagram will move.

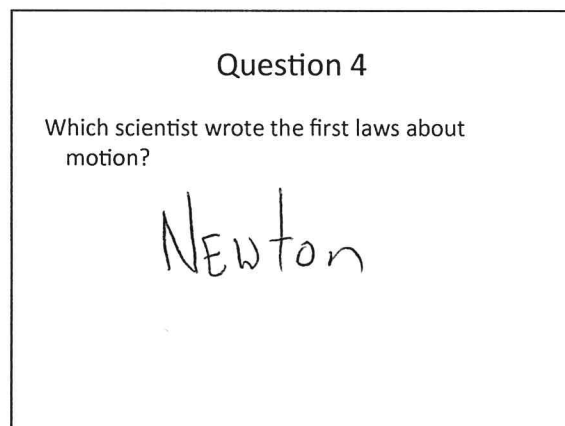
L net 475 N



Question 4

Which scientist wrote the first laws about motion?

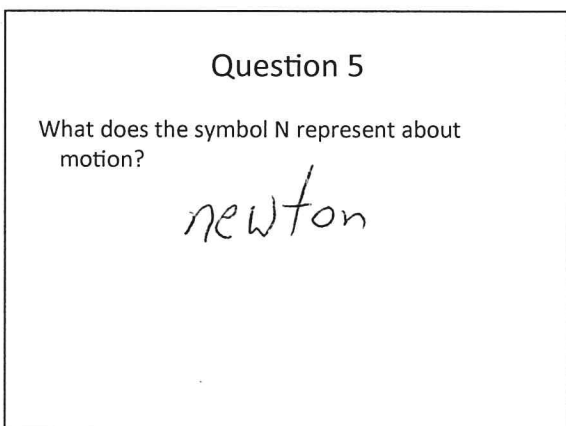
Newton



Question 5

What does the symbol N represent about motion?

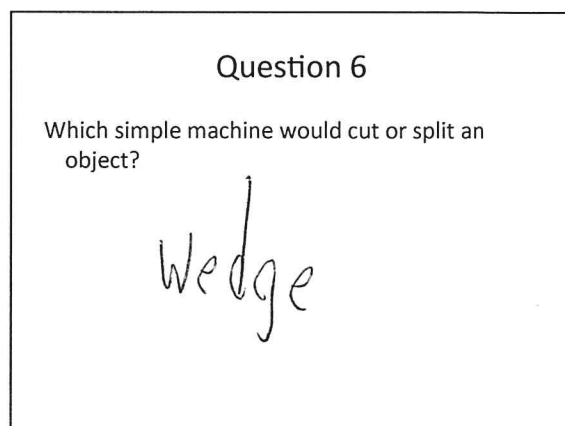
newton



Question 6

Which simple machine would cut or split an object?

wedge



Question 7

---→ ←---
600 N 600 N

Is this force diagram balanced or unbalanced?



Question 8

If an object was pushed with a force of 500 N, and it moves 0 meters, how much work was done?

$$500 \text{ N} \times 0 \text{ m} \\ = 0 \text{ N}\cdot\text{m}$$

Question 9

Which simple machines could lift an object off the ground?

pulley
incline

Question 10

Which simple machine uses a fulcrum?

lever

Question 11

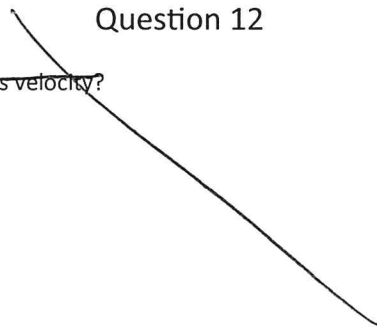
---→ ---→
250 N 250 N

What is the net force of this diagram?

500 N R

Question 12

What is velocity?



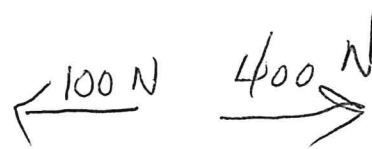
Question 13

Which type of simple machine allows you to roll an object uphill?

incline plane

Question 14

Draw a force diagram that is unbalanced and has a net force of 300 newtons.



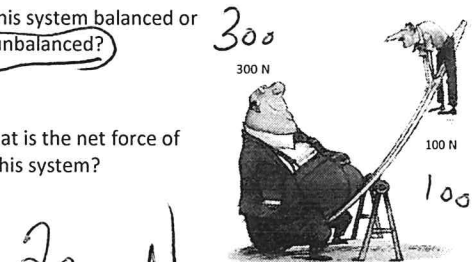
Question 15

Which type of simple machine allows you to pry something open?

lever

Question 16

Is this system balanced or unbalanced?



What is the net force of this system?

200 N

Question 17

What simple machine is wrapped around a screw?

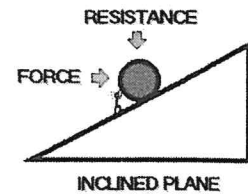
incline plane



Question 18

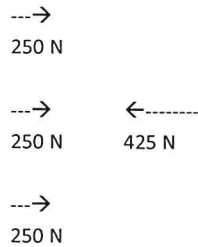
What are two examples of an inclined plane?

ramp
stairs



Question 19

Is this force diagram balanced or unbalanced?

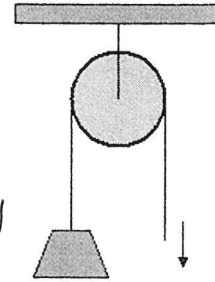


Explain.

$$\begin{array}{r} 750 \\ - 425 \\ \hline 325 \text{ N} \end{array}$$

Question 20

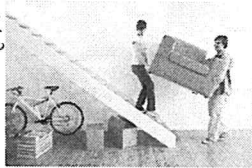
Does this pulley give you any mechanical advantage?



No
MA=1

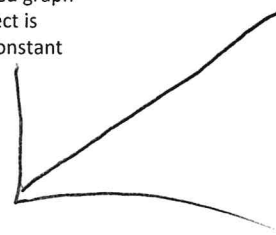
Question 21

Work is when you MOVE an object.



Question 22

How does a speed graph look if an object is moving at a constant speed?



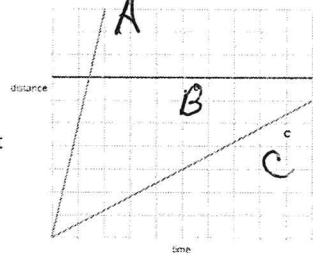
Question 23

Which speed line is moving the fastest?

A

Which speed line is not moving?

B



Question 24

What is potential energy?

stored

Question 25

What are two examples of kinetic energy?

if it's moving
 right
 kid on bike
 RIVER flowing

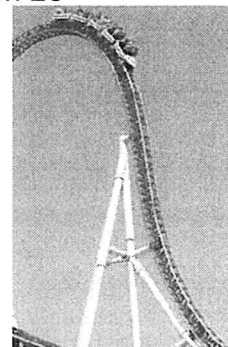
Question 26

Where is the most potential energy?

top of hill

Where is the most kinetic energy?

bottom first hill



Question 27

What is the average speed of a person riding on a scooter for 100 km in 4 hours?

$$\frac{100 \text{ km}}{4 \text{ hr}} = 25 \text{ km/hr}$$



Question 28

Where does the ball have the most potential energy?

high

Where does the ball have the most kinetic energy?

v

