

First Name: _____	Last Name = _____	Period: _____	Date: _____	School _____
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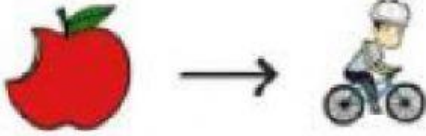
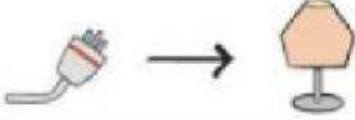
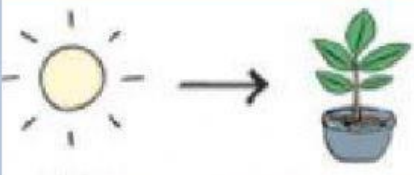
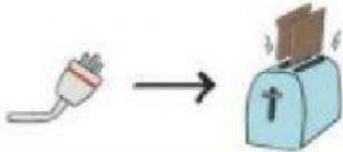
Force, Motion, Energy Resources and Transformation

Bassett Test Review II

Question 1

Instructions: Join with the line the picture with correct energy transformation

Picture





 Electric Generator

Energy Transformation

>Chemical to mechanical
>Radiant Light to chemical
>Electrical to heat
>Mechanical to light
>Electrical to light

Question 2

Definition:

The law of Conservation of energy:

The law of conservation of energy states energy cannot be created or destroyed but may be changed from one form to another.

Instructions: Use the above statement to complete the missing parts of the following text

The law of _____ of _____ states _____ be created or _____ but may be _____ from one _____ to _____.

Question 3

Potential Energy:

- **Stored energy**
- **The higher an object is at, the more Potential energy**

Kinetic Energy:

- **Released energy**
- **The faster an object is going, the more Kinetic energy**

Instructions: Label “potential energy” or “kinetic energy”



Question 4

Hint:

- >The higher the more PE
- > the faster the more KE

Instructions: Use the labels **A, B, C and D** to label the correct Potential and kinetic energy “amount” on the picture

A

KE=100 max
PE = none

B

KE = none
PE=100 max

C

KE= 50%
PE=50 %

D

KE= 75% or $\frac{3}{4}$
PE= 25% or $\frac{1}{4}$



Use the formula **Speed** = distance/time

$$\text{Speed} = \frac{d}{t}$$

Example

Instructions: Plug in the numbers inside the boxes and divide to find the answer

Find the Speed (S) ----- **Scalar quantity** (It has **no** direction)

S (Speed) = ?

d (distance) = 40 meters

t (time) = 5 seconds

$$S = \frac{\boxed{d}}{\boxed{t}} = \frac{\boxed{40 \text{ meters}}}{\boxed{5 \text{ seconds}}} = \boxed{8 \text{ meters/second}}$$

Question 5

Plug in the numbers inside the boxes and divide to find the answer

Evaluate the Speed (S)

S (Speed) = ?

d (distance) = 800 miles

t (time) = 5 hours

$$S = \frac{\boxed{d}}{\boxed{t}} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$

Question 6

Plug in the numbers inside the boxes and divide to find the answer

Evaluate the Speed (S)

S (Speed) = ?

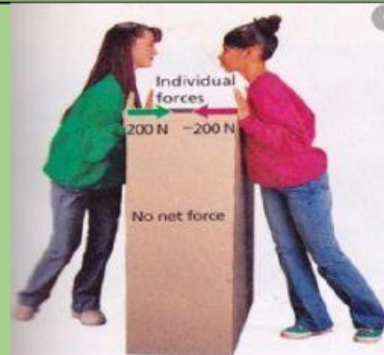
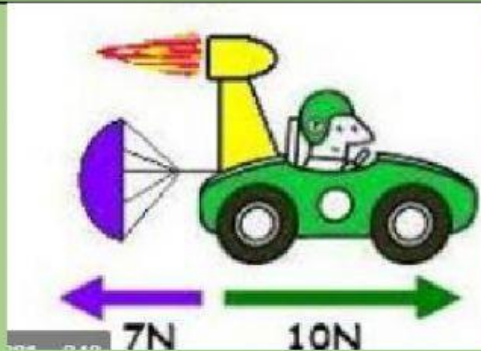
d (distance) = 48 meters

t (time) = 8 seconds

$$S = \frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}} = \boxed{}$$

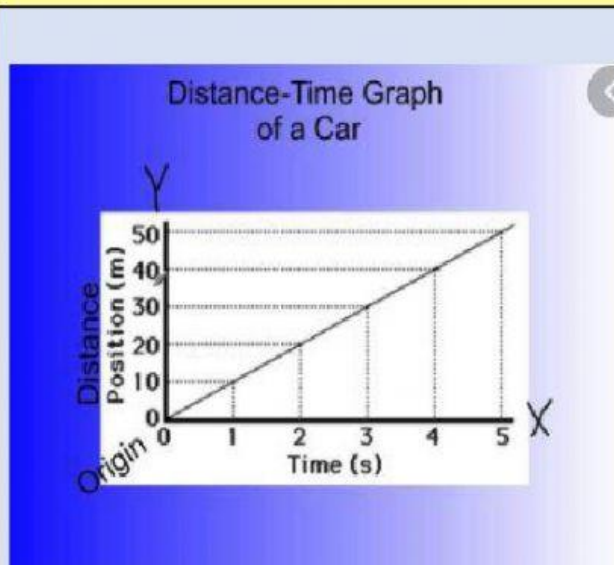
Question 7

Write “*balance*” or “*unbalance*” forces



Question 8

Use graphs to find the **distance**, the **time**, and the **speed**



Find the average speed

Step 1 : Distance at 5 sec

Step 2: Time at 50 meters

Step 3:

$$\text{speed} = \frac{\text{distance}}{\text{time}}$$

Question 9

Vocabulary

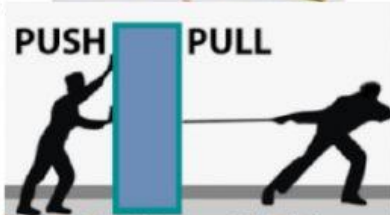
Match the word with the definition by writing the correct letter

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Word
1.X-axis
2.Force
3.Y axis
4.Unbalanced
5.Friction
6.Energy transformation
7.Potential Energy
8.Kinetic Energy
9.Inclined plane
10. Speed formula

Definition
Vertical Line
Energy stored
Energy of motion

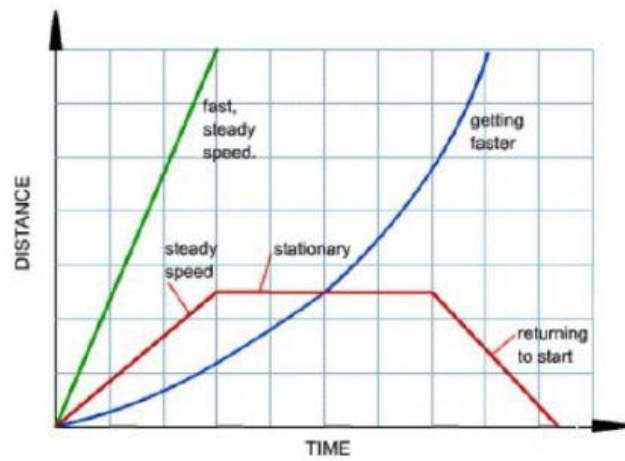
Horizontal line
$Speed = \frac{d}{t}$





Question 10

Practice: Understanding the distance vs time graph



Instructions: Use the graph on top to label the missing parts

