## Science Vocabulary Review

## Motion



## Science Vocabulary

## Motion Vocabulary

Picture that jogs my memory
SPEED - noun

Definition- $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Circle the examples of units of SPEED.
meters per second
inches / day
liters / second
hour per meter

s/m $\mathrm{cm} / \mathrm{yr}$

Write YES on the line before the sentence if it is correctly uses the word SPEED. Write NO if it is not correct.
$\qquad$ The SPEED of an object can be measured but not predicted.
2) $\qquad$ If an object doesn't move for a period of time then its SPEED must be zero.
3) $\qquad$ Any object's SPEED can be calculated by dividing the distance traveled by the time taken.

# Science Vocabulary 

## Motion Vocabulary

INSTANTEOUS SPEED - noun
$\qquad$


## Circle the examples of INSTANTEOUS SPEED.

exact speed at exact time
bus ride to school
speedometer
metronome
timer
clock

Write YES on the line before the sentence if it correctly uses the word INSTANTEOUS SPEED. Write NO if it is not correct.
1)
2) $\qquad$
3) $\qquad$ The police officer used his radar gun to register my INSTANTEOUS SPEED.

# Science Vocabulary 

## Motion Vocabulary

CONSTANT SPEED - noun

Definition- $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## Circle the correct facts about CONSTANT SPEED.

motion of the same distance in different amounts of time
motion of different distance in the same amount of time
motion of same distance in the same amount of time
$\square$
always the same
never changes
may change

Write YES on the line before the sentence if it correctly uses the word CONSTANT SPEED. Write NO if it is not correct.

1) $\qquad$ A metronome ticks at a CONSTANT SPEED.
2) $\qquad$ CONSTANT SPEED changes from one speed to another speed often.
3) $\qquad$ Cruise control is designed to keep your car moving at a CONSTANT SPEED.

## Science Vocabulary

## Motion Vocabulary

AVERAGE SPEED - noun

Definition- $\qquad$
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$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Picture that jogs my memory


## Circle the correct facts about AVERAGE SPEED.

speed is constant throughout
includes stops and starts
total distance moved per total time traveled

Write YES on the line before the sentence if it correctly uses the word AVERAGE SPEED. Write NO if it is not correct.

1) $\qquad$ The AVERAGE SPEED is a distance per time ratio.
2) $\qquad$ An AVERAGE SPEED is useful when trying to figure out how long it will take a person to drive a certain distance because it doesn't account for all the stops that they'll make for the red lights.
3) $\qquad$ The AVERAGE SPEED means the speed is always normal and there are no times when the speed is faster or slower than normal.

## Science Vocabulary

## Motion Vocabulary

REFERENCE POINT - noun
Definition- $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Circle the correct facts about REFERENCE POINTS.
Important for controlling experiment
can be more than one location on an object

Determines exact position to start/stop motion

Picture that jogs my memory

can only be one point on an object

Write YES on the line before the sentence if it correctly uses the word REFERENCE POINT. Write NO if it is not correct.

1) $\qquad$ A REFERENCE POINT is a point to which other things are compared.
2) $\qquad$ When conducting motion experiments, REFERENCE POINTs are optional.
3) $\qquad$ The REFERENCE POINT on the cart from science class was the rear wheel axle.

## Science Vocabulary

## Motion Vocabulary

DISTANCE - TIME GRAPH - noun
$\qquad$
$\square$

## Circle the correct facts about DISTANCE - TIME GRAPHS.

also called motion graphs
used to find speed
time plotted on y axis
distance, the dependent variable, is plotted on the x axis distance, the independent variable, is plotted on $y$ axis time plotted on x axis

Write YES on the line before the sentence if it correctly uses the phrase DISTANCE - TIME GRAPHS. Write NO if it is not correct.

1) $\qquad$
2) $\qquad$ Only one speed may be plotted on a single DISTANCE - TIME GRAPH.
3) $\qquad$ We can use a DISTANCE - TIME GRAPH to compare the speed of objects.

## Science Vocabulary

## Motion Vocabulary

SLOPE OF A LINE ON A DISTANCE - TIME GRAPH - noun

Definition- $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Circle the correct facts about the SLOPE OF A LINE ON A DISTANCE - TIME GRAPH.
slope is $d \div t$
slope is $t \div d$
slope is $d \times t$
slope on distance-time graph is the same as speed
slope on distance-time graph is not the same as speed

Write YES on the line before the sentence if it correctly uses the phrase SLOPE OF A LINE ON A DISTANCE - TIME GRAPH.
Write NO if it is not correct.

1) $\qquad$ If the units are the same, faster speeds will have a steeper SLOPE OF A LINE ON A DISTANCE-TIME GRAPH than slower speeds.
2) $\qquad$ Constant speed is indicated as a constant SLOPE OF A LINE ON A DISTANCE-TIME GRAPH.
3) $\qquad$ Zero speed is indicated as a vertical line with an undefined SLOPE OF A LINE ON A DISTANCE-TIME GRAPH.

## Science Vocabulary

## Motion Vocabulary

VELOCITY - noun
$\qquad$
$\square$

## Circle the correct facts about VELOCITY.

distance traveled per unit time
distance traveled in a certain direction per unit time
same units as speed
different units than speed

Write YES on the line before the sentence if it correctly uses the word VELOCITY. Write NO if it is not correct.

1) $\qquad$
2) $\qquad$ VELOCITY must be a value greater than zero.
3) $\qquad$ A person's velocity that is not moving is undefined.

## Science Vocabulary

## Motion Vocabulary

## ACCELERATION - noun

## Definition-

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$\qquad$
$\square$

## Circle the correct facts about ACCELERATION.

always means speeding up.
the change in speed in an amount of time
the change in velocity in an amount of time
can mean slowing down
can never be zero
can change direction

Write YES on the line before the sentence if it correctly uses the word ACCELERATION. Write NO if it is not correct.
$\qquad$
2) $\qquad$ As you walk out of the science class you ACCELERATE because you change your velocity.
3) $\qquad$ If a car is moving at a constant rate, it is not accelerating.

# Science Vocabulary 

## Motion Vocabulary

MOMENTUM - noun

## Definition-

$\qquad$


## Circle the correct facts about MOMENTUM.

Momentum is the same as mass $x$ speed.
Momentum is the same as mass $x$ velocity.

The momentum of a fast moving fire truck is greater than the momentum of a slow moving fire truck.

The momentum of a fast moving bicycle is less than the momentum of a slow moving bicycle.

Write YES on the line before the sentence if it correctly uses the word MOMENTUM. Write NO if it is not correct.

1) $\qquad$ The MOMENTUM of a SUV stopped at a stop light is greater than the MOMENTUM of a skateboarder moving at 5 meters per second.
2) $\qquad$ If the mass of two objects are the same, the velocity determines the objects MOMENTUM.
3) $\qquad$ It's harder to stop an elephant than a mouse because the pachyderm has more MOMENTUM.
