

Define the following words and provide an example. These words will be on the unit test.

	DEFINITION		EXAMPLE
1. Motion	<i>An object's change in distance from another point</i>		
2. Reference Point	<i>a <b>stationary</b> object used to compare a moving object to</i>		
3. Speed Formula:	<i>the distance an object travels divided by the time it takes to travel</i>		
4. Average Speed Formula:	<i><u>Total distance (add up all distance)</u> <u>Total time (add up all the time)</u></i>		
5. Calculate TIME Time = $\frac{\text{distance}}{\text{speed}}$	How much time does it take for a ball to travel 120 m with a speed of 20 m/s?		Units =
6. Calculate DISTANCE Distance = (speed)(time)	If a car's speed is 10 m/s, how far will it travel in 7 sec?		Units =
7. Velocity	<i>speed with direction (speed in a given direction)</i>		Units=
8. Acceleration	<i>A change in velocity Increasing = acceleration Decreasing = deceleration Changing direction at the same speed</i>		
9. Newton	<i>A unit of force (triple unit) N</i>		
10. Inertia Depends on:	<i>the tendency of an object to resist change in motion</i>		
11. Force	Definition: <i>A push or a pull</i>	Same direction: <i>add</i>	Opposite direction <i>subtract</i>
12. Balanced Force	<i>Does not cause a change in an object's velocity (equal but opposite)</i>		
13. Unbalanced Force	<i>Causes a change in an object's velocity.</i>		

14. Tension	<i>An elastic force that stretches or pulls apart</i>	
15. Compression	<i>An elastic force that squeezes or pushes together</i>	
16. Buoyant force	<i>Upward force exerted by the fluid on an object, Equal to the weight of water displaced</i>	
17. Gravity	<i>A force that pulls objects toward each other Planets: depends on mass of planet</i>	
18. Weight	<i>Gravitational pull on an object Changes when you go to different planets (mass X gravity)</i>	
19. Friction	<i>The force that one surface exerts on another when the 2 surfaces rub against each other</i>	
20. Newton's 1 <sup>st</sup> Law	<i>An object at rest will remain at rest. An object in motion will remain in motion with a constant speed and direction unless acted upon by another force</i>	
21. Newton's 2 <sup>nd</sup> Law	<i>Acceleration depends on net force and mass. <math>F = ma</math></i>	
22. Newton's 3 <sup>rd</sup> Law	<i>For every action, there is an equal and opposite reaction (action-reaction).</i>	
23. Potential Energy	<i>Stored energy</i>	
24. Terminal Velocity	<i>Force of gravity = force of air resistance</i>	
25. Kinetic Energy	<i>Energy in motion</i>	
26. Universal Law of Gravitation	<i>Scientific law states that every object in the universe attracts every other object</i>	