

Physics Throwback ~~Thursday~~ Tuesday

A car has an initial velocity of 10 m/s and slows to a stop in 4 s. What is the acceleration of the car?	What is the period of the minute hand on a clock in seconds?	A rock is thrown straight up at 10 m/s. How high does the rock go?	Draw a FBD of an object at rest on a table.	An egg is dropped from a height of 30 m. Neglecting air resistance, how long will it take the egg to hit the ground?
Draw a position vs. time graph for an object that is moving with a constant positive velocity.	Jeremy throws a rock horizontally off of a 100 m tall cliff. If the rock travels 50 m in the X direction before it hits the ground, what was the initial velocity of the rock?	What are the units of the coefficient of friction?	A force of 17 N is applied to an object that has a mass of 0.5 kg. If the coefficient of friction between the object and the surface it is on is 0.08, what is the force of friction?	Give an example of a situation where an object could have a negative velocity and a positive acceleration.
A car is going around a flat turn of radius 100 m. The force of friction between car tires and the road is 7000 N. If the mass of the car is 2000 kg, how fast is the car going?	A car is travelling at a constant velocity down Schoolhouse Road. It takes the car 4 s to go 73 m. What is the speed of the car?	FREE	TRUE or FALSE: The value of G changes depending on which planet you are on.	What is the gravitational force of attraction between two 50 kg masses separated by a distance of 0.01 m?
This question has a lot of text and it really is just a test to see if you actually bother reading the questions or if you just skip the ones with lots of words. What are the units of velocity?	A hammer and a feather are both dropped at the same time, from the same height, on the moon. Which will hit the ground first?	Draw a velocity vs. time graph for an object that is accelerating.	If a 70 N force is applied to a 100 kg object, what will be the acceleration of the object?	TRUE or FALSE: The value of g changes depending on which planet you are on.
What is the acceleration of a tennis ball thrown straight up in the air at the TOP of its trajectory?	A box is sliding across the level ground. It has an applied force of 50N and a friction force of 10N. What is the net force on the box?	The acceleration due to gravity on the moon is 1/6 what it is on earth. What is the acceleration due to gravity on the moon?	Draw a position vs. time graph for an object that is accelerating.	What is the velocity of an object spinning in a circle of radius 1 m if the object makes two rotations every 10 s?