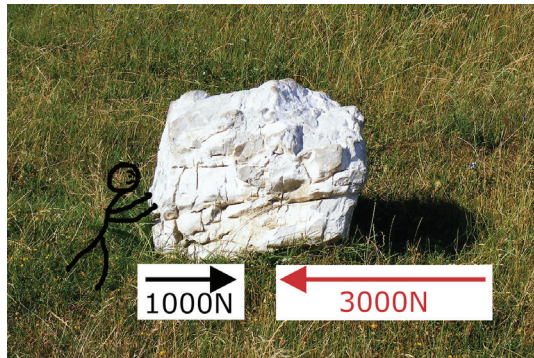
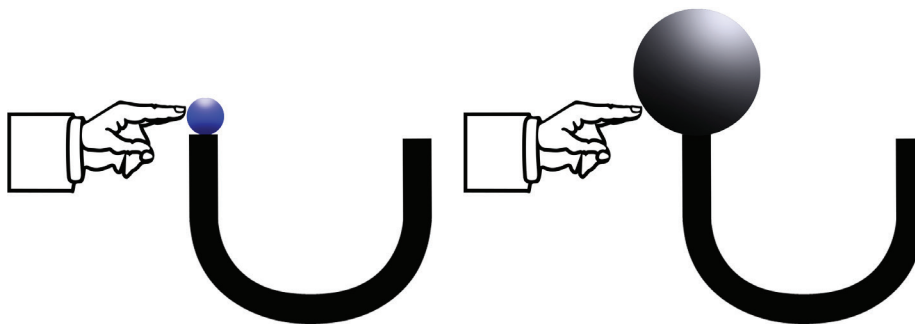


20. Stick man is pushing this rock as hard as he can and is generating 1,000N of force on the rock. The rock can exert up to 3,000N against stick man's push. True or False: since he is pushing with 1000N against this rock and exerting force to it, the rock will be accelerated from the force applied to it.



21. True or False: gravity is incapable of causing acceleration because of the normal force.
22. True or False: if the free fall distance is long enough, eventually enough drag develops that the falling object no longer accelerates downward and attains dynamic equilibrium.
23. Why is this statement false? According to Newton's second law, the minimum force needed to put the 0.150kg racquetball at the top of this ramp in motion would also be sufficient to put this 12kg cannonball into motion.



24. How much force is required to move a 105kg drive shaft to an acceleration of 126m/s^2 ?
25. What is the acceleration of a 0.43kg soccer ball kicked with a force of 15N?
26. True or False: If the same soccer ball from question 25 was kicked with 7.5N of force, it would cause the ball to accelerate twice as fast as it did when kicked with 15N of force.
27. An object was accelerated at 206m/s^2 with 37N of force. What was the mass of the object?
28. True or False: gravity causes a constant acceleration on all objects, but some objects can have characteristics that cause them to resist the pull of gravity more than others.