

Name: \_\_\_\_\_

1. If you push a 6.0 kg object with 3.0 N of force across a frictionless surface, what is its acceleration?
2. How many newtons of force would be required to accelerate a 20.0 kg object at a rate of 5.0 m/s<sup>2</sup>?
3. How much does a 34.5 kg gymnast weigh?
4. A box experiences a net force of 250.0 N causing it to accelerate at 2.1 m/s<sup>2</sup>. What is the mass of the box?
5. A 2500 kg car experiences a net 250 N force, (a) What is the acceleration acting on the car? (b) What is the car's speed at the end of 35 seconds?