

## Newton's Second Law

1. If a ball has a acceleration of 5 meter/minute/second and its mass is 2 kg, what is its force? You will need to change the acceleration to meters/second/second.
2. If a sled dog team can pulling a sled with a force of 73 N at an acceleration of 15 meters per second per second, what is the mass of a sled?
3. A child is pulling a wagon with 0.2 N. If the wagon's mass is 8 kilograms, what is the acceleration of the wagon?
4. A dog is pulling on their leash with a force of 15 N. If the person being pulled has a mass of 48 kg, what is the acceleration of the dog pulling the person?
5. If you are pushing a chair with a mass of 15 kg across the floor and you pushing it with an acceleration of 2 meters per second per second, what is the force you are pushing on the chair?
6. An adult elephant as a mass of 55,000 kilograms. How much force would you need to apply to the elephant to get it to move 5 meters per second per second?