

Science Period _____

Date _____

Mr. Anthony

Newton's 2nd Law Worksheet

$$\text{acceleration} = \text{force} \div \text{mass}$$

Newton's Second Law states:

1. A car with a mass of 750 kg accelerates with a net force of 1000 N. The net force acts for 1.5 s. What is the acceleration?

acceleration =

2. A ball with a mass of 100 kg accelerates with a net force of 500 N. The net force acts for 0.5 s. What is the acceleration?

acceleration =

3. A baseball with a mass of 0.2 kg accelerates with a net force of 500 N. The net force acts for 0.4 s. What is the acceleration? What is the final speed?

acceleration =

4. How much net force is exerted on a baseball with a mass of 0.2 kg if it accelerates at 500 m/s²?

net force =

5. How much net force is exerted on a tennis ball with a mass of 0.1 kg if it accelerates at 100 m/s²?

net force =

6. How much net force is exerted on a tennis ball with a mass of 0.5 kg if it accelerates at 10 m/s²?

net force =