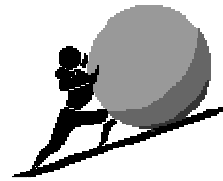


Name _____

Period _____

Date _____

Force Practice



Force Equation:

Force Triangle:

Force Units:

Force = Newtons (N)

Mass = kilograms (kg)

Acceleration = m/s/s **OR** m/s²

Show all of your work for each question in the space provided.

- 1- Draw the equation triangle.
- 2- Write the equation.
- 3- Substitute in your values with correct units of measure.
- 4- Solve the equation with correct units of measure.

1. A 5 kg rock is pushed off the edge of a cliff. While the rock is falling it is accelerating at 30 m/s/s. What is the force of the rock?

2. What is the force of 2200 kg car that is accelerating at 6.5 m/s/s?

3. If you exert a constant force of 50 Newton's on a 20-kilogram box to push it across the floor, how fast will it accelerate?



$$a = \frac{F}{m}$$

$$a =$$

4. What is the mass of an elephant this accelerating at 2.5 m/s/s and has a force of 16,000 N?