**Scientist\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

### N2 Practice Problems

(g= 9.8 m/s2) F=ma or F=mg

1. If a woman has a mass of 50 kg, calculate her weight in Newtons.

2. Calculate the weight of a 2000 kg elephant.

3. Calculate the acceleration if you push with a 20 N horizontal force on a 2 kg block.

4. An arrow is shot with a force of 25N. It accelerates at 250 m/s2. What is the mass of the arrow?

5.A car with a mass of 1500 kg runs out of gas. As two men push the car, it accelerates at 0.50 m/s2. How much force did the men apply?

6. What is the weight of a book that has a mass of 2.0 kg?

1) 490 N 2) 19600 N 3.)10 m/s2 4) 0.1kg 5) 750 N 6) 19.6 N

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