Name	
Class	

Science

Date \_\_\_\_\_

## Homework 3-20: Force and review

## Answer on a separate paper, show all work!

Force = m x a

1. You hit a basketball (2 kg) which accelerates at a rate of 20 m/s<sup>2</sup>. What amount of force acted on the ball?

2. You give a shopping cart a shove down the isle. The cart is full of groceries and has a mass of 25 kg. The cart accelerates at a rate of 3 m/s<sup>2</sup>. How much force did you exert on the cart?

3. You push a friend sitting on a swing with a force of 100N. She accelerates at a rate of 5 m/s<sup>2</sup>. Find the mass of your friend in kg (use m=F/a).

## **Final Exam Review**

1. In class we learned about two changes physical and chemical, describe each change and give five examples of each.

2. There are three routes of exposure to toxic chemicals: ingestion, inhalation, and absorption through the skin.

- a. Explain what each route is.
- b. How can you prevent exposure by each route?