

Handed Out: \_\_\_\_\_  
Due: \_\_\_\_\_

Name: \_\_\_\_\_  
Date: \_\_\_\_\_

## **Newton's 1<sup>st</sup> Law**

### *Physical Science and Technology*

1. A giant chicken is standing on top of a car that is travelling at 60 km/sec. The car slams on its brakes and comes to a stop. What happens to the giant chicken? Why?
  
2. A very small chicken is sitting on a table. There is no net force acting on her. What happens to her? Why?
  
3. A medium-sized chicken is holding Mr. Bregar at the top of a cliff. She lets go. What happens to Mr. Bregar? What was the force that caused Mr. Bregar to move?
  
4. An infinitely large chicken is holding Mr. Bregar at the top of a cliff in a location where there **is no gravity**. She lets go. What happens to Mr. Bregar? Why?
  
5. An infinitesimally small chicken is pushing Mr. Bregar down a gravel road. She stops pushing. What happens to Mr. Bregar? What was the force that affected Mr. Bregar's motion after the infinitesimally small chicken stopped pushing him?
  
6. A sizeless chicken is pulling Mr. Bregar down a brick road that is **completely frictionless**. She stops pulling Mr. Bregar. What happens to Mr. Bregar?
  
7. An animal formerly known as Chicken is moving with a velocity of 7.1 m/s. She is being pushed upward by the floor, pulled downward by gravity, pushed forward by Mr. Bregar, and pushed backwards by friction. There is no net force acting upon her. How long will it take her to stop moving?