

## Force and Newton's Laws

## What is Newton's Second Law of Motion?

(Virtual LAB) \*Pg. 81\*

Name \_\_\_\_\_

**Question 1:** According to Newton's second law of motion a net force on an object will cause it to accelerate. How does the Newton's law relate to the force of gravity?

**Answer 1:**

**Question 2:** How does the force of gravity affect the rate of acceleration?

**Answer 2:**

**Question 3:** Describe what happens when identical objects are dropped under different gravitational conditions.

**Answer 3:**

**Question 4:** Describe what happens when objects of different mass are dropped under same gravitational conditions.

**Answer 4:**

**Question 5:** What is weight? What is mass? How are mass and weight different?

**Answer 5:**

**Question 6:** Based on your experience with the experiments how does mass affect weight?

**Answer 6:**

**Question 7:** What other conclusions can you draw from the data you collected in your table?

**Answer 7:**

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Gravitational Acceleration, Mass, and Weight

Test	Location	Acceleration (m/s <sup>2</sup> )	Object	Mass of Object (kg)	Weight of Object (N)
1					
2					
3					
4					
5					
6					