

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

Period: \_\_\_\_\_ Date: \_\_\_\_\_

**Gravity: *Galileo and Newton* Study Guide**  
Astronomy



**Nerd Words:**

1. Natural Motions –
2. Violent Motions –
3. Acceleration of Gravity –
4. 1<sup>st</sup> Law of Motion –
5. Momentum –
6. 2<sup>nd</sup> Law of Motion –
7. Acceleration –
8. Velocity –
9. Speed –
10. 3<sup>rd</sup> Law of Motion –

**Review:**

1. When was Isaac Newton born and where?
2. Who did Newton give a lot of credit to for his work?
3. What type of model did Aristotle have about the universe? Is it right?

4. Explain what Aristotle meant when he said everything has a proper place.
5. What types of things did Aristotle specify and what were their proper places?
6. Compare and contrast natural and violent motion. How are they similar and how are they different?
7. Describe the experiment conducted by Galileo that showed Aristotle's ideas about proper places and how the rate at which they reach those places was not accurate.
8. What is the acceleration of gravity measurement? (with units of course)
9. Does acceleration depend on weight or mass? Explain.
10. Rumor has it that Galileo figured out gravity using what major landmark?
11. What astronaut demonstrated the simplicity of falling objects and on what lunar mission?
12. Galileo disagreed with Aristotle when it came to violent motion. What was the discrepancy? Explain.
13. Give an example of low momentum vs a high momentum.
14. How is the 2<sup>nd</sup> law of motion different from the 1<sup>st</sup>? What about the 3<sup>rd</sup>? Explain with examples of each!
15. What is the difference between speed and velocity?