

Name: _____ Date: _____ Period: _____

Online Gravity Exploration

Use a search engine and reputable websites (NOT Wikipedia!) to find the answers to each question below.

1. There's been a long-held theory that an apple fell onto Isaac Newton's head and that's what inspired him to develop the law of universal gravitation. Is this a true story, or a myth? What actually happened, and what did he observe and then conclude from this?

Website: _____

Answer: _____

2. What is the difference between mass and weight?

Website: _____

Answer: _____

3. Find your mass and weight on different planetary objects and fill in the chart below:

Website: _____

Planetary Object	Mercury	Venus	Mars	Jupiter	Saturn	Uranus	Neptune	Pluto	Sun	Moon
Mass (kg)										
Weight (lb)										

4. Why does your weight change on these different planetary objects?

Website: _____

Answer: _____

5. How far would you be able to jump on the different planetary objects? First, jump 5 times to find the average distance you can jump on Earth (your distance should be measured in meters!).

Jump 1	Jump 2	Jump 3	Jump 4	Jump 5	Average

Next, fill in the chart below with how far you would be able to jump on the different planetary objects:

Website: _____

Planetary Object	Mercury	Venus	Mars	Jupiter	Saturn	Uranus	Neptune	Pluto	Sun	Moon
Length										

6. What does the force of gravity between two objects depend on?

Website: _____

Answer: _____

7. Create 3 questions on your own about gravity, and have another student find a website to answer them.