

Mass & Gravitational Force 101

1. What is Mass? _____
2. What happens to your mass when you go from Earth to Saturn? Explain why. _____

3. What happens to your weight when you go from Earth to Saturn? Explain why. _____

4. What is Gravity? _____
5. What is the gravitational acceleration rate on earth? _____ What is the gravitational rate on the moon? _____
6. Why is gravitational force lower on the moon than on earth? _____

7. Draw a picture of the relationship between mass and gravity below:

8. Draw a graph diagram of the relationship between the force of gravity and mass.

9. How does mass and distance affect gravitational force? _____

Check for Understanding:

1. Does mass ever change? Explain your answer. _____

2. Does weight ever change? Explain your answer. _____

3. What is the relationship between mass and gravitational force? _____

4. Is this a direct or indirect relationship? Explain your answer. _____

5. Summarize the example of the astronaut. _____

