

# WHAT IS THE DIFFERENCE BETWEEN MASS AND WEIGHT?

Remember that mass is the amount of “stuff” in an object. The more “stuff” the greater the mass. You can’t change the amount of “stuff” without changing the mass of the object.

We determine weight in much the same way that we determine mass. However, we do not define weight as the amount of “stuff” in an object. Rather, **weight** is a measure of the force of gravity as it pulls on an object. Increase the force of gravity and you will increase the weight of the object.

Think about this for a moment – what would happen to your **weight** and **mass** if you were to travel to the moon? If you said that you would weigh less on the moon – you’re right! The gravitational force between the moon and you is less, therefore you would weigh less. Now what about your mass? Since you are not changing the amount of “stuff” in you, then technically your mass would stay the same! Look at the following illustrations – they will help you understand this concept better.

