

## Mass vs. Weight Video Activity

**Instructions:** Complete the following fill in the blanks about the definitions explored in the "Mass vs Weight - Part 1 – Introduction" video from the Minds On. Use the word bank to help you.

**Word Bank:**

gravity   mass   weight   360   matter   orbit   masses  
gravity   60   0   mass   earth   moon   gravity   sun

\_\_\_\_\_ is the vertical force exerted by a \_\_\_\_\_ as a result of gravity. It is the strength of the gravitational pull on the object. How heavy is it?

An astronaut on Earth would weigh \_\_\_\_\_ pounds when wearing their space suit. On the moon, the same astronaut would weigh \_\_\_\_\_ pounds. And in orbit around the Earth, the same astronaut would weigh \_\_\_\_\_ pounds. That is because in Space there is no \_\_\_\_\_.

\_\_\_\_\_ is the property of a body that causes it to have weight in a gravitational field. The mass of an object is not dependent on \_\_\_\_\_. Mass is the amount of \_\_\_\_\_ in an object. Forces affect objects with less mass more than objects with greater masses. An animal's mass would be the same on \_\_\_\_\_ on the \_\_\_\_\_ and in orbit.

\_\_\_\_\_ is a force that governs motion throughout the universe. On Earth, it holds us to the ground. It keeps the Moon in \_\_\_\_\_ around us. It keeps the Earth in orbit around the \_\_\_\_\_. It is the attraction between any two \_\_\_\_\_. Gravity is like the glue that holds the universe together!