

Name: _____

Date: _____

GET GRAVITATIONAL

WEIGHT IN SPACE

As you learned from the Gravity video, it's easier to jump on planets that have less mass. That's because planets with less mass have less gravity. When there's less gravity, you weigh less, so it's easier to jump. Find out how much you'd weigh at different locations in space, or calculate LeBron James' weight (249 lbs) on different planets. Use the chart below.

LOCATION	WEIGHT ON EARTH	GRAVITY	CALCULATED WEIGHT
Moon	X	0.17	=
Mars	X	0.38	=
Saturn	X	1.32	=
Uranus	X	0.93	=

JUMPING IN SPACE

How far can you jump on Earth? Mark your starting point with a piece of tape on the floor. Jump as far as you can on two feet. Have a partner mark where your feet touch down. Measure the distance and write it down. Now, fill in the chart below to learn how far you would jump in outer space.

LOCATION	AVERAGE LENGTH ON EARTH	GRAVITY	LENGTH
Moon	X	5.88	=
Mercury	X	2.63	=
Venus	X	1.16	=
Jupiter	X	0.35	=

