

Fly Away Moon

Background

Gravity holds the Earth and Moon together. What do you think would happen to the moon if there were no gravity?

What You Need

1 piece of string 1 paper towel tape

What You Do

1. Crumple up the paper towel into a ball. Use tape to hold it together.
2. Tape the ball to one end of the string.
3. You will be the Earth, the ball will be the Moon, and the string will be gravity. Make sure you have lots of room around you. Hold the loose end of the string and spin the ball around your head. The Moon will continue to go around the Earth as long as gravity is pulling the two together.

Pretend that there is no gravity by letting go of the string. What happens to the Moon?

Think About It

Every planet and moon has its own gravity. The strength of the gravity depends on the mass of the planet or moon. You will weigh more on a planet that has more gravity. Let's see what you'd weigh in different places.

What is your weight on Earth?	_____ pounds
On the moon, you would weigh much less, about 1/4 of what you weigh on Earth. How much would you weigh on the moon?	_____ pounds
On Jupiter, you would weigh much more, about 2 1/2 times what you weigh on Earth. How much would you weigh on Jupiter?	_____ pounds

Could you actually stand on the moon and on Jupiter?
