Inertia with a stone

You will need a stone weighing about 1 kg for this experiment. Wrap a length of heavy string about the stone. Now, on opposite sides of the stone, attach half-metre lengths of lighter cord to the heavier cord. The lighter cord should be barely strong enough to support the stone when it is suspended. Next carefully suspend the stone above a table top. Place a length of board on the table under the stone so that the table top will not be dented when the rock strikes it. Grasp the lower end of the string firmly and give it a quick jerk. If you are successful, the lower string will break and leave the stone suspended. The inertia of the stone caused this. Now take hold of the remaining length of the lower string and pull steadily on it. This time the upper string breaks and the stone falls to the table because the steady application of force (rather than the quick jerk) set the stone in motion.