

# Plastic bag strength variance



**ASSIGN  
BUSTER**

Plastic bags can hold some weight but not as much as a paper bag can. You can take several plastic bags that are different shapes and sizes and test them on how much weight they can hold. It is fun to find out how much weight your favorite store plastic bags can hold. Then the next time you go shopping you will know how much weight a plastic bag can hold. This is a fun experiment to do for a science project or just for the fun of it. You will need a scale and some tiny rocks along with the variety of plastic bags.

Take the plastic bag and place it on the scale. Then fill the plastic bag with about ten pounds of rocks. Lift the plastic bag with the rocks in it so see if the handles stretch. If the handles do not stretch you can put another two pounds of rocks into the plastic bag of rocks. Lift the plastic bag of rocks again and see if the handles stretch. Keep adding more rocks at two pounds intervals and see if the handles of the plastic bag stretch. When they start to stretch it is safe to say the plastic bag can't handle any more weight.

Then try the next plastic bag to see how much weight that plastic bag can hold. Do the same thing with each of the different plastic bags that you have and write down the weights of each plastic bag. When you are done with all the different plastic bags you will know what type of plastic bag can hold the most weight. Then for added fun try a paper bag and see how much weight a paper bag can hold. Try a large paper bag and a medium paper bag.

Paper bags are harder since they do not have handles so you will have to judge by if the paper bag rip when you pick it up. This is a fun experiment to do to see how much weight can be put in different bags. You can use plastic bags that come from different stores and you can try different sizes of plastic bags too. Each store has a variety of plastic bags you can try this with. Then

the next time you go shopping you can help bag the items and you will know how much the plastic bags can hold.