

sky Diver

Design a parachute that floats safely to the ground—no crash landings allowed!



1 Get what You need.

- 10" squares of: lightweight plastic (like clear bags from the grocery store) • heavyweight plastic (like thick trash bags) • tissue paper
- notebook or copier paper • 8" pieces of string or thread (4 per parachute) • scissors • clear tape • large paper clips

2 Test Your materials.

Compare the different types of materials and pick the one you think will make the best parachute. What are some tests you can do to decide which material to use?

3 Make a parachute.

Tape string to each corner of the parachute—try to use even lengths of string. Then tape the ends together around a large paper clip.

4 Float it.

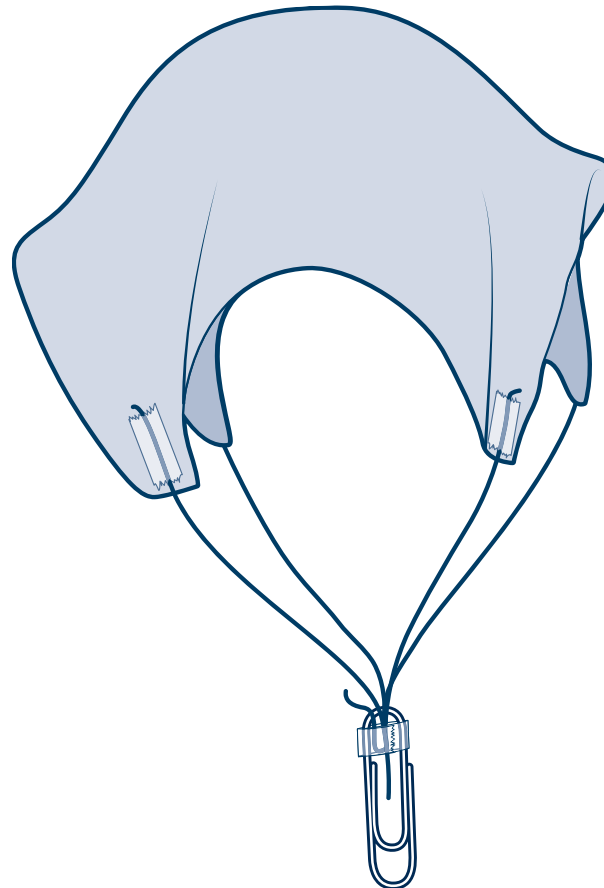
Hold up your parachute and drop it. What happens as it falls to the ground?

5 Design and test another parachute.

Select a different material and make another parachute. Compare how it falls with the parachute you made earlier.

6 Make it big!

Make a parachute at least double the size of the others you made. What adjustments do you need to make to get the bigger parachute to work?



Chew on This!

When you throw something into the air, it falls because gravity pulls it to the ground. As a parachute falls, the part that fills with air is called the canopy. A parachute works because air gets trapped in the canopy and slows its fall. This is the result of air resistance—the force of the air against the canopy.

Dig Deeper

Take it outside. Test your parachute on a windy day. What difference does the wind make?

super-size it! Can you make a really big parachute—so big, it's super-sized? Using what you know about making a parachute, make one that's big enough to float safely when dropped from a significant height, like in an open stairwell or out a window. If necessary, get permission first before dropping your extra-large parachute!

Did You Know?

In August 1960, Joseph Kittinger set the record for the highest parachute jump. He jumped from a height of 102,800 feet—three times higher than most planes fly! He was so high up, he had to wear a special pressurized suit to stay safe. As he fell, Kittinger hit a top speed of 614 mph! He landed safely in a desert in New Mexico and his record still stands today.



Watch **FETCH!** on PBS KIDS GO! (check local listings) and visit the **FETCH!** Web site at pbskidsgo.org/fetch.



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Fold

Fetch!

sky Diver



Chet's last hobby was fire ant juggling—he lost a few whiskers in that experiment! Now he wants to try sky diving, and there's no stopping him! Can you design a parachute to keep my little buddy safe?



**GOOO
FETCH!**