Make a Parachute

Procedure

1. **Collaborate** Work with a partner to build a parachute. Cut a 30 cm × 30 cm square from a plastic bag. Cut four 30 cm pieces of string. Tape one end of each piece of string to each corner of the square. Tie the other ends to the metal washer. **Safety:** Be careful with scissors.

2. **Predict** How do you think the parachute will change the way a washer falls? Write your prediction on the lines below.

3. **Experiment** Test your prediction. Drop the washer with the parachute and a plain metal washer from the same height above the floor at the same time. Compare how they fall. Record the results on the lines below.

4. **Experiment** Perform other trials. With your teacher’s permission, drop parachutes and washers from other heights. Measure and record the time they take to fall.
Conclusion

Write the answers to the questions below.

1. **Analyze Data**  Compare your prediction in step 2 to the results.

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2. **Hypothesize**  Form a hypothesis to explain how a parachute works. Propose an experiment to test this hypothesis.

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3. **Predict**  When are parachutes most useful? Describe a situation where a parachute would not be useful to slow someone’s rate of falling.

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**Investigate More!**

**Design an Experiment**  Will a larger area of plastic change the rate at which a parachute falls? Design and conduct an experiment to find out.