

Crumbs are a bummer when you open a new bag of chips. Design a package to ship a chip that will arrive in one piece.

- Potato chip (i.e. Pringles)
- Everyday materials for package assembly
 - Paper
 - Cardboard
 - String
 - Tissues and/or cotton balls (limit 3 items total)
 - Toothpicks
 - Popsicle sticks
- Large box

1. Divide into teams of two to four students.
2. Each team designs a package using everyday materials that will protect a chip from breaking while in the mail.
3. Collect all the packages and place them in a large box. Test the designs by shaking the box to simulate packages being shipped through the mail.
4. After the shipping test is complete, open your package to inspect your chip. Did you chip the chip? Modify your design if needed and test again using a new chip.

- Adjust the difficulty by limiting the amount of materials available. For example, allow for five tissues and/or cotton balls or limit the use of tape.
- Add an assessment to determine how well each packaging design performed. Collect the following measurements:

- Calculate the overall score using the following equation (be sure your measurement system is consistent):

The highest overall score indicates the best packaging design.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins or other markings on the paper.