

Summer Science Activity: Extreme(Iy Simple) Egg Drop

Many of you may be familiar with the classic “egg drop” challenge. It goes something like this: Individuals or teams design and build a contraption or container that cushions a raw egg and is tough enough to withstand the force of a mighty fall from several stories above without breaking into a gooey mess.

There are many variations on this engineering project, each with its own set of rules. But since it’s summer, let’s keep it simple. Stick to two different materials—popsicle sticks and masking tape—and see what ingenious designs you come up with. Make it more fun by enlisting other kids in the neighborhood, siblings, or classmates to join in the fun. You can even video the contest, or take photos of the winning designs.

Materials:

- Eggs
 - Scotch® Masking Tape
 - Popsicle or craft sticks (you can buy packs of these at the store, but also recycle yours from popsicles and ice-cream bars throughout the summer)
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Procedure:

1. Spend a good deal of time tinkering with different designs. (But don’t waste too many eggs unnecessarily, or your parents may not be pleased!) This is half the fun.
2. Choose a single location for the egg drop. Make sure it is safe (do not stand on a roof or high in a tree, for instance) and a reasonable height (a second floor window should do it).
3. Ask a parent or neighbor to be an independent judge. The judge should inspect each device to make sure it complies with contest rules (i.e. there are no hidden objects to act as cushions).
4. Drop the egg contraptions one at a time, and see what happens!
5. Draw your own conclusions, and take these into consideration during your next egg drop.
6. Dying to do it all again? Next time, choose a different combination of materials—but again limiting it to two or three. How does this egg drop differ? What do you conclude?
7. For an extra dimension of fun, have a video camera on hand and document the excitement of the final plunge!

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