

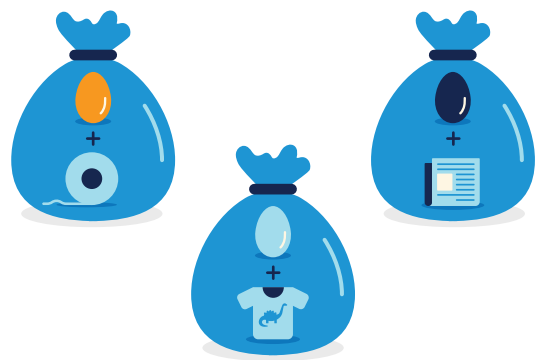


# Brain-Boosting STEM Lab

Calling all math and science campers! Avoid summer brain drain by trying some of these engaging and educational activities that just feel like fun games.

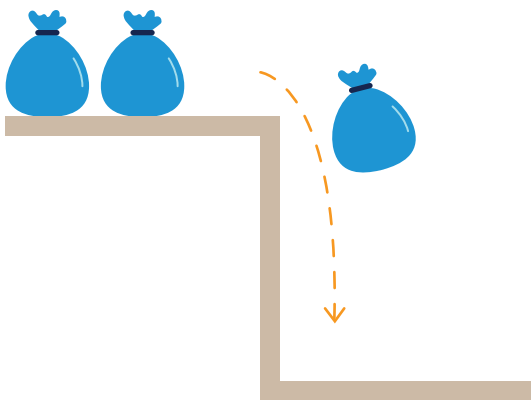
## Egg Drop Challenge

Test your knowledge of physics with this classic challenge.

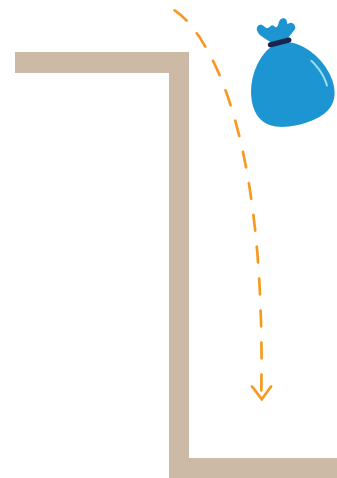


**1.** Gather 3-6 fresh eggs, plastic bags, and various recycled materials from around the house that will protect an egg from cracking when dropped! Experiment with materials like paper towels, dry cereal, packing peanuts, old t-shirts, or newspapers.

**2.** Fill each of your bags with a different material that you have found in your home, then carefully place one raw egg in each bag and tape it shut. Make predictions about which material you think will cushion the blow and keep the egg from cracking.



**3.** Find a place outside to drop your bags. Try to drop each bag on the same hard surface and from the same height every time. See which of the materials worked best and why.



**4.** Once you've identified the best material to protect your egg, try dropping it from a taller height, and see if you can predict how far it can fall before breaking.

## Coding Ciphers



Codes and ciphers have been used for thousands of years. These days, computers do most of the coding for us, but you can create your own coded message at home!

The Caesar cipher was named after Roman leader Julius Caesar, who used the coding technique to deliver secret messages. Are you ready to learn this ancient cipher code at home?

Kids ages 9 and up can try this Caesar cipher code [worksheet](#) to decode a message and then write your own!

## Even More Fun



Check out [My Future](#) provided by Boys & Girls Clubs for more fun brain-powering activities you can do at home.



Learn more about coding, including free access to classes, at [Amazon Future Engineer](#).



Anyone with an Amazon Device can expand their knowledge of math and science with the [STEM Party](#) skill—just say, “Alexa, open STEM Party” or ask Alexa, “how to make Slime.”



Prime Video’s discovery category has plenty of educational shows for kids, including [Sid the Science Kid](#), [Tumble Leaf](#), and [Annedroids](#).