

BALANCING GHOST



Learn about balance and centre of mass with a balancing ghost!

You'll need

A small piece of dowel
Play-Doh
Paper straws
cardstock/card ghost
Tape



Instructions

Cut the ghost image out from the template page or draw your own.
Attach a small piece of dowel to the bottom of the ghost as shown in the photo.
Try to balance the dowel on your finger. The ghost should fall off.
Attach two straws to the back of the ghost with tape so they point diagonally downward on each side.
Try to balance the ghost again. If it falls off, add a little Play-Doh to the bottom of each straw and adjust until it balances.

Why does it work

The ghost balances when its centre of mass (its balance point) is aligned with or below the top of the wooden dowel.

Without the straws, gravity pulls on the top heavy ghost, creating a turning force that tips it over. Taping straws downwards and adding Play-Doh at the ends lowers the overall centre of mass. Adjusting the Play-Doh shifts this balance point directly under the support point, keeping your ghost perfectly stable and balanced!

