



BALANCING ICE SKATER

You'll need



Small piece of dowel

Play doh

Paper straws

Cardstock/card ice skater

Tape



Instructions

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



The skater stays balanced when its centre of mass is directly above the dowel. Gravity pulls downwards, and if the centre of mass isn't lined up over the dowel at the bottom, it creates a turning force that tips the skater over.

Adding straws and play dough changes the centre of mass of the skater. By adjusting the straws and play dough slowly, you can make it balance.