

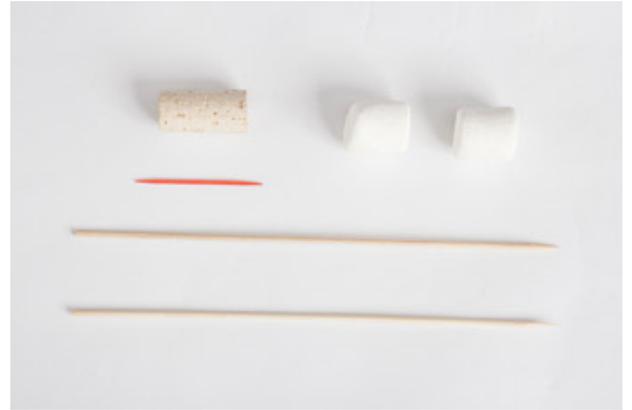


Balance Magic

1

Here's what you need to make your Balance Toy!

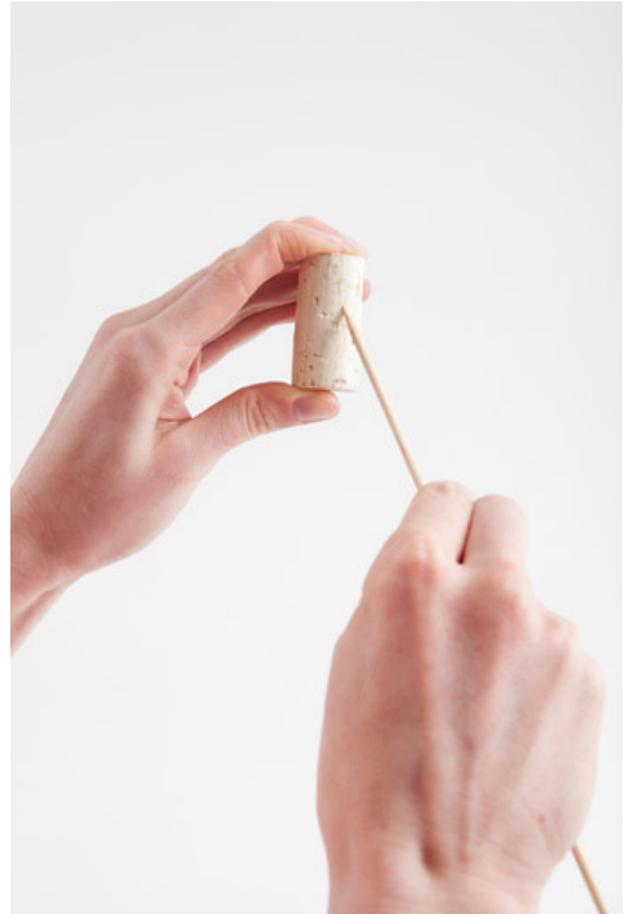
- Body: Cork (or packing foam, dry sponge, marshmallow, etc.)
- Arms: Barbeque skewers (or wire, pencils, pipe cleaners, etc.)
- Base: Toothpick (or a paper clip, push pin, nail, etc.)
- Weights: Marshmallows (or clay, poster putty, metal washers, etc.)



2

Insert an arm into the side of the body

Insert the skewer at an angle so that its end is below the cork.



3

Insert a second arm

Repeat, poking it opposite of the first one.



4

Add weight to the end of each arm

Slide a marshmallow onto each skewer.



5

Balance the sculpture on your finger

- Test how stable it is by rocking it gently.
- If it balances, try giving it a spin!
- *TIP: If your sculpture isn't balancing... Adjust the arms so that more than half the weight is below the resting point and is evenly distributed.*



6

Make the resting point even smaller

Insert a toothpick into the body.



7

Test it

Balance the sculpture on your finger again.



8

Try balancing it on other surfaces

Balance your sculpture on other things, like the flat top of a water bottle, your nose, or your head!



9

Did you know?

By adding weight below the sculpture, you're lowering its center of gravity. As long as more than half the weight is under the resting point, it will balance.



10

Try this next!

- **Decorate your sculpture.** Add things like ribbons, planets, or birds that “fly” as it spins!
 - **Supersize it.** Add more skewers. Make it multi-level. How complicated can you make it?
 - **Balance it off the edge of a table.** You can make your sculpture lean way out beyond the edge of a table. Stick the base in at a different angle. Slight adjustments will let the sculpture balance on a table edge while sticking out into midair.
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