



AIR POWER MECHA EXPERIMENT

WHAT MOVES A TINFOIL BALL FARTHER:
A FAN OR YOUR BREATH?



LEARNING BENEFIT: EXPERIMENTS ARE NOT ONLY SUPER FUN, THEY ALSO BUILD STEM MECHAPOWERS AND PERSISTENCE!

Help your little superhero think critically about Science, Technology, Engineering, and Math like Mecha Builders Cookie, Abby and Elmo with this super science experiment!

PLAN IT!

Help your STEM superhero gather all the materials: an empty cereal or cracker box, a sheet of tinfoil, two spoons, and two wooden blocks.

Make the box into a fan: A grown up should cut one side of the cereal box into a triangle and your child can decorate it with stickers and crayons. Then, pick it up by one of the corners, wave it in the air, and voila - it's a homemade fan!

Make the tinfoil into a ball: just crumple it up.

Explain the experiment: We're going to see which moves the tinfoil ball farther, our breath or our homemade fan!

Have your little one guess which one will move the ball farther (breath or fan)...

I think the _____ will move the ball farther
because _____.



TEST IT!

1. Stack the two blocks on top of one another on a smooth surface (a floor, a table). This is your starting point for the experiment.
2. Carefully place the tinfoil ball on top of the blocks.
3. Take a deeeeeep breath in and then blow the tinfoil ball as far as you can.
4. Mark how far it went with one spoon
5. Gather the ball and put the ball back on the blocks just like in step 2.
6. Give one big wave of your homemade fan behind the ball to move it forward.
7. Mark how far it went with the other spoon.

SOLVE IT!

1. Ask your child what they observed...

The _____ made the tinfoil ball move farther!

2. Discuss what their results might mean:

The force of taking a deep breath in and blowing out moves the ball the farthest.

Cartoonito Extra: Try to move the tinfoil ball with different sources of air: a bike pump or a mini handheld fan! What moves the ball the farthest?