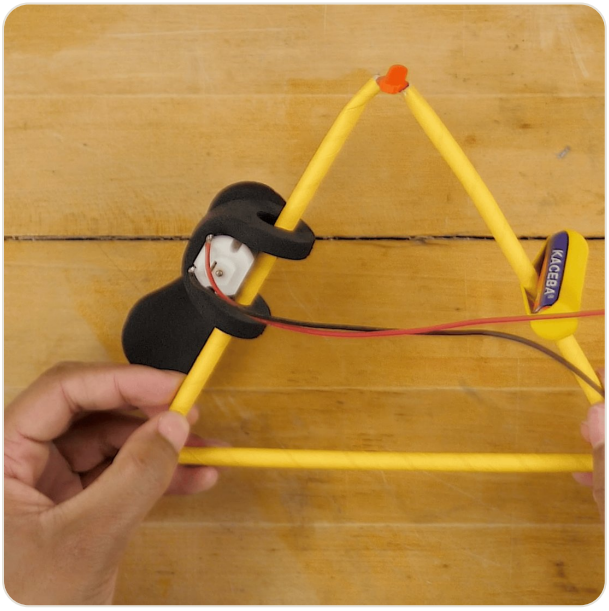
# Strawbots

A motorized wiggling machine made of straws.



SCREEN-FREE | AGES 7 TO 14 | ABOUT 45 MIN | MAKE AND KEEP

### WHAT PARTICIPANTS MAKE

**A battery-powered straw frame that wiggles across the table, and can join other Strawbots into a mega bot.**

### HOW IT WORKS

Campers close a battery and motor circuit on a straw frame and discover how an off-center spinning weight creates vibration that makes the bot move. Then they iterate on shape and legs, comparing triangle and square bases, or combine bots into a collaborative mega bot. It explores circuits and balanced and unbalanced forces.

### CAMPERS EXPLORE

Closing an electric circuit; unbalanced forces and vibration; energy transfer (electrical to mechanical to kinetic); structural stability (triangle vs. square bases); iterative troubleshooting








### PACK SIZES

| PACK | CAMPERS | SKU |
|---|---|---|
| Small Group Pack | 10 | G3 SBOT 010 |
| Class Pack | 25 | CL SBOT 025 |

Every camper gets an individual reclosable kit with a printed visual guide. Scissors optional.

**Educator video**
7:17 min

**Educator guide**

**Standards connections (from the educator guide):** NGSS K-PS2-1, K-2-ETS1-2, 3-PS2-1, 3-5-ETS1-3, MS-PS3-5, MS-ETS1-2. Common Core SL.K-2.1, RI.K-2.7, RI.3-5.3, W.3-5.2, RST.6-8.3, SL.6-8.1, K.G.A.1, K.MD.A.1, 3.MD.B.4, 4.G.A.1, 6.RP.A.1, 6.EE.C.9.