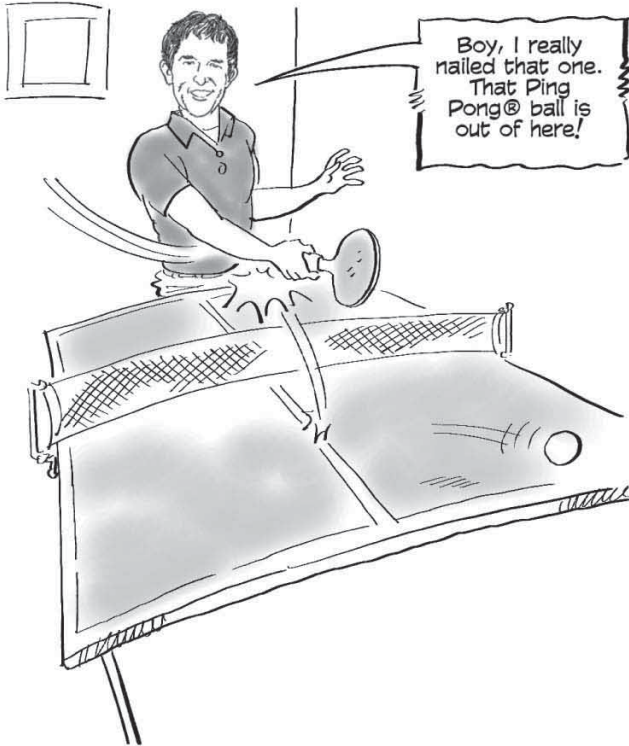


KICK STICK



as built on TV
pbs.org/designsquad



I challenge you to DESIGN and BUILD a motorized kick stick that can hit a Ping Pong ball across the floor at high speed. Let's do it!



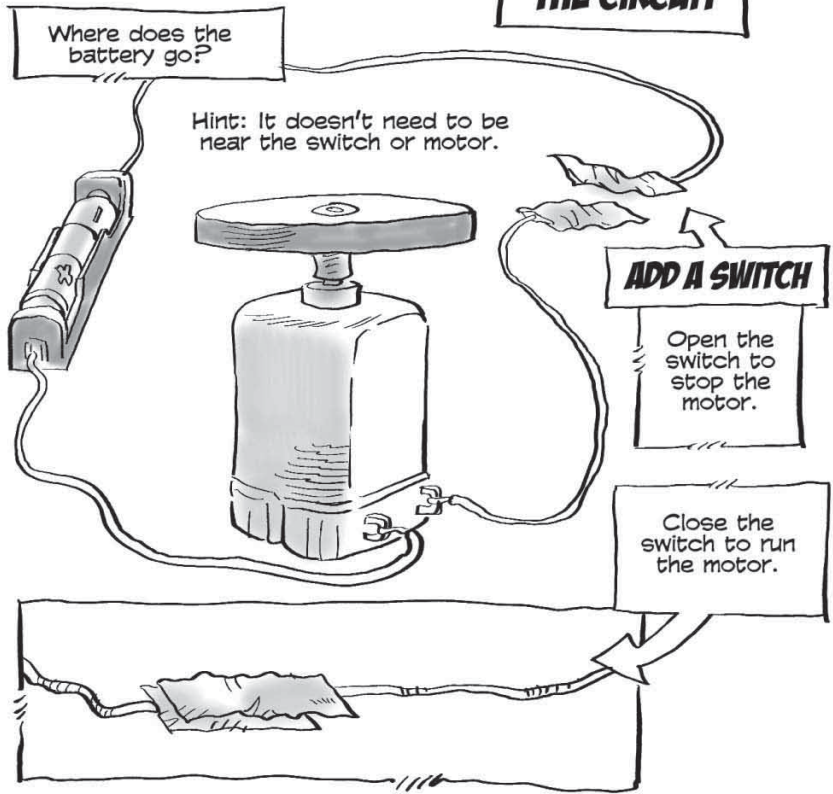
DESIGN AND BUILD

BRAINSTORM



There are lots of ways to go. Grab some paper. How many ideas can you come up with?

THE CIRCUIT



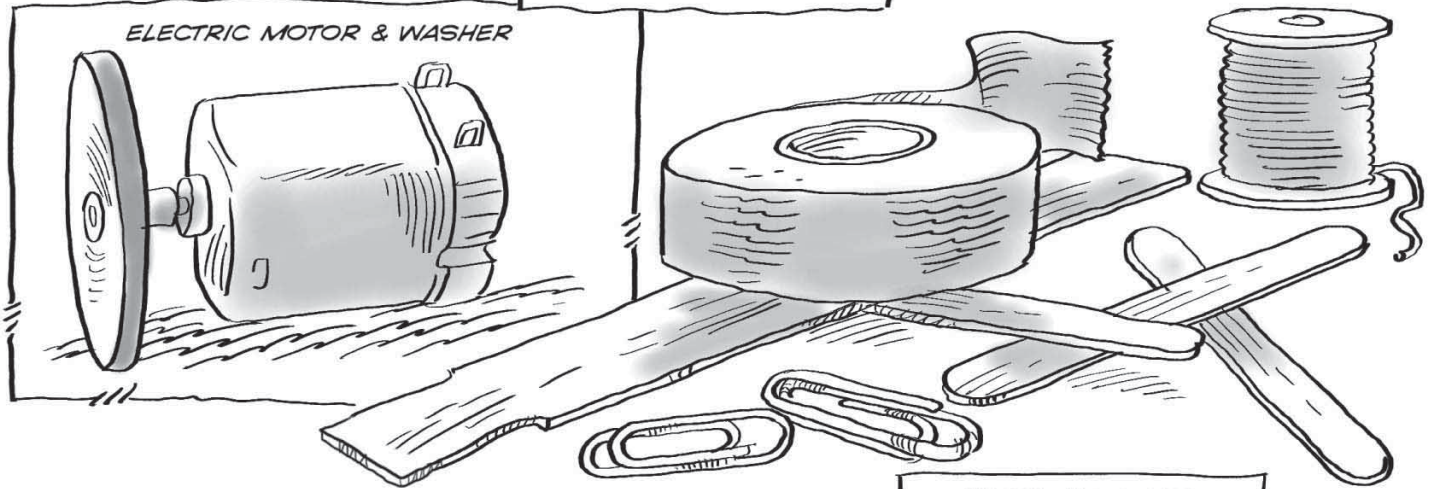
"Ping Pong" is a registered trademark of Parker Brothers, Inc.

DESIGN AND BUILD

THE KICKER BLADE

Kicker blade materials
Did you choose duct tape?
Craft sticks? Paper clips?
Paper? All these will work.
Test what gives a Ping Pong
ball a solid kick.

Where will the motor go?
In the middle of the stick? At
the end pointing out? At the
end pointing down?



ELECTRIC MOTOR & WASHER

**Attach the motor,
washer, and blades**
Put the washer on the
motor gear. Tape your
blades to the washer.

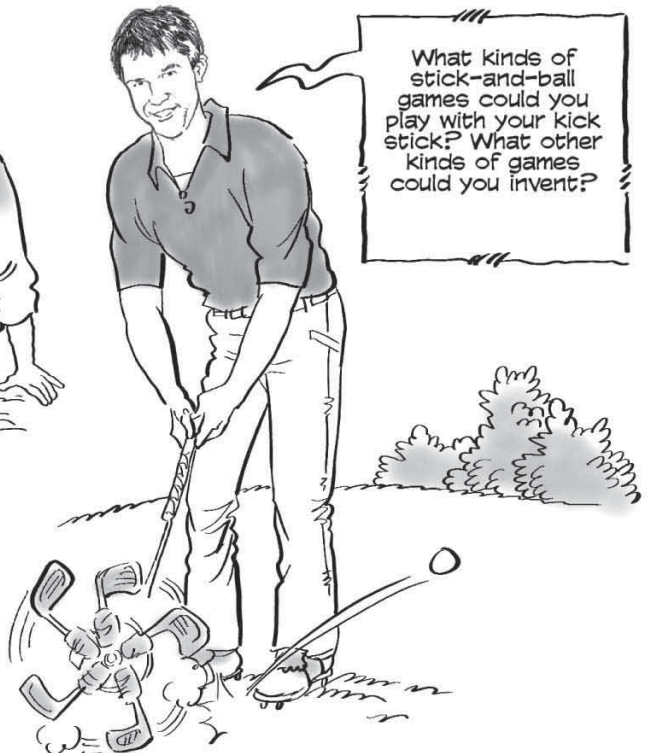
TEST AND REDESIGN

On target!
How can you
make your
kicker kick
more
accurately?

What kinds of
stick-and-ball
games could you
play with your kick
stick? What other
kinds of games
could you invent?

**Invent a
game**
Then test it
out.

Improvements?
How can you
make the
switch and
blades work
better?



PBS. Watch DESIGN SQUAD on PBS or online at pbs.org/designsquad.

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