

Bot Maker

**BUILD
YOUR OWN**

**BUG
BOT**

Tucker Besel



**BLACK
RABBIT
BOOKS**

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CONTENTS

CHAPTER 1

Be a Bot Maker.....4

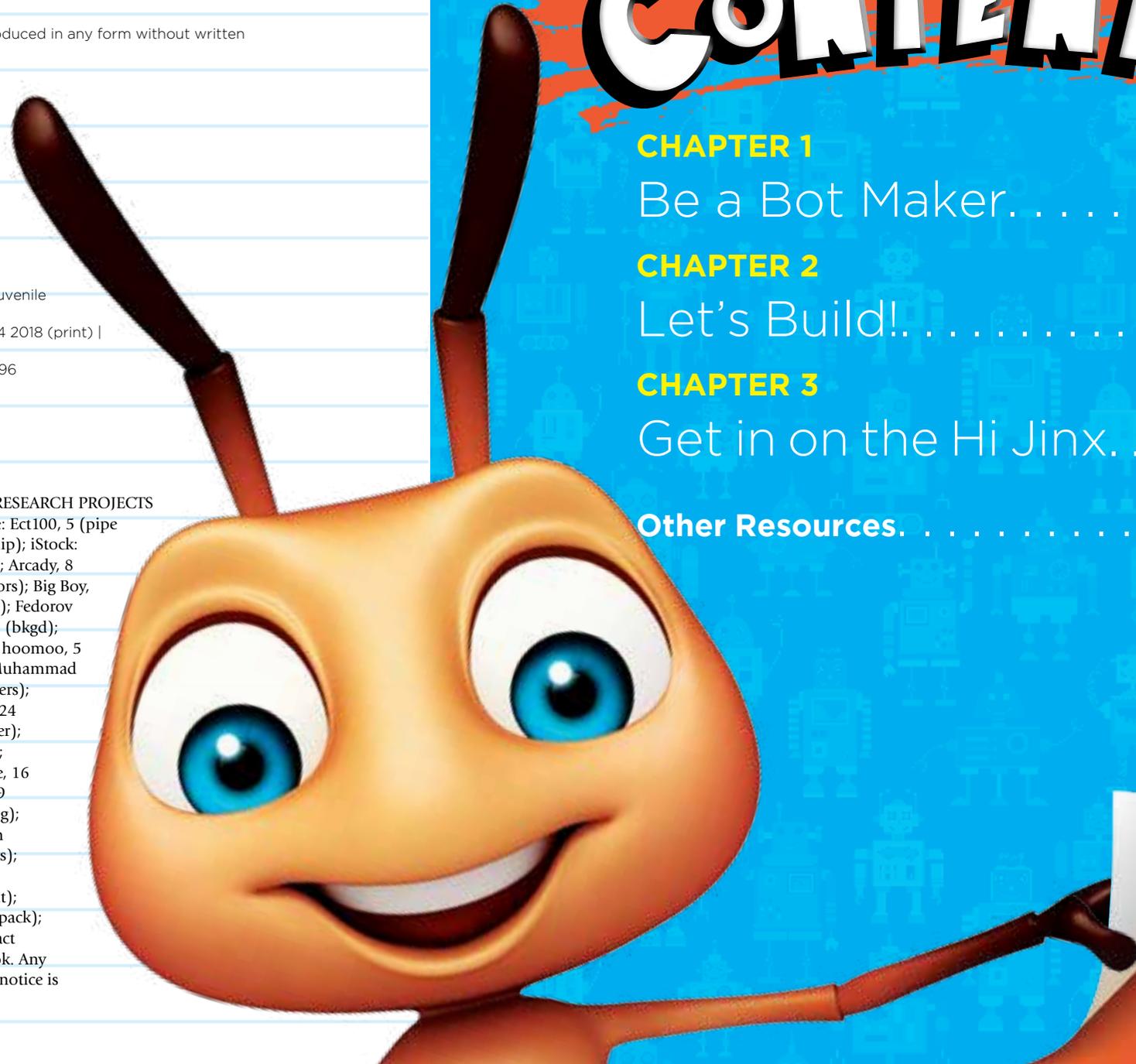
CHAPTER 2

Let's Build!.....6

CHAPTER 3

Get in on the Hi Jinx. .20

Other Resources.22

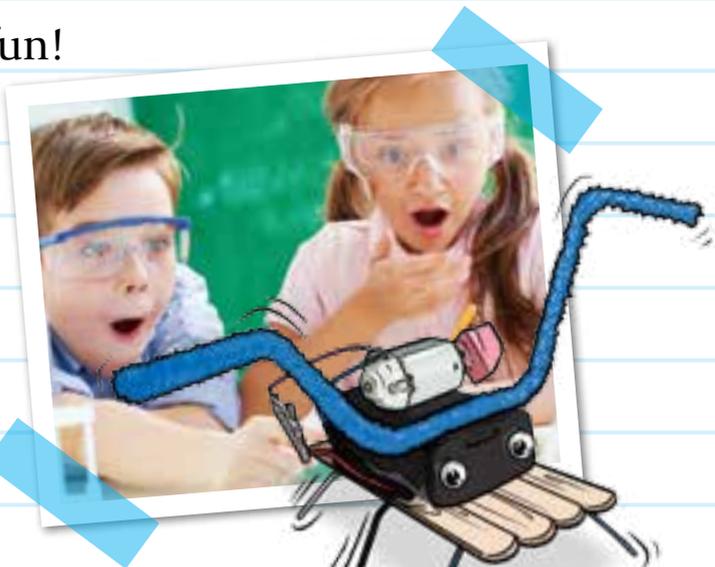


Chapter 1

BE A BOT MAKER

Robots aren't just for movies. People are creating robots that walk, run, and battle. Even beginners can create bots that wiggle and roll.

This book will help you create your own simple bug robot. Robot building takes patience. Don't give up if something isn't working. Experiment until it does. And, most importantly, have fun!



WHAT YOU'LL NEED



ruler



pipe cleaners



electrical tape



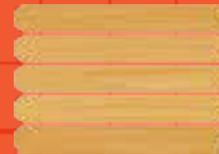
sharpened pencil



2 AA batteries



safety glasses



5 4½-inch- (11-cm-)
long wood craft sticks



pliers



hot glue gun
and hot glue



3 1-inch- (2.5-cm-)
long paper clips



1¼-inch (3-cm)
alligator clip



large eraser



enclosed AA battery pack
that holds two batteries (with
½ inch [1 cm] of wire exposed)



scissors



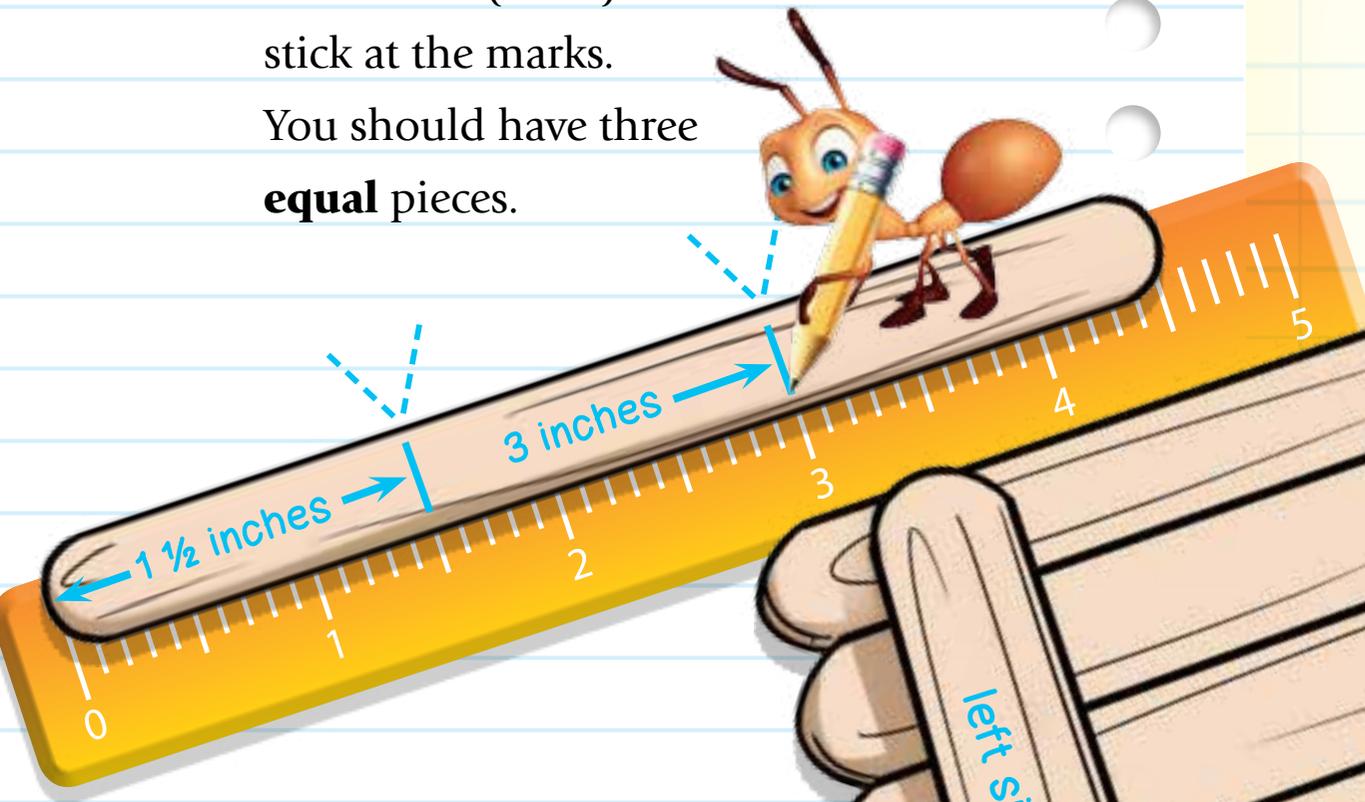
6-volt toy motor with wires
(with ½ inch [1 cm]
of wire exposed)



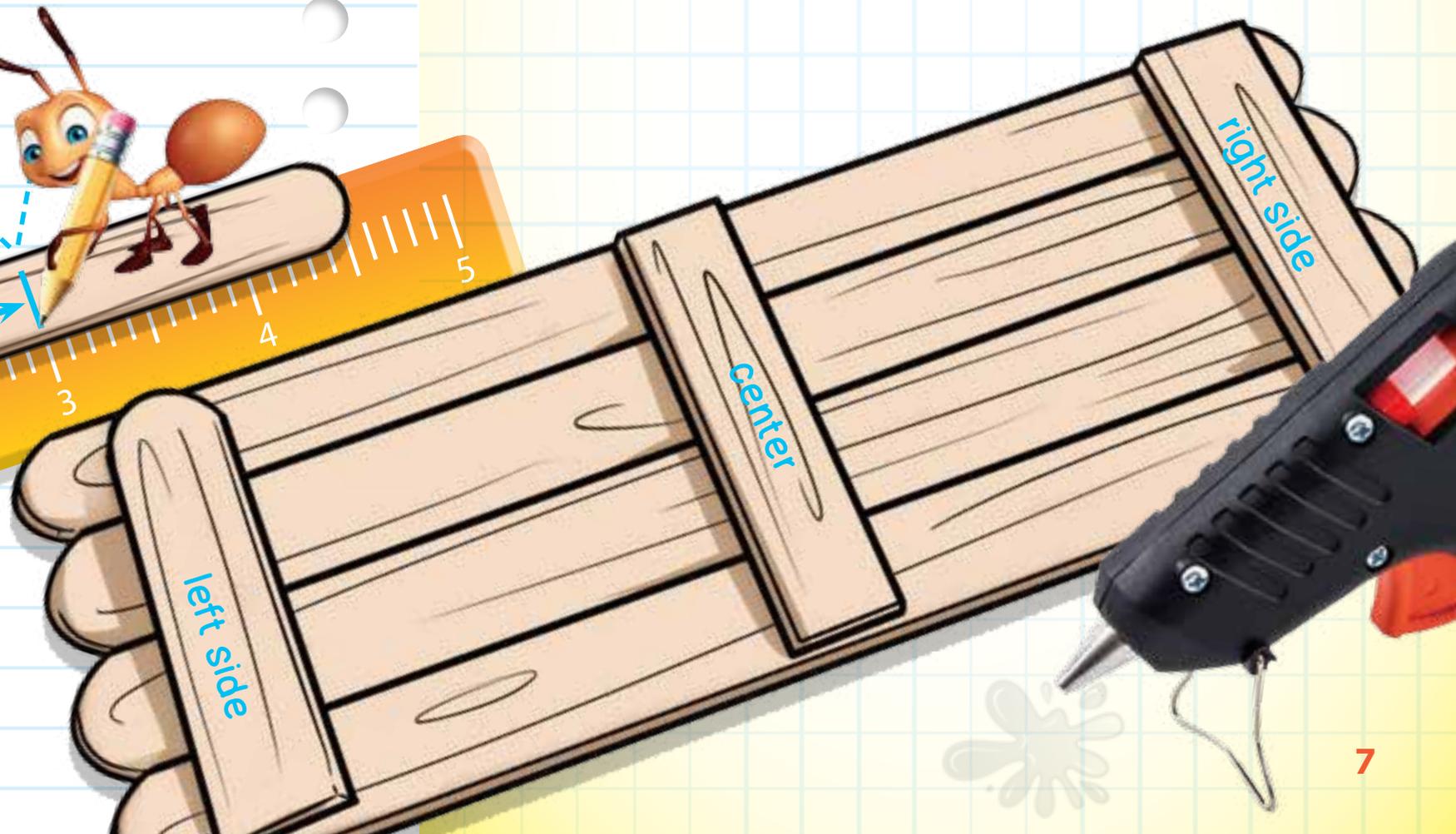
googly eyes

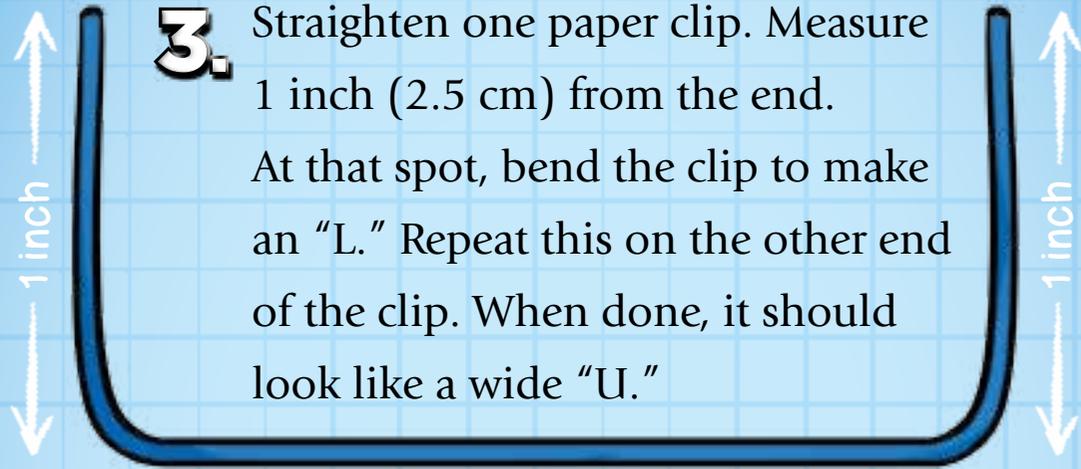
LET'S BUILD!

1. Use the ruler to mark a popsicle stick at $1\frac{1}{2}$ inches (4 cm) from one end. Make another mark at 3 inches (8 cm). Break the stick at the marks. You should have three **equal** pieces.



2. Lay the other four popsicle sticks side by side on your workspace. Hot glue one short piece across the center of the four long sticks. Glue one short piece across the left side. Then glue the last short piece across the right side.





3. Straighten one paper clip. Measure 1 inch (2.5 cm) from the end. At that spot, bend the clip to make an "L." Repeat this on the other end of the clip. When done, it should look like a wide "U."

4. Repeat step 3 with the other paper clips.



Did you know
all insects have
six legs?
Well, now you know.

front of bot

5. Hot glue the paper clips to the short sticks to make legs. On the side pieces, glue the clips to the inside edges. In the middle, glue a clip to either side of the short stick. The side the clip is closer to is the front of your bot.

