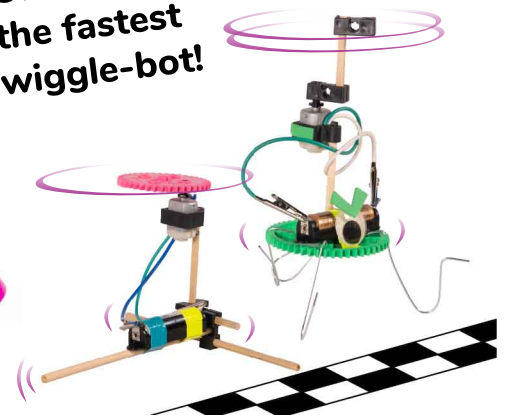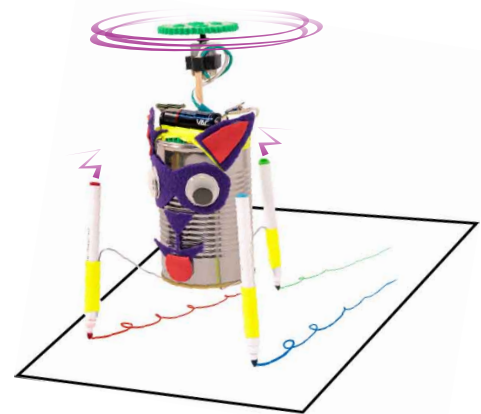# Go Guide

Wiggle-Bot

TeacherGeek

Design and build your own motorized Wiggle-Bot. Evolve your design to spin, wiggle, and more!

WRRR

Create a scribble-bot that makes art!

Or compete to make the fastest wiggle-bot!

Choose how you would like to complete this activity.
Download documents & videos at **teachergeek.com/wiggle**

Go Guide	Optional Labs	Optional Challenges
Start here! Build your Wiggle-Bot, evolve your design, and begin a challenge!	-Electricity Lab (Ages 8+) -Wave Lab (Ages 8+)	-Scribble-Bot Challenge* -Wiggle-Race Challenge* *See Page 5

Supplies

These are the parts you need to build one Wiggle-Bot.

WIGGLE-BOT PARTS

Do you have more parts? You may have the Super Wiggle Bots kit.
Download the **Super Go Guide** at **teachergeek.com/wiggle**

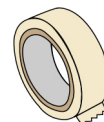| NAME	QTY	PICTURE
Gear Set SKU 1821-28	**1** set 4 gears	
Blocks SKU 1821-34	**2**	
Battery Holder SKU 1821-01	**1**	
Small Motor w/Leads SKU 1821-01	**1**	
Steel Wire 30 cm (12 in) SKU 1821-72	**2**	
Dowels various sizes SKU 1821-20	**6**	Dowel Sizes 2x 30 cm (12") 1x 7.5 cm (3") 2x 15 cm (6") 1x 5 cm (2")

MATERIALS YOU SUPPLY

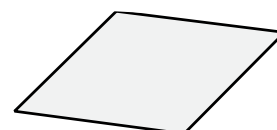**Recycling Materials**
What can you use for
a Wiggle-Bot body?
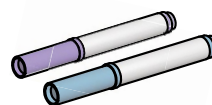
Markers

Tape

AA Battery

Paper
or
Poster Board
(for scribble-bots
to draw on top of)

- - - Optional Tools - - -

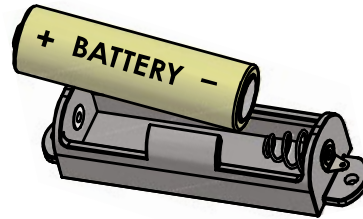Modify materials to make even
more creative designs with the
Maker Tool Set
SKU 1823-84

TeacherGeek

Make It Spin

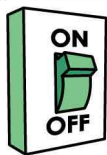**1** Put the **battery into** the **holder** with the flat side against the spring.

+ BATTERY −

Want to learn more about electricity using your Wiggle-Bot?

Download the **Electricity Lab** at **teachergeek.com/wiggle** Ages 8+
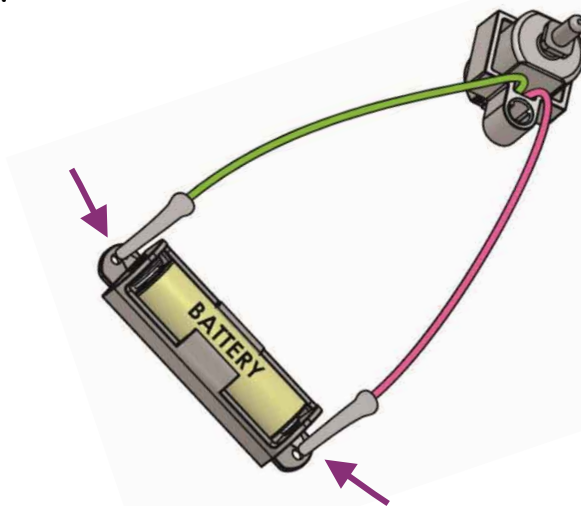
2 **Connect** the **motor leads to** the battery **holder** tabs. This should turn the motor on.

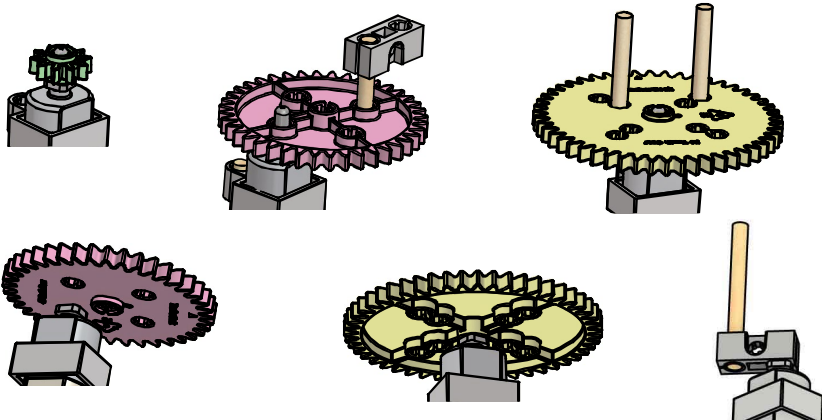**Open** alligator clip **leads, by pinching**, to attach and detach them.

ON OFF

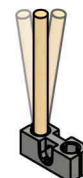To turn the **motor off**, **disconnect** a **lead**.

BATTERY

Make It Vibrate

Attach different components to your motor**,** in different places. Can you **make it vibrate** slow or fast? Vibration (wobbling) can make your Wiggle-Bot move.

Tip

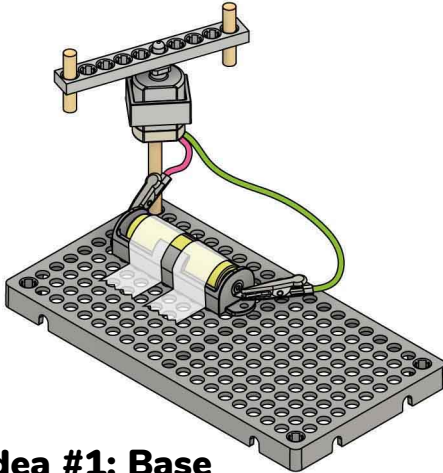Connect dowels to components by wiggling or tapping them into holes.
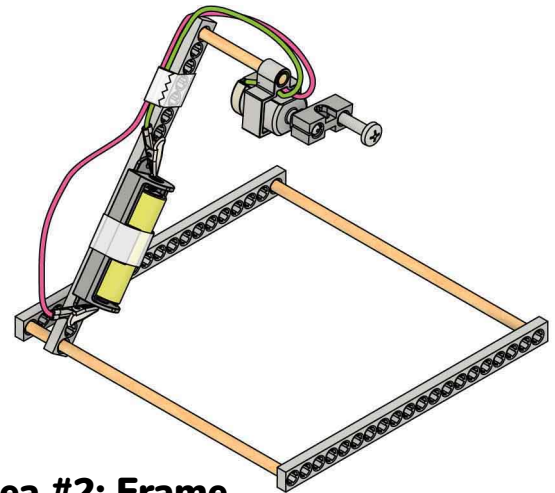
BUILD YOUR BOT

Here are some ideas to get you started.

Your first design may not work, but don't give up! You're doing real engineering! Keep experimenting and evolving your bot.
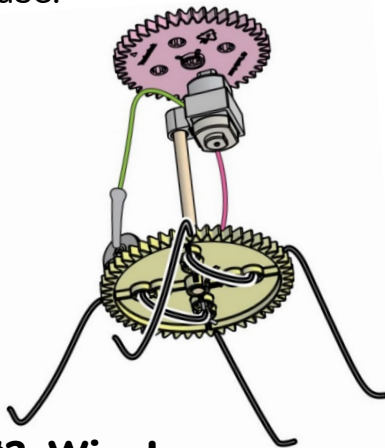
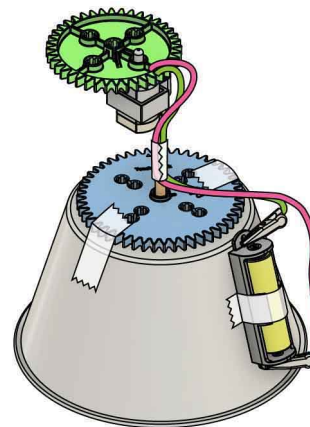### Idea #1: Base

Use **hole plates** or **gears** as a base.

Idea #2: Frame

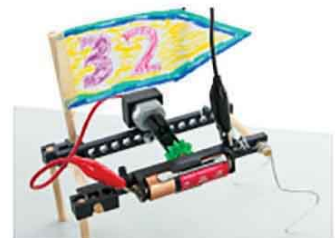Make a frame using **strips**, **dowels** and **blocks**.

Idea #3: Wire Legs

Use **steel wire** to create legs. Bend them to change how it wiggles.

Idea #4: Other Materials

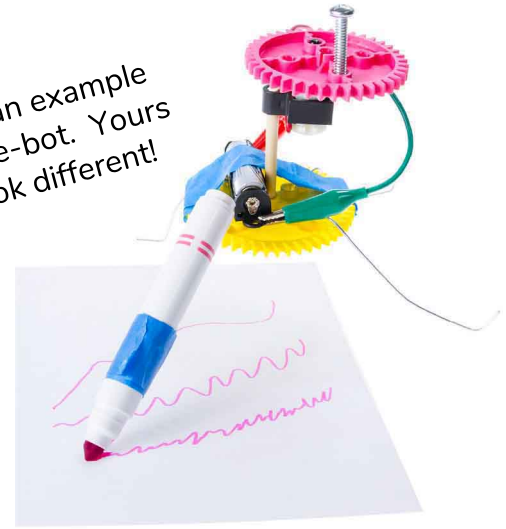Use **other materials** to add to and change your Wiggle-Bot.

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Scribble Bot Challenge

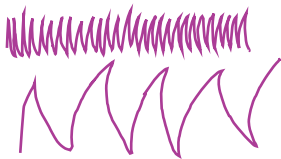### Design a Wiggle-Bot to make artwork!

Attach markers to your Wiggle-Bot, then let it loose on a big piece of paper or poster board!

Redesign your Wiggle-Bot to draw as many marker patterns as you can!

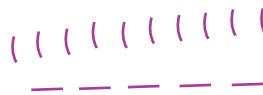*This is an example scribble-bot. Yours will look different!*

Zig-Zags   Loops   Dashes

Solid Lines   Dots

Want to learn more about waves?
Download the **Wave Lab** at **teachergeek.com/wiggle**
Ages 8+

Wiggle Race Challenge

Build the fastest Wiggle-Bot!

Race an opponent or try for the shortest time!

Set up a start and finish line, then add yard sticks (or other boundaries) for each racer's lane (to keep your Wiggle-Bot going straight).
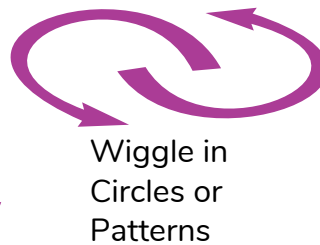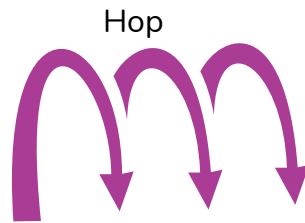
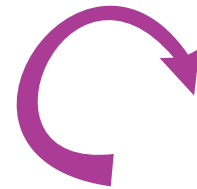Don't have yard sticks? Poke your Wiggle-Bot to keep it going straight.

Keep Experimenting

Keep improving and changing your design. There is no perfect design; every design can be improved.

Can you make it...

Wiggle Forwards

Hop

Wiggle in Circles or Patterns

Roll or Spin

What Else Can You Make?

Use Wiggle-Bot components to make your own inventions...

Wiggle Pen

Fan

Boat
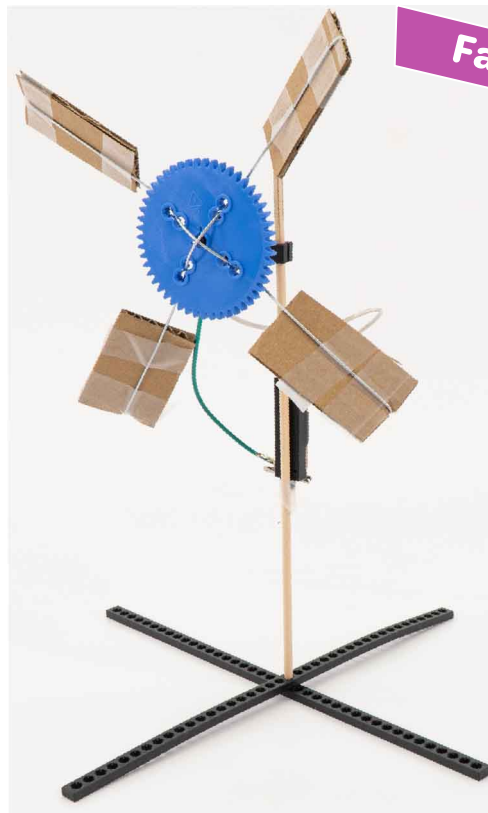
The only limit is your imagination!