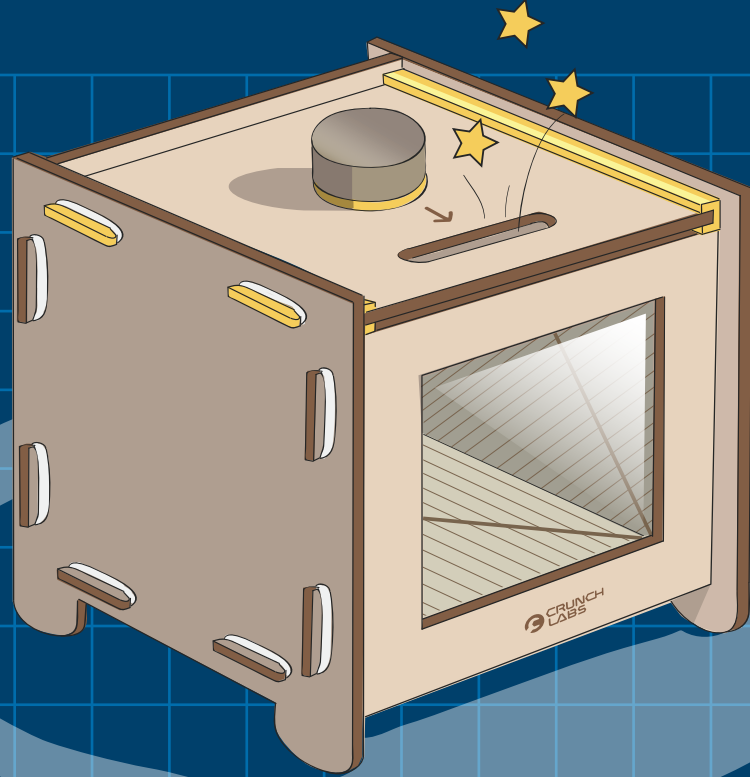




BUILD  
BOX ▶

MIRROR BANK



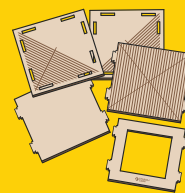
# NEW VIDEO UNLOCKED

BUILD ALONG & LEARN WITH MARK ROBER



[CRUNCHLABS.COM/BANK](https://crunchlabs.com/bank)

## PARTS



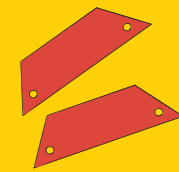
wood pieces



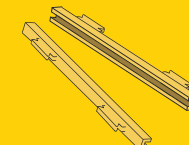
wood knob



mirror



mirror supports



guide rails



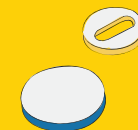
clear film



small o-rings



large o-rings



adhesive foam



dowel



elastic cords



plastic arm



spider

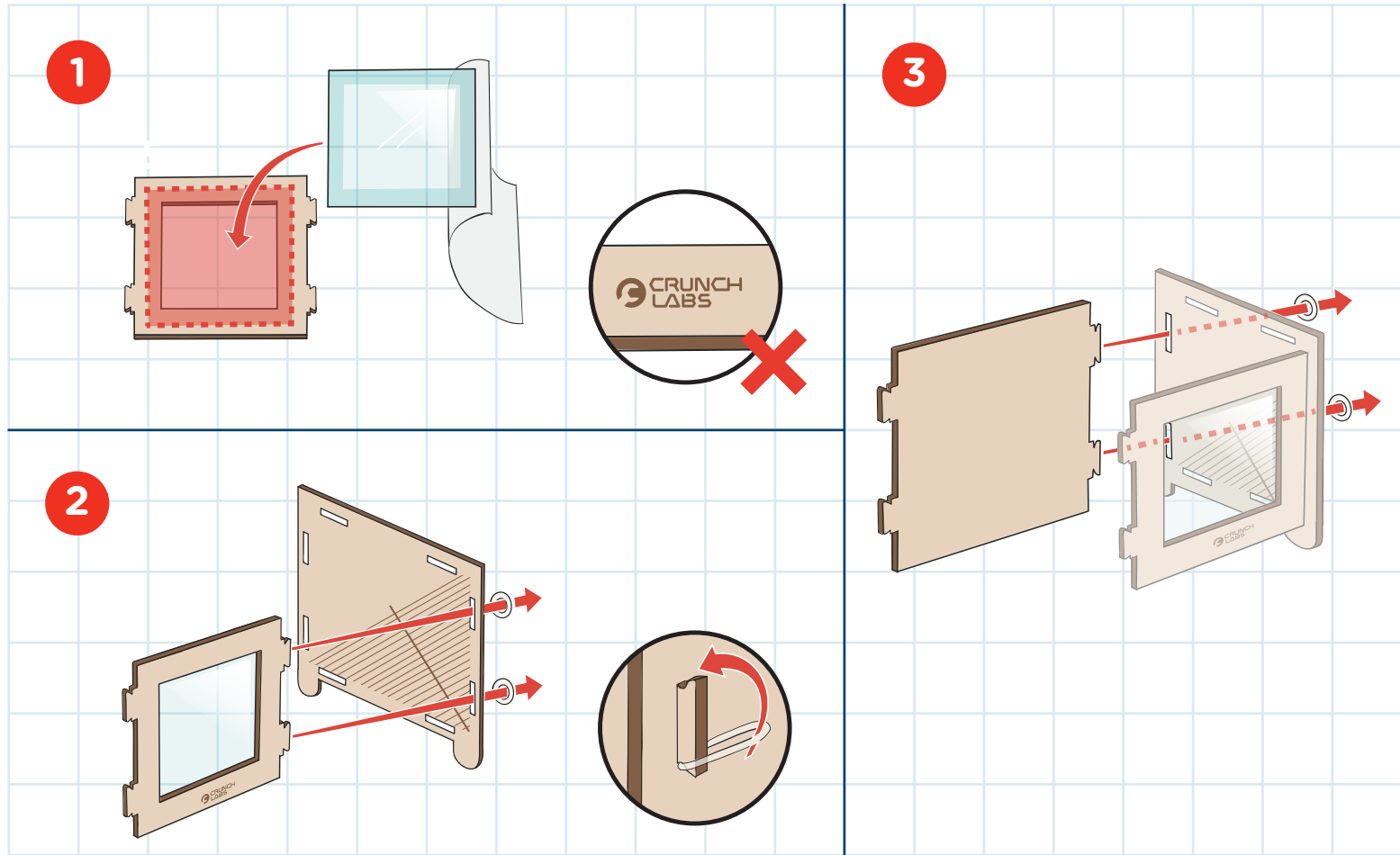


coins

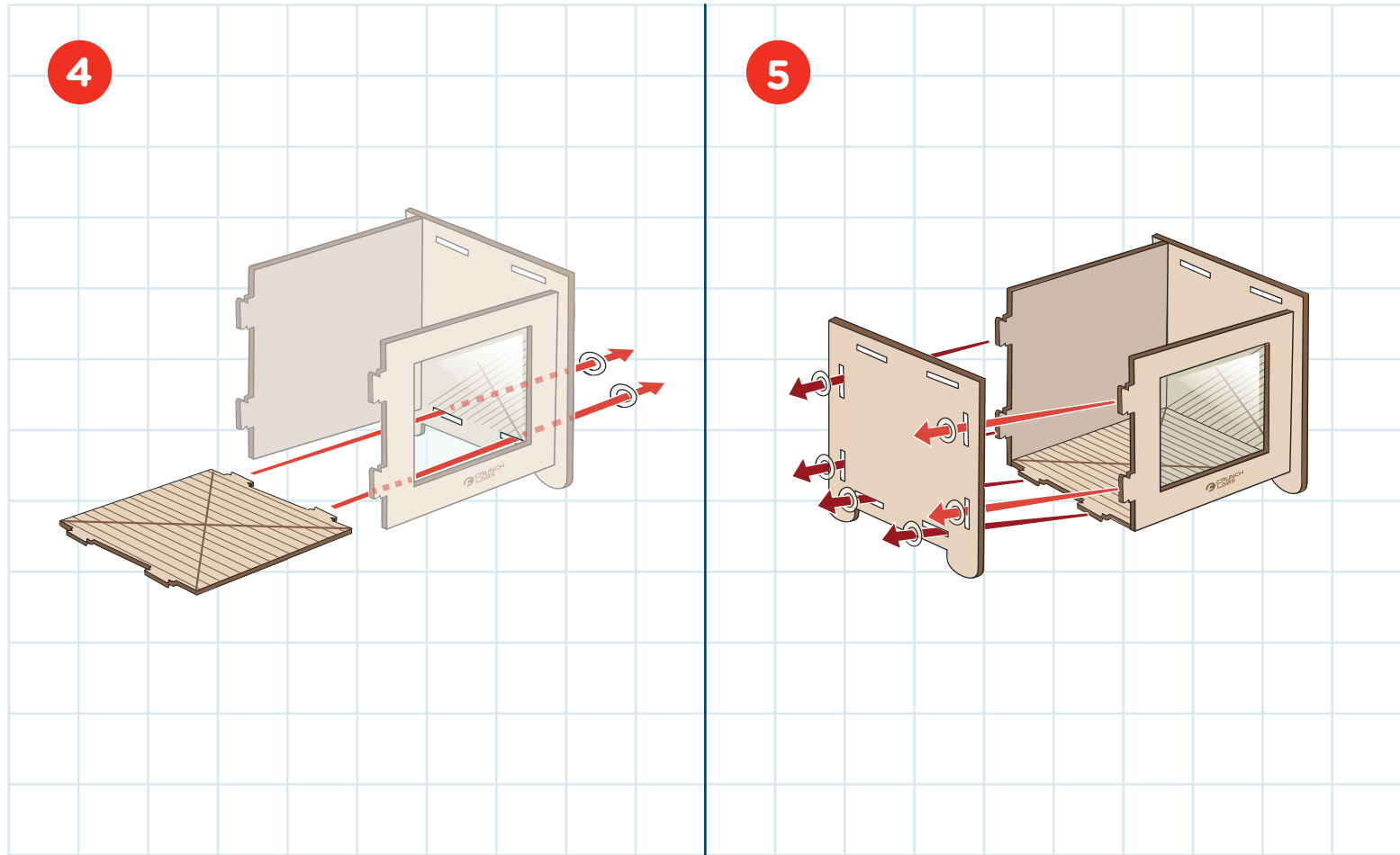


foam ball

# BUILD

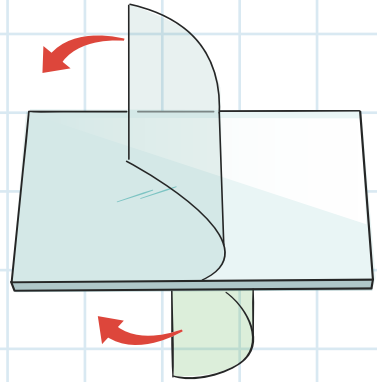


# BUILD



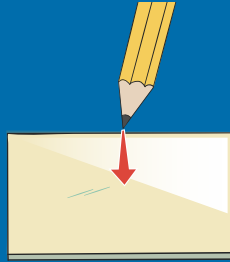
# BUILD

6

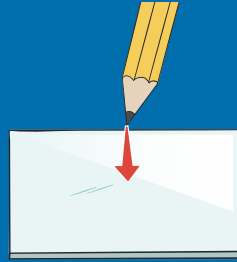
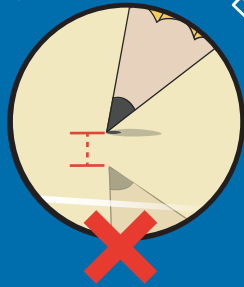


**PRO TIP!** ▶▶  
Mirrors are made by painting see through glass or plastic with a thin layer of shiny metal, usually silver. Check to make sure you're using the right side.

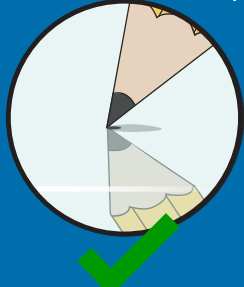
## TEST



WRONG SIDE



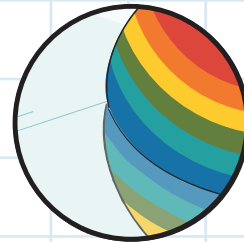
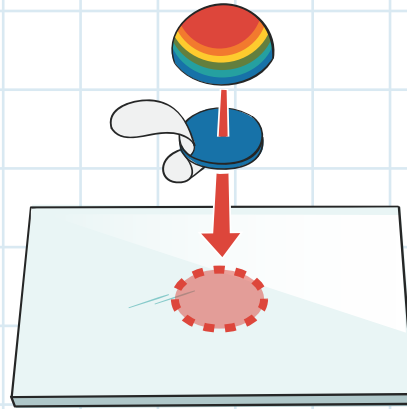
RIGHT SIDE



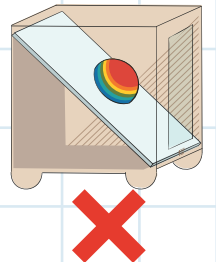
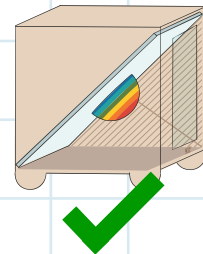
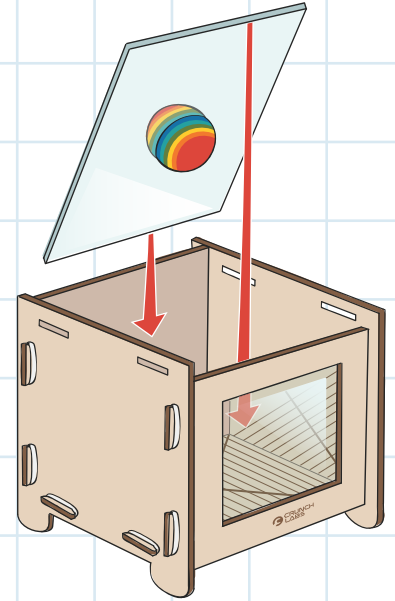
Having trouble? Watch the video at [crunchlabs.com/bank](http://crunchlabs.com/bank)

# BUILD

7

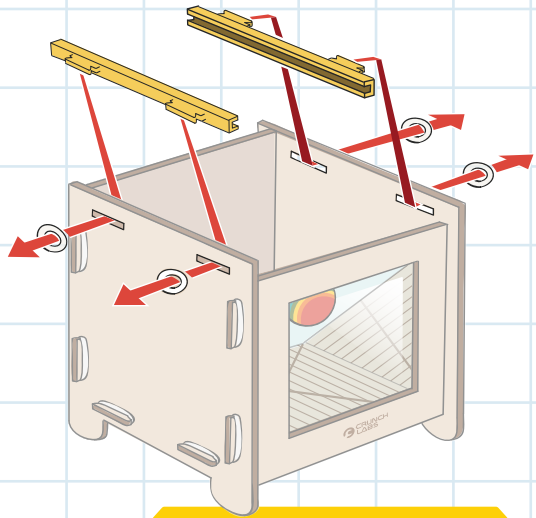


8



# BUILD

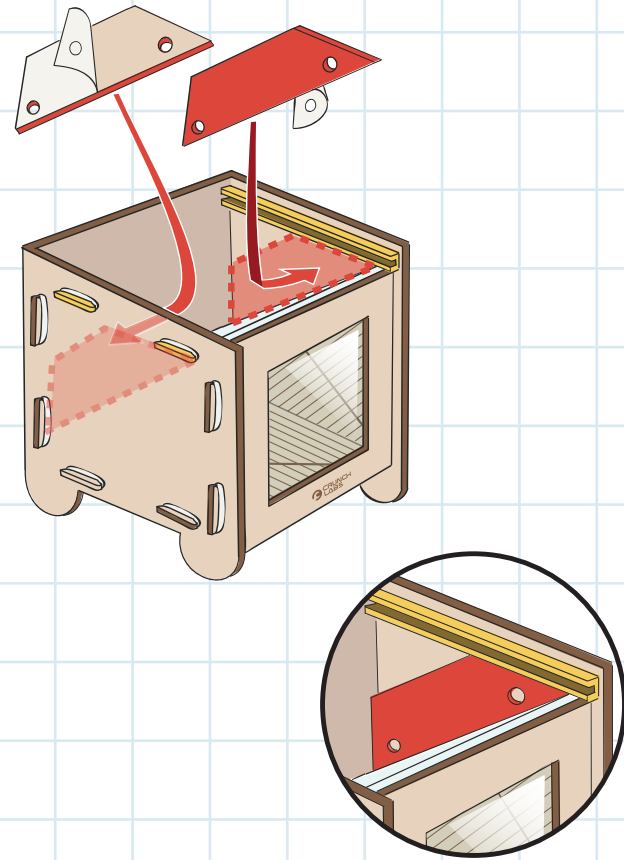
9



## PRO TIP! ▲▲

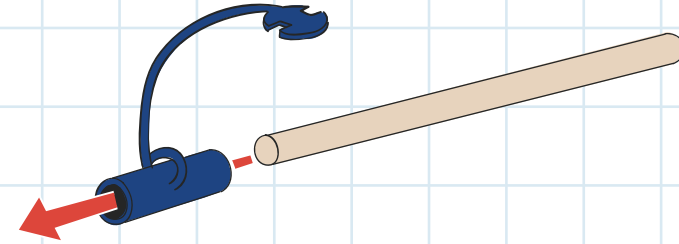
Guard rails help things move easily along a certain path. These rails will help the bank lid open and close smoothly.

10

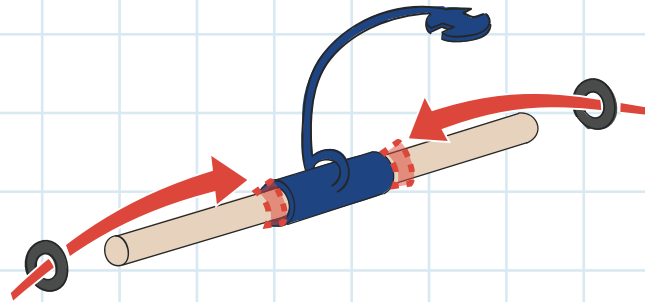


# BUILD

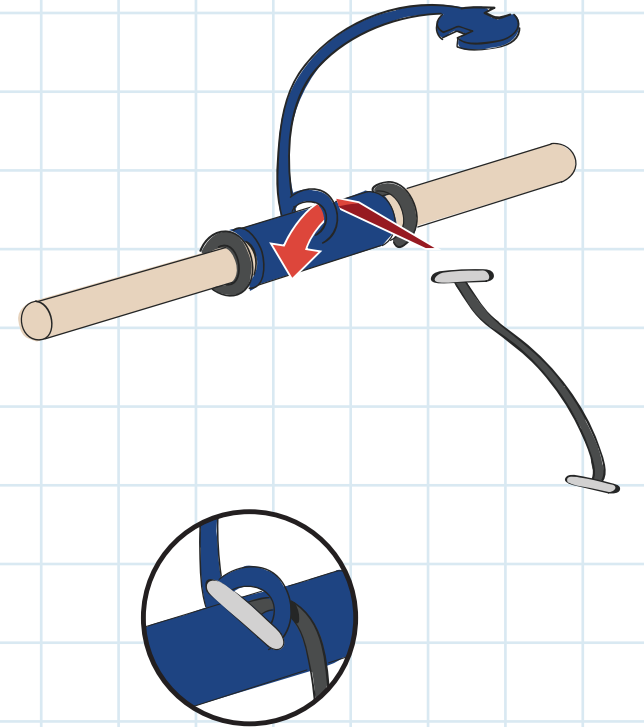
11



12

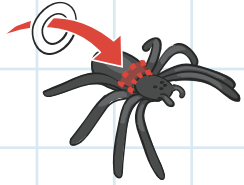


13

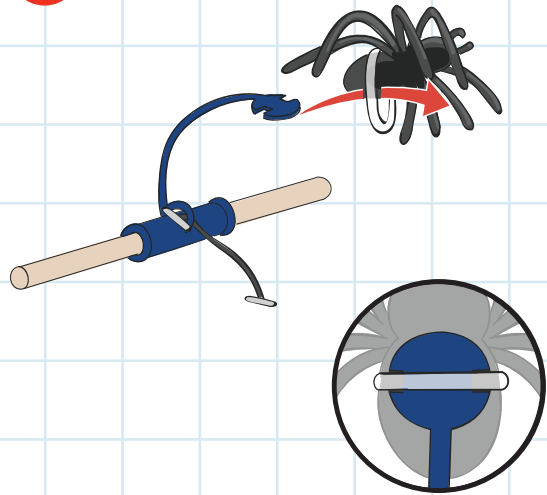


# BUILD

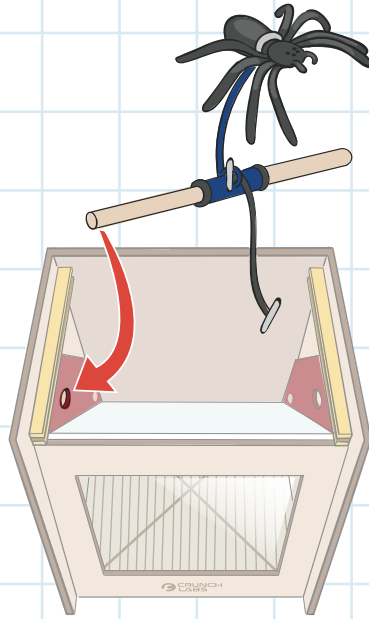
14



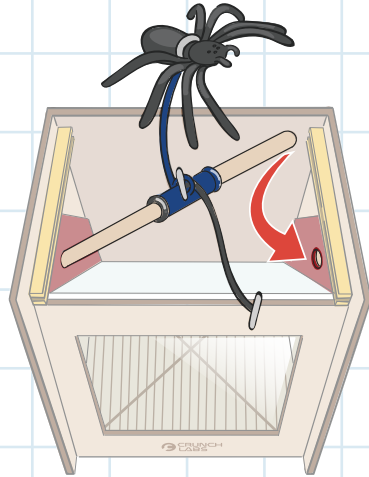
15



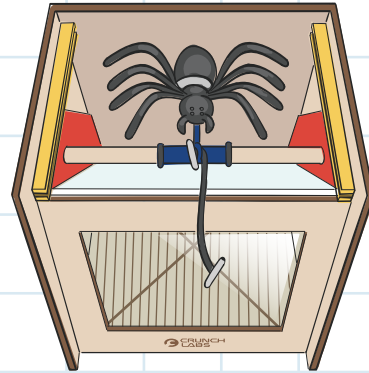
16



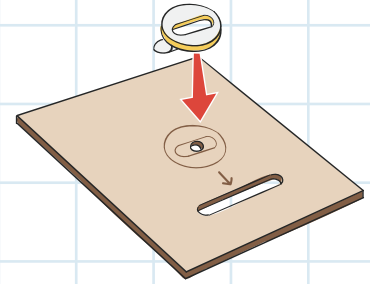
17



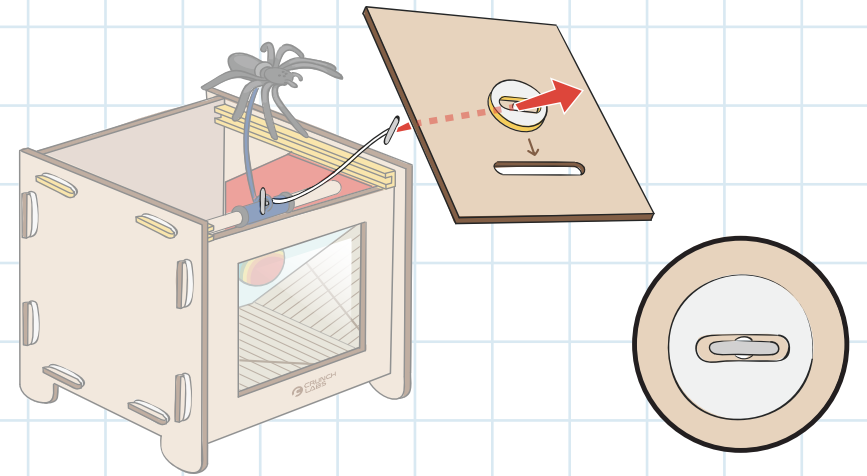
18



19



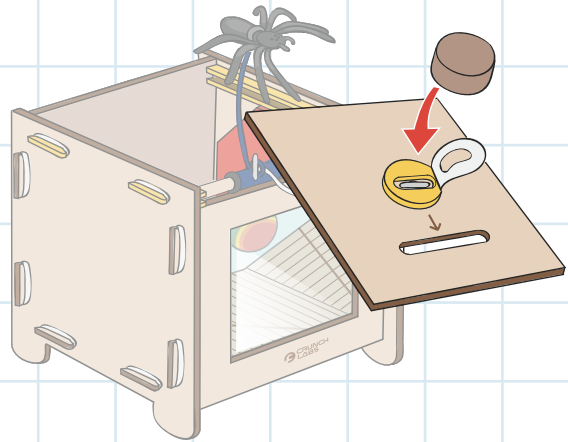
20



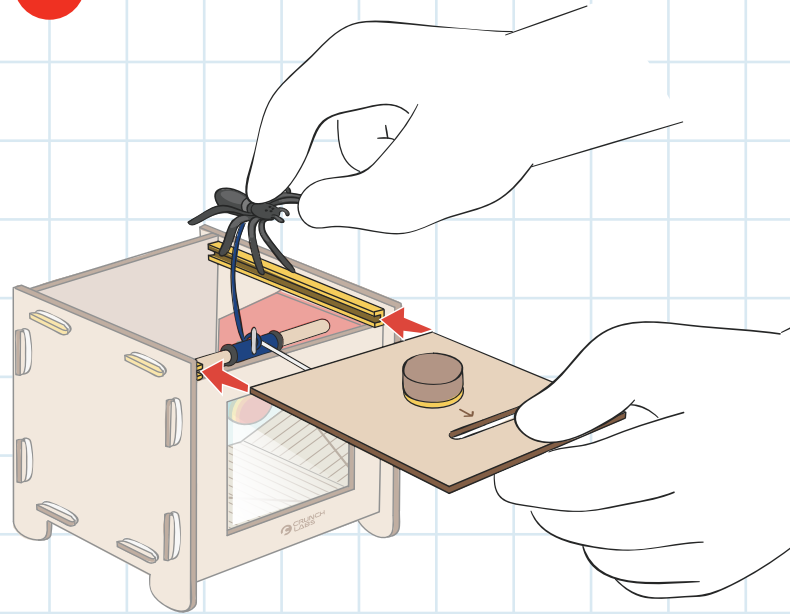
# BUILD

# BUILD

21

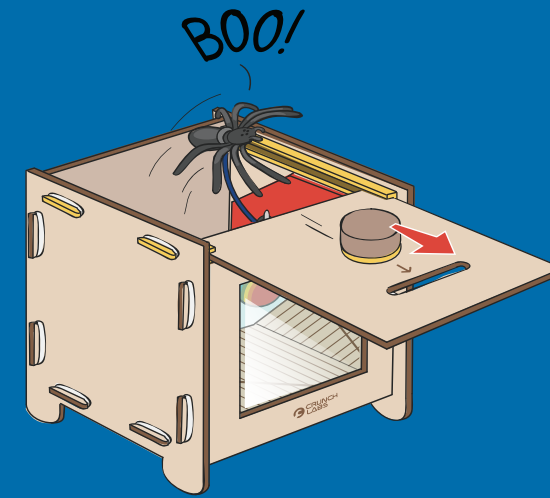


22

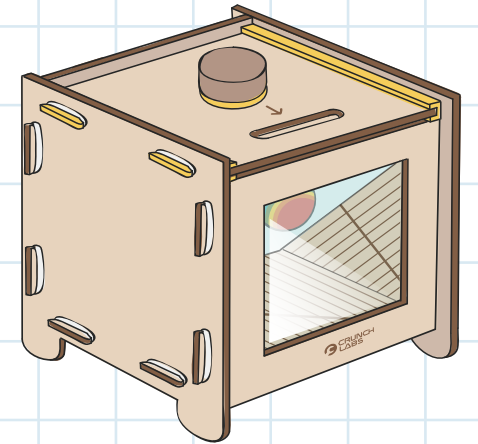


# BUILD

## TEST

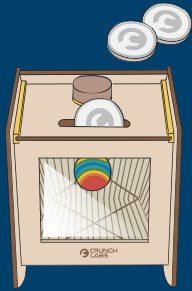


BUILT!



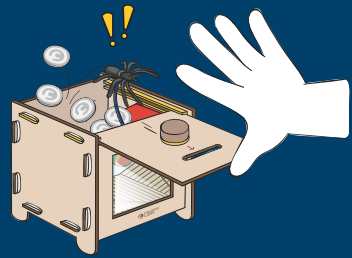
Having trouble? Watch the video at [crunchlabs.com/bank](https://crunchlabs.com/bank)

## PLAY



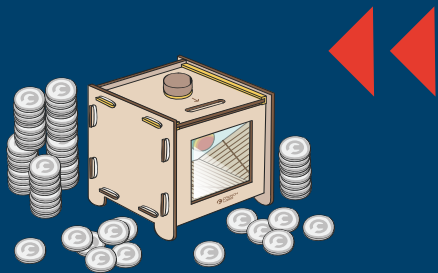
### COIN EATER

Perform a magic trick by having coins disappear before your very eyes! Look into the box window and drop a coin in.



### PRANK BANK

Hand someone your bank, and then challenge them to solve the mystery. SURPRISE! Coins weren't all that was hiding in there.



### PRANK WAR

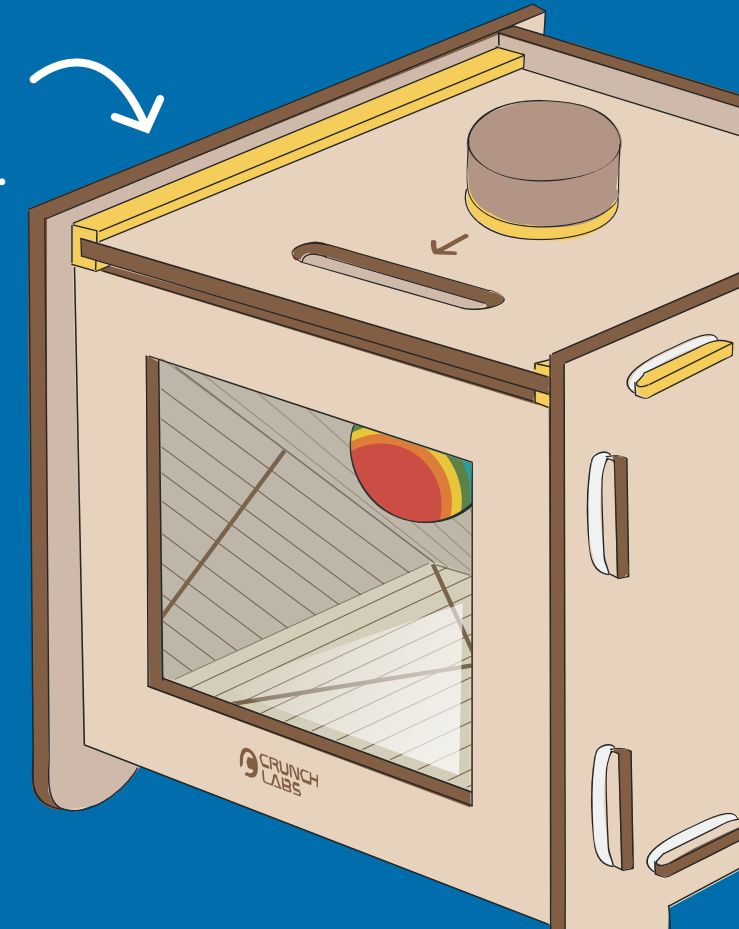
Start a prank war with a friend! Any time you get them with a prank, they put a coin in the bank, and vice versa. After a while, see how much you've both saved and go get ice cream together.

## THINK

**Mirrors are smooth surfaces that reflect a clear image.**

Basically, it's light changing directions.

Your Mirror Bank uses the reflective surface of a mirror to create an illusion of an empty box. The box is only *half* empty, but because the mirror reflects the empty half perfectly, your eye is tricked into seeing one entirely empty box. The stripes help disguise the edges of the mirror, so it's harder to detect the illusion.

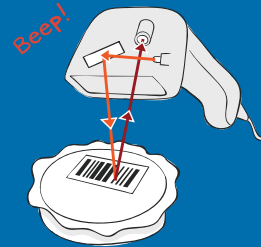




THINK

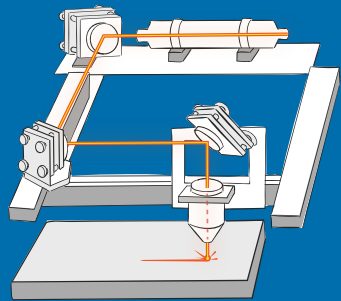
## Find mirrors in other machines!

Mirrors can be used for more than just checking for lettuce between your teeth, they can redirect beams of light without moving the source.



## BARECODE SCANNER

Beep beep! Scanners read prices by bouncing a light onto an item's barcode. A mirror in the scanner helps it scan a wider area.

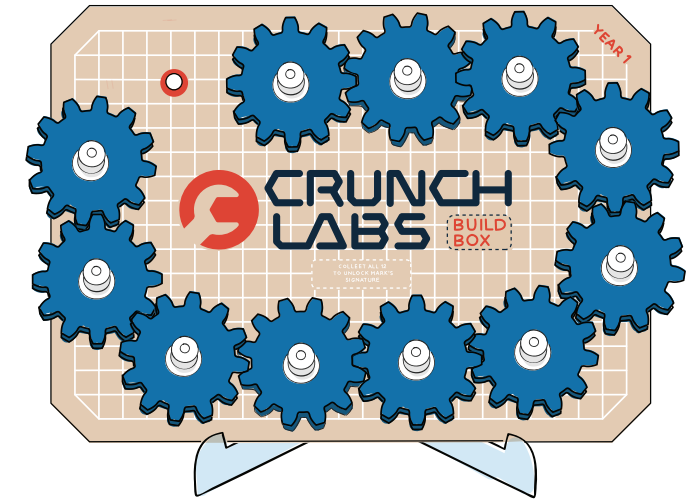


## LASER CUTTER

Mark uses a machine called a laser cutter that *literally* cuts stuff with lasers. The machine guides the laser beam with a bunch of tiny mirrors, so it can safely and accurately slice through material.

THINK

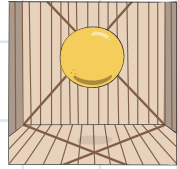
# CONGRATULATIONS! You earned a gear badge for mirrors



Don't forget to add your gear badge to your gear train!

# CRUNCH

It's crunch time! Use your engineering superpowers to keep pranking.



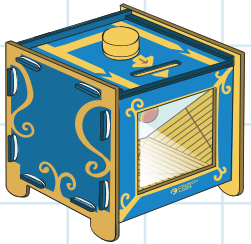
## FLOATING OBJECT

Hold up different objects to your mirror. Which ones would look the most convincing as floating objects and why?



## SPIDER ON A STRING

Prank outside of the box by using your spider in other surprising spots. Try hiding it in a drawer or dangle it on a string!



## DECORATE

Can you make your Mirror Bank even more enticing to open? Draw, color, or paint your designs on the wood.

# SHOW OFF YOUR BUILD



Share your best pranks & coolest modifications!

#crunchlabs @crunchlabs    



## SWEEPSTAKES

**Each CrunchLabs build box contains the chance to WIN a trip to visit CrunchLabs with Mark Rober! Sadly, you are not a prize winner this time. Check inside your next build box for another chance to win.**

*Trip includes roundtrip transportation and two (2) night's hotel accommodations for a family of four (4). Approximate value: \$4,500. NO PURCHASE NECESSARY. Open to legal U.S. residents, 18 years of age or older. Void where prohibited. For complete Official Rules, including promotion end date and information on how to obtain a free game ticket, visit [www.crunchlabs.com/win](http://www.crunchlabs.com/win).*

This toy is intended for use by children over the age of eight years. These instructions contain important information, do not throw away.