



In Collaboration With

CURIOUS JANE

# D.I.Y. INTRUDER ALARM PROJECT

INSPIRED BY PAPER GIRLS EPISODE 3: "MICE TO MEET YOU"

Is "knock first" simply not working? In 'Mice to Meet You', Caily can't keep her younger sister, Edie, from sneaking into her room and stealing her favorite chocolate bars. If you're having the same problem, we've got you covered with your very own D.I.Y. Intruder Alarm!

## maker checklist

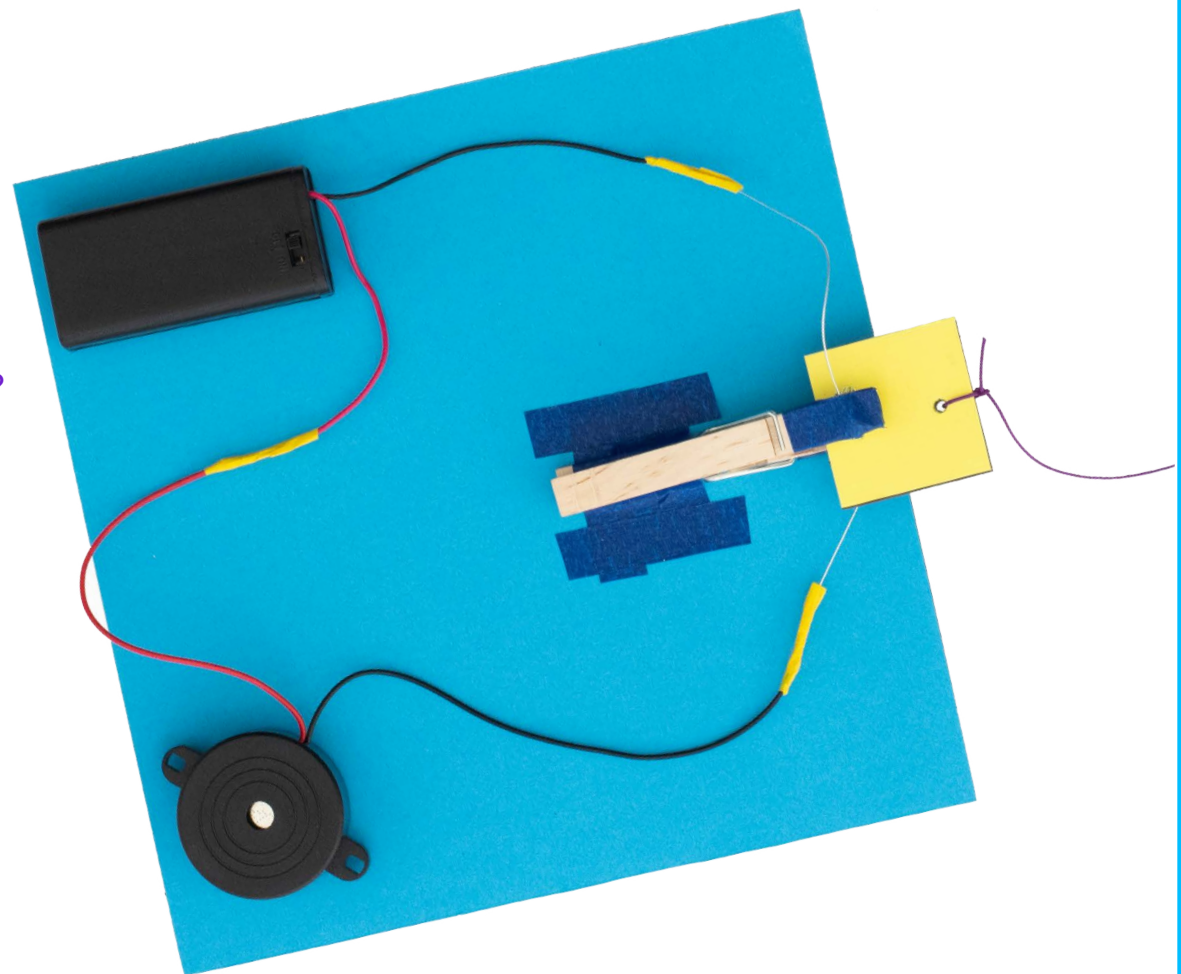
### things you may need to order

- 1 square of board or foam core (8x8 inches)
- 1 3-volt buzzer alarm
- 1 AA battery holder with switch
- 4-6 double-stick foam squares
- 1 12-inch piece uncoated 24-gauge wire

### things you may have at home

- 2 AA batteries
- 1 old-fashioned clothespin
- 6-foot length of thin, strong cord
- scissors, pencil, ruler
- masking tape
- 1 small square of cardboard (1x1 inches)

←  
looking for  
items online?  
this list is  
clickable!

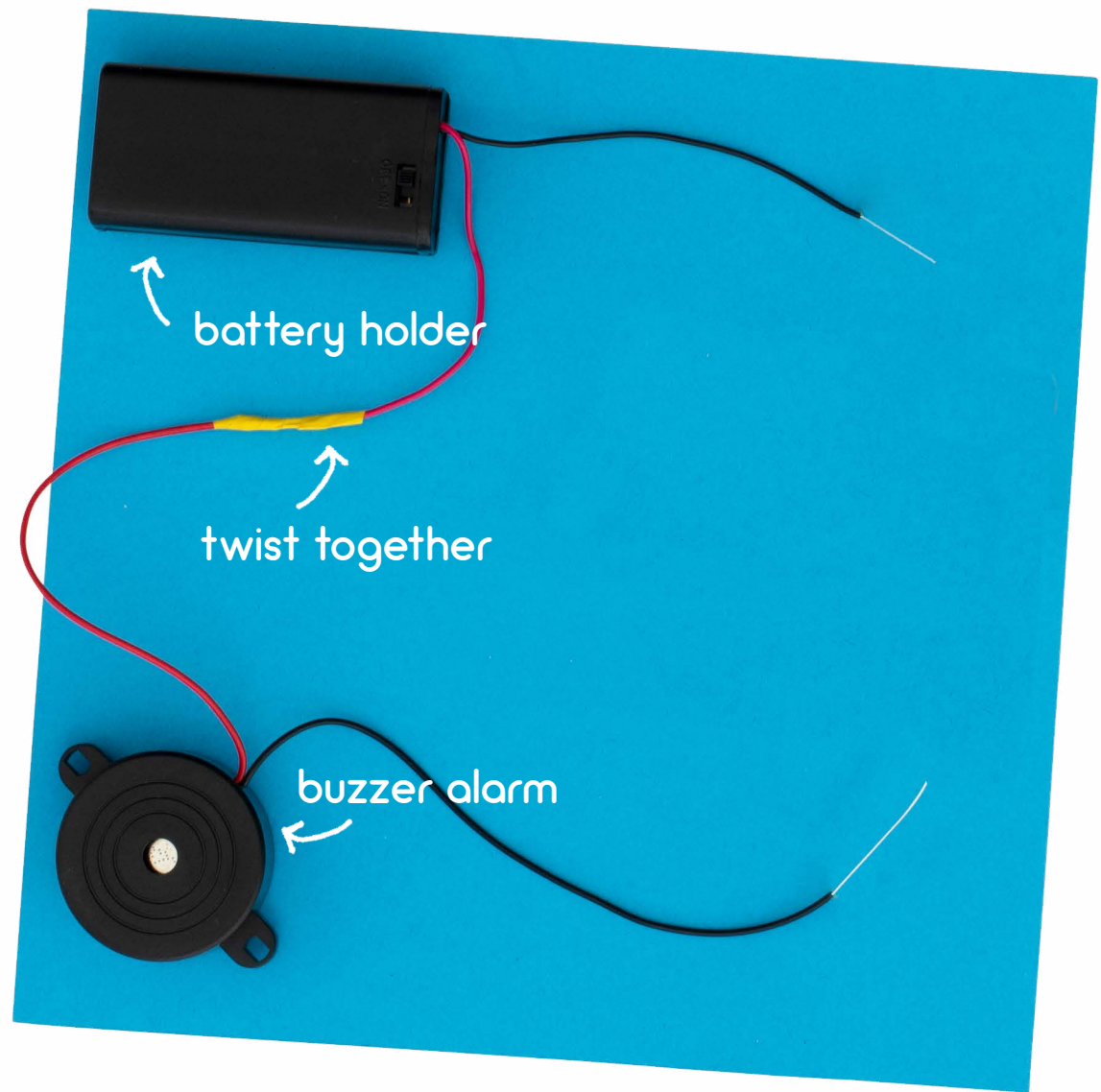


## STEP 1: Set Up the Board

affix the battery holder to the board in one corner, using adhesive foam tape. make sure to put the batteries in first, and turn the switch to OFF while you work.

affix the buzzer to the board in the opposite corner using the foam tape.

connect the battery pack and alarm by twisting together the red leads. wrap up with a bit of masking or electrical tape.

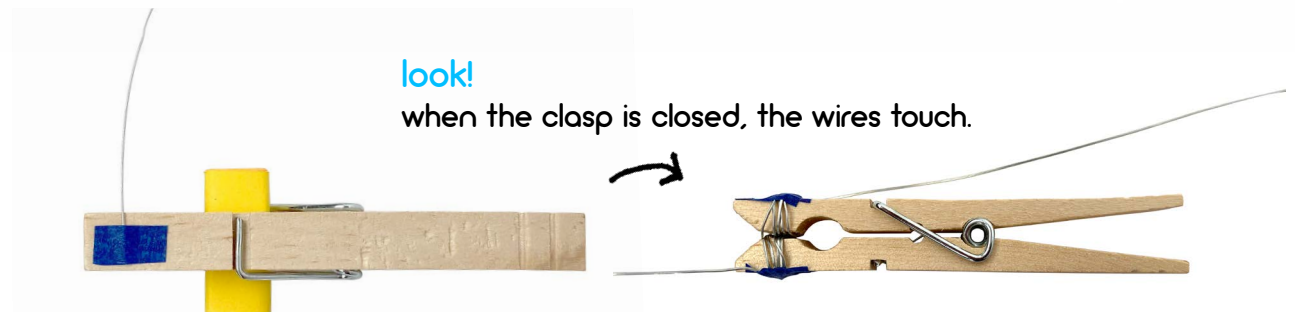


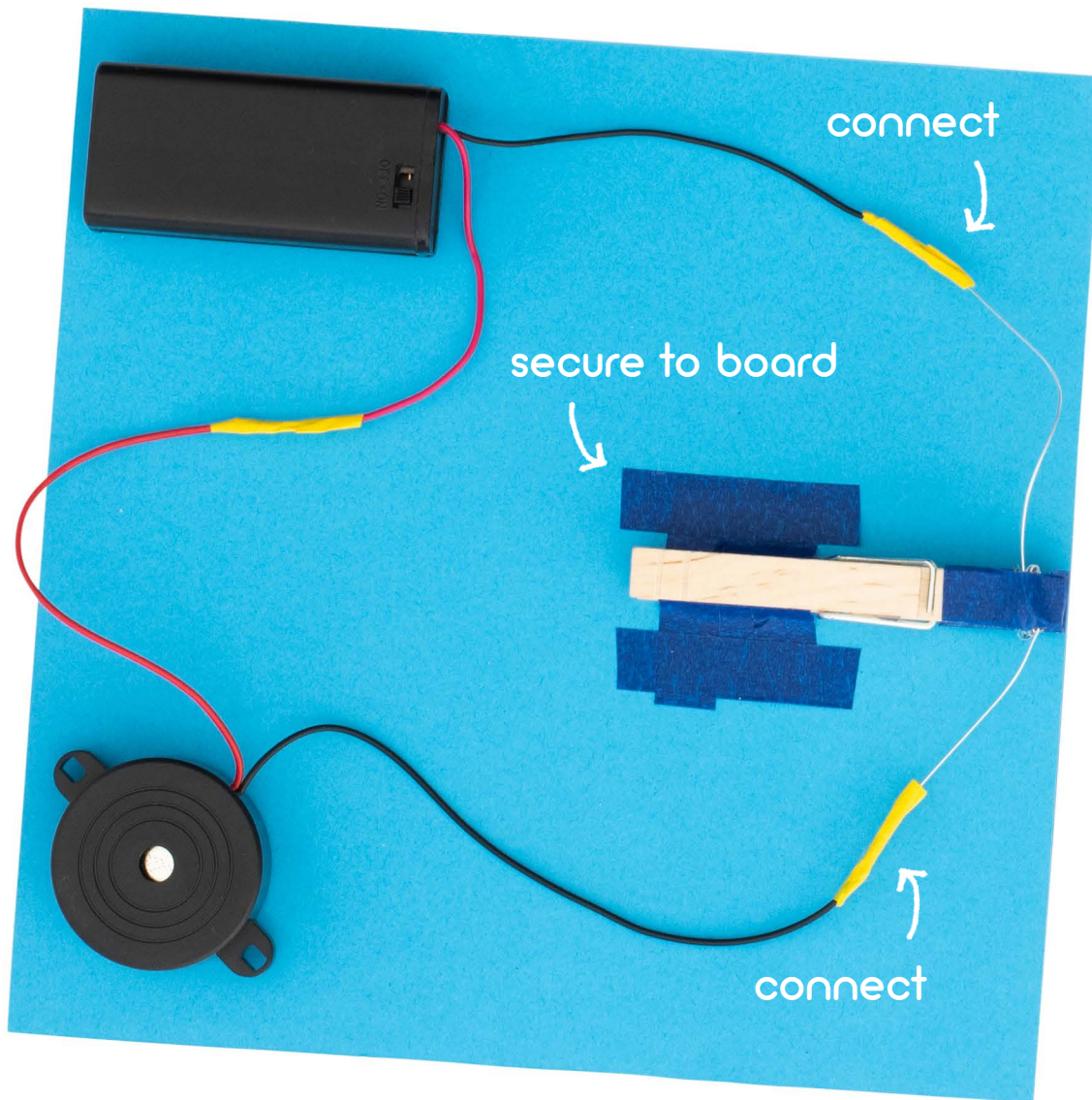
## STEP 2: Wire the Clothespin

cut two pieces of wire 6 inches long. tape the end of one wire to the top of the clothespin. wrap the wire around the top half of the clasp a few times, leaving a 3-inch tail. tape in place to secure.

repeat with the other wire on the bottom half of the clasp, leaving a 3-inch tail pointing in the opposite direction.

**TIP!** use a wedge of paper to keep the clothespin clasp open while you work.





### STEP 3: Finish the Circuit

position the clothespin on the board so the clasp is turned toward the edge.

tape the bottom leg of the clothespin securely to the board, making sure the clasp can still open and close.

connect one wire from the clothespin to the black lead of the battery holder; twist together, and wrap with tape.

repeat to connect the other wire from the clothespin to the alarm; twist and tape!

### STEP 4: Test it Out!

turn the battery pack switch "ON" and the alarm should sound! if it doesn't...

#### TROUBLESHOOT!

make sure the contact in your connections are secure. make sure the wires wrapped around the clasp of the clothespin touch each other without interference. test your batteries and alarm, and replace if needed.

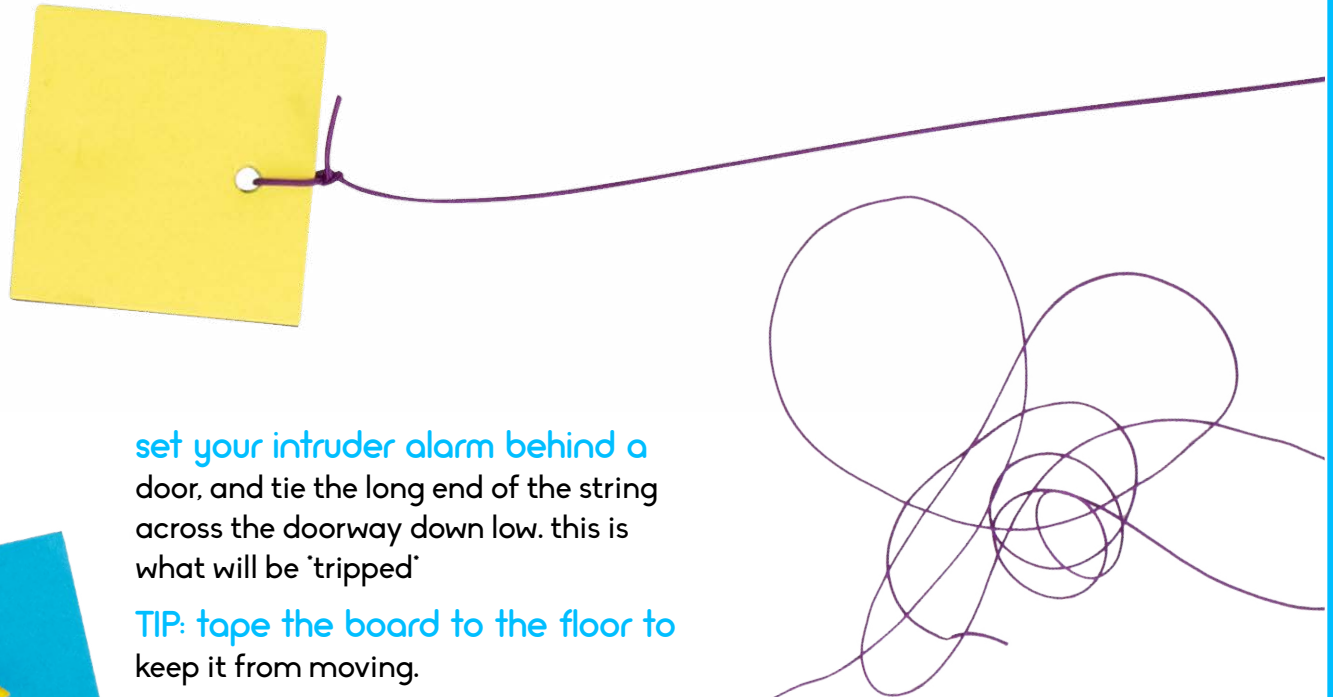
do some detective work to fix it!

## STEP 5: Set the Trap

cut a 1-inch square of cardboard and punch a small hole near one edge.

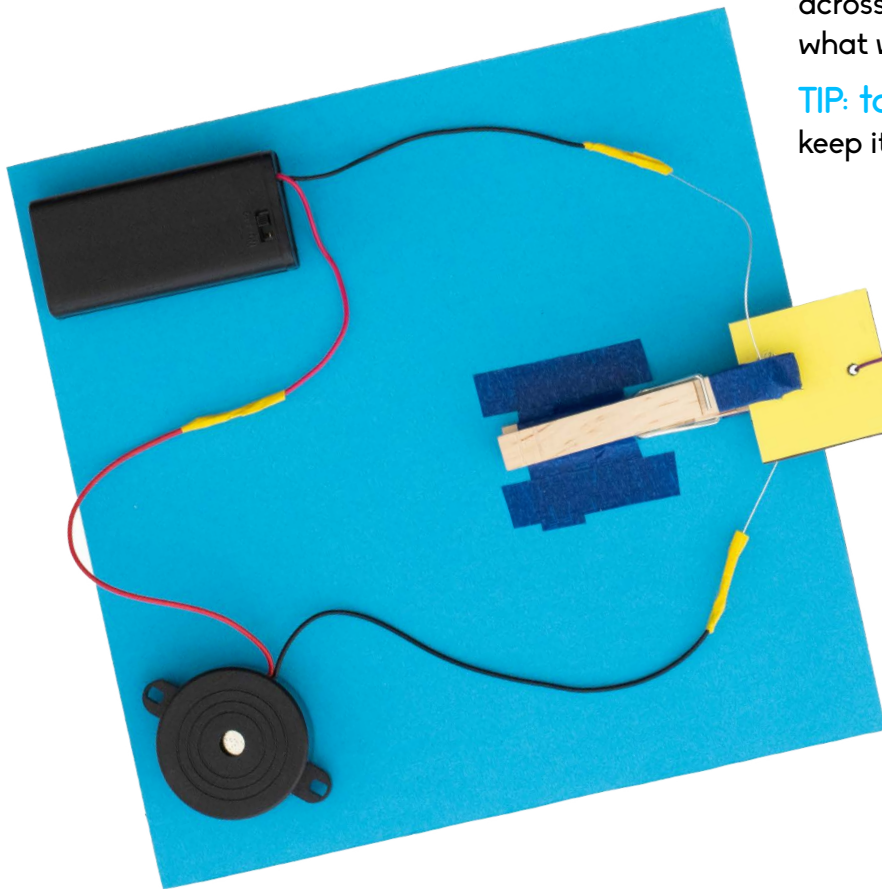
tie a 4- to 6-foot length of thin cord through the hole in the cardboard.

set the cardboard into the clasp of the clothespin, preventing the wires from touching (this BREAKS the circuit).



set your intruder alarm behind a door, and tie the long end of the string across the doorway down low. this is what will be 'tripped'

TIP: tape the board to the floor to keep it from moving.



## How it Works

trip the wire... the alarm sounds!  
tripping the wire causes the cardboard square to be yanked from the clothespin, allowing the two wired halves of the clothespin to touch.

this completes the circuit so that power runs freely from battery pack (power source) to alarm in a closed loop. and the alarm goes off!

