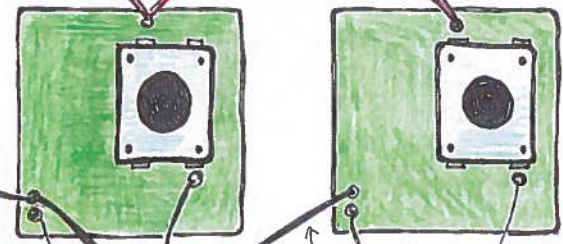
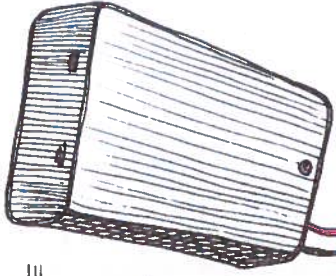


Now... WANT 2 LED STRANDS?
 OF COURSE YOU DO. TAKE 2 LENGTHS OF WIRE
 AND STRIP BOTH ENDS OF EACH

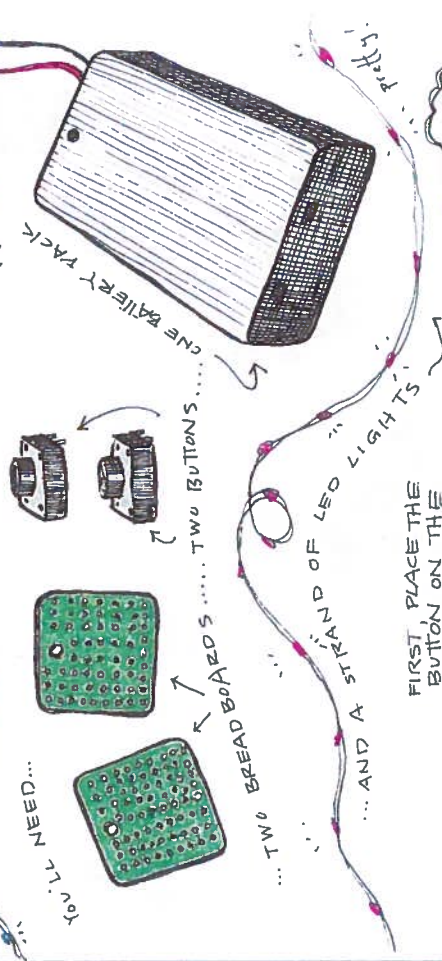
- THEN PREPARE THE ENDS OF ANOTHER STRAND OF LED'S (USE YOUR SANDPAPER).
- ATTACH A SECOND BUTTON TO A SECOND BREADBOARD JUST AS YOU DID BEFORE. SOLDER.
- ATTACH YOUR NEW LED STRAND TO THE SECOND BREADBOARD, SOLDERING AS BEFORE.
- NOW, ATTACH & SOLDER YOUR NEW LENGTHS OF WIRE AS SHOWN, CONNECTING THE TWO BREADBOARDS.

• PUSH THE BUTTONS AND MARVEL AT YOUR GLOWING LIGHT STRANDS!



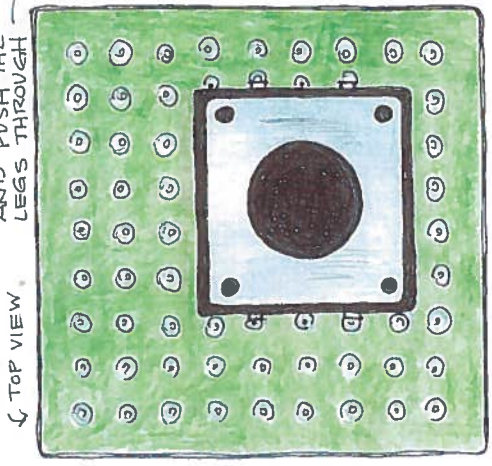
• LESSON BY JEFF BRANSON ~ ILLUSTRATIONS BY BEVERLY BALL.

BUTTON BIKE LIGHTS



OF COURSE, YOU NEED 3 AA BATTERIES

FIRST PLACE THE BUTTON ON THE BREADBOARD AND PUSH THE LEGS THROUGH

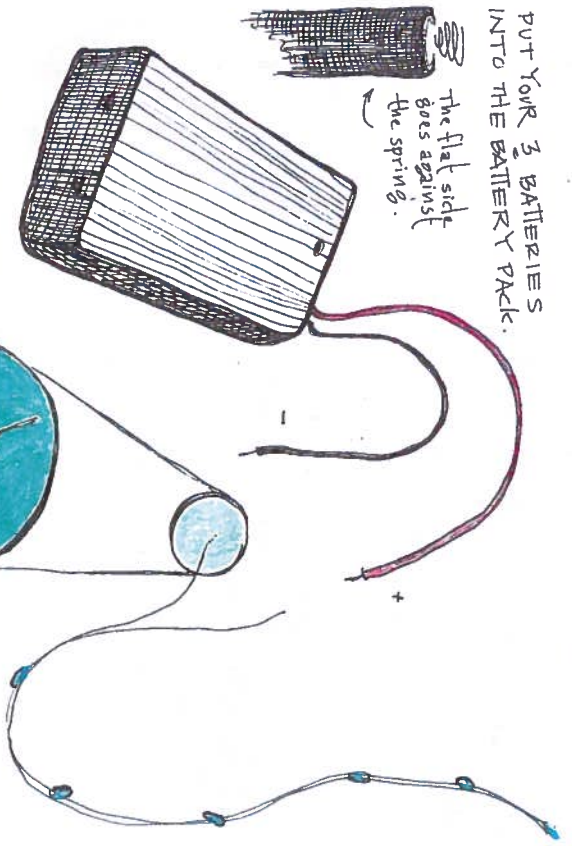


ON THE UNDERSIDE SOLDER THE LEGS TO THE BOARD. WE'LL WORRY ABOUT THE 2ND BOARD LATER.

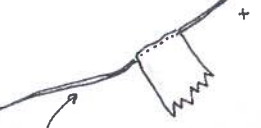
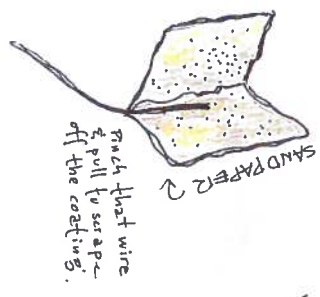
NEXT PAGE.....>

PUT YOUR 3 BATTERIES INTO THE BATTERY PACK.

The flat side goes against the spring.



NEXT, PULL APART THE TWO THIN WIRES OF THE LED STRAND, JUST AT ONE END AND ONLY ABOUT 1". THEN PINCH EACH END IN A FOLDED UP PIECE OF SAND PAPER, PULLING THE SAND PAPER TO SCRAPE OFF THE ENAMEL COATING ON THE WIRE. DO THIS A FEW TIMES SO YOU'RE CERTAIN THE COATING IS OFF.



THE LED STRAND IS IN CONTACT WITH THE RED (+) LEAD ON THE BATTERY PACK & THE NEGATIVE (-) LEAD ON THE STRAND IS IN CONTACT WITH THE BACK (-) LEAD ON THE BATTERY PACK. CONGRATULATIONS -! YOU'VE JUST CHECKED THE POLARITY.

Now turn your BATTERY PACK ON AND TOUCH THE SCRAPED WIRES TO THE RED & BLACK WIRES (OR "LEADS" AS THEY'RE CALLED. YOUR LIGHTS WILL GO ON WHEN THE POSITIVE (+) LEAD ON THE LED STRAND IS IN CONTACT WITH THE RED (+) LEAD ON THE BATTERY PACK & THE NEGATIVE (-) LEAD ON THE STRAND IS IN CONTACT WITH THE BACK (-) LEAD ON THE BATTERY PACK. YOU'VE JUST CHECKED THE POLARITY.

