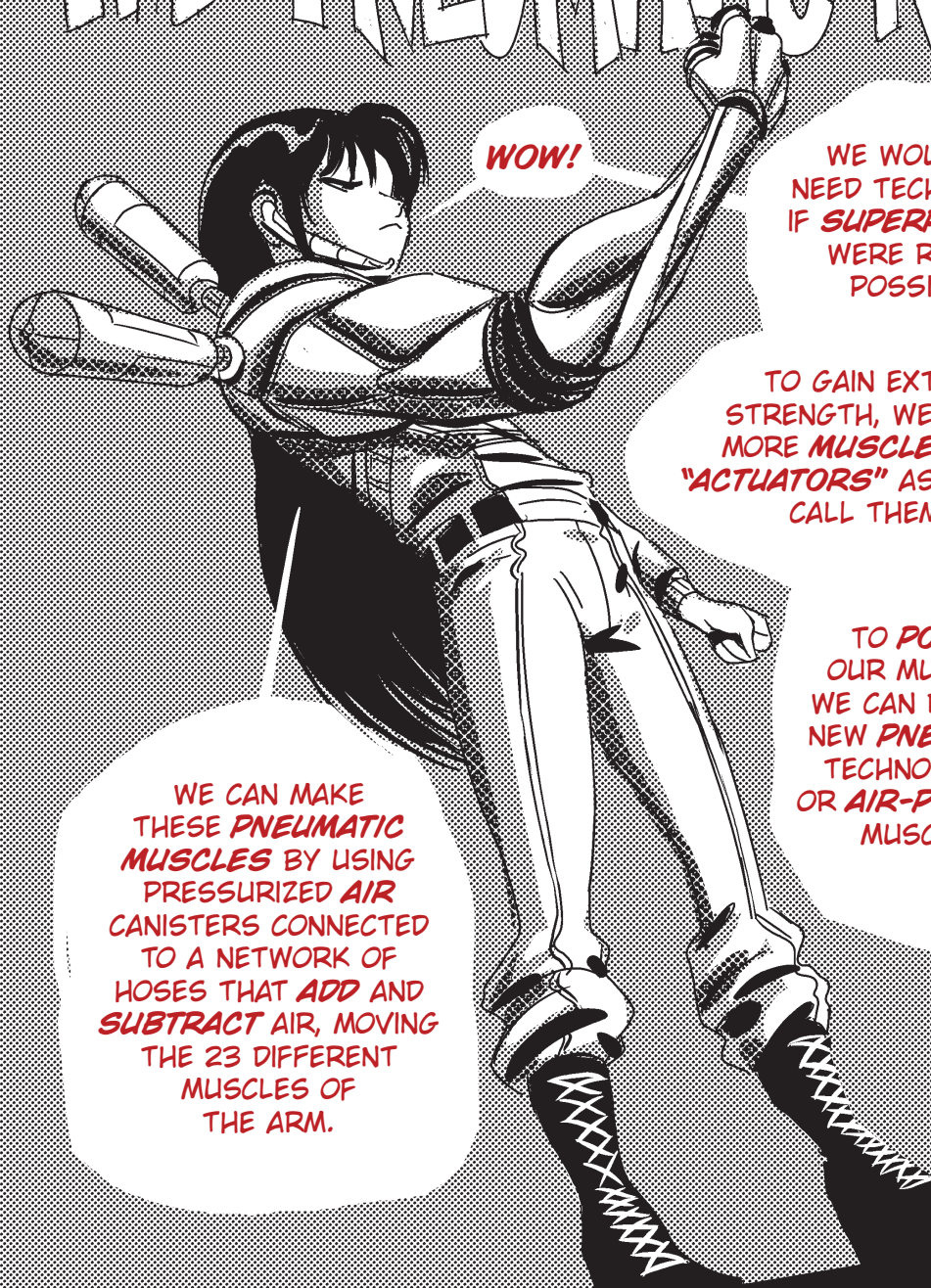


THE PNEUMATIC KIDS



WOW!

WE WOULDN'T NEED TECHNOLOGY IF **SUPERPOWERS** WERE REALLY POSSIBLE!

TO GAIN EXTRA STRENGTH, WE NEED MORE **MUSCLES**, OR "**ACTUATORS**" AS TECHIES CALL THEM.

TO **POWER** OUR MUSCLES, WE CAN DEVELOP NEW **PNEUMATIC** TECHNOLOGIES, OR **AIR-POWERED** MUSCLES.

WE CAN MAKE THESE **PNEUMATIC MUSCLES** BY USING PRESSURIZED **AIR** CANISTERS CONNECTED TO A NETWORK OF HOSES THAT **ADD** AND **SUBTRACT** AIR, MOVING THE 23 DIFFERENT MUSCLES OF THE ARM.

MAKE AN ACTUATOR:

PAPER



SCISSORS

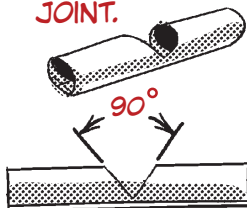


TAPE



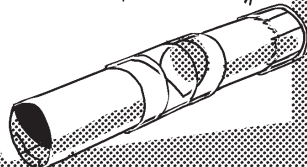
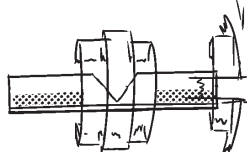
1

CUT 90° NOTCH AT MIDDLE FOR JOINT.



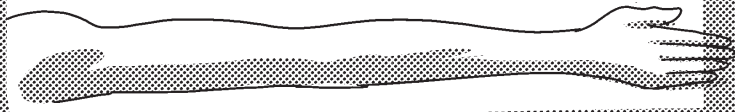
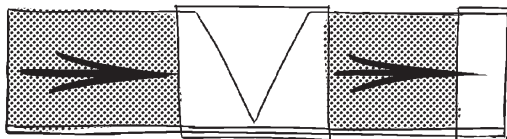
2

TAPE JOINT AND ONE END.



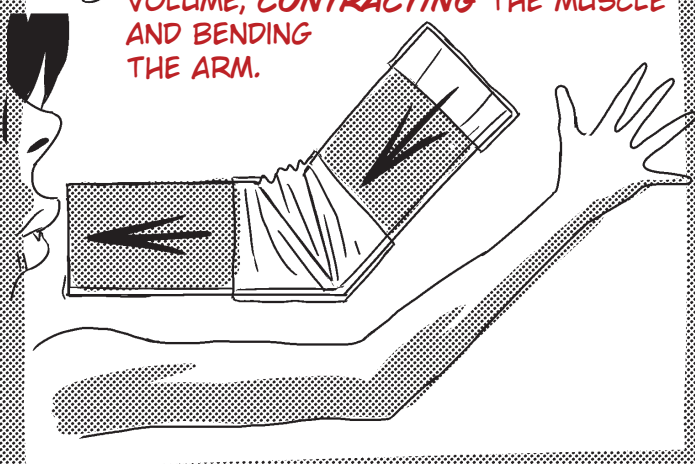
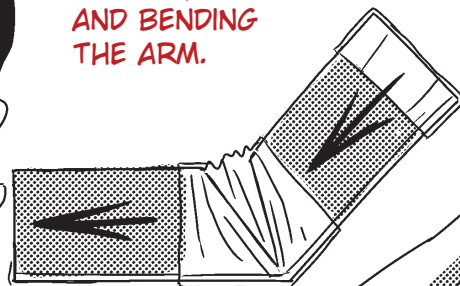
B

LOWING AIR IN INCREASES THE VOLUME, STRAIGHTENING THE MUSCLE.



S

UCKING AIR OUT REDUCES THE VOLUME, CONTRACTING THE MUSCLE AND BENDING THE ARM.



THE FUTURE IS ONLY AS STRONG AS OUR IMAGINATION!

