Challenge

Challenge: Combine batteries in series and/or parallel to power a motor.

Motor Requirements

- 6V = V
- 150 mA = I
- Run for at least 48 hours

Battery Options

Type	Nominal Voltage(V)	Typical Drain (mA)	Capacity (mAh)
9 V	~~9 V~~ Too high	~~15~~	~~500~~
AAA	1.5 V	~~10~~	~~1,000~~
AA	1.5 V	~~50~~	~~2,400~~
C	1.5 V	~~100~~ Too low for The Load	~~6,000~~
D	1.5 V	200	13,000

Goal: Determine a battery configuration that satisfies the power requirements of the motor.

$\frac{6V}{1.5V}$ = 4 batteries in Series

$\frac{13{,}000\ mAh}{150\ mA}$ = 86.6 h > 48h