VEX Winch Efficiency Activity

Build Instructions
Overview
Attach 269 motor to winch bracket through bearing block
Attach bearing block on opposite side with pop rivets
Attach assembly to end of base plate
Insert 4” axle with locking collars, nylon washer, spacers, and winch drum.
Note locking collar is placed to allow disengaging the winch axle from the motor.
Wire breadboard as shown
Black from Voltmeter ➔ Red of motor
Black of motor ➔ Black of switch
White of switch ➔ Red from Ammeter
Red from Breadboard → Black on Ammeter
Red on Ammeter → Red on Voltmeter
Black from Breadboard → Black on Voltmeter
Black on Voltmeter ➔ Black on breadboard and black on battery
Red on Voltmeter ➔ Red on Ammeter and red on battery
Place two pieces of masking tape on string and make marks with Sharpie 30 cm apart (place weight on string to keep string stretched out).