

Radio Shack RS-202 Setups for Kiser Middle School

Western Michigan University
Electrical and Computer Engineering



Thanks to Dr. John Kelly for
Making Kits Available to IEEE
Teacher In-Service Program

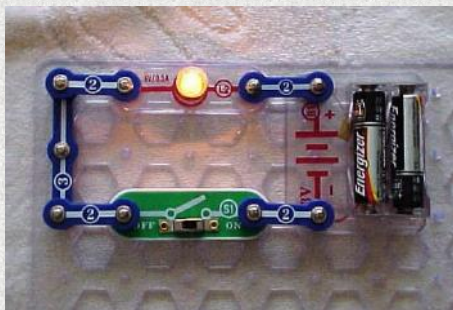
RADIO SHACK RS-202 KIT For TryEngineering LESSON PLANS



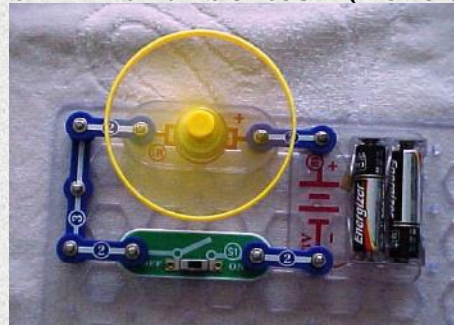
RS-202 KIT PARTS



PROJECT #1 SIMPLE SERIES CIRCUIT (LAMP)



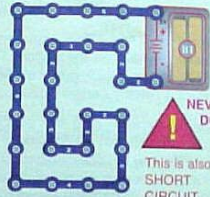
PROJECT #2 SIMPLE SERIES CIRCUIT (MOTOR)



WATCH OUT FOR SHORT CIRCUITS.

Examples of SHORT CIRCUITS - NEVER DO THESE!!!

Placing a 3-snap wire directly across the batteries is a SHORT CIRCUIT.

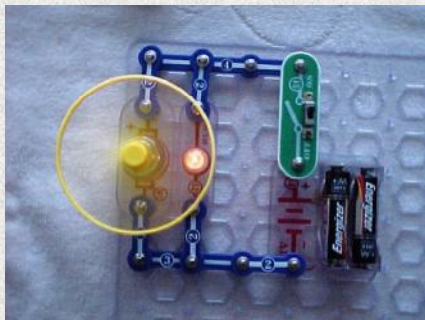


ALWAYS PUT RESISTANCE IN BLUE CIRCUIT!

PROJECT #5 MOTOR LAMP SERIES CIRCUIT



PROJECT #6 MOTOR LAMP PARALLEL CIRCUIT

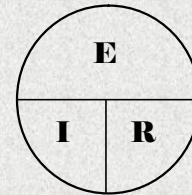


OHMS LAW

$$E = I \times R$$

$$I = E/R$$

$$R = E/I$$



VOLTAGE = (CURRENT) X (RESISTANCE)

CURRENT = (VOLTAGE) ÷ (RESISTANCE)

RESISTANCE = (VOLTAGE) ÷ (CURRENT)

Project #150 Current Equalizing



Use Multimeter to measure voltages across devices; all devices have equal currents in series circuit.

SERIES & PARALLEL CIRCUITS



WHAT IS DIFFERENCE IN CIRCUIT ACTIONS? Why?