Electric Vehicles

A motorized car with a real gear train.



SCREEN-FREE | AGES 8 TO 14 | ABOUT 60 MIN | MAKE AND KEEP

WHAT PARTICIPANTS MAKE

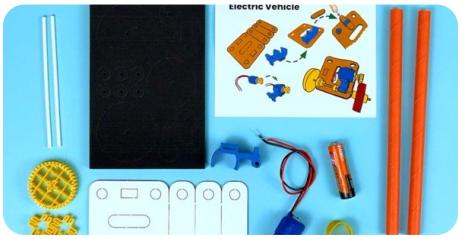
A battery-powered vehicle with a motor, gear wheel, and axles that campers tune to go faster, straighter, or farther.

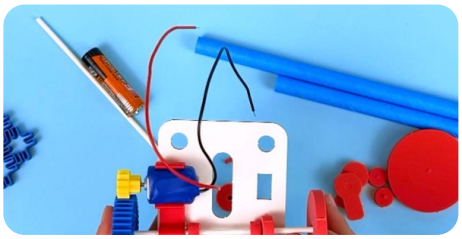
HOW IT WORKS

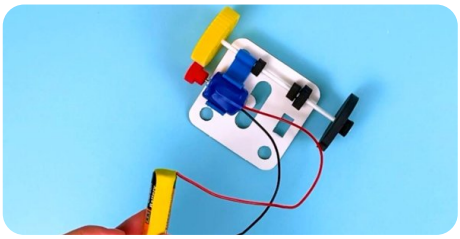
Campers close a circuit between a battery and a motor, mesh a gear to drive the wheels, then flip the wires to discover polarity and send the car in reverse. From there they troubleshoot and redesign. It is a hands-on introduction to circuits, gear trains, and cause and effect for upper elementary and middle school.

CAMPERS EXPLORE

Closing an electric circuit; gear trains and torque transfer; electrical polarity; iterative vehicle design; cause and effect in mechanical systems







PACK SIZES

PACK	CAMPERS	SKU
Small Group Pack	10	G2 ELEC 010
Class Pack	25	CL ELEC 025

Every camper gets an individual reclosable kit with a printed visual guide. Scissors optional.

Educator video 8:09 min

Educator guide

Standards connections (from the educator guide): NGSS 4-PS3-2, 3-5-ETS1-3, MS-PS3-5, MS-ETS1-3. Common Core RI.3-5.7, SL.3-5.1, RST.6-8.3, SL.6-8.1, 4.G.A.2, 4.G.A.1, 6.RP.A.1, 7.RP.A.2.