ATLAS STEM

PROGRAM 02

CIRCUIT CITY

A ninety-minute session in which teams of three build a working electric grid, discover its limit by overloading it, and decide what to leave dark.

90
Minutes, one session

3
Students per team

3V
Nothing reaches a wall

$0
Cost to the school

WHAT A SCHOOL USUALLY ASKS

COST TO THE SCHOOL
$0. Atlas supplies every kit, tool and print-out. Boards and battery packs are reused school to school.

SAFETY
Three volts from two AA cells. Nothing plugs into a wall, there is no soldering, and no cutting tool reaches a student.

WHO SUPERVISES
Three Atlas volunteers, FCPS-registered, plus one school staff member in the room at all times.

SPACE AND TABLES
One classroom. Flat tables, one per team, and a wall outlet only for the projector.

TIME IT TAKES
Ninety minutes end to end, including setup and pack-down. Atlas arrives thirty minutes early.

HOW MANY STUDENTS
Built for twenty, in teams of three. Below twelve the competition round stops working.

HOW THE DAY IS SCORED
Two rounds, judged on houses lit brightly and held for sixty seconds. Every team finishes with a working grid.

WHAT GOES HOME
Every student keeps a pocket house, one LED and a coin cell, plus a printed wiring card.

The constraint worth knowing: the room needs to go dim for the judging round. Blinds or a lights-off minute is enough; a windowless room is not required.