ATLAS STEM

PROGRAM 01

THE TRAP ROOM

A ninety-minute session in which teams of three or four rig a doorway with a hidden pressure plate and a trip wire, then try to catch an intruder three different ways.

90
Minutes, one session

3–4
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 part, tool and print-out. Buzzers, battery packs and clips are reused school to school.

SAFETY

Three volts from two AA cells. No soldering, no blades in student hands, and the trip wire sits at ankle height.

WHO SUPERVISES

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

SPACE AND TABLES

One classroom. A table per team, and a doorway made from two chairs a stride apart. No real doors needed.

TIME IT TAKES

Ninety minutes end to end, including setup and pack-down. Atlas arrives twenty minutes early.

HOW MANY STUDENTS

Built for twenty, in teams of three or four. Every team rigs its own doorway.

HOW THE DAY IS SCORED

Three intruder walks per round and two rounds, with a fix window between. Hidden plates and quick resets earn extra points.

WHAT GOES HOME

Every student keeps a working mini alarm they built: a buzzer, a coin cell and a clothespin trip switch.

The constraint worth knowing: each team needs a clear strip of floor about two strides long for its doorway. Pushing desks toward the walls is enough.