Build & Test

Mission: the thief rigged the mascot inside a box only real engineers can open. Build with paper and tape, stress-test what you build, crack the blueprint code on the whiteboard, whisper the password, open the box, free the mascot. Character trait today: **Social Awareness**.

1 · Payload Protector (5–16 min) — build a cradle, drop it, smallest survivor wins

Just pass drop from shoulder height. Any cradle that keeps the paper ball in passes. Cheer every pass.

Shrink it same drop, now the cradle must get smaller and lighter and still hold. Judge size by eye or by heft.

Raise bar drop from above your head. Over-taped bricks pass but never win, the lightest survivor takes it.

Diff TK–2: big open nest, low waist-high drop, everybody passes. 3–8: material limit (4 sheets, one arm of tape), head-to-head bracket, a student runs it as drop-tester and judge and hefts survivors to break ties.

2 · Launch It (16–31 min) — fold a launcher, farthest or best on target wins

Build ramp (fold a sheet into a V or tube, prop one end up) or lever (fold a strip over a pencil-thick roll, load the ball, slap the far end). Test-fire while you build.

Rounds warm-up, distance (farthest wins), target (a taped floor zone scores). 3 shots each, best counts, one 60-sec rebuild between rounds.

Diff TK–2: coach helps fold one ramp, big close target, launch freely. 3–8: scoring zone (5/3/1), material limit (3 sheets), winner-stays-on ladder to a champion, students measure and judge on the whiteboard.

3 · Blueprint Code (31–45 min) — order the build steps, the letters spell the password

BUILD scramble five steps: B "Bunch a sheet into a nest", U "Unfold a second sheet for walls", I "Insert the ball", L "Lock it with tape", D "Drop-test it". True order B→U→I→L→D spells BUILD.

GO two steps, G "Grab a sheet, roll a ramp", O "Off it goes, roll the ball down". Good for a first round or younger team.

Diff TK–2: short GO set, coach reads steps aloud, draw a blank per letter. 3–8: 6-letter LAUNCH (Lay, Angle, Use tape, Nestle, Countdown, Hit), 3-min race, wrong whisper = 30-sec penalty, teams design a scrambled code for a rival and referee it.

4 · Finale + Wristband (45–60 min)

Open Winning team announces the password to the room, coach turns the key, mascot lifts out, big cheer. Optional "thief's note" inside: "You out-built my box. I surrender!"

Award the **Social Awareness** trait wristband to detectives who listened to teammates, shared the tape, and read a failed test without blaming ("good, now we know, change one thing").

3–8 For older kids and the two middle schools, run the whole hour competitive: fixed teams, score every game on the whiteboard, visible timer each round, crown a champion here. Games bank adds **Detective Mafia** (2–3 Culprits + a Detective, 5–7 min rounds) — the one middle schoolers ask to replay.

Detective's Oath (say together, magnifiers up): I am a detective. / My brain is my best tool. / I don't guess, I reason. / I follow the clues to the truth.