Number Ninjas

Mission: the thief locked the mascot again behind a number code, and guessing won't crack it. Win the games, solve the math code on the whiteboard, whisper the number, open the box, free the mascot. Character trait today: **Responsible Decisions**.

1 · Number Ninja Relay (5–16 min) — call a target, teams reach it with mental math

Warm-up small targets under 10, one operation. "Get to 8." Coach the habit: "Say it in your head first, then call it."

Form it call 12 or 15, teams make the number with fingers or bodies. Add across the team and be sure before you freeze.

Chain it bigger targets (20, 24) needing two or three steps. A wrong call passes the turn. Reward being right the first time.

Diff TK–2: small targets, adding only, coach counts aloud. 3–8: targets into the 30s and 40s, multi-step mixed operations, 15-sec shot clock, elimination rounds, students call the targets and referee rivals' chains.

2 · Last One Standing / Nim (16–31 min) — line of 15, take 1 to 3, take the last one to win

Setup Line of 15 (kids or board marks). Two teams alternate, remove 1, 2, or 3. Whoever takes the LAST one wins. Play several rounds.

Strategy Leave a multiple of 4. Go first, take 3 to leave 12, then 8, then 4, then 0. Whatever they take, you make the pair add to 4.

Diff TK–2: start at 9, take 1 or 2, coach thinks aloud. 3–8: run a best-of-three tournament bracket to a champion, then break it (line of 21, or take 1–4) and re-derive under a 20-sec move clock. Cracker designs their own setup and referees a match. Do not announce the trick.

3 · Crack the Number Code (31–45 min) — solve the math, each answer is a digit

743 5 + 2 = 7, 9 – 5 = 4, 3 × 1 = 3. Read top to bottom, code is 743. Set your lockbox to match.

25 1 + 1 = 2, 4 + 1 = 5. Two easy problems, code 25. Good for a first round or younger team.

Diff TK–2: two easy problems, solve the first aloud, blank box per digit. 3–8: four or five digits, two-step and order-of-operations problems, beat-the-clock with a 30-sec wrong-guess lockout (3 pts fastest). Older kids write a code for a rival team and referee it.

4 · Finale + Wristband (45–60 min)

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

Award the **Responsible Decisions** trait wristband to detectives who worked it out and checked before they called it ("I did the math first", "I made sure before I said it").

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.