



TROOP BOSS BATTLE PACK (JUNIOR EDITION): STEM SQUAD: CODE NAME CHAOS

Badge Mashup:

STEM Career Exploration + Detective + Product Designer + Think Like a Programmer + Animal Habitats

MISSION OVERVIEW:

Juniors become elite members of the STEM SQUAD, a secret team called in to solve complex global problems using logic, creativity, and collaboration. Each girl leads a quest tied to a STEM field. Once they've completed all 5 mini quests, they unite for the Boss Battle: Operation EcoHack, where they design and present a tech-based solution to help animals thrive in their changing habitats.

MINI QUESTS:

1. CAREER CODEX: Explore five cool STEM careers and choose one to “train” for. Create a badge, ID card, and lab persona. *(STEM Career Exploration)*
 2. CLUE CREW: Solve a troop mystery using fingerprinting, logical reasoning, and observation. Bonus: hide a clue for others to solve. *(Detective)*
 3. DESIGN DEPOT: Brainstorm a real-world problem and sketch out an invention that could help solve it. *(Product Designer)*
 4. LOGIC LAB: Play through coding logic puzzles and create your own unplugged algorithm challenge using cards or blocks. *(Think Like a Programmer)*
 5. WILDWATCH: Research a local animal’s habitat, then build a simple prototype to help that animal survive (nest box, food station, shade cover, etc.). *(Animal Habitats)*
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BOSS BATTLE:

Operation EcoHack – Girls team up to invent, prototype, and pitch a science-based solution that helps local wildlife adapt to climate or urban challenges. They present their invention to a panel of troop leaders, parents, or older girls acting as an “Environmental Task Force.”

Each team must:

- Explain the problem and why it matters
 - Show their prototype or digital model
 - Describe how their STEM roles worked together
 - Answer at least one “curveball” question from the panel
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LEADERSHIP ROLES:

- Chief Coder – Builds logic chains and simplifies complexity
- Invention Agent – Designs, builds, and revises prototypes
- Detective Lead – Tracks patterns, anomalies, and test results
- Habitat Specialist – Brings eco-knowledge and empathy to the project

- Science Communicator – Pitches the solution with confidence and clarity
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Bonus:

Girls can enter their invention in a school science fair, submit it to a local zoo or nature center, or display it during a troop open house.

Theme:

STEM discovery, problem-solving, leadership through experimentation, and environmental impact.

