FLIGHT SCHOOL

Educational App

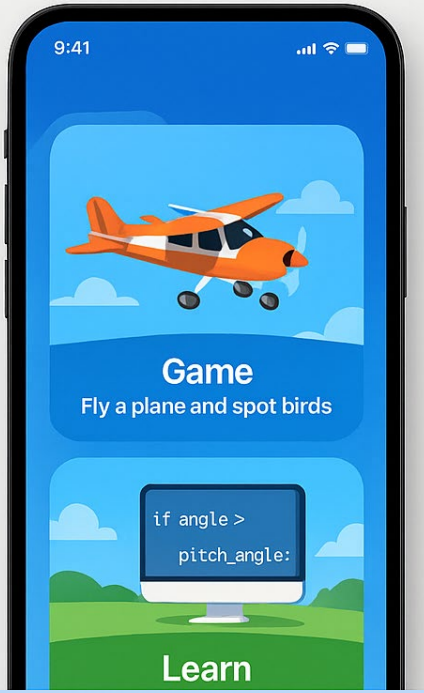
Flightschool.tech

Problem

👦 Kids love planes and games.

👨‍👧 Parents want them to learn.

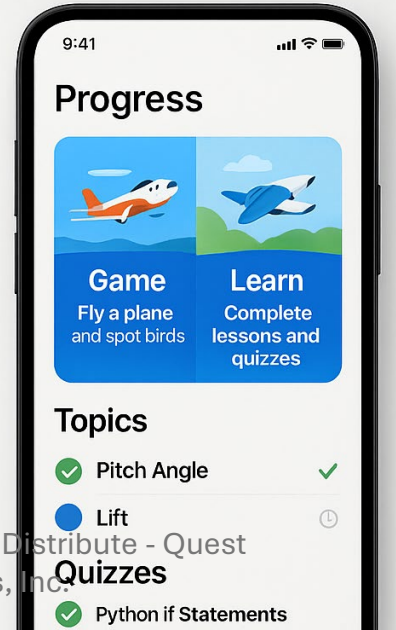
📉 But STEM learning tools are either boring, disconnected from real-world excitement, or not built to sustain engagement.

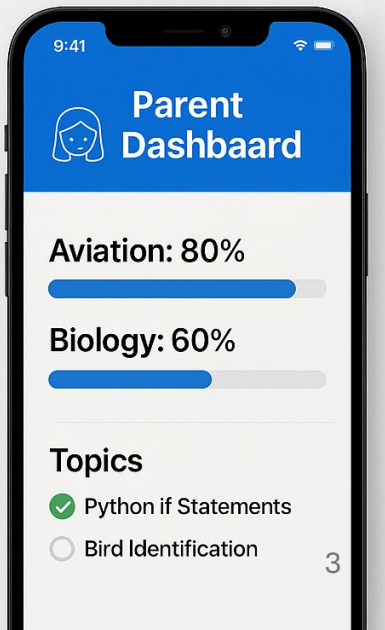


Solution

🎮 *Flight School* — a mobile learning game that teaches physics, chemistry, biology, engineering, math confidence, and communication by letting kids fly planes, solve engineering challenges, and build bird habitats.

📊 Progress is measurable, tied to real standards, and reported to parents.



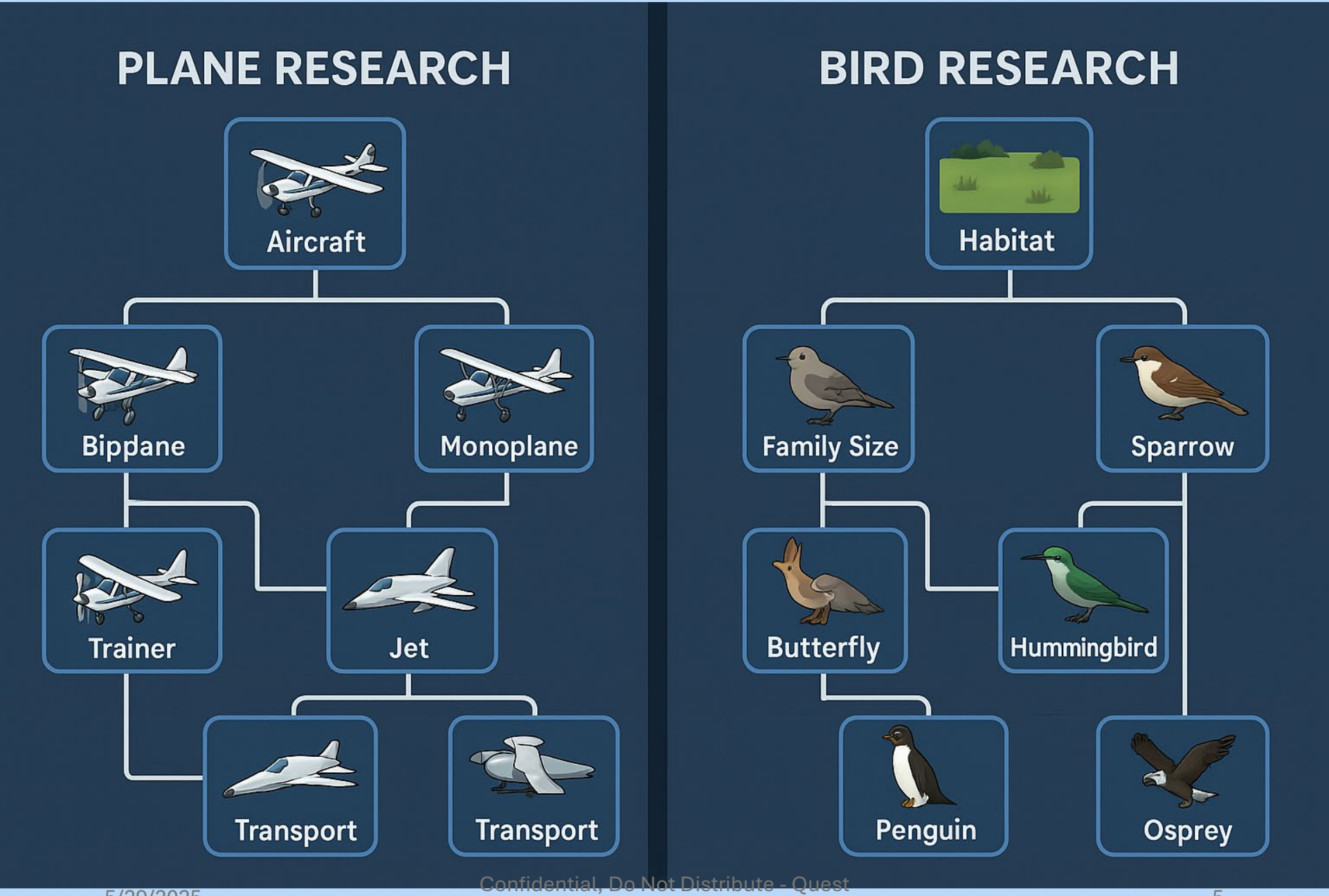


Why Now

- 📱 97% of U.S. teens have a smartphone

- 🧠 Parents are spending **$1,000+/yr** on supplemental education

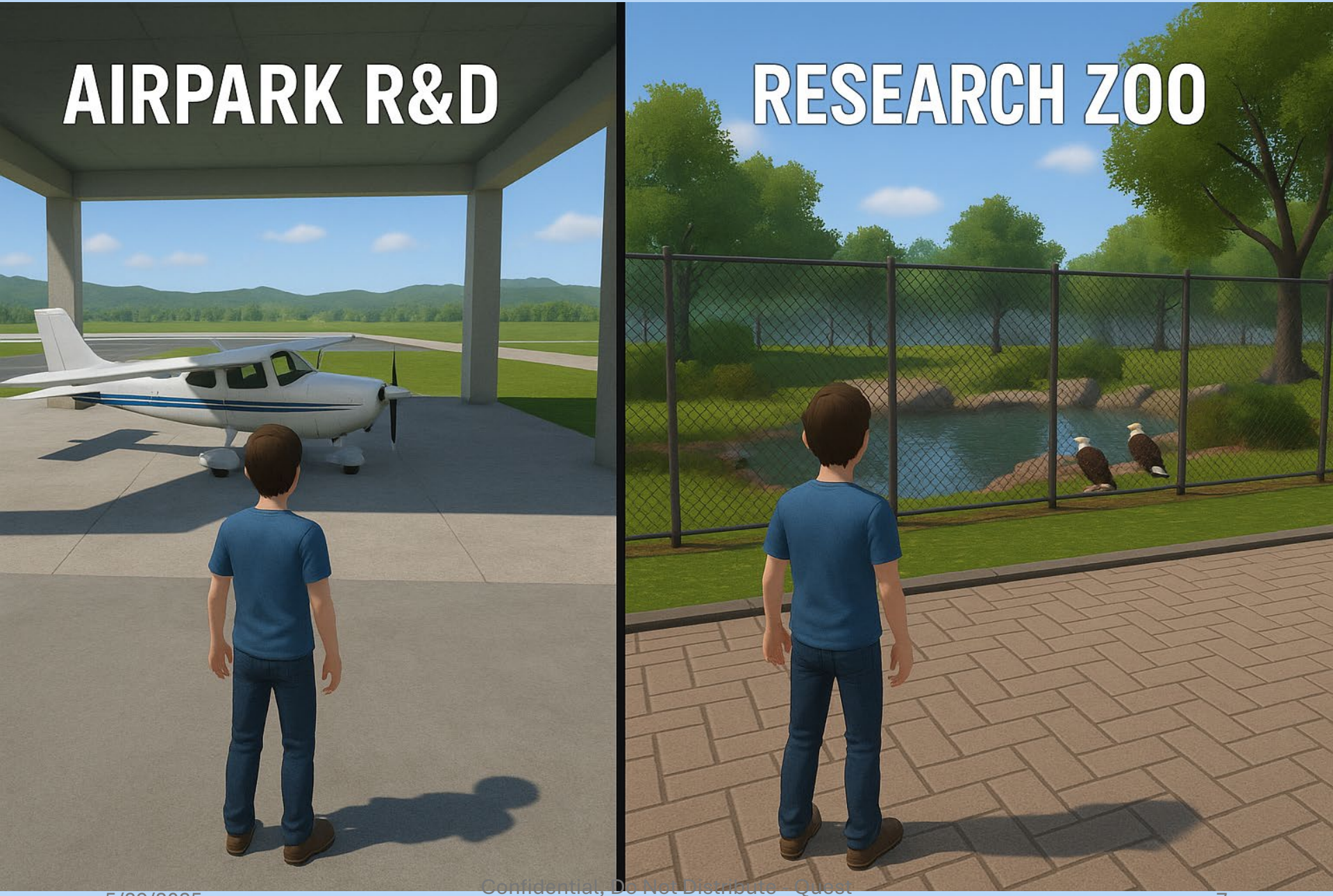
- 👩‍💼 EdTech investment is shifting to **gamified, measurable, subscription-based tools**



Product

- **Mobile App** ($5/month subscription)
- Curriculum: Physics, Coding, Biology
- Unity-powered game engine
- Personal AI tutor + Parent dashboard
- Safe, AI-moderated social environment

-Kids *earn in-game perks* by mastering STEM content.
-Parents *see clear academic ROI*.



Business Model

- **$5/month per user**
- **Direct-to-parent via App Store**
- **District licensing (phase 2)**

Market Opportunity

$10B+ global EdTech consumer market

- **50M+** U.S. K–12 students
- **20M+** tween gamers in the U.S.
- **70%** of parents report paying for supplemental learning apps

RESEARCH PROJECT

BIRDPLANE X-1

RESEARCH

BIRDS & HABITATS

Traction

✅ Design challenge drew real engagement: a 13-year-old submitted working flight design

✅ Full standards-aligned STEM curriculum in development

✅ Game prototype in Unity underway

✅ UX mockups completed

✅ Advisory team includes GPT-40/o3, educators, pilots, and developers

Low Barrier MVP

Flight School Digital Collectible Card Game (DCCG).

Target: 4th–5th Grade (expandable), aligned with NGSS + CCSS

Go-to-Market

- DCCG via App Stores Yr 1
- Influencer & STEM YouTube promo
- Launch Full System Prototype Yr 2; Direct-to-Parent
- Partner with homeschool education orgs
- Transition into formal classroom pilots Yr 5

The Ask

🚀 **$50,000 seed round**

- Indiegogo launch-to-MVP DCCG trading card app completion
- Curriculum authoring
- Paid crowdfund marketing

Goal: Reach 10,000 paying users within 12 months

- Flight School isn’t just a game.
- It’s an **early on-ramp.**
- To the possibility of a rewarding STEM career, regardless of environment
- To general science literacy influencing decisions
- To *the future*.

THANK YOU!

Parent Features

- Dashboard shows:
  - Topics completed
  - Strengths & weaknesses
  - Weekly email reports
  - Achievement alerts
- Controls:
  - ChatGPT-like tutor locked inside app
  - No free chat unless parent-approved
  - AI-moderated interactions

Kid Features

- Personal chatbot tutor
  - Leads, doesn’t give answers
  - Tracks knowledge gaps
  - Rewards difficulty attempts
- Safe social zones:
  - Flight challenges
  - Bird-spotting competitions
  - Age-gated mini games

Full STEM Ed System MVP Modules (Sample)

Feature	Level 1 Version	Future Version
Learning Modules	"Pitch Angle" & "Bird Classification"	Full STEM curriculum
Flight Game	Simple 3D flying, bird habitat	Full airpark simulation
Points System	Basic points → Skins/Upgrades	Full reward economy
Parent Dashboard	Weekly summary emails	Real-time progress dashboard
Chatbot Tutor	Static hints	Adaptive, AI personalized
Safe Social	No chat	Limited safe chat + contests

DCCG Details: Creative Actionable, Agent+Human

🏗️ GAME MODELS INFLUENCE:

- **Hearthstone / Magic: The Gathering** (Card economy + deck strategy)
- **Slay the Spire** (Progression + reward loop)
- **Pokémon TCG** (Creature affinity + energy/resource mechanic)
- **Prodigy / Legends of Learning** (STEM quiz integration)
- **Spore / Tyto Online** (Ecosystem building + bioinspired research)

🚀 Game Loop (MVP)

- **Choose a Path**: Falcon 🦅 (Birdplane R&D) or Dolphin 🐬 (Bioinspired Cyberdolphin Robot Lifeguard R&D)
- **Build a Team Deck**:
  - Engineer, AI Scientist, Biologist, Ecologist, Financial Analyst
  - Infrastructure cards (Aviary, Lab, Kelp Farm, Solar Panels)
  - Innovation cards (Winglets, Echolocation HUD)
- **Solve STEM Puzzles**:
  - Math (fractions, ratios, area, energy use)
  - Science (lift, propulsion, neural networks, ecosystems)
  - Engineering mini-games (drag optimization, fluke design)
- **Earn Cards + XP**:
  - Unlock powerful research cards
  - Get upgrades (future tech, "tech spells", art of influence)
- **Compete & Collaborate**:
  - Local competitions: Aerobatic points, Sustainable Innovation Score
  - Trade cards, challenge friends
- **Evolve Path**:
  - Advance from MVP to full-featured product
  - Balance innovation vs sustainability score

Category	Sample Card	Function
🧠 Researcher	AI Scientist	Boost control logic efficiency
🔧 Engineer	Mechanical Engineer (Wing Design)	Reduce energy cost of flight
🧬 Bio Card	Peregrine Falcon	Boost max dive speed (airshow skill)
🧪 Infrastructure	Solar Lab	Generates Energy/Turn
💡 Tech Power	Futurist Vision	Boost fundraising & public trust
📘 STEM Challenge	Angle of Attack Puzzle	Solve to unlock rare research
🎨 Culture Card	Spirit Animal: Raven (Native Wisdom)	Extra insight bonus in planning

🔄 Energy/Economy System

- **Energy** = How many cards/actions you can play per turn
- **Sustainability** = Your long-term innovation value
- **Carbon Footprint** = Penalizes wasteful tech/overbuilding
- **Inspiration Meter** = Builds over time from cultural + nature cards (unlocks spirit guides, wisdom bonuses, narrative progress)

🧠 Quiz/Puzzle Integration

- Each card pack unlock requires solving:
  - **Math puzzle** (e.g., add resistances in parallel to build sensor system)
  - **Science logic** (e.g., match the control surface to its bird analog)
  - **Reading comp** (story-based puzzle tied to bio/ecosystem cards)

🌍 MVP Focus Zones

🦅 Falcon Track: Birdplane R&D

- Flight mechanics
- Wing/feather innovation
- Aerodynamics
- Sensor fusion & AI
- Airshow & energy score competition

🐬 Dolphin Track: Aquatic Cyberbiology

- Aquatic locomotion
- Bioelectric sensing
- Kelp farm & sonar dome infrastructure
- Ecosystem management
- Water quality and energy optimization

🔮 Expansion Paths

- 🐢 Reptiles → heat regulation / terrain mobility
- 🐜 Insects → swarm AI / lightweight structures
- 🐆 Mammals → neural models, energy efficiency
- 🐠 Fish → propulsion and fin design
- 🧠 Culture tracks → explore myths, art, wisdom across cultures

🎓 Academic Integration

- Align each track with NGSS/CCSS standard clusters
- Scaffold puzzles to grade band (4th–5th, expandable to 6–8)
- Enable teachers to assign "puzzle sets" as classroom tools