Board Game Design Challenge: Cyber Security Edition

In this activity, you will work in small groups of no more than 3 to design and create your own **board game**. The game must include themes of **cyber security**, integrate **contextualised maths**, and feature **bonus cards** that give challenges, rewards, jump ahead, and fall back mechanics. You will have **2 hours** to plan, design, and prototype your game.

Activity Stages

Stage 1: Brainstorm & Concept (20 minutes)

Discuss as a group the theme of your board game. Decide how cyber security will be represented (e.g., threats, hackers, encryption, phishing, etc.). Consider how maths challenges could be included (e.g., probability with dice rolls, scoring systems, ratios, percentages).

Stage 2: Game Board Planning (20 minutes)

Sketch the layout of your game board. Decide how players will move, where bonus cards are collected, and what the win condition will be.

Stage 3: Bonus Cards Design (20 minutes)

Design at least 10 cards. These should include a mix of challenges (maths/cyber problems), rewards (extra moves, protection), jump ahead (move forward), and fall back (move back).

Stage 4: Prototype Build (30 minutes)

Create a rough version of your board and cards using paper, pens, and provided materials. Focus on making it playable, not polished.

Stage 5: Playtest & Review (20 minutes)

Test your game with another group. Note any issues with rules, balance, or clarity. Gather feedback and make quick adjustments.

Stage 6: Reflection (10 minutes)

Write a short group reflection: What worked well? What would you improve? How did you integrate cyber security and maths?

Links to Curriculum Content:

Cyber Security: Threats (phishing, malware, hacking), encryption, user behaviour, data protection. **Maths:** Probability (dice rolls, chances), ratios, percentages, scoring systems, basic arithmetic.