



Game Design

Scouts BSA · STEM

Name

Started

Completed

Game Design is about what makes games fun and how designers create them. You'll study games you know, change the rules, and build and test a game of your own. Every playtest teaches you something new.

Requirements

Every official requirement, in plain language. Check the official wording when you sign off (scouting.org/merit-badges/game-design/). Tips and examples are ideas, not extra requirements.

1 Analyzing games

Tips for this section: Pick four very different games, like a card game, a board game, a video game, and a sport. Think about what makes each one fun to play.

Example for this section: For tag, the play value might be physical challenge and chasing. For chess, strategy. For a cooperative board game, teamwork against the game. For a story-driven video game, exploring and discovery. Write a short paragraph on each.

- ☐ **1a** Analyze four games you've played, each in a different medium: name its medium, objectives, player format, rules, resources, and theme (if any). Discuss with your counselor how each plays and what you like and dislike, and chart how they compare

- ☐ **1b** Describe four kinds of play value, giving a game built around each. Talk with your counselor about other reasons people enjoy games

- ☐ **2** Discuss FIVE of these 17 terms with your counselor, each tied to a game: balance, depth, pace, difficulty, replay value, setting, story, characters, level design, play sequence, interface design, age appropriateness, single-player vs. multiplayer, real-time vs. turn-based, cooperative vs. competitive, strategy vs. reflex vs. chance, abstract vs. thematic

Tip: Learn the terms by spotting them in games you already play. That makes them easier to remember.

Example: Pick five terms and show each in a game you know. In a racing game: balance means no car always wins, pace speeds up on the final lap, difficulty rises as the tracks get twistier, replay value comes from unlocking new cars, and it's real-time instead of turn-based.

- ☐ **3** Define intellectual property and describe the kinds found in game design. Explain how it's protected and why that matters. Define a licensed property and give an example

Tip: Talk about who owns a game's name, art, and rules, and why designers protect their work.

4 Changing the rules

Tips for this section: Change one rule in a familiar game and play it again. Notice whether it got more fun, more fair, or harder.

Example for this section: Take Uno and add one rule: you can only play a card if you say its color out loud. Play three rounds with family and note what happened. Was it more fun, more chaotic, slower? Did any player have a new advantage?

- ☐ **4a** Choose a game whose rules or objectives players can change (such as basketball, hearts, chess, or kickball). Sum up its usual rules and goals, then play it the normal way

- ☐ **4b** Suggest changes to several rules or objectives and predict how each will change play

- ☐ **4c** Play with one change and watch how it affects what players do and how they feel. Do this again with two more changes

- ☐ **4d** Tell your counselor how each change affected what players did and felt, and how accurate your predictions were

- ☐ **5** Design a new game in any medium or mix of media, keeping a game design notebook of your work:

Tip: Start small with a simple game idea and write in your notebook every time you make a change and why.

Example: A notebook entry might read: "Version 3: players kept running out of cards, so now you draw two at the start of each turn. Testers said it felt less frustrating." Note the problem, the change, and why.

- ☐ **5a** Write a vision statement naming the medium, player format, objectives, and theme, plus the setting, story, and characters if they fit

- ☐ **5b** Describe why someone would want to play your game

- ☐ **5c** Draft a first list of rules and define the resources

- ☐ **5d** Draw the game's elements

6 Prototype and playtest

Tips for this section: Play your game with friends and family many times. Take notes on what confuses people and what makes them laugh.

Example for this section: Your prototype can be index cards, coins, and a hand-drawn board. Playtest it five or more times with different people, and change only one or two things between tests so you know what made the difference.

- ☐ **6a** After your counselor approves your concept, build a prototype of your requirement 5 game. If it applies, show your counselor how the rules and equipment keep players safe. Log your work in your notebook

- ☐ **6b** Playtest with enough people to fill the player format and compare it to your answer in 5b. Fix unclear rules, gaps, dead ends, and exploits. Then change one or more rules, mechanics, or objectives, say why, play again, and log whether it worked as expected

- ☐ **6c** Do 6b at least two more times, logging the results in your notebook

7 Blind test

Tips for this section: Write clear instructions and hand them to someone who has never seen your game. Watch quietly and see where they get stuck.

Example for this section: Write your rules, hand them to a family friend who has never seen the game, and stay silent while they set up and play. Mark every spot where they hesitate or get it wrong. Those are the parts to rewrite.

- ☐ **7a** Write an instruction sheet with everything needed to play: how to set up, play, and end the game, plus its objectives

- ☐ **7b** Give your requirement 6 prototype, instructions, and components to players who haven't played or watched it before. Watch them play without giving any help, and log their feedback in your notebook

- ☐ **7c** Show your counselor your notebook. Discuss how players reacted and what you learned about designing games, name what you like best about your game, and suggest at least one change

8 Meet a game professional: Choose 1 of 2

Tips for this section: Ask your counselor about local game studios, colleges, or clubs where you could meet a designer or teacher.

- ☐ **8a** With permission from your parent or guardian and approval from your counselor, meet a game development professional and ask about their job and where it fits in the development process

- ☐ **8b** Meet a game development educator and discuss which skills they stress in class