

AI + Board Games: From Idea to Prototype in 2 Hours

Presenter: Michal Mujgoš

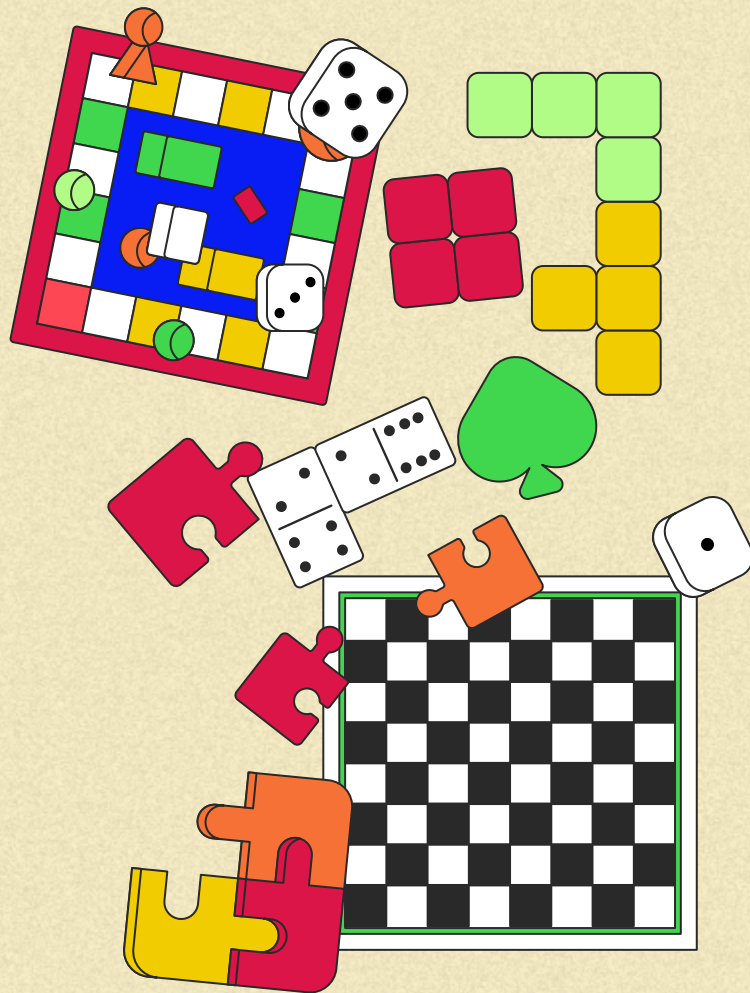
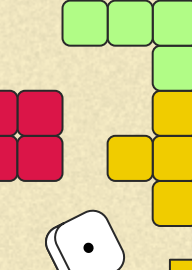


Table of contents



01

Introduction

Goals of the seminar and how AI supports every stage of game design.

02

AI basics

A simple overview of AI tools, categories, and limitations.

03

Prompting Skills

How to craft effective prompts for graphics, storytelling, and mechanics.

04

Storytelling & World-Building

Expanding ideas into worlds, characters, and narrative hooks.

05

Mechanics & Gamification

Turning stories into core systems and playable loops.

06

Rules Writing

Using AI to create clear, structured, and balanced rulesets.



Table of contents

07

Content & Visuals

Generating cards, events, quests, and matching illustrations.

08

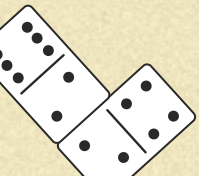
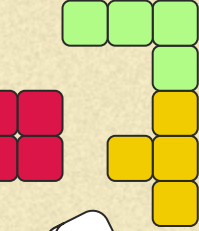
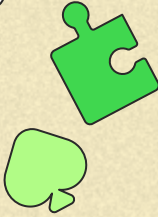
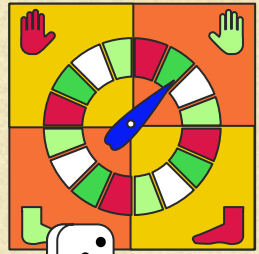
Testing & Balancing

Simulating playthroughs and refining mechanics with AI.

09

Wrap-Up & Q&A

Key takeaways, tools cheat sheet, and next steps.



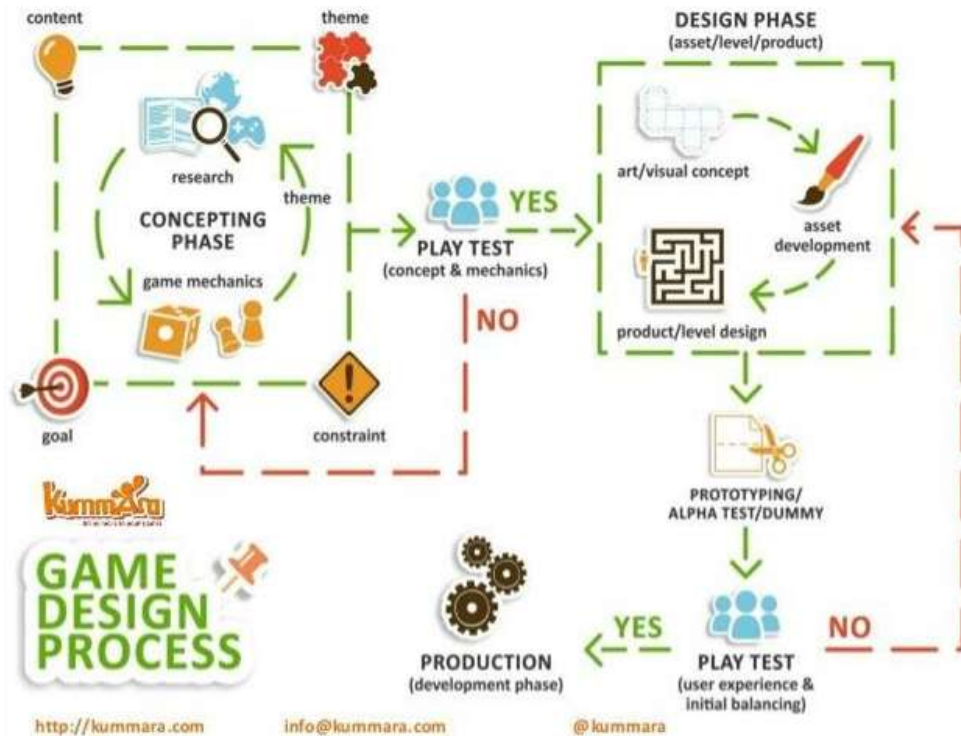
01

Goals of the seminar and how AI supports every stage of game design.





AI is changing how we create games. It won't replace your creativity, but it can boost your ideas, speed up prototyping, and help you test smarter.

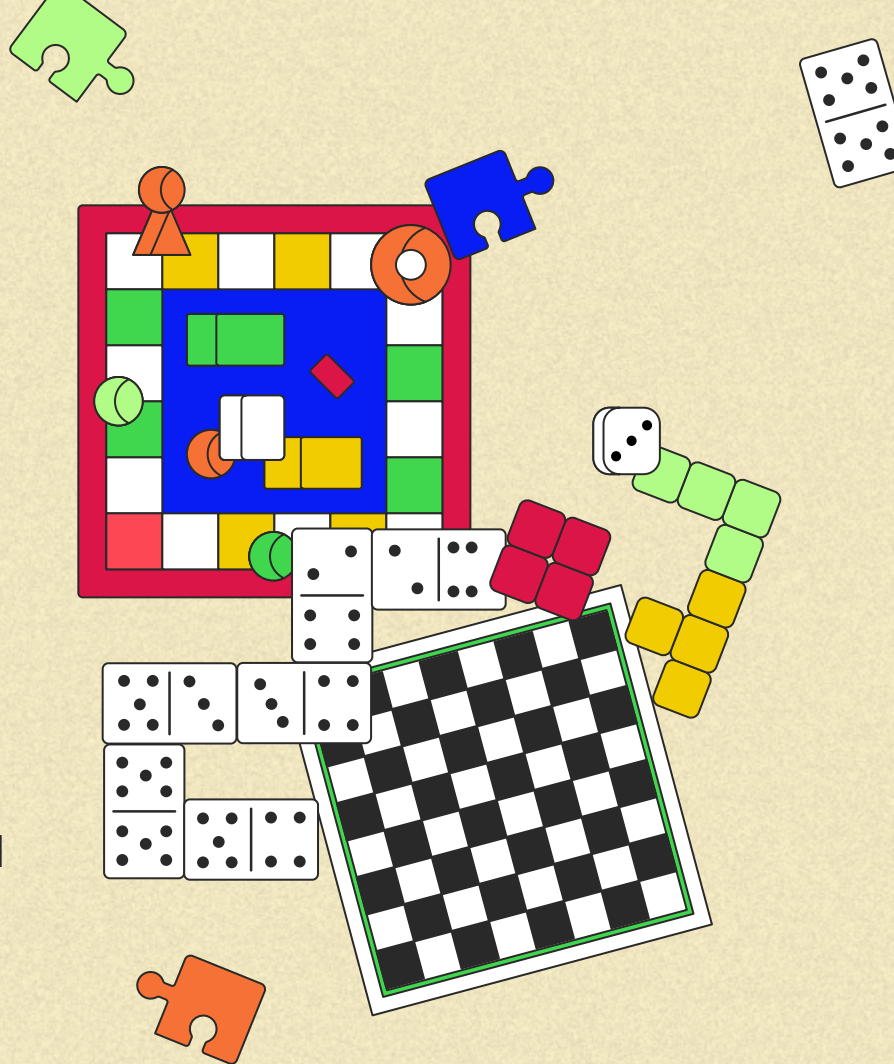


Game design process

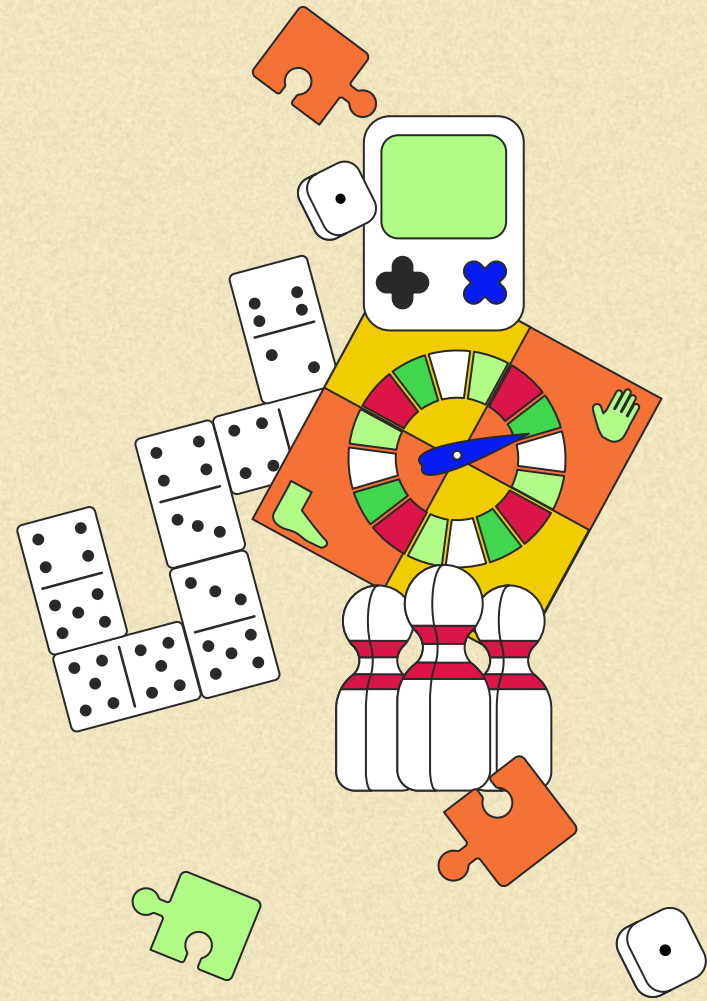
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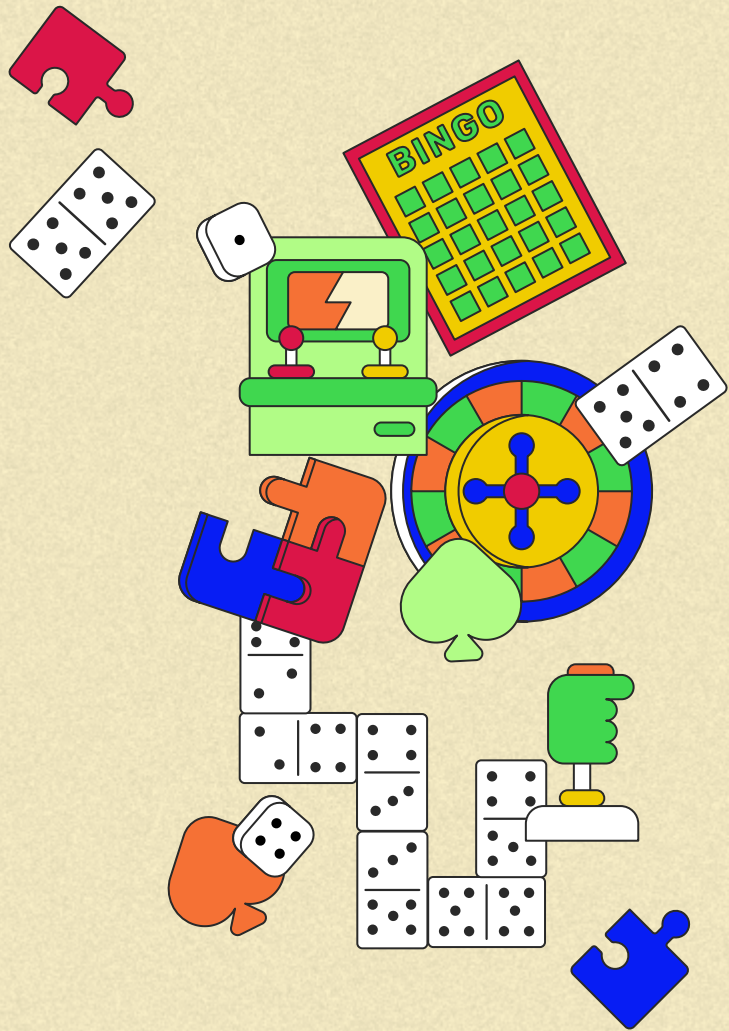
AI basics

A simple overview of AI tools, categories, and limitations.



“AI helps us generate ideas, write content, create visuals, and even simulate playtests. Understanding the main tool types makes it easier to choose the right one for the job.”





Main categories of AI tools



Text

ideas, rules, storytelling (ChatGPT, Claude)



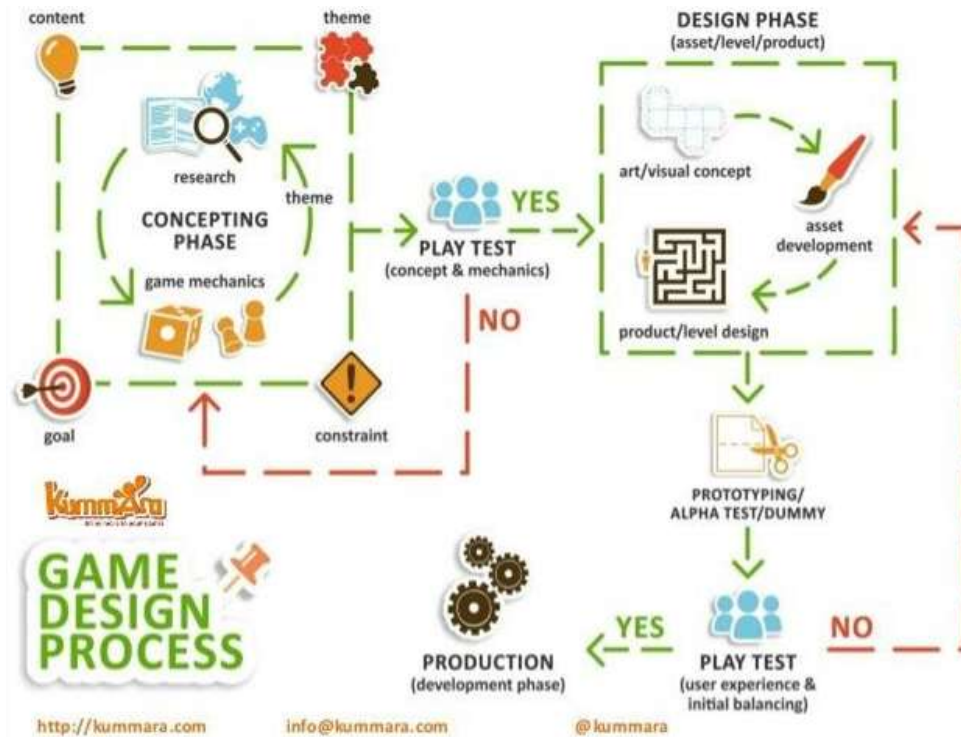
Image

art & prototypes (MidJourney, Stable Diffusion)



Data/Simulation

balancing, testing (Sheets + AI)



Game design process



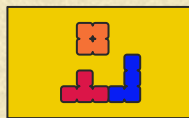
AI in Concepting Phase

- Brainstorming unique themes & goals
- Suggesting mechanics
- Researching references & inspirations



AI in Testing & Balancing

- Simulating turns and strategies
- Detecting imbalances
- Suggesting rule clarifications



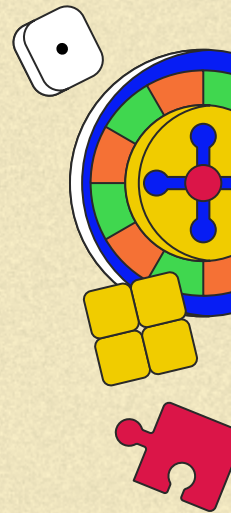
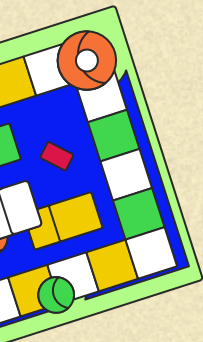
AI in Design Phase

- Drafting rulesets clearly
- Creating cards, quests, and events
- Generating art & prototypes (boards, tokens, maps)



AI in Production & Beyond

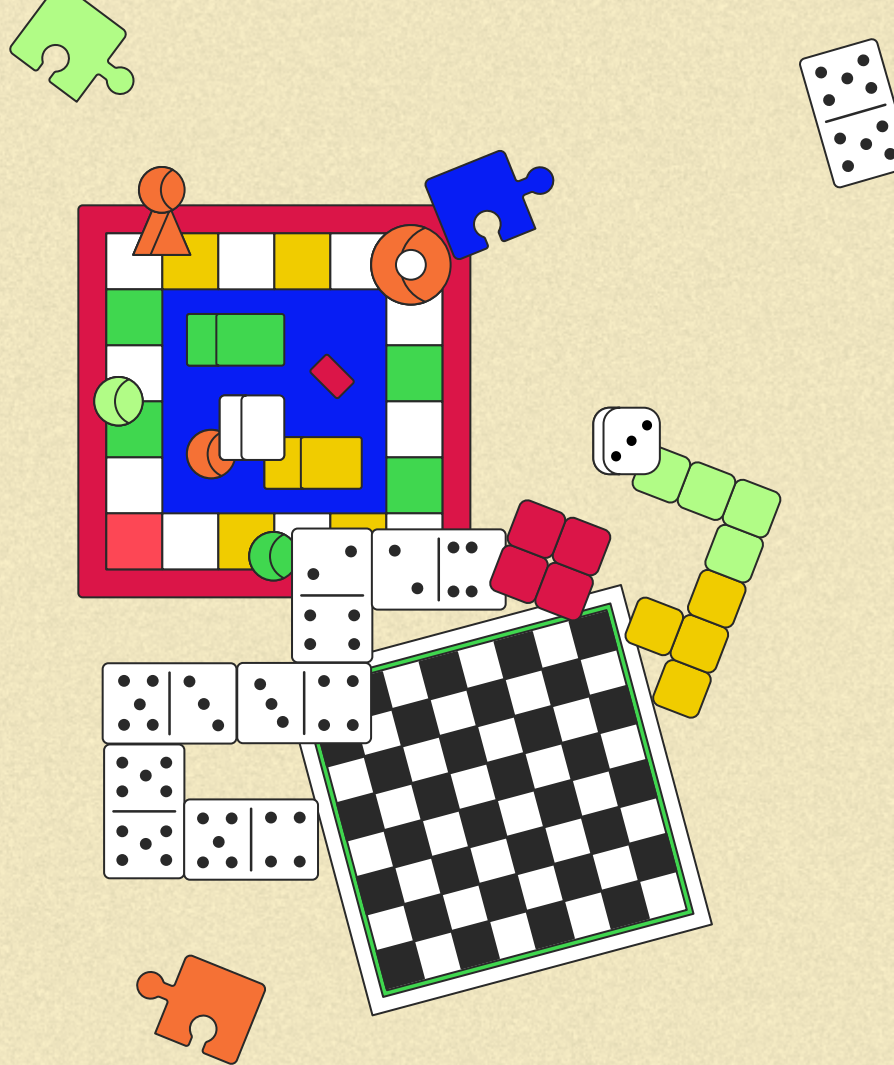
- Improving clarity of rules & tutorials
- Generating marketing content
- Supporting iteration during production



03

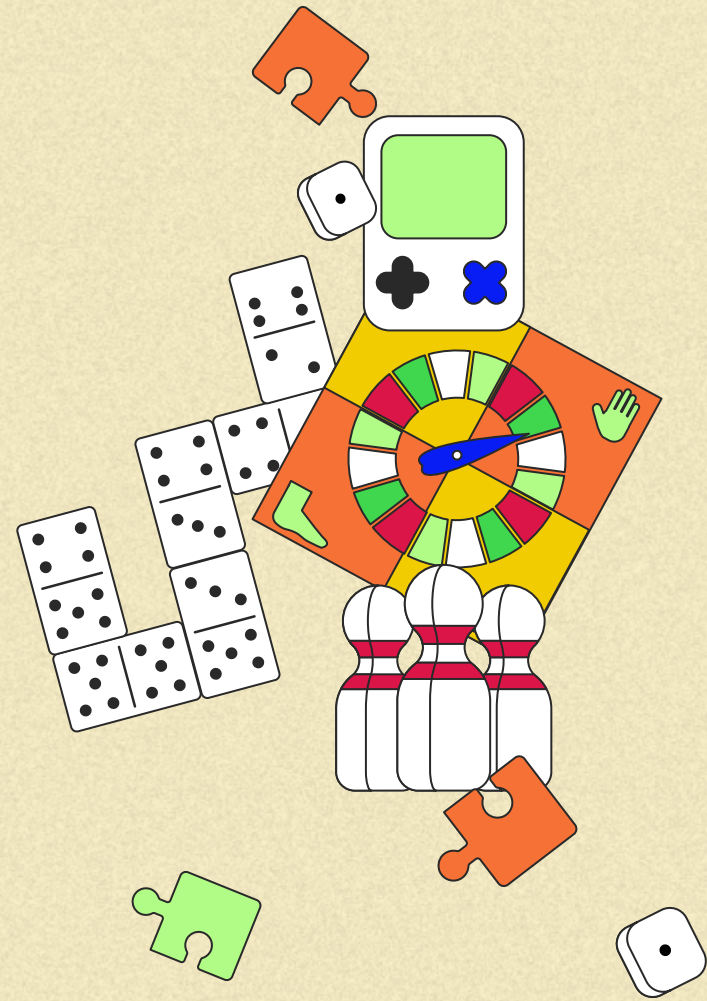
Prompting Skills

How to craft effective prompts for graphics,
storytelling, and mechanics.



“Generative AI is only as good
as the prompt you feed it.”

**Be clear, add context, and
specify format.**



Prompting Basics

AI gives better results when you guide it clearly.
A good prompt explains the goal, adds context, and defines the format you want back. Think of it like giving instructions to a teammate.

Don't forget to give full context and all documents.

Process

01

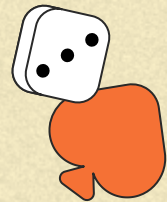
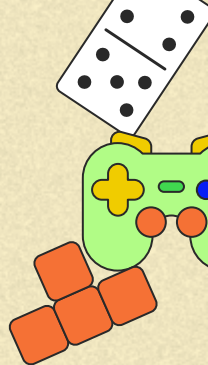
State the goal
(what you want).

02

Add constraints
(style, length, mechanics)

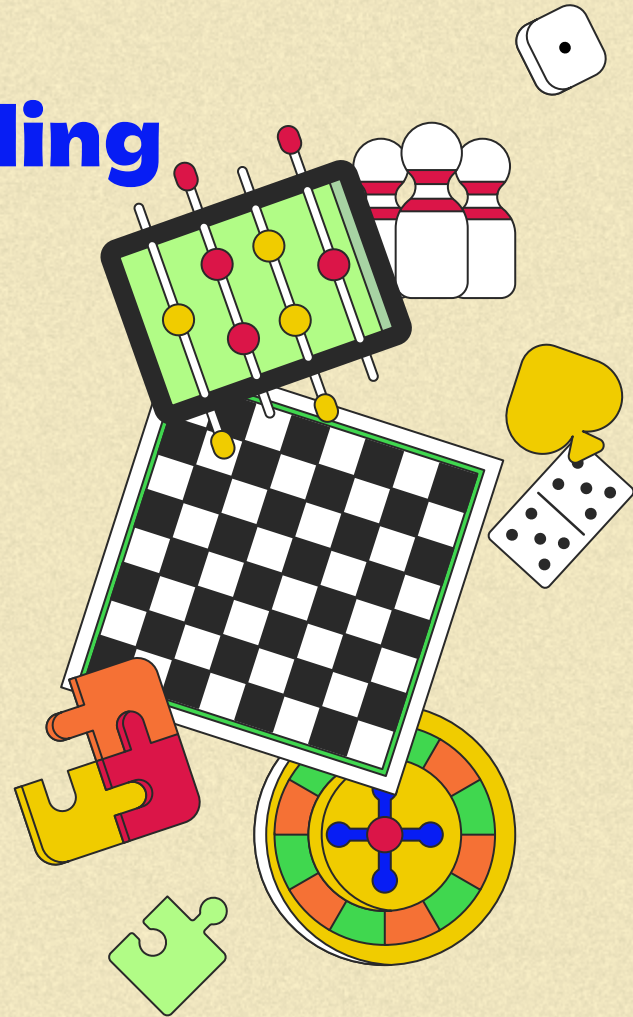
03

Request format
(list, table, bullet points)



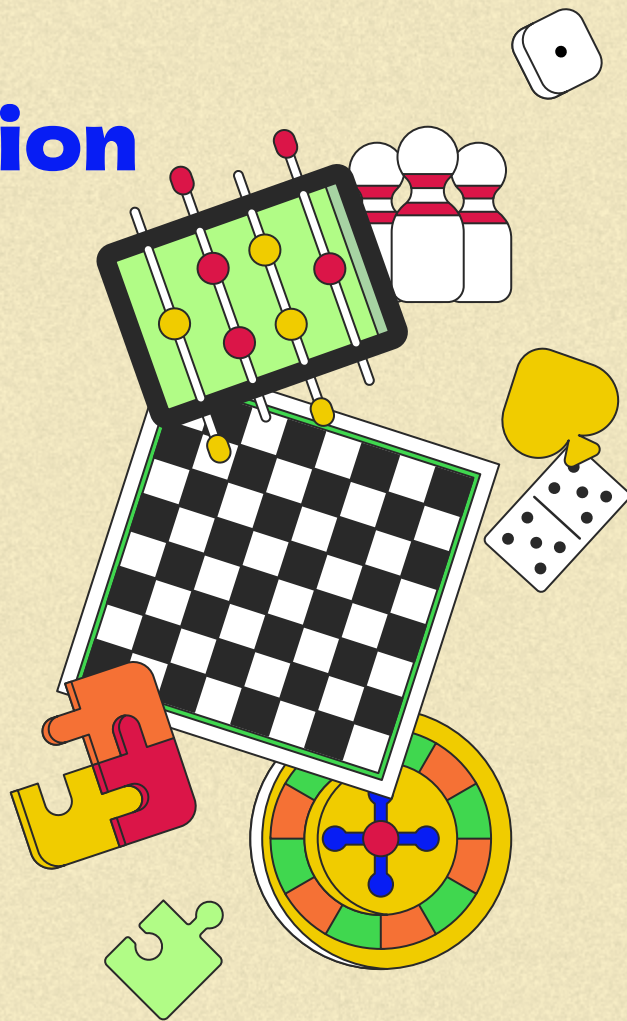
Prompts for Storytelling

- “Write a backstory for a cooperative game where players are scientists racing to stop a virus outbreak.”
- “Generate 5 detective characters, each with a hidden goal.”
- “Create 10 short event cards for a post-apocalyptic survival game (good, neutral, bad outcomes).”

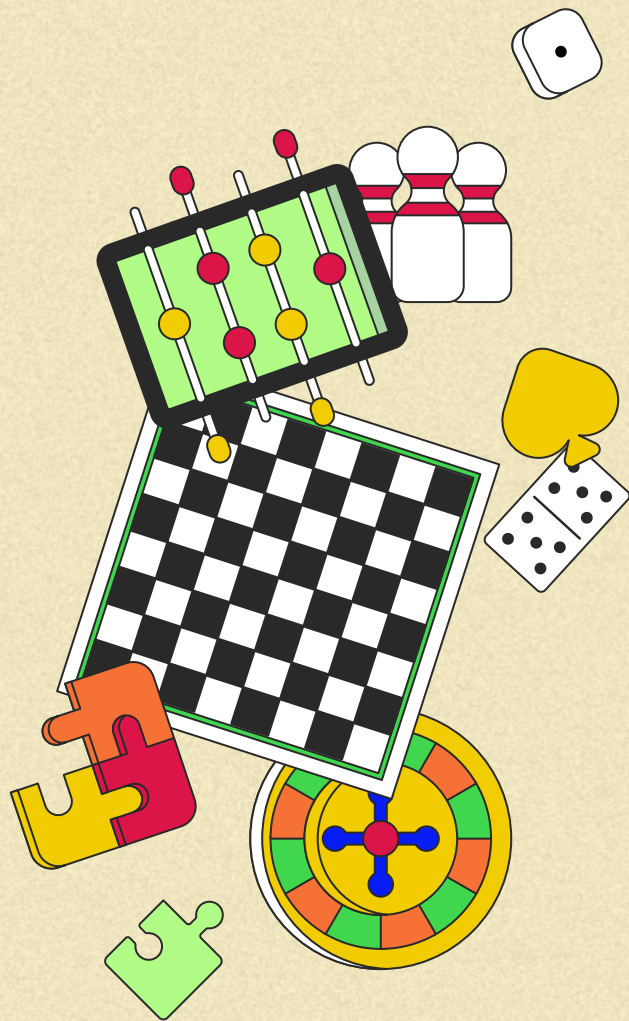


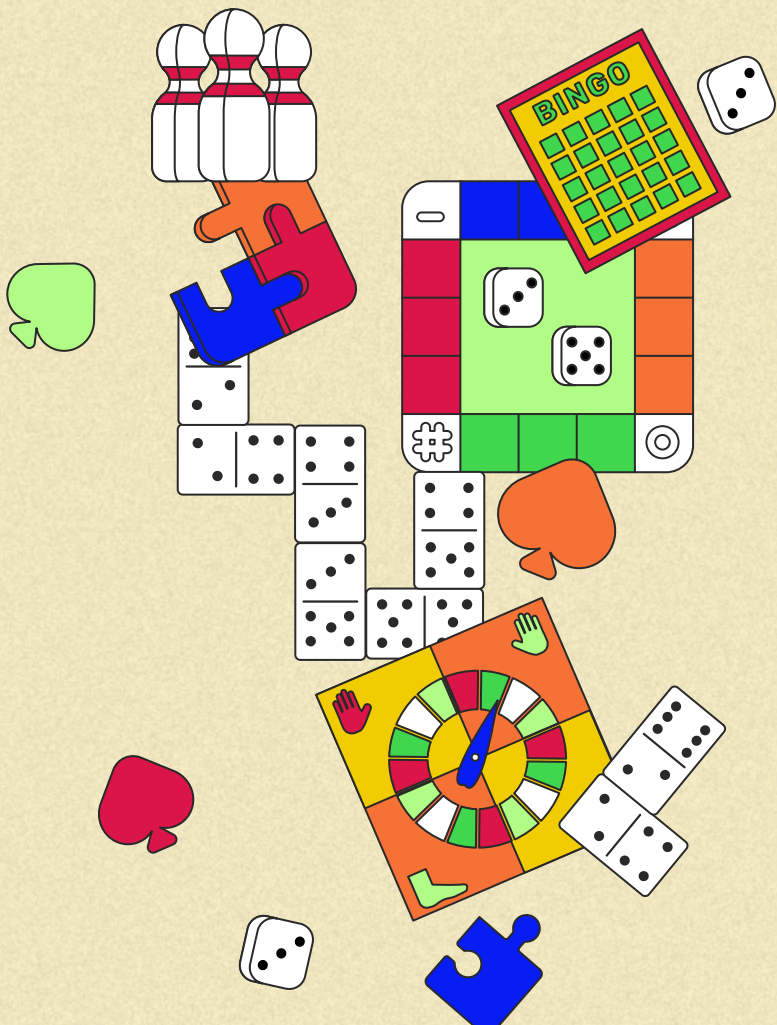
Prompts for Gamification

- “Suggest 5 mechanics for a competitive game about building medieval cities.”
- “Convert this storyline (players escaping a sinking ship) into a turn-based loop.”
- “Balance this mechanic: players gain coins every turn but must spend coins to move forward — propose 3 variants.”



- **“Design 10 fantasy-style playing cards with watercolor illustrations of magical items, simple layout, high contrast.”**
- **“Generate a top-down board map for a pirate treasure hunt, cartoon style, suitable for kids.”**
- **“Create icon graphics for tokens (wood, stone, gold) in flat minimal vector style.”**





How to give AI context

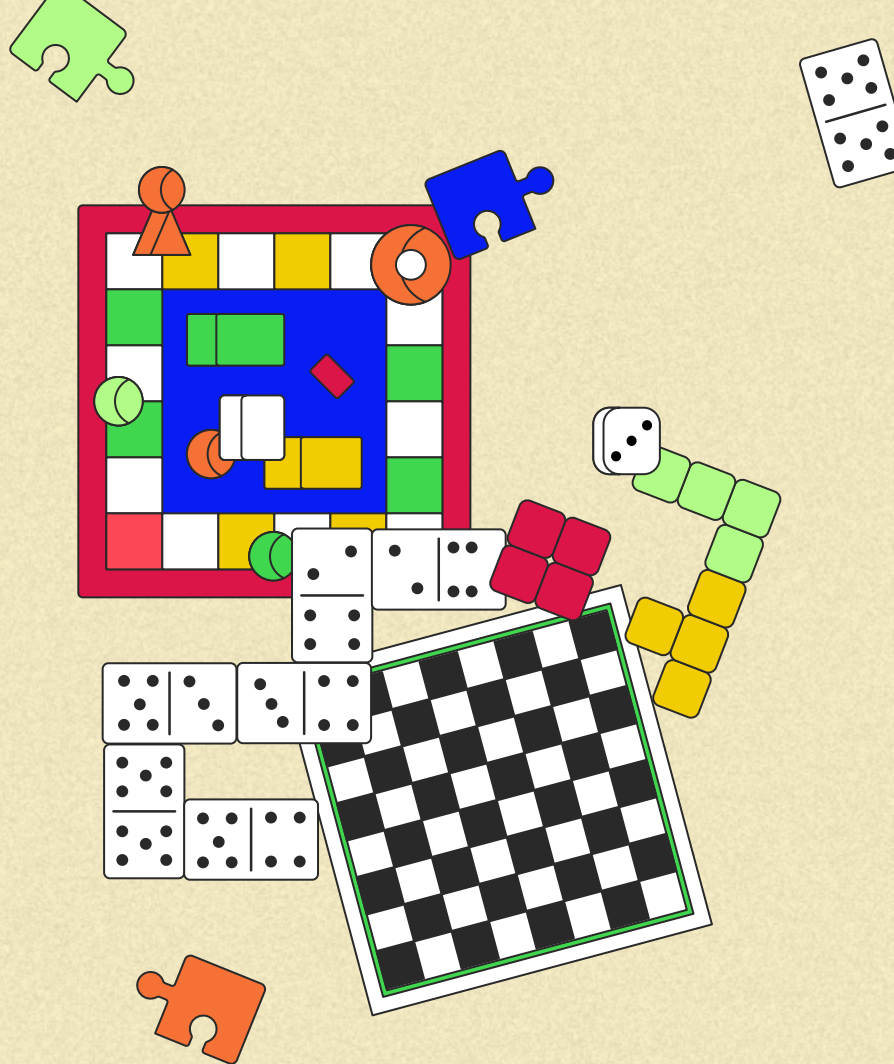
We don't want to repeat ourselves. Keep in mind, even AI sometimes forgets the context or hallucinate.

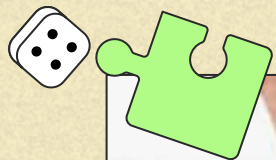
The best approach is to fill the questionnaire.

04

Storytelling & World-Building

Expanding ideas into worlds, characters, and narrative hooks.

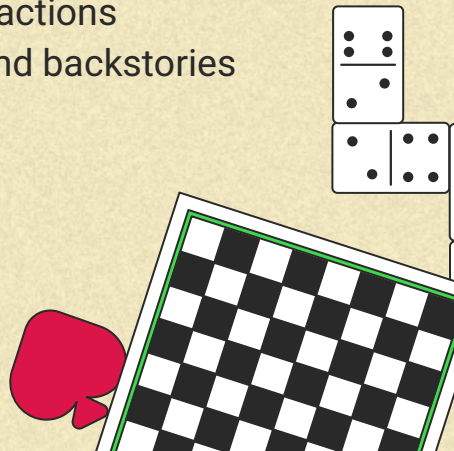


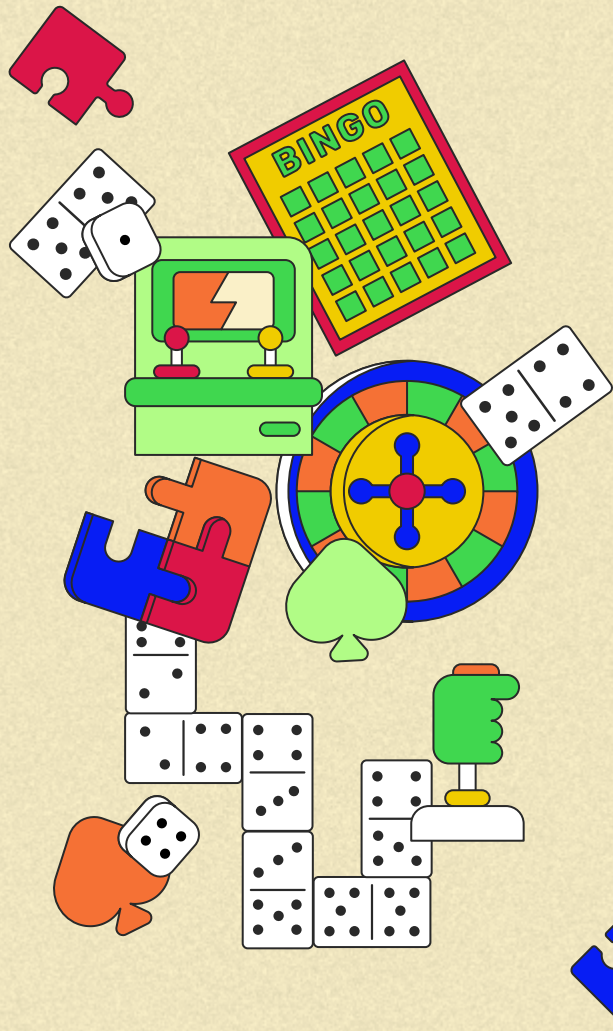


Why Storytelling Matter

A strong story gives players motivation and context. AI can expand a simple idea into worlds, characters, and events.

- Creating settings & themes
- Generating **characters** & factions
- Writing events, quests, and backstories





Prompts for storytelling

From Theme to World

"Expand the theme 'pirates searching for treasure' into a world with locations, factions, and conflicts."

Character & Faction Design

"Create 4 factions for a space-colony game. Give each faction a name, strength, weakness, and secret agenda."

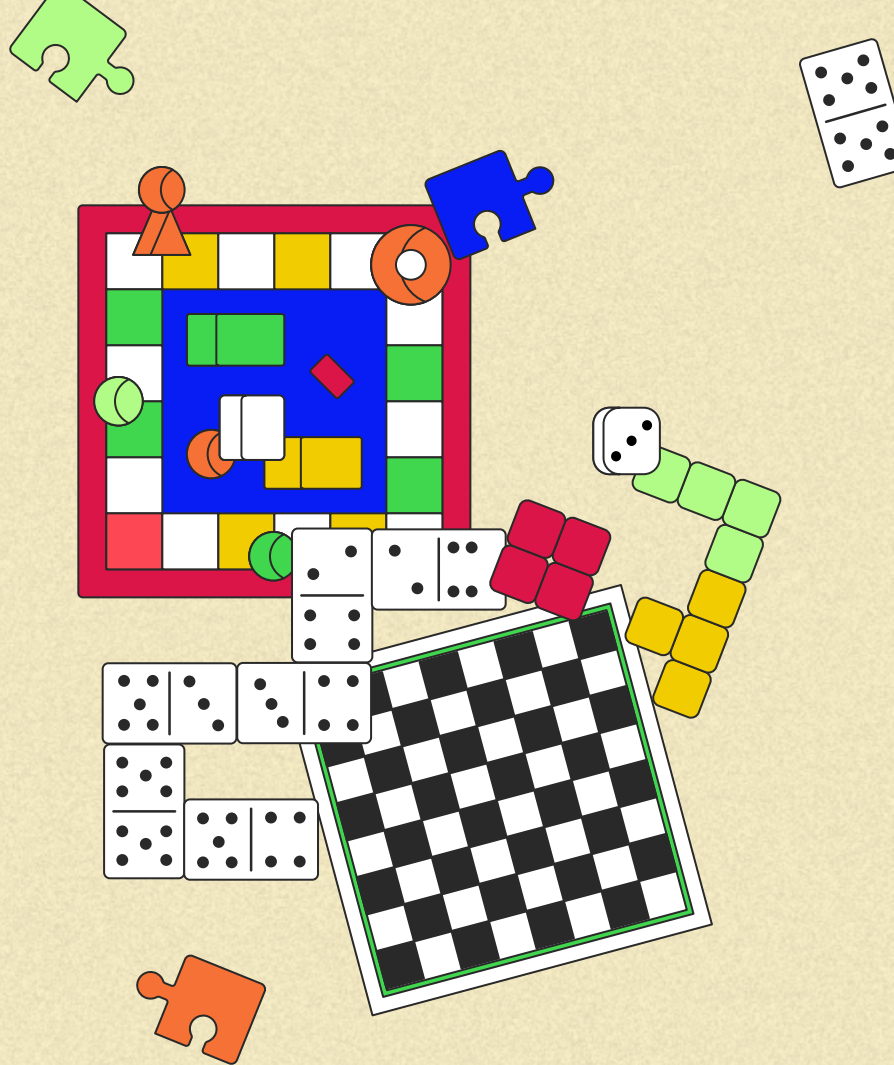
Events & Quests

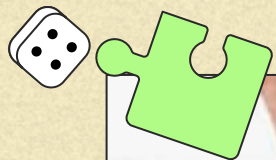
"Write 10 short event cards for a survival game, mixing good, bad, and neutral outcomes."

05

Mechanics & Gamification

Show how AI can help transform themes & stories into playable systems, test different mechanics, and balance the core loop.

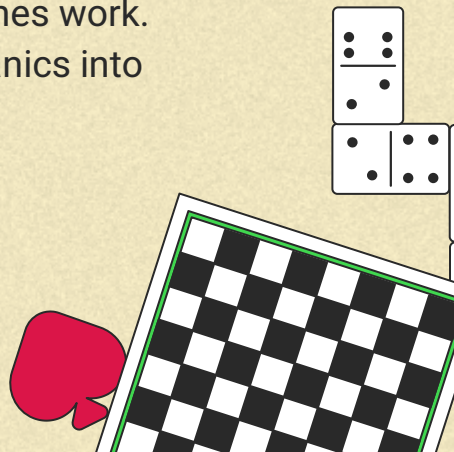


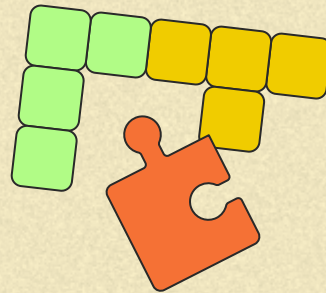


Why Mechanics Matter

Mechanics are the rules players actually interact with. They decide how fun, fair, and replayable a game is

- Suggest mechanics for a given theme.
- Explain how existing games work.
- Combine multiple mechanics into something new.





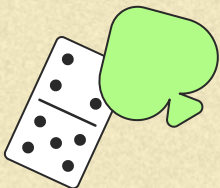
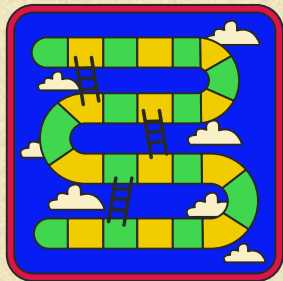
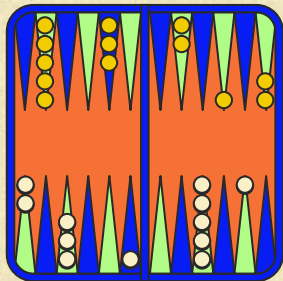
Core Game Loops

Example core loops:

- **Collect** → **Upgrade** → **Win points**
- **Explore** → **Fight** → **Gain rewards**
- **Bluff** → **Trade** → **Build alliances**

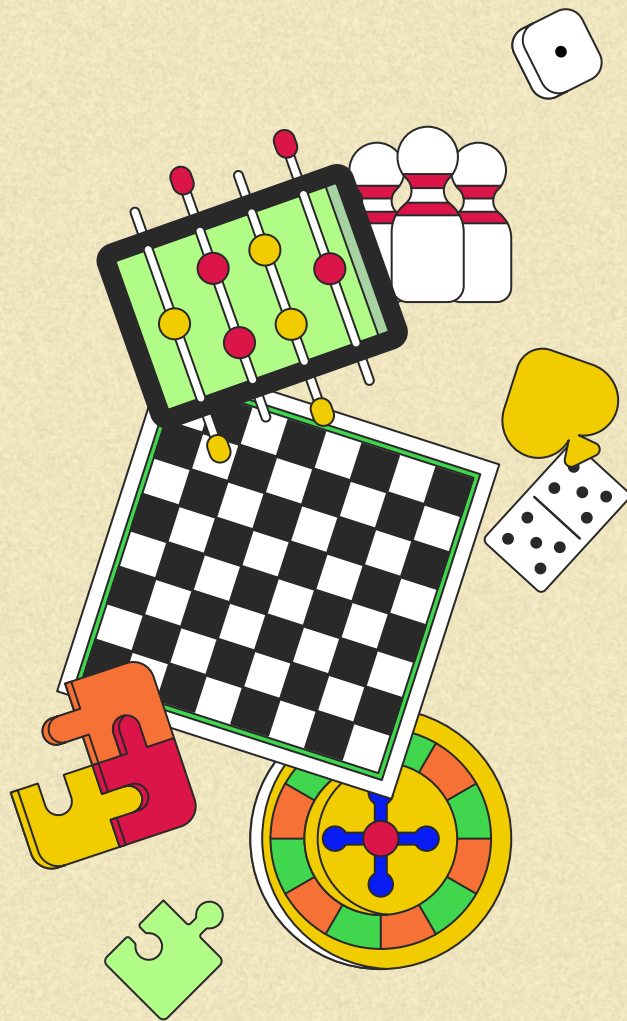
Example Prompt:

"Turn the theme 'exploring a haunted forest' into a core loop with 3 repeatable player actions."



AI Mechanics Library

- Consider mechanics, Example Prompt:
 - “Suggest 3 possible core mechanics for this theme.”
 - “List pros and cons of dice-based vs. card-draw mechanics for resource gathering.”
- Create mechanics, Example Prompt:
 - “Suggest 5 mechanics for a cooperative game about building medieval cities.”
- Balancing mechanics, Example Prompt:
 - “Balance this rule: players gain coins each turn but must pay coins to move forward — propose 3 fairer versions.”



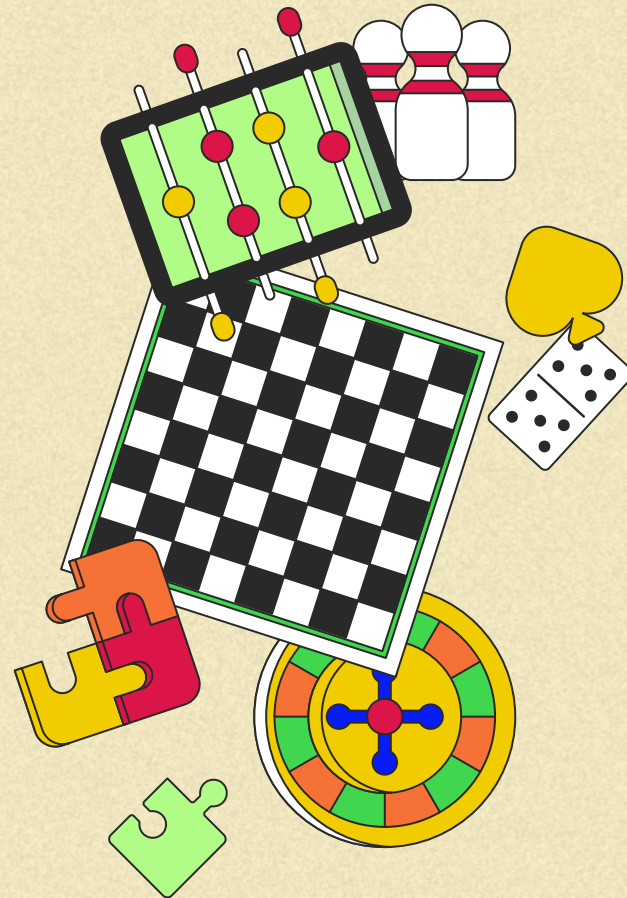
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Rules Writing

Using AI to create clear, structured, and balanced rulesets.



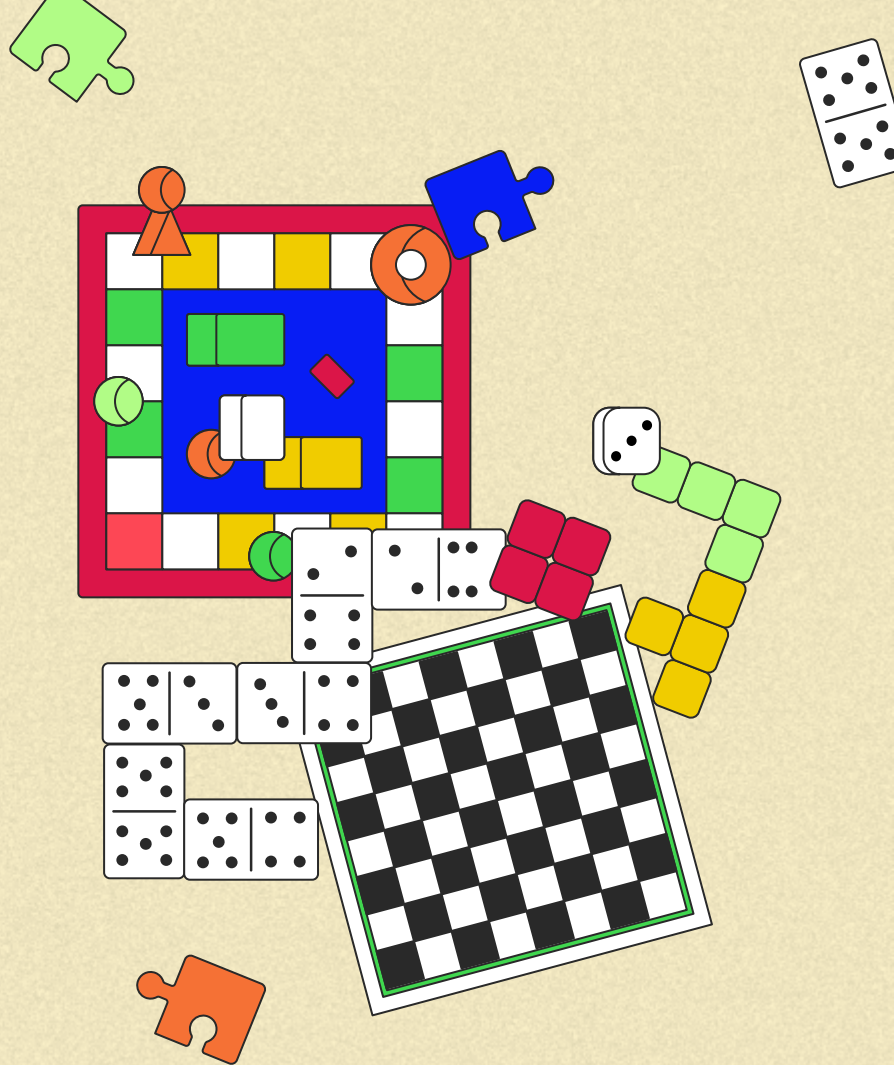
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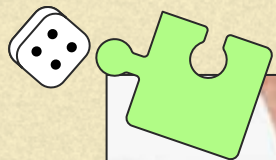


07

Content & Visuals

AI helps generate game content (cards, quests, events) and matching visuals (art for boards, tokens, characters), making prototyping faster and more inspiring.

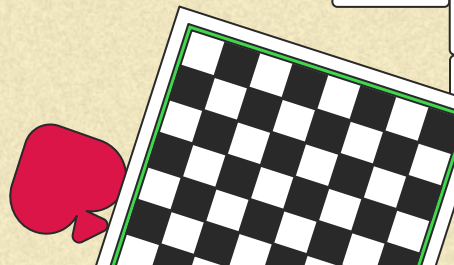
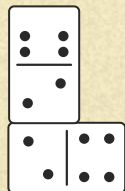




Why Visuals Matter

Content brings variety, visuals bring life.
Together they make a prototype engaging and testable.

- Generate card text, quests, challenges
- Create illustrations for boards, tokens, cards
- Adapt styles (cartoon, realistic, minimal)





Board game design elements and visuals

Core Visual Components

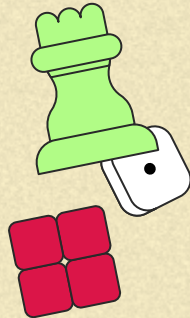
- Game Board / Map
- Cards (event, character, item, action)
- Tokens / Markers
- Player Pieces / Pawns
- Dice / Spinners
- Player Boards / Mats

Rule & Info Elements

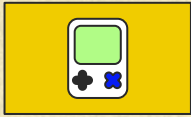
- Rulebook
- Quick Reference Cards
- Scoring Track

Supportive Visual Assets

- Icons & Symbols
- Illustrations
- Box Cover Design
- Theme Elements (fonts, colors, style)



Board game Design prompts



1. Visual Identity

"Create a visual moodboard for a board game concept.

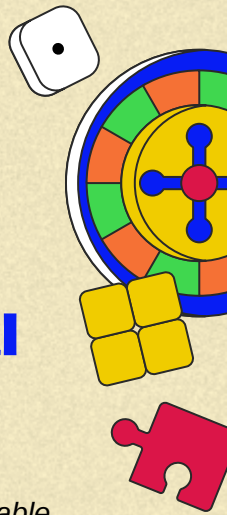
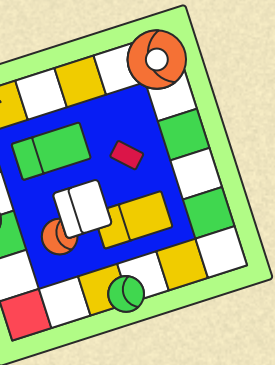
- Color palette (show harmonious swatches at the top)
- Psychologic/Scale imagery (surreal, exaggerated or symbolic visuals to set tone)
- Scenery (detailed backgrounds and locations connected to the theme)
- Mood (lighting, atmosphere, overall vibe of the world)
- Character concepts (sketches, objects, or figures representing players or NPCs)"

Here is the [theme/genre]. " -> now visualize it



2. Promotional banner

"Create a hyper-detailed board game setup on a table, featuring a richly illustrated game board, detailed miniatures, thematic cards, dice, and a decorative game box. The background blends seamlessly with the game's world, showing large-scale scenery, characters, or structures that extend beyond the table. Cinematic lighting, ultra-realistic, highly detailed, immersive atmosphere."



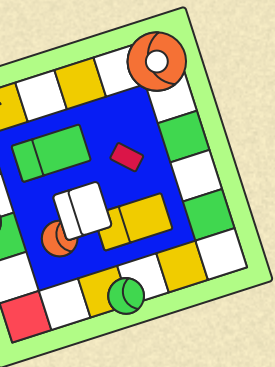


3. Game Board Prompts

Isometric

"Create a hyper realistic isometric game board for a board game. Show 3D perspective tiles, paths, and spots.

Here is the [theme/genre]. "



4. Game components

Create a game components glossary page for a board game rulebook.

- A clear **title** at the top (e.g. 'Game Components').
- A short **overview paragraph** explaining the game or expansion.
- A **grid layout** with images of all components (cards, tokens, figures, dice, boards, markers, etc.).
- Each component shown with a **small quantity number** (e.g. '40 Unit Cards', '6 Tokens').
- Clear **labels and categories** for different types of cards, figures, and resources.

A clean, thematic frame or background that matches the game's style. Keep proportions and spacing organized, as if it is the first page of a professional board game manual."*



5. Full game setup

Tabletop setup view

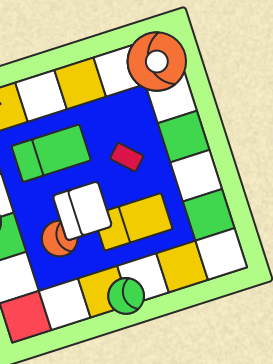
"Create a hyper-detailed top-down photo (tabletop setup view) of a complete board game setup on a wooden table. Show the main game board on one side, multiple player boards arranged in rows, miniatures, tokens, resource markers, dice, and cards neatly organized. Use realistic lighting and sharp focus so that all game elements are clearly visible. The layout should feel immersive, professional, and ready to play."



6. Character creation

Create a character concept sheet for a board game. Show a full turnaround of the character with front, side, and back views, plus close-ups of important details (face, gear, accessories). Use a clean white background, consistent proportions, and a stylized but clear art style. The design should be practical for use as miniatures or printed illustrations, with attention to outfit, silhouette, and personality cues.

Here is the [theme/genre]. " -> visualize it

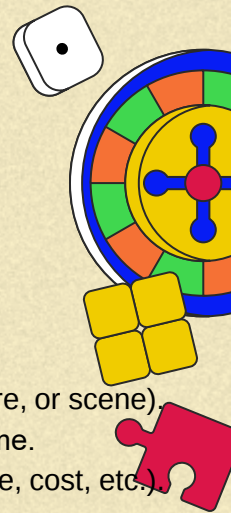


7. Playing Card Prompts

"Create a game card design. Include:

- A **main illustration area** (character, item, creature, or scene).
- A **title/banner space** at the top for the card's name.
- **Stat/attribute icons or numbers** (attack, defense, cost, etc.).
- A **text box** for card description or abilities.
- A **decorative border/frame** that matches the theme.
- Optional **back design** with a central emblem, logo, or symbol. Keep proportions consistent with standard trading/board game cards."

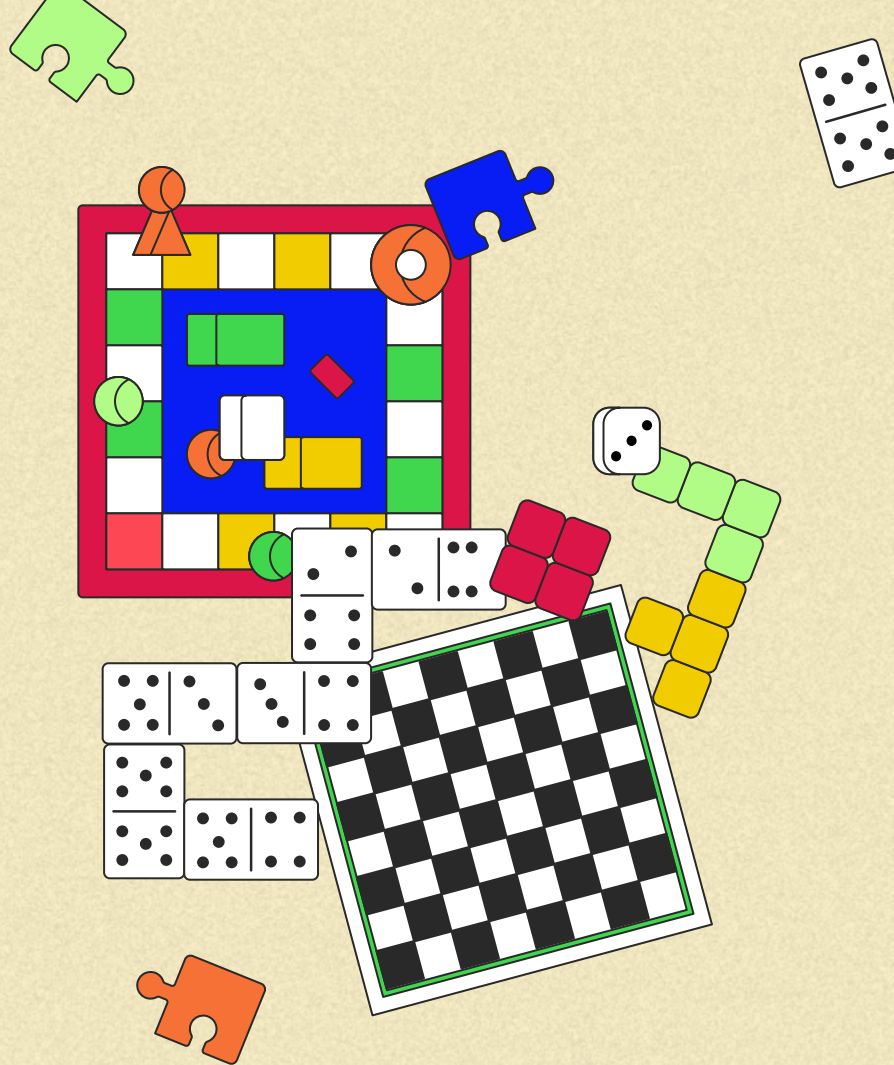
Here is the [theme/genre]. "



08

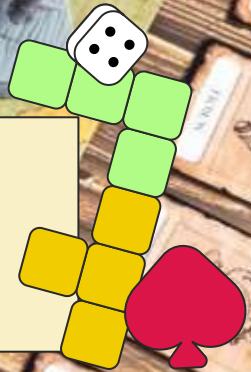
Testing & Balancing

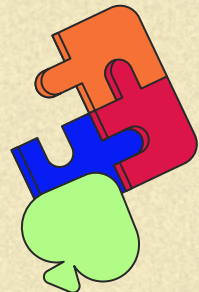
Simulating playthroughs and refining mechanics with AI.



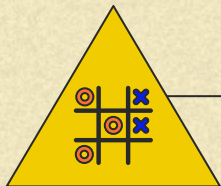


Time for testing!



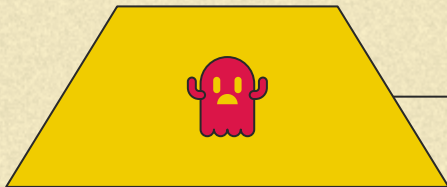


Pyramid of Testing & Balancing with AI



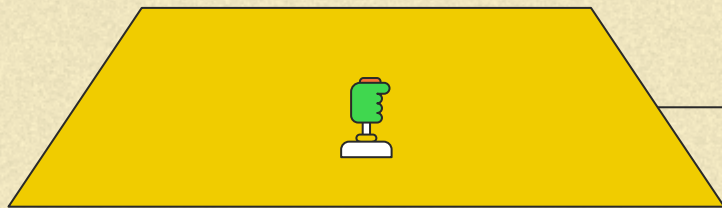
Concept Check

"Are these rules clear enough for a beginner?"



Simulation Play

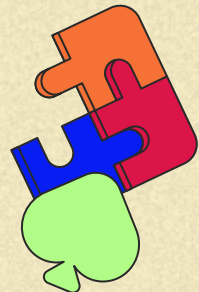
"Simulate 4 players for 3 turns, each choosing different strategies. Report issues."



Balancing Adjustments

"Players gain 2 coins per turn and spend 5 to move. Suggest 3 balanced alternatives."

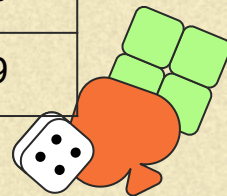




Game enjoyability

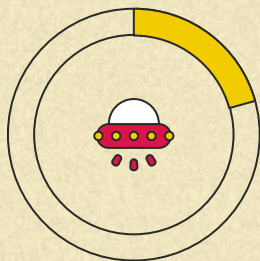
"Simulate a playtest of this game with 3 players. Rate each player's joy per round on a scale of 0–5 (0 = none, 5 = maximum). At the end, give each player an overall rating such as 'Bored', 'Average', or 'Great'. Show the results in a table format with columns: Player, Overall rating, Round 1–7."

Player	Overall rating	Joy (5 most, 0 least) during game						
		Round 1	Round 2	Round 3	Round 4	Round 5	Round 6	Round 7
Player 1	Bored	2	0	1	1	0	3	0
Player 2	Average	5	4	5	0	0	0	6
Player 3	Great	0	2	2	0	3	4	9



Analysis of the results

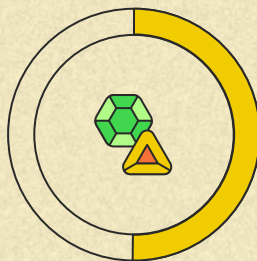
Prompt: "Rate this game on clarity, balance, and engagement (1–10 each).
Give one suggestion for improvement in each area."



20%

Clarity

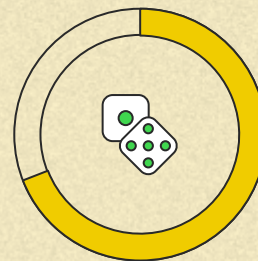
AI rating



50%

Balance

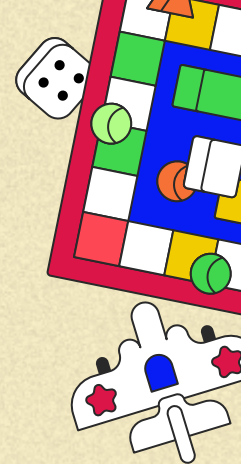
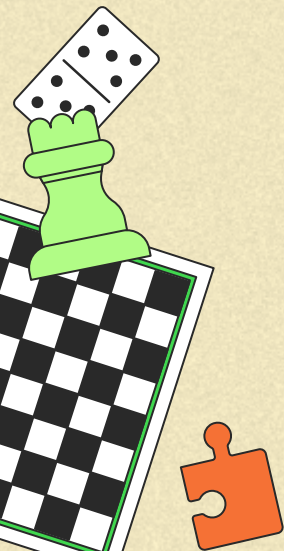
AI rating



70%

Engagement

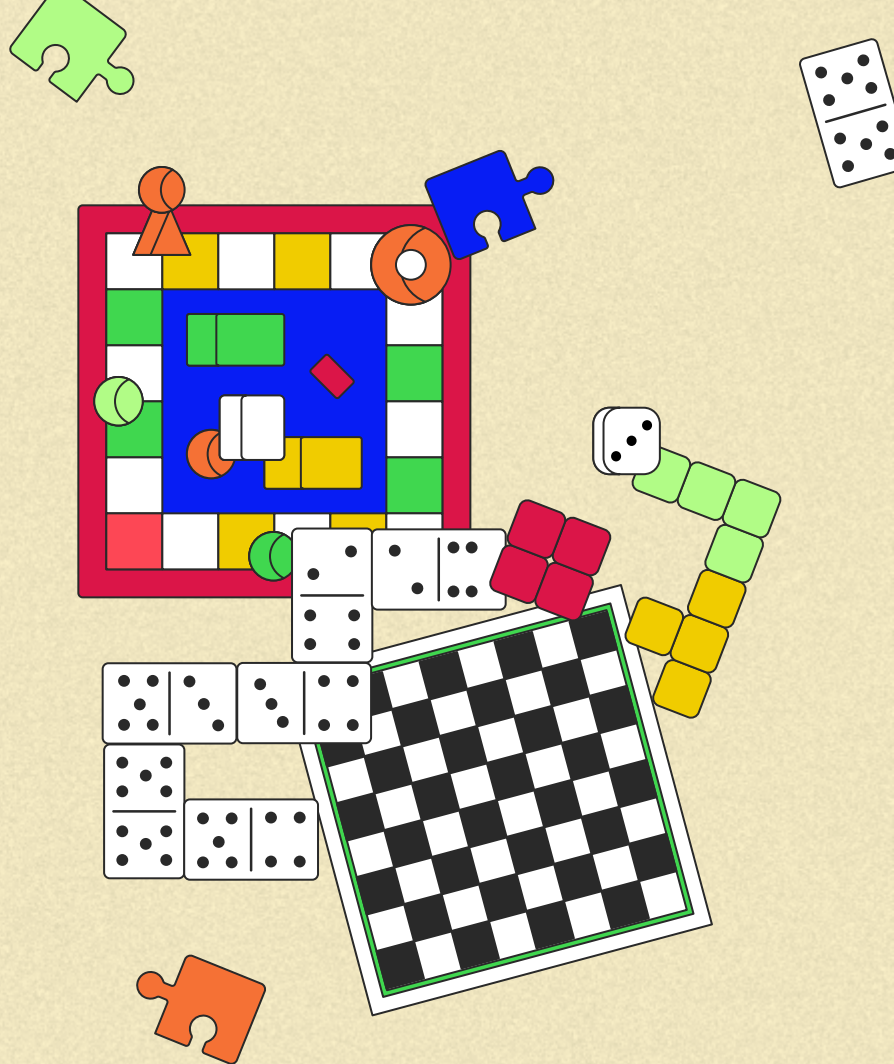
AI rating

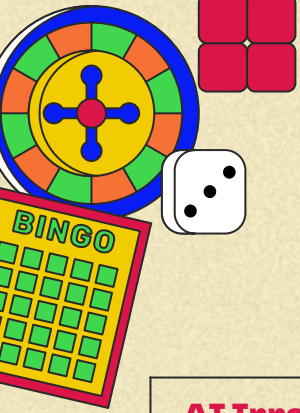


09

Wrap-Up & Q&A

Key takeaways, tools cheat sheet, and next steps.

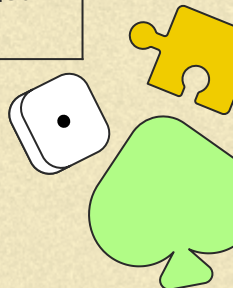




More resources

Where you can find more information on this topic?

AI Innovation in Board Game Design	https://syntetica.ai/blog/blog_article/ai-innovation-in-board-game-design
Generative AI vs The Artist? The Changing Face of Board Game Design	https://dcc.com/news-and-insights/generative-ai-vs-the-artist-the-changing-face-of-board-game-design/
Six Evolutions of Board Gaming: Embracing AI and Digital Integration	https://boardgamegeek.com/blog/13009/blogpost/155622/six-evolutions-of-board-gaming-embracing-ai-and-di
Will Ai Artwork Ruin Board Games?	https://medium.com/@Back2Boardgames/will-ai-artwork-ruin-board-games-e903b159a4b8
The Role of AI in Game Development and Player Experience	https://www.researchgate.net/publication/389358711_The_Role_of_AI_in_Game_Development_and_Player_Experience



Thanks!

Hope you enjoyed the presentation.

Michal Mujgoš

