



STORY FORGE

PROCESS BOOK

AKA FORGING THE 'STORY FORGE' STORY

BECKY ROETKER & MORGAN SLONE

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MEET THE TEAM

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industrial designer



graphic communication designer

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OVERVIEW

Story Forge is a collaborative role-playing game (RPG) that encourages social and emotional development in kids ages 9+. The core premise of tabletop RPGs is storytelling: players create and guide their unique characters through fantasy adventures.

Working toward a common goal encourages empathy, communication, and impulse control, which makes RPGs inherently beneficial for social growth. Through the buffer of fun and fiction, players can solve problems and practice risk-taking in a safe environment.

Since most existing RPGs are complicated to learn and play, *Story Forge* is designed to help new players and kids to enjoy the fantasy gaming genre together without feeling intimidated by the time commitment or learning curve.

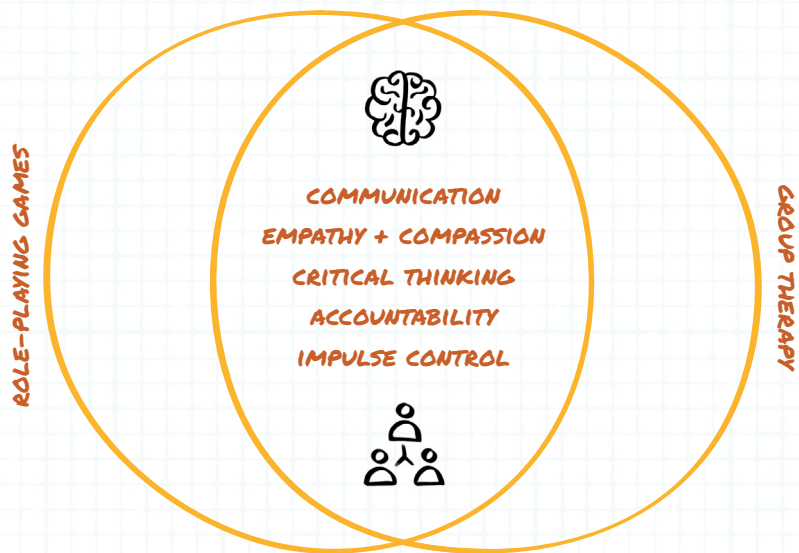
OBSESSION

Inspiration for our capstone originated during a year of weekly Dungeons & Dragons sessions with friends. In this well-known tabletop fantasy role-playing game, one person known as the Game Master serves as the world's architect/storyteller/referee. Each of the players creates and assumes the role of a unique character. Players control the course of the narrative by deciding what their team does, and actions succeed or fail based on the outcome of dice rolls.

Setting aside our work and phones for hours, we solved puzzles and battled monsters. D&D adventures provided a much-needed break from daily stressors. Playing the role of a confident, self-assured character also helped one of our party members cope with social anxiety.

Because of D&D, Becky and I discovered the emerging field of RPG therapeutics. It currently exists at the niche intersection of therapy and tabletop gaming, but it has been picked up by a handful of non-profits and educators across the United States.





JOURNEY

The groups and individuals using RPGs for educational and therapeutic purposes are mainly using *Dungeons & Dragons* or *Pathfinder*. These systems, written for an adult audience, have complex rules and can take hours to learn. Typical sessions last between 2-6 hours, with frequent cross-referencing between several rule handbooks.

Many of these groups are running sessions with adults, but there are also organizations that use RPGs for childrens' social and emotional development. Anxiety and behavioral issues can manifest at a young age, especially when kids are first learning to express themselves. An inability to articulate thoughts and anxieties is part of the struggle with diagnosing and treating behavioral issues early.

One of the problems these groups run into is the steep learning curve and time commitment of using traditional, rule-heavy RPG systems. Another problem is the games have to be run almost exclusively by experienced gamers, because the rules are overwhelming.

We decided to create a more user-friendly game: easier for kids and new adults to pick up in a short period of time.



INDUSTRY

The hobby game industry is booming; it's experiencing a revival that can be attributed to a basic human desire for connection, authenticity, and shared experience in our increasingly digital world. Whether competing or working cooperatively, there is something fulfilling about being with other people for an extended period of time and focusing on something together.

Global sales of games and puzzles jumped from from \$9.3 billion in 2013 to \$9.6 billion in 2016. Role-playing games, specifically, grew from \$25 million in 2014 to \$35 million in 2015. Not only has this renaissance led to the creation of new games, but also to bars, cafés, and other venues focused on gaming.



→ 1974

Dungeons & Dragons (D&D) became the first commercially available fantasy RPG

1985 ←

Formal research of the educational and social impacts of RPGs began

→ 2004

RPG Research, a non-profit charitable organization, became the first and largest online database for decades of RPG research and services

2009 ←

Teachers and therapists began documenting their experiences using RPGs as a teaching aid for students and patients

→ 2017

Training and certification courses for running RPGs in therapy sessions became standardized and available to the public

"A campaign gives you the opportunity to **connect** with your character and to extrapolate that connection into your own life. You'll see your character **grow and change**, which demonstrates how you can personally grow and change from similar challenges."

ADAM DAVIS, GAME TO GROW

"Kids who may never open up in a direct conversation with a therapist can **find a voice** in their character."

THE BODHANA GROUP

"Our goal on the front line of RPG therapy is to create a united front for **sharing ideas** and **swapping stories**; to get people together and build this method collaboratively."

ADAM JOHNS, GAME TO GROW

"By opening up a classroom to a large-scale fantasy game, students are placed on **level footing** and are able to employ the full extent of their strongest skill-sets."

SARAH ROMAN, TEACHING WITH D+D

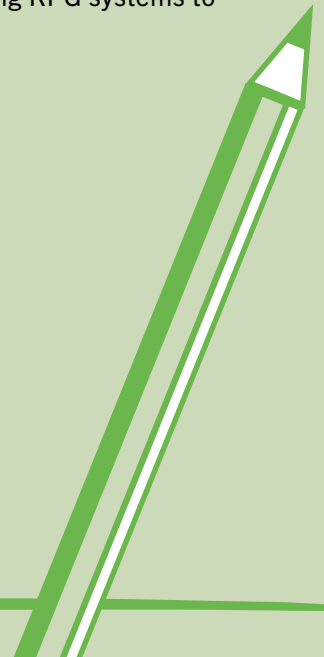
INTERVIEWS

There are approximately half a dozen groups across the U.S. using RPGs in a professional therapeutic setting. Teachers with gaming experience are also independently developing campaigns that enhance their course material.

We reached out to some of the leading professionals in this emerging field, Adam Davis and Adam Johns. Since 2011, Davis and Johns have been running therapeutic groups using RPGs to help teens and adolescents. They both have backgrounds in psychology, family therapy, education, and drama therapy.

Then we had an interview with Sarah Roman, a high school teacher who is using *Dungeons & Dragons* to get her AP literature students fully immersed in the material. She runs teachingwithdnd.com to help other teachers gamify their classrooms.

These interviews were invaluable when learning which systems people work with, why, and how they are used. We received lots of advice about how to work with kids, and how game facilitators edit existing RPG systems to suit their needs.



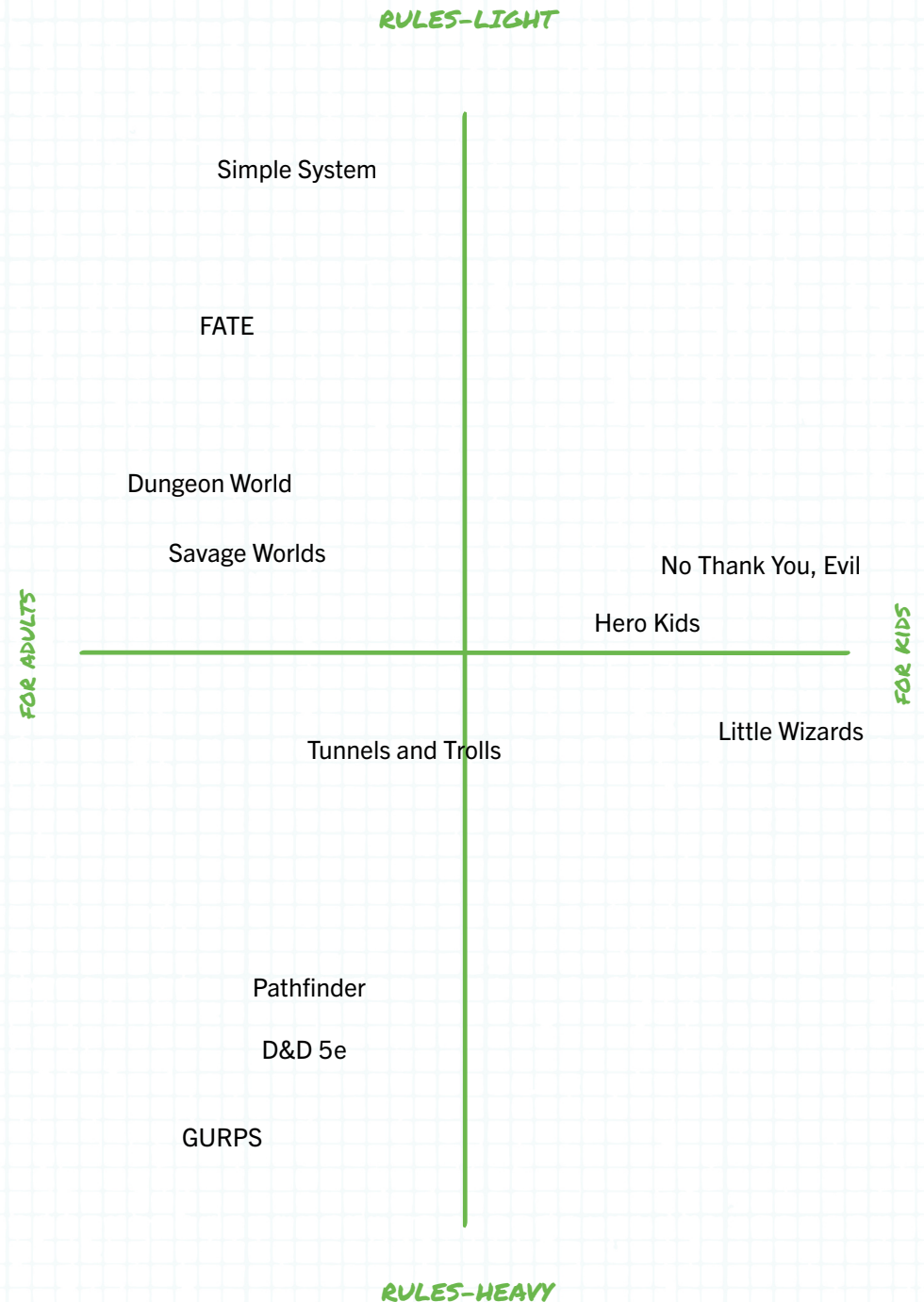
SYSTEM COMPARISON

We cross-examined a variety of RPG systems to better understand what makes them compelling to players. This comparison of pros and cons later helped us map out the essential components for a functional and appealing game.

By far, the most widely-used system is *Dungeons & Dragons 5th edition* (or *D&D 5e*). This system is largely popular because of its popularity in media. The 5th edition of *D&D* also has a great mix of structured rules and free-form customizability. The publisher also regularly updates supplementary materials. The downside of *D&D* is that it can be intimidating to brand new players. There are rules, text, and campaigns to take in. Even veteran players can find themselves confused on a rule from time to time.

From there, we researched less popular games. These are the systems people who are more well-versed in RPGs migrate to once they've explored more of the genre. Most can be categorized as 'rules-light' or 'rules-heavy.'

We also found that there are far, far more systems meant for adults than there are for children. The games for kids are often simplified well, but they're also usually meant to be played by very young kids (4-7 years) only once or twice. They don't offer much in the way of long-term campaigns or character development opportunities.





DESIGN OBJECTIVES

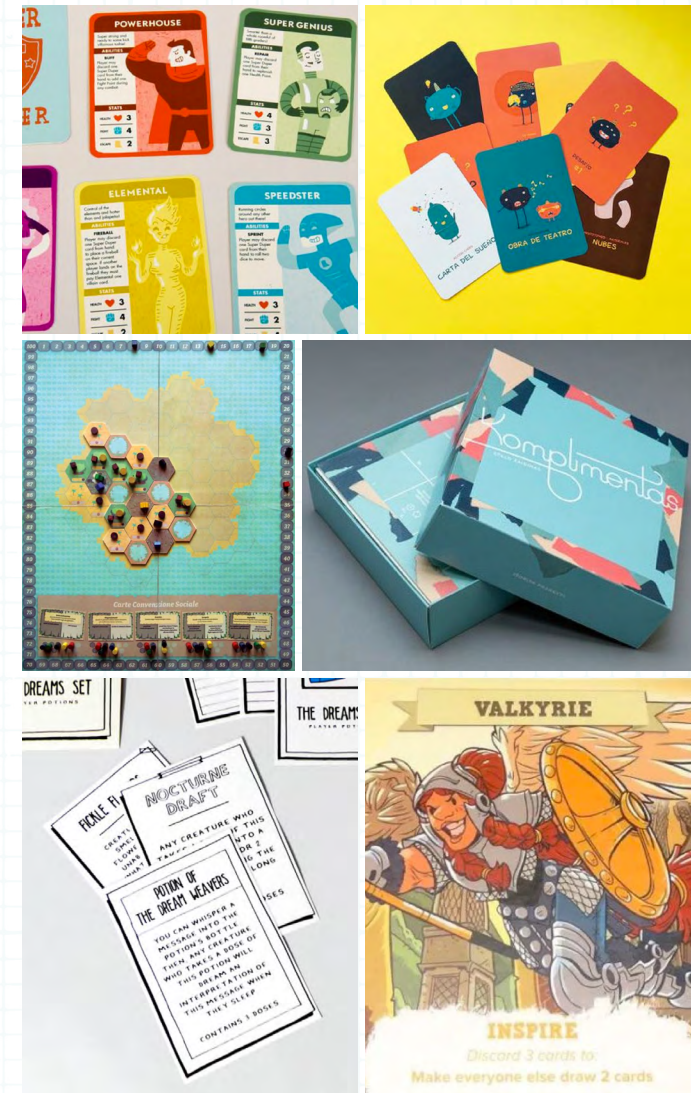
Right now character creation is too complicated in most other table-top RPG systems. We need to simplify.

World building and map-making is either non-existent or entirely on the GM to create! We need to include a way to collaborate on the world.

We need to maximize the storytelling and minimize the math and rules. We need efficiency and to foster freedom!

We need to communicate the rules of the game to kids *and* the adult running the game! We need a guide.

The content needs to be comprehensive enough for an adult to pick up the game and explain the rules to children quickly and the other game materials need to be engaging to kids as well!



These graphics successfully demonstrate qualities that can be appreciated by adults and children alike: vibrant and engaging colors, elements of fantasy, and clear legibility for ease of use/comprehension.

Idea 1: self-contained, unique class sheets!

CHARACTER INFO (NAME, CLASS, SPECIES, LEVEL)

STATS

PHYSICAL	MENTAL	SOCIAL
Health	Intuition	Charm
Might	Magic	Grace

INVENTORY

PERKS

CLASS PERK ○
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SPECIES PERK ●
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BACKGROUND PERK ○
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ACTIONS

ACTION 1
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ACTION 2
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ACTION 3
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SPELLS

SPELL 1 ●○○○
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SPELL 2 ●●○○
Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet.

SPELL 3 ○○○○
Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet.

LEVEL UP ○ Lorem ipsum ○ Lorem ipsum ○ Lorem ipsum ○ Lorem ipsum ○

- | PROS: | CONS: |
|---|---|
| <ul style="list-style-type: none"> • Allows for kids to write and draw on it • Easy to print more • Easy to change and modify as the campaign progresses | <ul style="list-style-type: none"> • Not very tactile • Been done before • Filling out sheets can be confusing • Hard to keep track of everything |

INITIAL CONCEPTS (CHARACTERS)

Our original plan for player character management was to use the standard of RPGs: a character sheet. However, once we started brainstorming, ideating, and testing, we realized filling out a character sheet required more time, management, and math than uncertain new players and children were willing/able to spend.

Instead, we designed a series of character cards for the players. Our first card iterations were small (2.5" x 3.5"), divided up by level, class, and special actions. Although the cards were easier to read, we ran into a new problem: there were too many for players to keep track of easily. We moved forward using fewer, bigger cards. Each class had two cards: one with stats and one with special actions.



INITIAL CONCEPTS (CHARACTERS)

PROS:

- Portable
- No writing required
- Easy to find available moves during combat or roleplay
- Good for kids who are more visual
- Great for classes with spells, especially

CONS:

- Lots of cards to keep track of- potentially up to 21 per class
- Lots of cards means its easy to lose one
- Only room for one copy of each class
- Really small real estate to work with

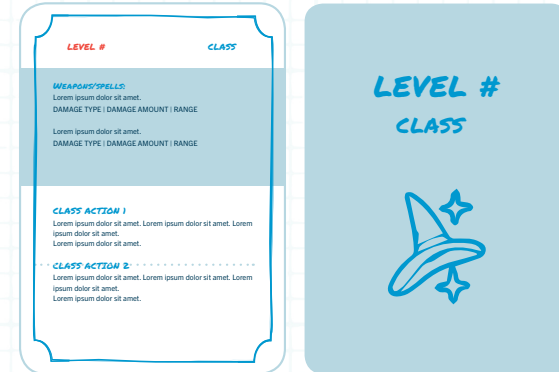
PROS:

- Easy for kids to mix - and - match
- No writing required
- Can have blank custom design cards
- More tactile
- Gives a sense of control and choice

CONS:

- Need something to keep track of them
- Can't be written on
- Having to fit a lot of information in a small area

Idea 2: class cards with 1 level per card



Idea 3: class cards with stats and all levels



CARD EVOLUTION

MAGE
LEVEL 1

MAGE LEVEL 1

PHYSICAL	MENTAL	SOCIAL
Health	Intuition	Charm
Might	Magic	Grace

HIT
Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet. *x1 use per turn*

SHIELD BASH
Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet. Lorem ipsum dolor sit amet. *x2 per day*

MAGE

MAGE

35
Health

12
Armor

-1
Strength

+2
Magic

0
Charm

+2
Knowledge

+1
Grace

Staff
Damage: 104-1

1 turn = 1 movement + 1 action/attack/spell

ACTIONS

LEVEL 1

BASIC SPELL: You unleash a focused, bright orb of pure energy. *1L 10M*

BASIC ATTACK: You use your magic staff as a weapon to club. *1L 10M*

FRIEND: You attempt to charm an enemy to being your friend. The target must roll a magic saving throw of 12 or higher to resist. *3L 20M*

LEVEL 2

ILLUSION: You conjure an image within a 10 ft area. Any creature that sees it must roll a magic saving throw of 13 or higher to see through it. *1L 20M*

LEVEL 3

REBALL: You hurl a crackling orb of flames. If target must roll a Grace saving throw of 14 or higher to dodge. *2L 20M*

Magic reaction roll: 1d20 + the target's Magic stat
1 turn = 1 movement + 1 action/attack/spell

MAGE

CLASS

MAGE

PHYSICAL	MENTAL	SOCIAL
Strength -1	Knowledge +2	Charm 0
Health 0	Magic +2	Grace +1

12
AC

35
HP

DESCRIPTION: a mage is also known as a magician or a wizard. Mages study and train their whole lives to be able to use and shape the magic that permeates the world and universe beyond. The lore of power and knowledge often leads them from their studies and schooling out into the wilderness, seeking out old ruins and exploring temples.

THE BASICS: during combat, once per turn you may take one move, and one action. An action can be a spell attack, a weapon attack, or special move.

WEAPON: staff/1 must be equipped to use spells does 104-1 damage as a weapon attack

MAGE SPELLS

LEVEL 1

SPELL: you unleash pure magic at an enemy roll 1d4+2 damage. *x1 use per turn*

END: you pick an enemy within sight, they roll a magic saving throw of 12 or higher, or they become your friend. *x2 use per day*

EL 2

FLAME: you hurl out a ball of flames, a successful saves 2d6+2 damage. *x2 use per day*

EL 3

ILL: you create a small illusion and enemies make a magic saving throw of 13 or higher to through it. *x1 use per day*

EL 4

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod, *x2 use per day*

EL 5

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod, *x1 use per day*

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod, *x2 use per day*

MAGE

STATS

MAGE STATS

35
Health

12
Armor

-1
Strength

1
Magic

0
Charm

2
Knowledge

0
Agility

Staff
Damage: 104-1

Spell
Damage: 1d6-2

MAGE ACTIONS

LEVEL 1

BASIC SPELL: You unleash a focused, bright orb of pure energy. *1L 10M*

BASIC ATTACK: You use your magic staff as a weapon to club. *1L 10M*

FRIEND: You attempt to charm an enemy to being your friend. The target must roll a magic reaction roll of 12 or higher to resist. *3L 20M*

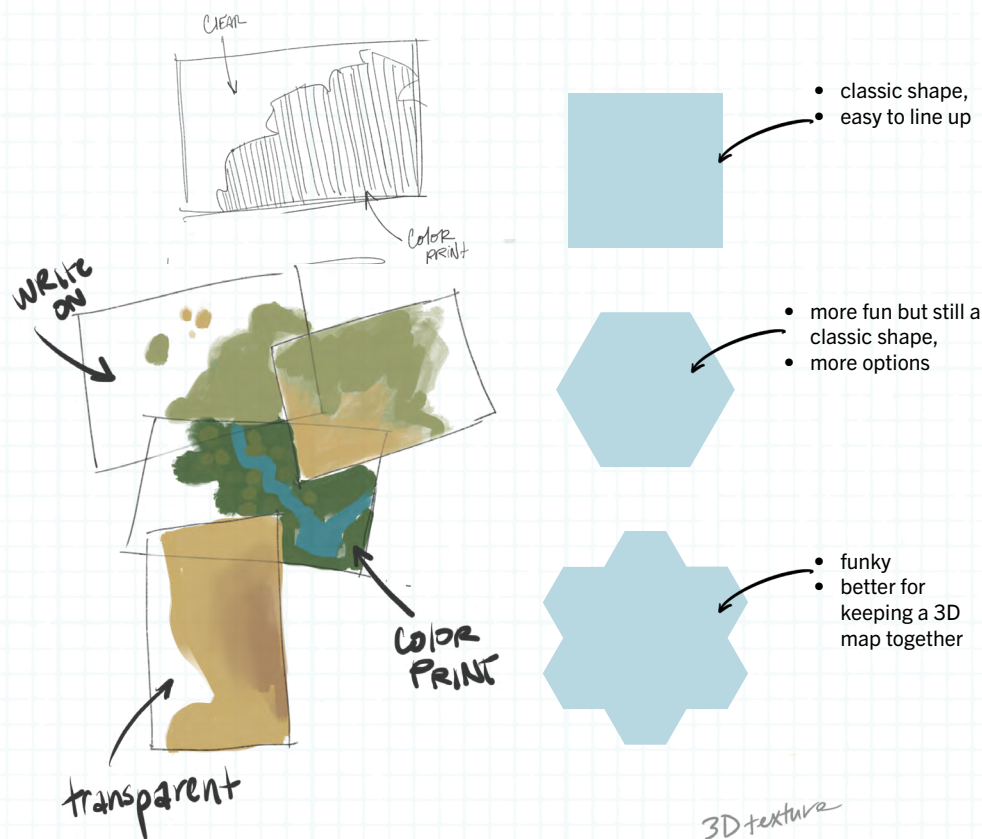
LEVEL 2

ILLUSION: You conjure an image within a 10 ft area. Any creature that sees it must roll a magic reaction roll of 13 or higher to detect or through it. *2L 20M*

LEVEL 3

REBALL: You hurl a crackling orb of flames at enemy. *Damage: 4d6-2* *2L 20M*

Magic reaction roll: 1d20 + the target's Magic stat
1 turn = 1 movement + 1 action/attack/spell



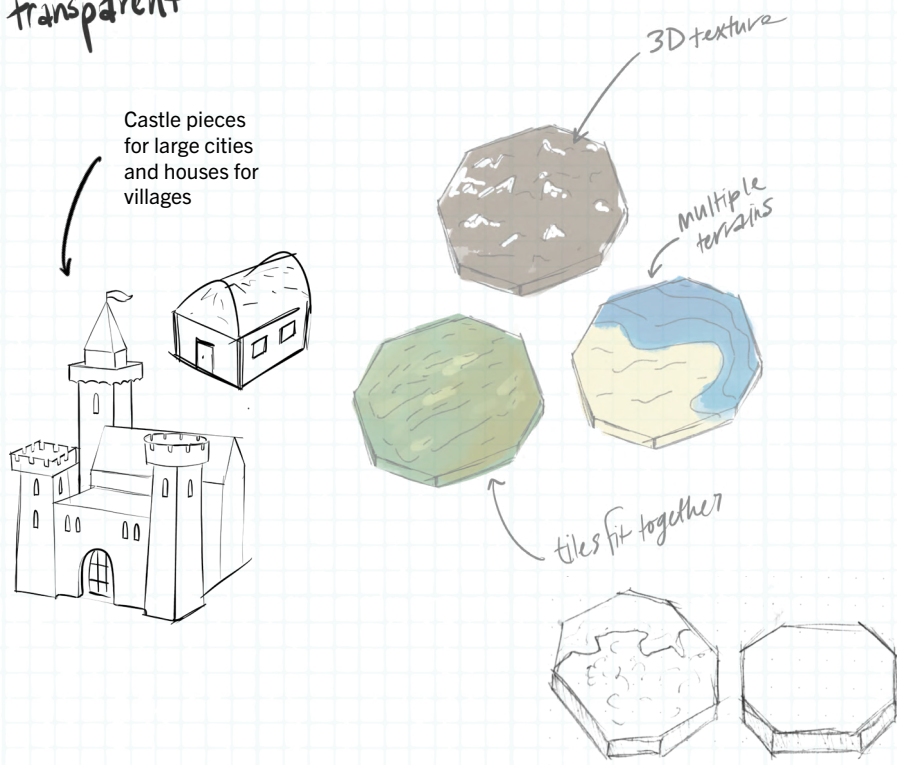
INITIAL CONCEPTS (MAPS)

We also wanted to have some way for GMs to easily and quickly create world maps to facilitate their games. We also wanted the GM to have the option of working with their players to create a map.

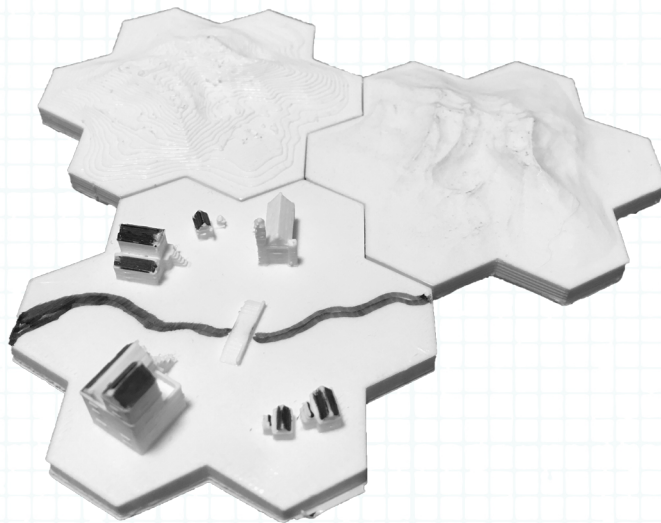
We had three different concepts. Our first idea was to print different map biomes onto transparent plastic and layer them on top of each other. We decided this was too messy and fell apart too easily.

Our next idea was to 3D-print topographical terrain tiles. These ended up being too bulky to store in a box, and the small parts were too fragile to be handled by children.

The idea we then moved forward with was series of 2D tiles with environment icons printed on them. They were small and thin enough that they could be printed in bulk. The map could be built out to cover large areas as needed.



MAP EVOLUTION



FIRST PROTOTYPES

After determining we wanted to move forward with our third concept, we made our first basic prototypes with sharpie and paper. Then we began a second iteration so that we could have a prototype to test with. Our earliest models included these:

STAT CARDS

- 2 per class
- card 1: health, armor, stats, weapons
- card 2: special moves/actions/spells, rules

SPECIES CARDS

- 1 per player
- species, optional features, unique perk/skill

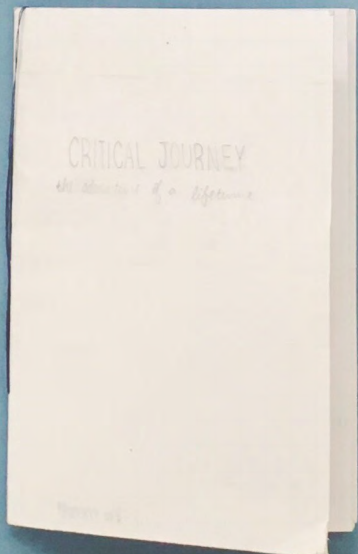
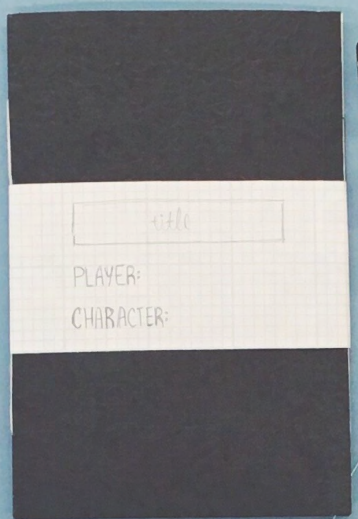
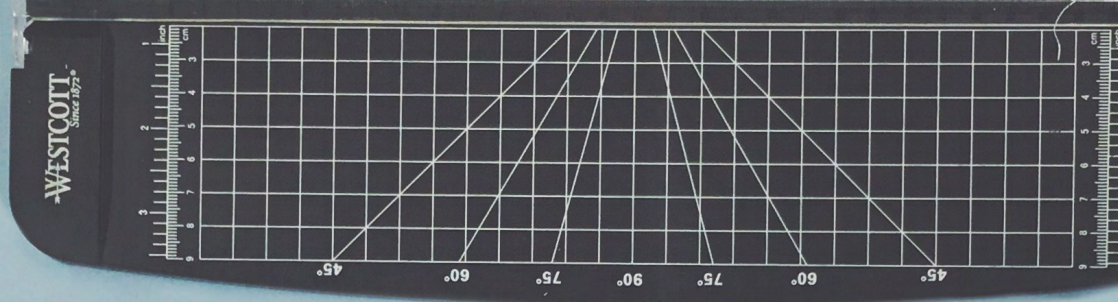
PLAYER JOURNALS

- 1 per player
- pocket for storing class and species cards
- health tracker and daily actions/spells
- paper for game notes, background, drawing

MAP TILES

- generic terrain
- 3d printed interlocking shapes



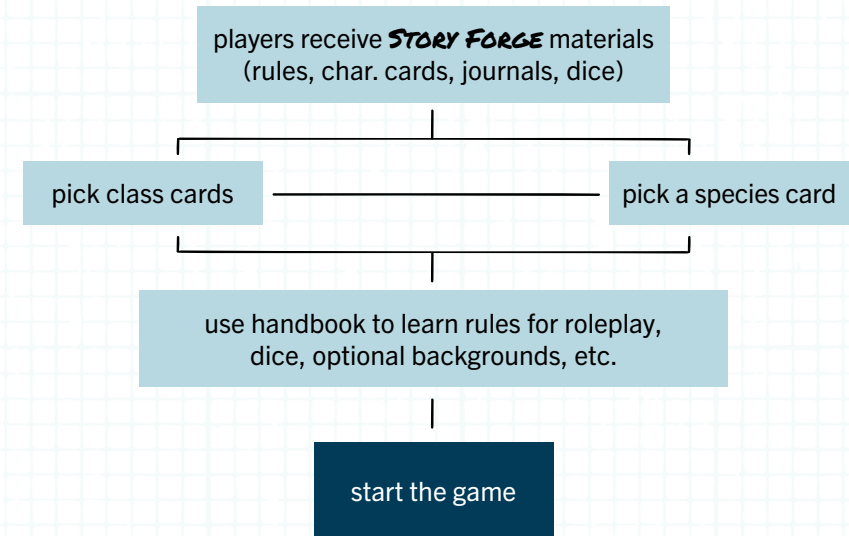
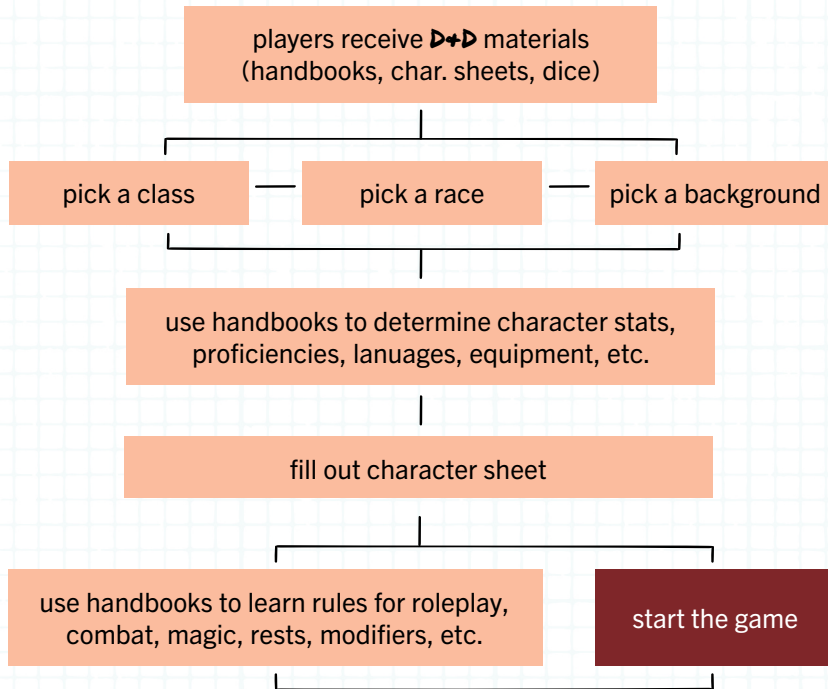


USER TESTING

Our test users included a 6-year-old who was new to RPGs, two adults who were new to RPGs, and two adults who were experienced RPG players.

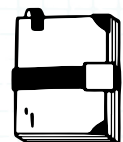
The play-testing sessions gave us valuable feedback on usability and visuals. We added some basic rules to the cards, eliminating the need for players to repeatedly reference the handbook during game play. We also began to structure the handbook based on how our users were intuitively trying to learn the game, read the cards, etc.





CHARACTER CREATION

child (inexperienced): N/A, did not finish
 adults (inexperienced): 45-60 min.
 adults (experienced): 20-25 min.



RULE COMPREHENSION

child (inexperienced): 5 min. before growing bored
 adults (inexperienced): 20 min. for basics
 + in-game explanations
 adults (experienced): 0 min. for basics
 + in-game reminders



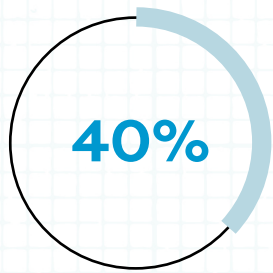
CHARACTER CREATION

child (inexperienced): 4 min.
 adults (inexperienced): 5-8 min.
 adults (experienced): under 2 min.

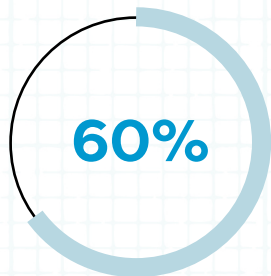


RULE COMPREHENSION

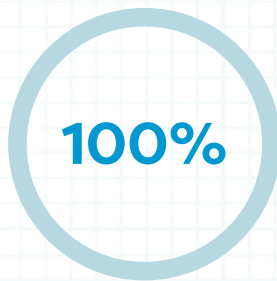
child (inexperienced): 5 min.
 + in-game reminders
 adults (inexperienced): 10 min. for basics
 + in-game reminders
 adults (experienced): under 5 min.



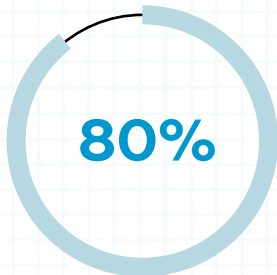
...thought renaming the stats would make them more self-explanatory



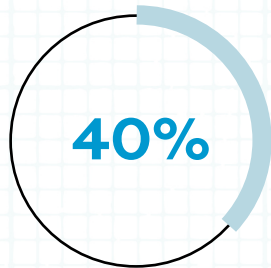
...wanted less words and more visuals/icons



...said our system made character creation easy



...liked the idea of using player journals for notes



...experienced confusion with how weapon attack rolls worked

FEEDBACK

STAT CARDS

- use Health and Armor instead of HP and AC
- don't need Physical, Mental, Social categories written on cards, maybe just in book
- rethink label words on stats (especially Grace, Charm, and Health)

LEVEL CARD

- is "Basic Attack" intuitive enough to eliminate it?
- on Mage card, list "Basic Spell" spell before any nonmagic basic actions
- instructions on how to roll/include modifier for weapon attacks (find somewhere to add basic roll info, possibly under attack description)

SPECIES CARDS

- backs could be the same for all; nonspecific

PLAYER JOURNALS

- need areas for: name, damage, action/spell use per day/turn, background
- dice breakdown (visuals and glossary)
- stay generic, don't color code by class

HANDBOOK

- reading through beforehand or reading during gameplay may affect content order
- quickstart booklet/card?
- setup first, then rules

OTHER

- define "days" / examples of how time can work
- map ideas: whiteboard sheet, laminate sheet pre-printed with terrain, or 2D printed tiles

VISUAL LANGUAGE

Traditional high-fantasy books and games use muted colors, grunge textures, and a variety of display typefaces crammed into small charts and tables. These elements can be overwhelming to new players. Our visuals needed to convey much of the same information but in a more charming, approachable way. We went through several rounds of revision to strike a balance between simple, engaging, fun, and trustworthy.

Our body copy is set in Trade Gothic for versatility and legibility at a small scale. Filson Pro, a bold geometric typeface, emphasizes important numbers and provides playful personality to our wordmark. We also included a clean modern twist on traditional fantasy calligraphy with Permanent Marker. The brushed marker style strategically mirrors our artwork (which was kid-tested and approved).

Colors play a significant role in defining the personality, audience, and structure of our game. The dynamic 5-color palette evokes youthfulness and whimsy, implying a young target audience on first glance. Tints and shades of the 5 colors are purposefully applied to reinforce the hierarchy of information.

STORY FORGE

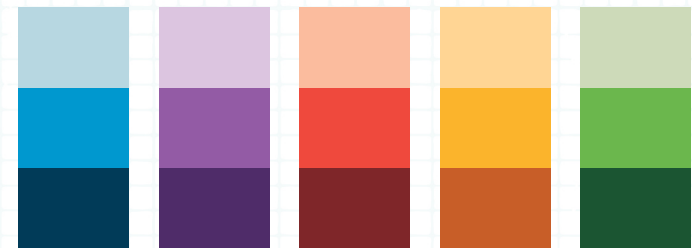
ACT, ROLL, REACT, REPEAT

FILSON PRO BOLD

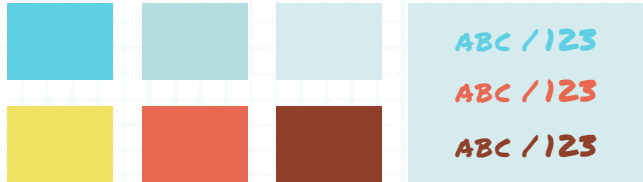
Trade Gothic Next Lt Pro Regular

TRADE GOTHIC LT BOLD CONDENSED NO. 20

PERMANENT MARKER



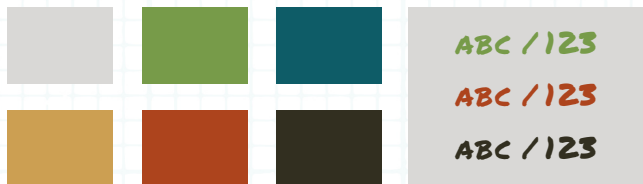
DEVELOPMENT



1 Youthful, fun, modern



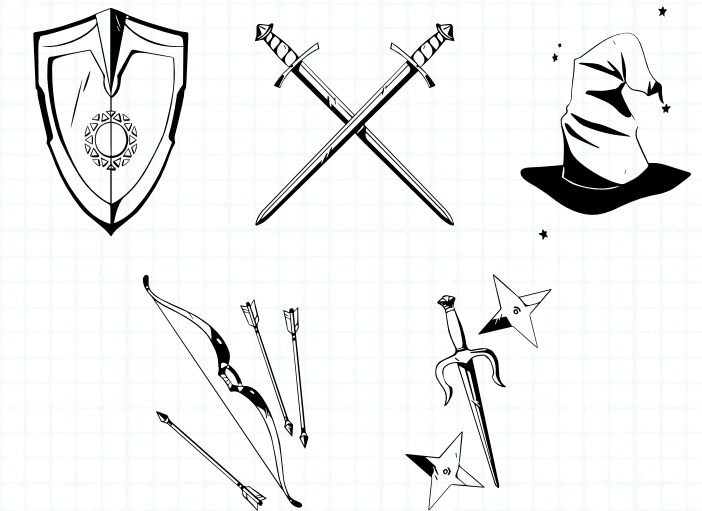
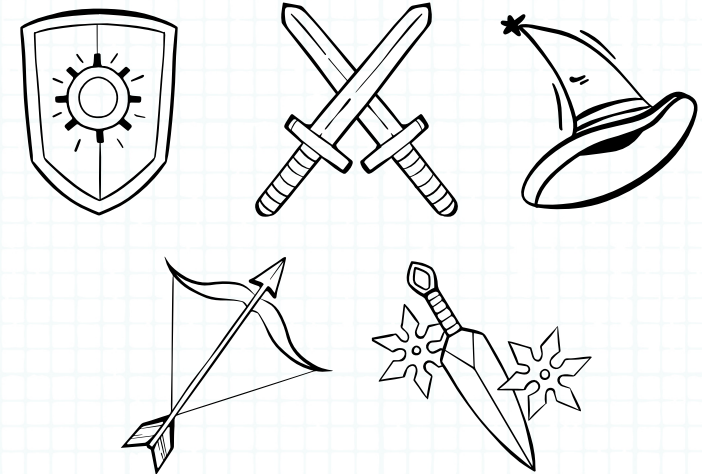
2 Bright, simple, friendly

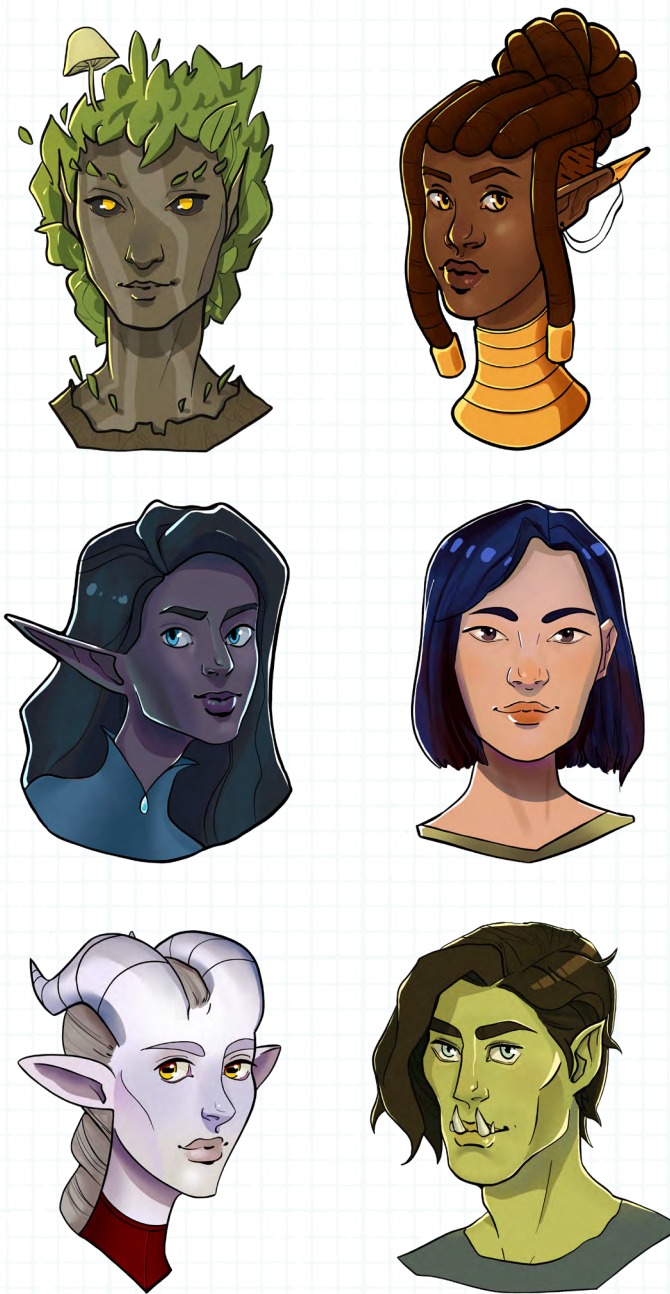
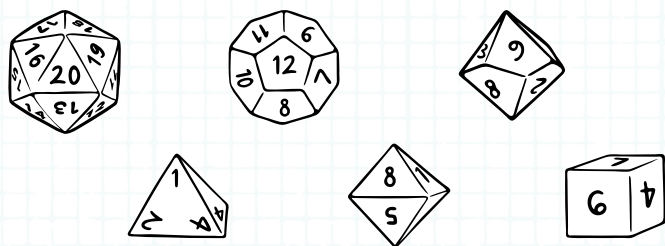
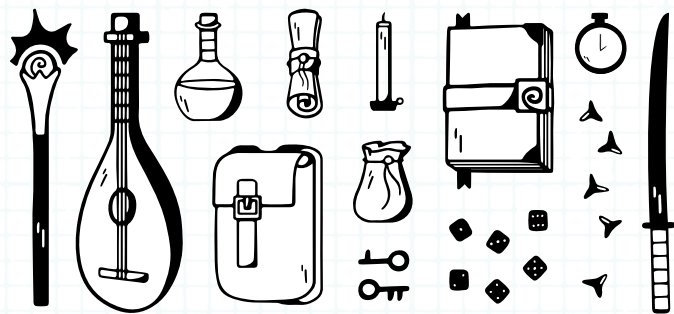
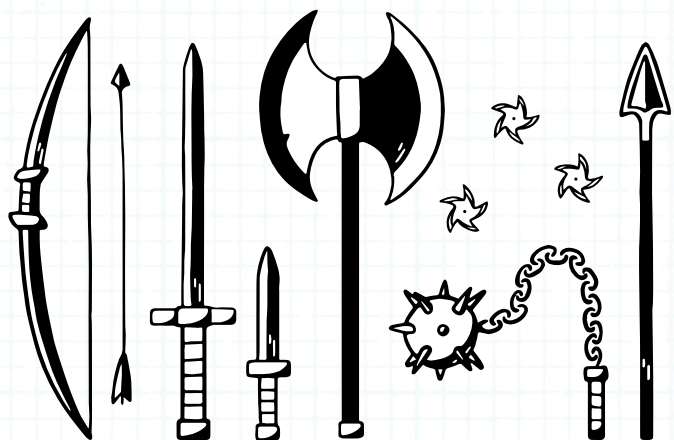


3 Traditional, high-fantasy



4 Dynamic, engaging









PHILOSOPHY

The core idea of our capstone process was simplification and distribution of information. We saw a product with a lot of benefits to offer, but it only existed through the lens of an unintuitive system that made it inaccessible to the people it might benefit the most. To maximize usability, we broke this system down to its basic components and viewed it through the lens of the target users. This is communication design: providing a bridge between people and useful information.

CONCLUSION

Based on our experience, research, and testing, we made *Story Forge* as approachable as possible for new players and kids. Our simplified rules and visuals reduce the learning curve and time commitment of most tabletop RPGs, which makes the creative benefits more accessible to a young audience.

Story Forge includes dice, character cards, player journals, map tiles, and a comprehensive GM handbook. Everything is visually stylized as a modern take on high fantasy. Gameplay itself is structured to promote empathy by rewarding positive social interaction and creative collaboration. Each player can connect with their character as their adventures progress.

