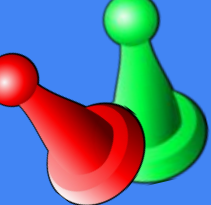


[www.gamestormedu.com](http://www.gamestormedu.com)



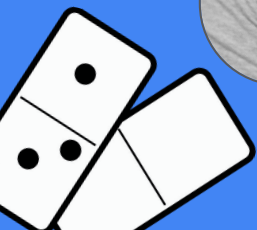


**Jon Spike**

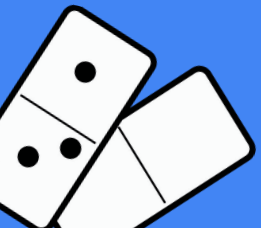
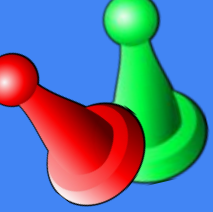
**[thejonspike@gmail.com](mailto:thejonspike@gmail.com)**

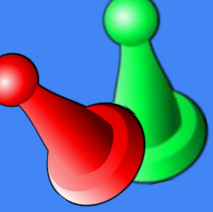
**Coordinator of Instructional  
Technology Integration  
Services**

**UW-Whitewater College of Ed  
[@JonathanSpike](#)**



# Game Designer Template

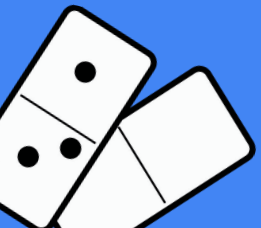




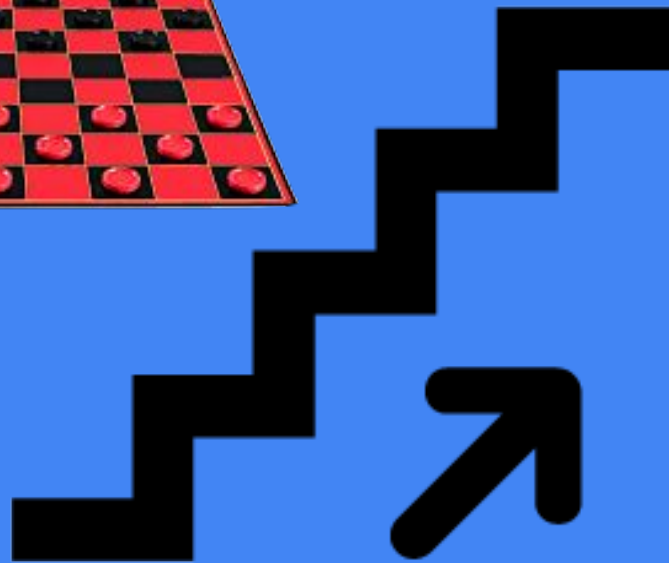
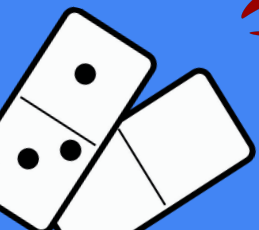
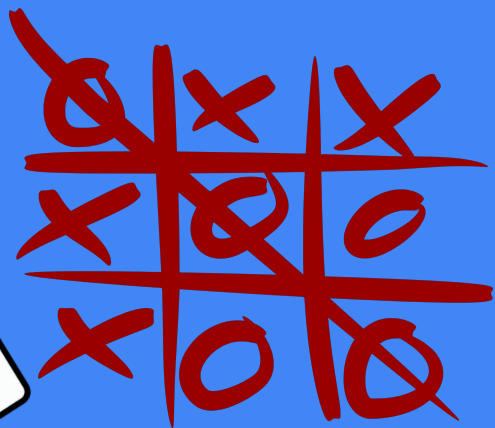
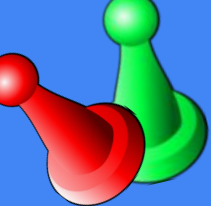
# Why Game Design?

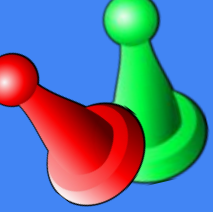


[pollev.com/coeps](http://pollev.com/coeps)



# Remix a Game - Differentiate

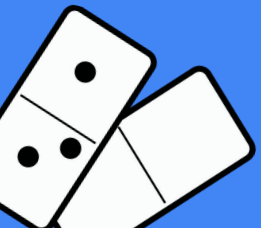


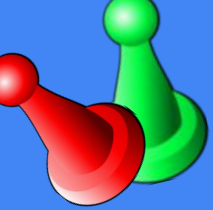


# Remixing a Game



Change the Verbs  
of the Game

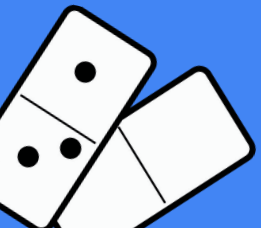




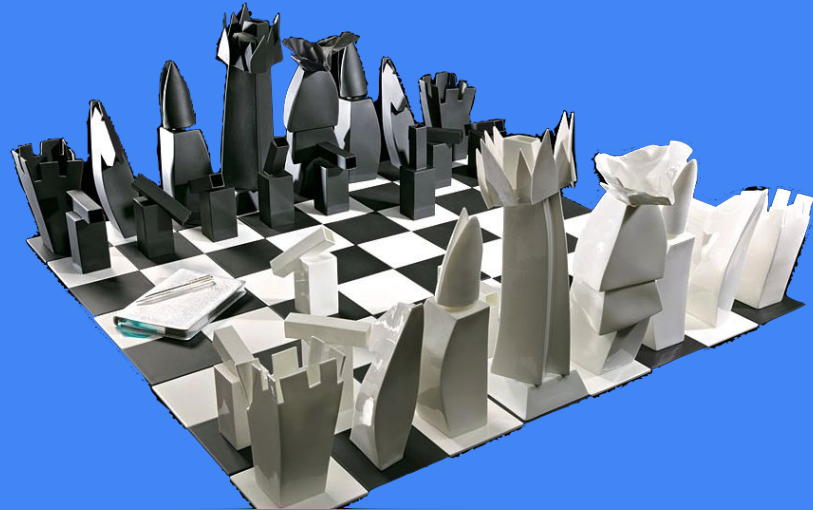
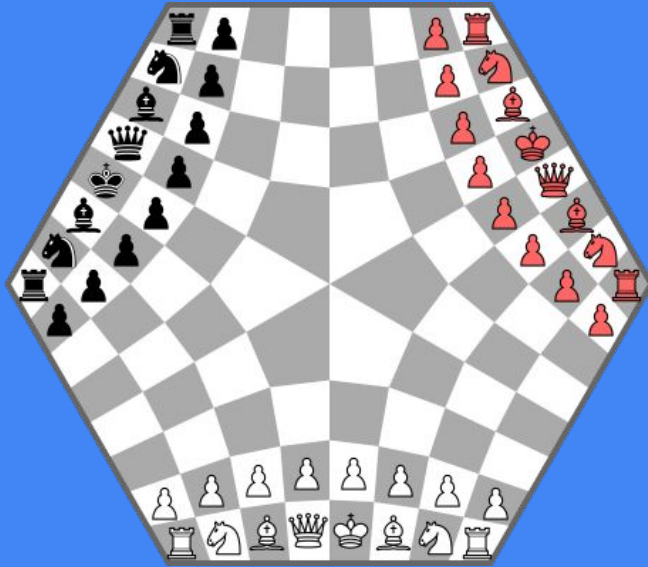
# Remix a Game



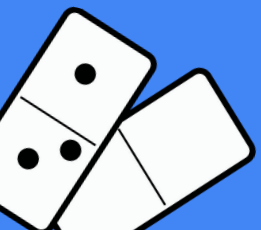
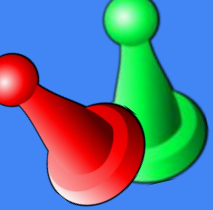
How can we adapt the  
rules/mechanics of an existing  
game?



# Remix a Game

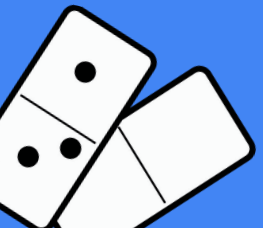
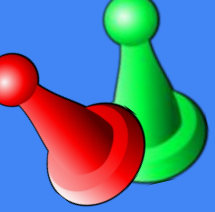


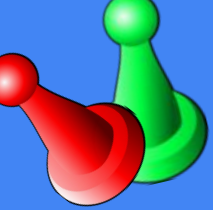
How can we change the mechanics of the game?





# Remix a Game

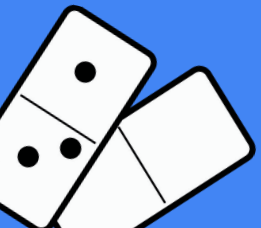




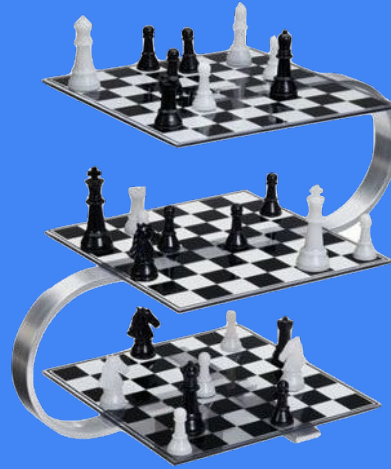
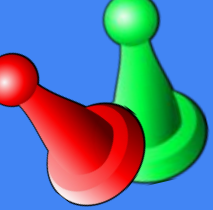
# Remix a Game



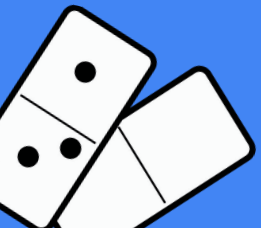
How can we change the  
physical board/play space?



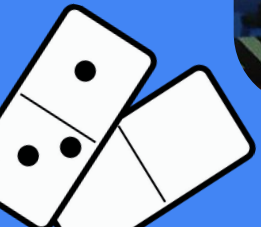
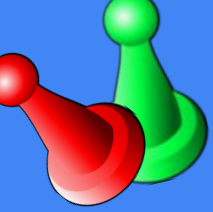
# Remix a Game

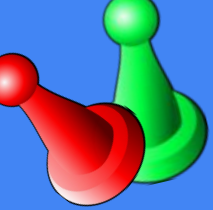


How can we change the  
physical board/play space?



# Remix a Game

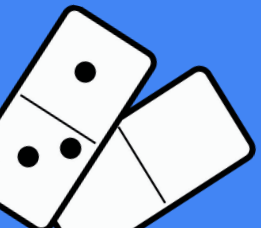




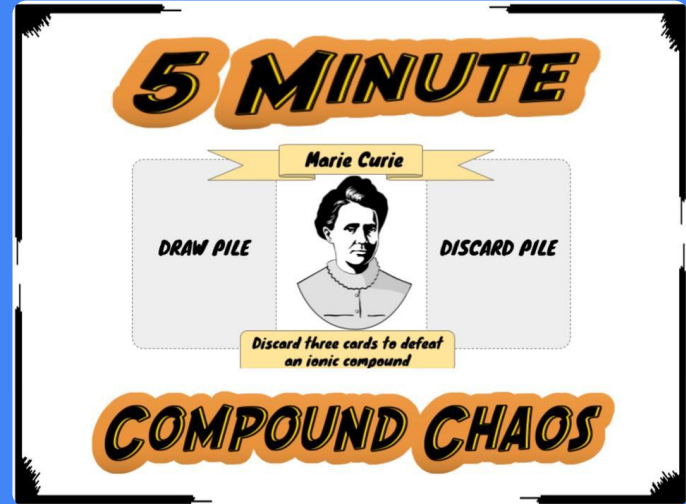
# Remix a Game



How can we change the mechanics of the game?



# Remix a Game

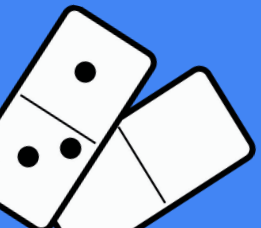
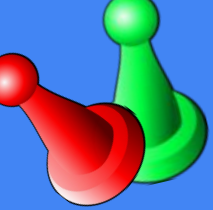


# Remix a Game



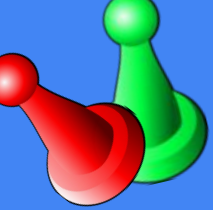
# Gamestormers

## Magic: The Gathering Inspiration

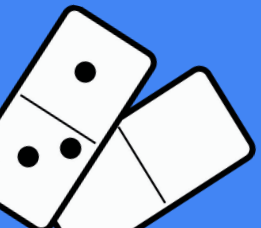




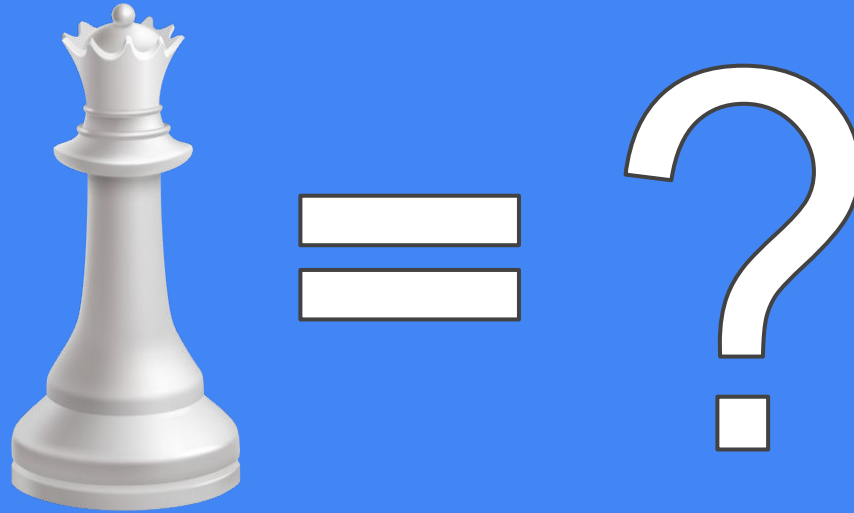
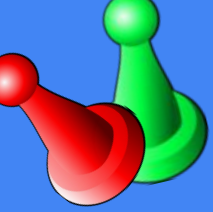
# Reskin a Game



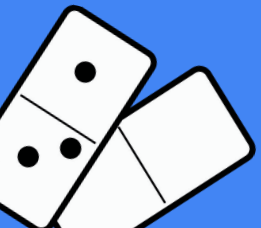
How can we keep a game similar, but change its theme?



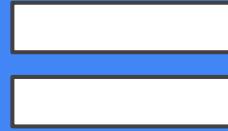
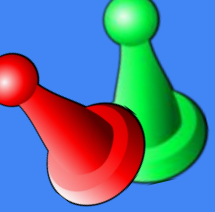
# Reskin a Game



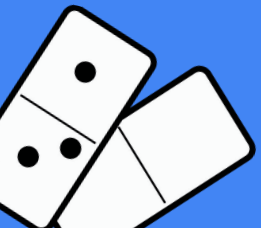
How are the roles/characters  
in a game similar to content?



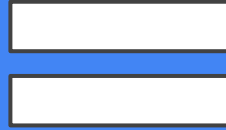
# Chess as Politics



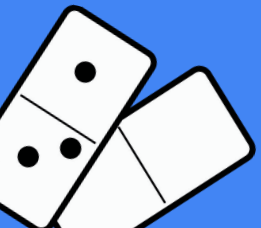
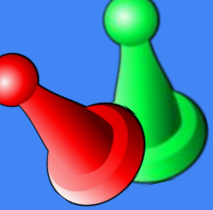
Queen as VP Cheney - actually  
had all of the power instead of  
“king” President Bush



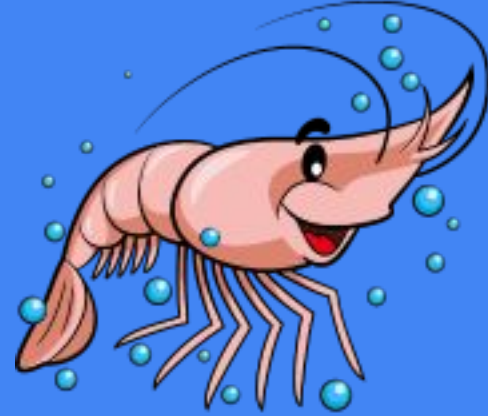
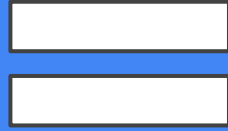
# Chess as Literature



Knight as Romeo & Juliet -  
moves erratically, much like  
their decision-making

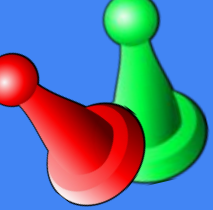


# Chess as Biological Ecosystem

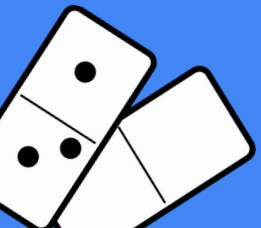


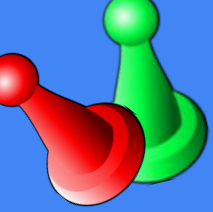
Pawn as Plankton - lowest on  
the food web in the ocean,  
much like pawns

# Reskin a Game



How can we keep a game similar, but change its theme?

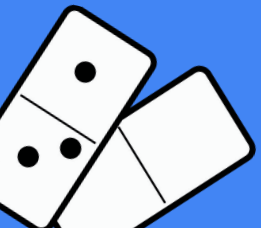


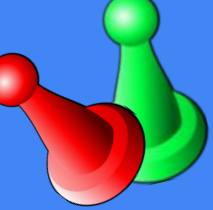


# Backwards Design Approach



Start with end  
goal and work  
forward from  
there!





# 1. Establish Player Goal

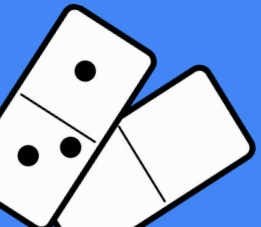
Build the best society

Use math to eliminate enemies

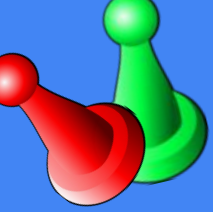
Make the most persuasive argument



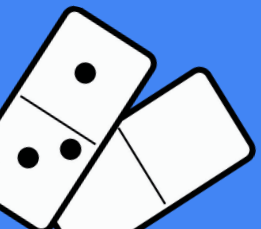
Keep a food chain in balance

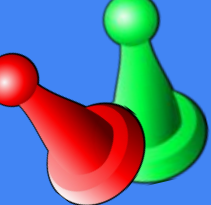






# Establish Player Goal...

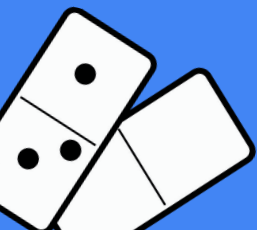


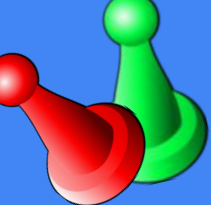


# Sample Game: Knights of the Numeracy Table



Work together to defeat monsters using your decks and purchased cards!





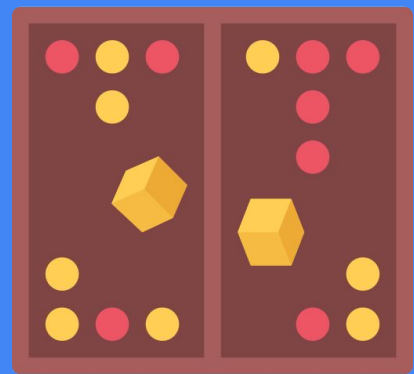
# 2. Determine Game Type



Combat

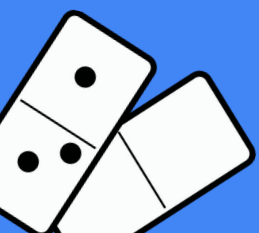
Creative/Party

Cooperation



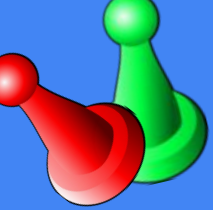
Meeple Placement

Roll and Do



Deck Game





# Deck Games



## Objective:

- \*Start with a deck of cards used to accomplish a goal
- \*Buy new cards to make your deck stronger
- \*Work as a team or play another person

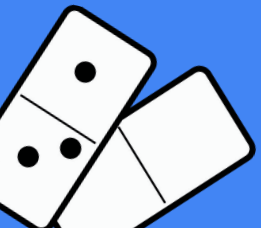


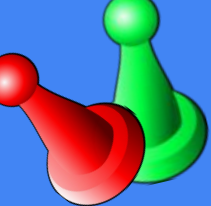
## Great for...

- \*Math - numeracy skills and number sense
- \*Social Studies - famous historical eras and wars
- \*Science - chemicals, ecosystems & more

## Check out...

- \*Clank, Star Realms, Harry Potter: Hogwarts Battle





# Deck Games



## How do I...

\*Generate “currency”  
to get new cards?

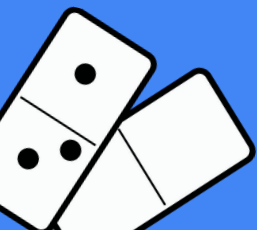
\*Work toward my win  
condition? Take

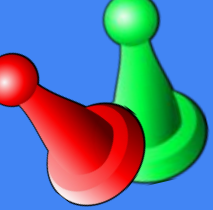
tricks? Deal damage?

Collect sets?

\*Handle mechanics?

Turns? Free-for-all?



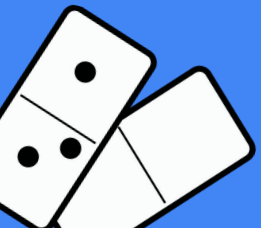


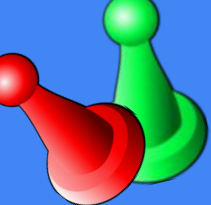
# Deck Building Example



Math - Play cards to add up to totals of enemies on board

Social Studies - Build an industrial empire by playing resources and buying new technology to meet goals



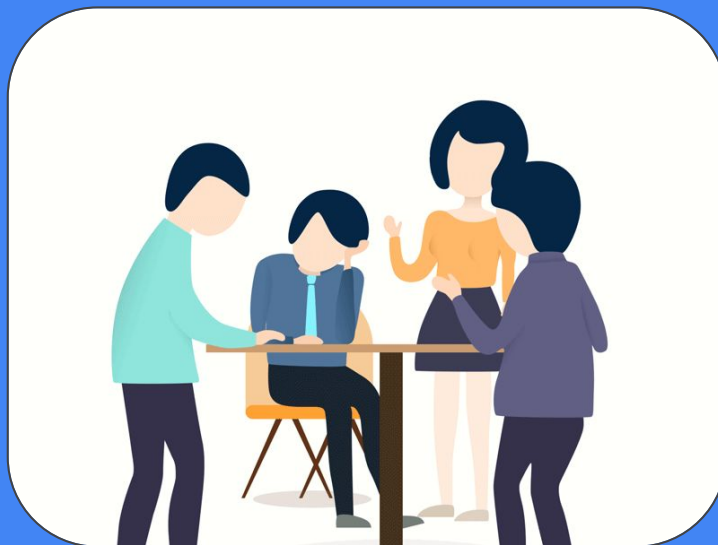


# Creative/Party



## Objective:

- \*Players create original responses to prompts, creatively express answers, or match teammates
- \*Responses could be written, acted, or made

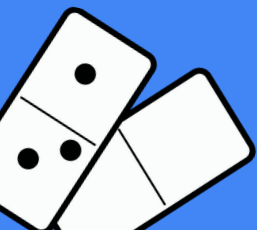


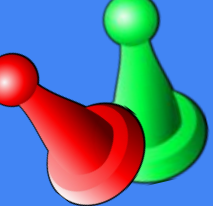
## Great for...

- \*ELA - Vocabulary terms, characters
- \*Social Studies - famous events, historical figures
- \*Science - Species, vocabulary, etc

## Check out...

- \*Balderdash, Codenames, Apples to Apples,



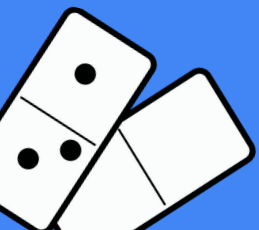


# Creative/Party

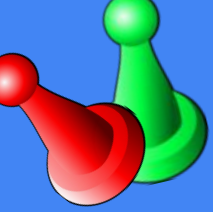


## How do I...

- \*Creatively express my response?
- \*Setup a system to determine a victor?
- \*Handle mechanics?  
Turns? Submissions?  
Teams?





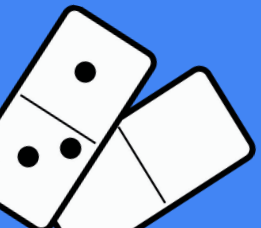


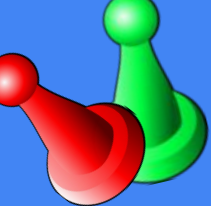
# Creative/Party Example



ELA - Create fake news, tweets, and hoaxes to fool your fellow players making their own

Science - Teams must draw a science term and get their team to guess it using gestures, play-doh, or word association





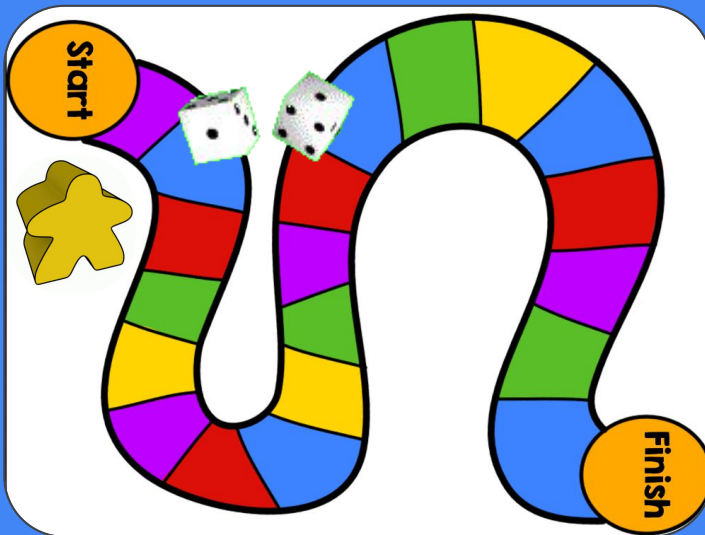
# Roll and Do



## Objective:

\*Be the first to make it to the end of the game board with dice rolls, cards, or another means

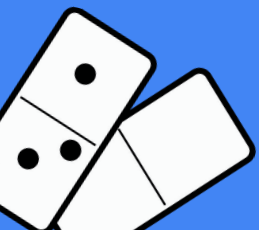
\*Obstacles, opponents, or luck get in the way of success



## Great for...

\*Math - numeracy, equations, etc

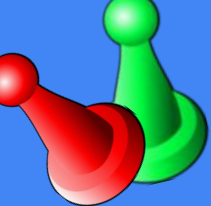
\*ELA - Vocabulary, character, narrative



## Check out...

\*Sorry, The Magic Labyrinth, Zombies!



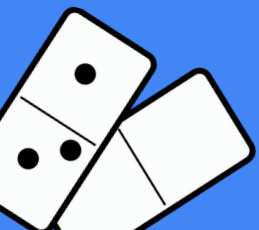
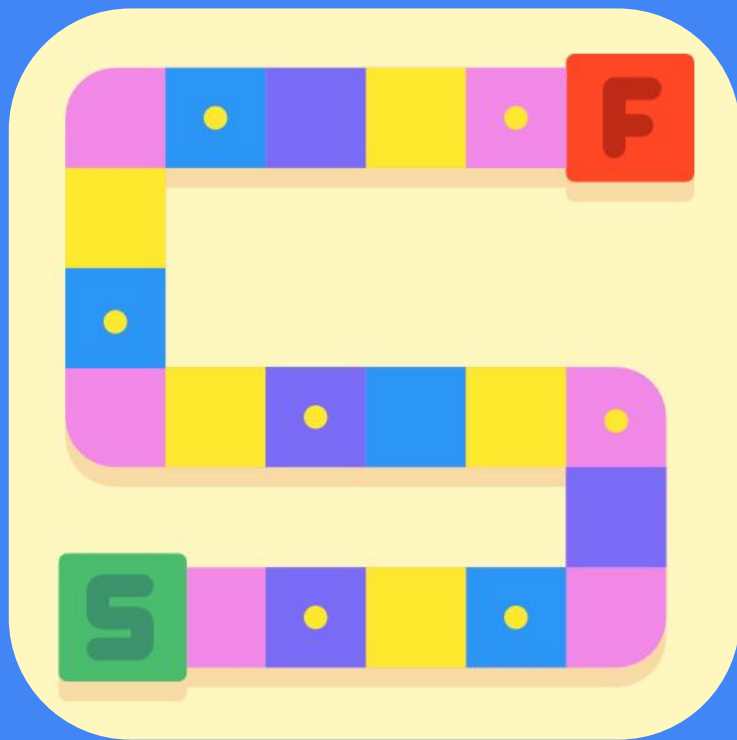


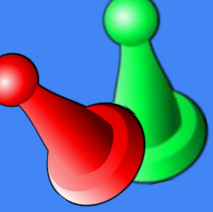
# Roll and Do



## How do I...

- \*Move across the board?  
Random? Barriers to moving?
- \*What events affect movement? Other players?  
Roadblocks?
- \*How many paths to objective? Fixed? Multiple?



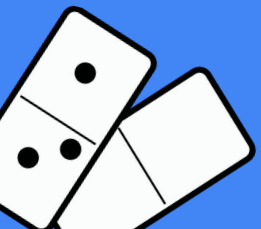


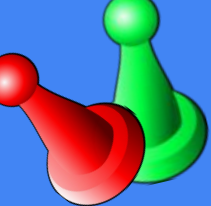
# Roll and Do



Math - Use a combination of dice numbers and math symbols to move forward on a game board

ELA - Move around a board with a story chart to match up your cards with the correct location on the chart





# Meeple Placement



## Objective:

- \*Place pieces on areas to accomplish goals & get resources
- \*Space is limited on the board, so order matters! Resources or goals may be scarce or competitive

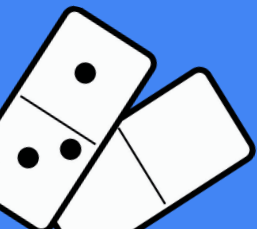


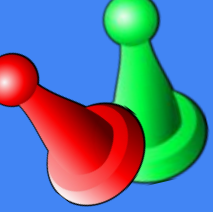
## Great for...

- \*Social Studies - resource scarcity, society & nature, etc
- \*Science - ecosystems, hunters & gatherers, etc

## Check out...

- \*Stone Age, Agricola, Dead of Winter



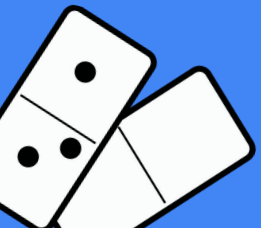


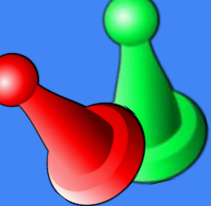
# Meeple Placement Example



Social Studies - Gathering supplies from various natural resources in a society

Science - finding food, water, and shelter in an ecosystem





# Cooperation

## Objective:

- \*Work together to reach a shared goal
- \*Often involves communicating information, sharing resources and planning ahead

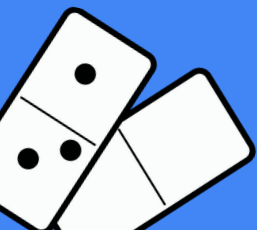


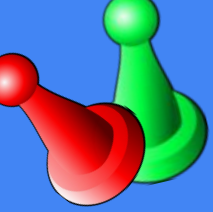
## Great for...

- \*Social Studies - government, nations, societal simulation
- \*Science - Experiments, animal kingdom, etc
- \*ELA - narratives, persuasion, etc

## Check out...

- \*5 Minute Dungeon, Mystery, Pandemic



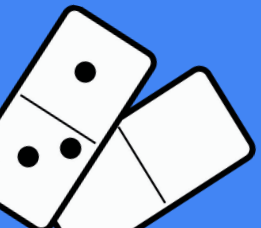


# Cooperation Example

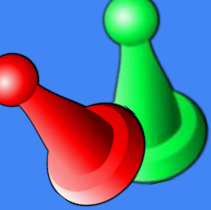


Science - Create chemical compounds by combining like elements as a team

ELA - Each character in a narrative has a specific strength to contribute to solving a common problem in the storyline







# Combat



## Objective:

- \*Players attempt to eliminate each other or another team
- \*Each person usually has health or hit points they must protect/attack

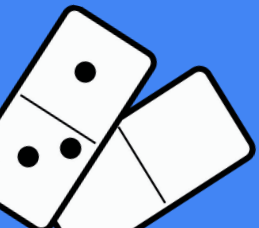


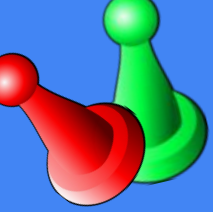
## Great for...

- \*Math - numeracy, number sense
- \*Science - food chain, animal kingdom
- \*Social Studies - famous conflicts, historical figures

## Check out...

- \*King of Tokyo, Coup, Bang: The Dice Game



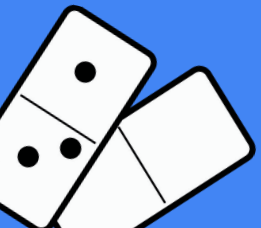


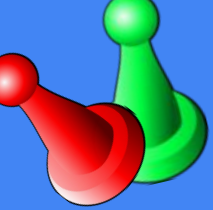
# Combat Example



Math - Use a combination of number cards and math symbols to deplete your opponent's health

Science - Deploy a variety of animals in the food chain to eliminate the other person's based on the food chain





# 3. Develop Key Mechanics

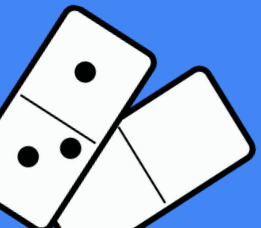


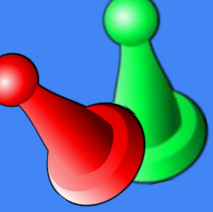
Combine number cards  
to add up to enemy total

Trick others into  
guessing your fake news

Match elements to make  
compounds

Gather enough resource  
cards to meet objective

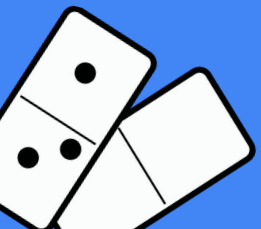


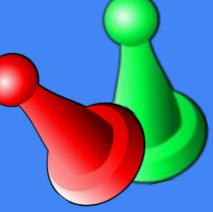


# Other Ways to Brainstorm



If this character/historical figure/famous person was in a story, what would their powers be?

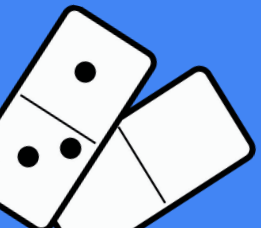


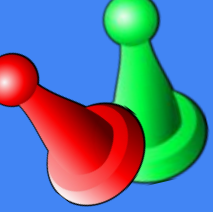


# Other Ways to Brainstorm



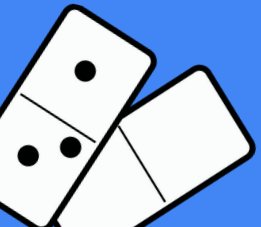
What would be the “currency”  
in a game about this topic?



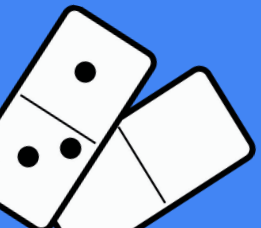
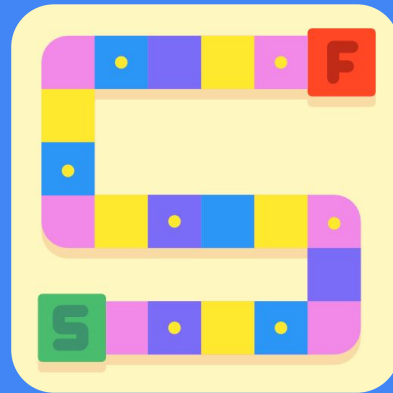
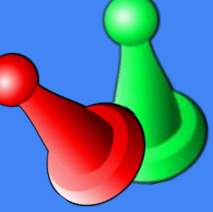


# Other Ways to Brainstorm

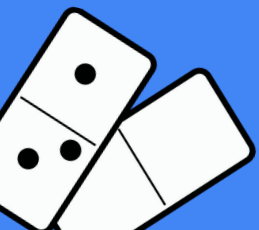
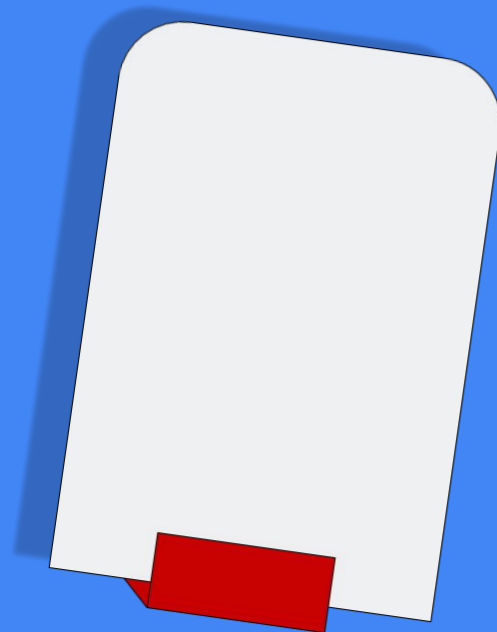
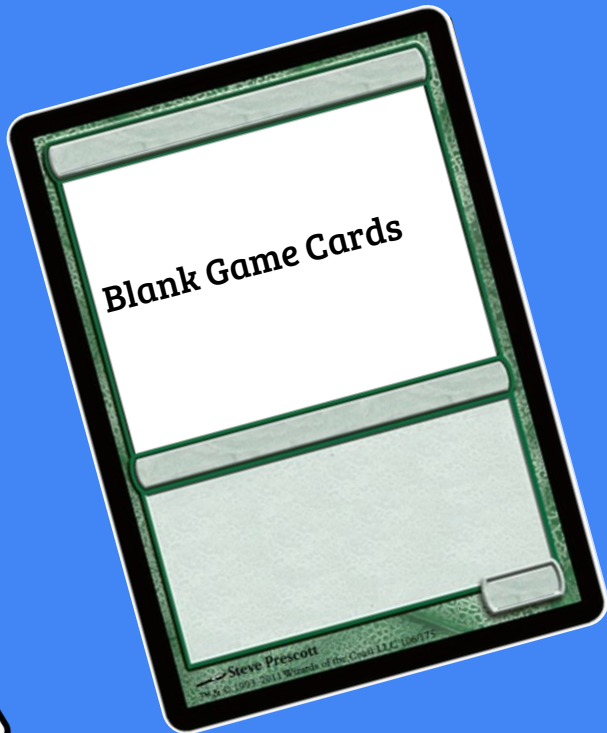
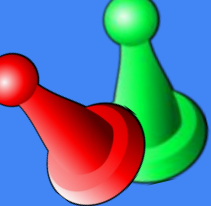
What choices would a player need to make regarding this topic?



# 4. Create Prototype

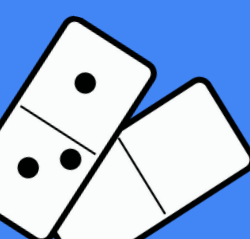
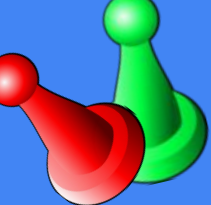
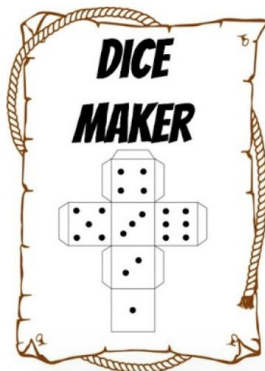
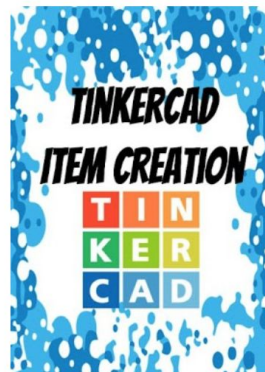


# Resources to Make Games

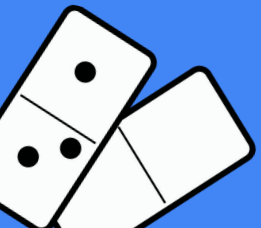
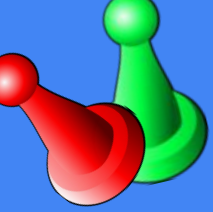


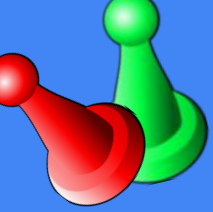


# Resources to Make Games

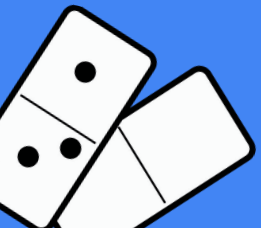


# 5. Playtest

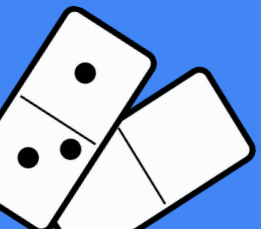
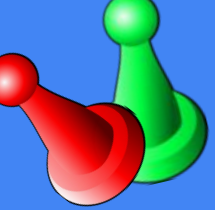
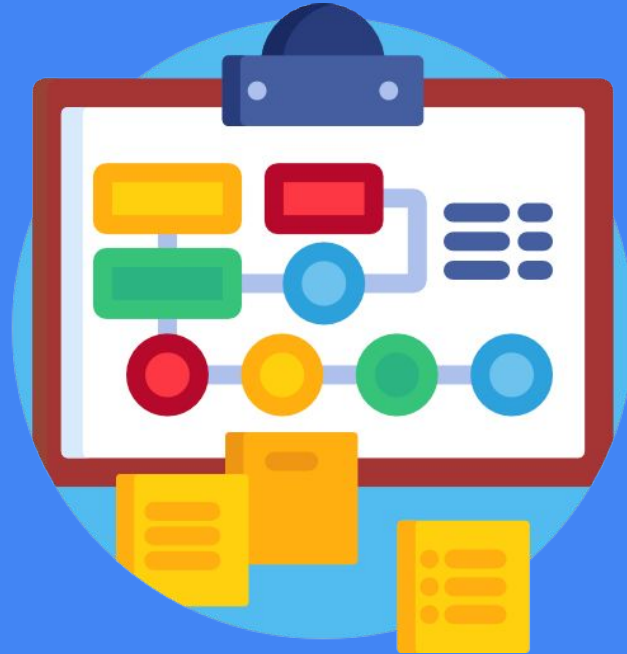




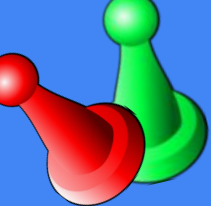
# GameStormEDU Game Template



# 6. Revise Prototype



# Should We Try a Game?



[pollev.com/coeps](http://pollev.com/coeps)

