XpOSURE .

How-to-Play:

PURPOSE

City X needs your team's help on resolving their stay-at-home versus reopening decision for its citizens amid the COVID-19 pandemic.

OBJECT

Travel through the entire game board as individual players, but meet the threshold values for each of the city's bars as a TEAM in order to win the game, and reopen City X.

CREATORS

Judy Chon, Ashley Hong, Josh Moy, Tyler Vu, and Ruizhi Wang

CONTENTS

- [Master Copy] Board Game Slides:
    - https://docs.google.com/presentation/d/1dSjQIif29m0h4gwwrVHviQbRL83LuCHA1rFs8z5EvQY/edit#slide=id.gc1ba334f32_0_43
- Risk Bar Spreadsheet:
    - https://docs.google.com/spreadsheets/d/1HP976rNQFEBenG2qYhn0HEfkErb_MJ3dAc-T42mHqyQ/edit?usp=sharing
- Google Drive Folder
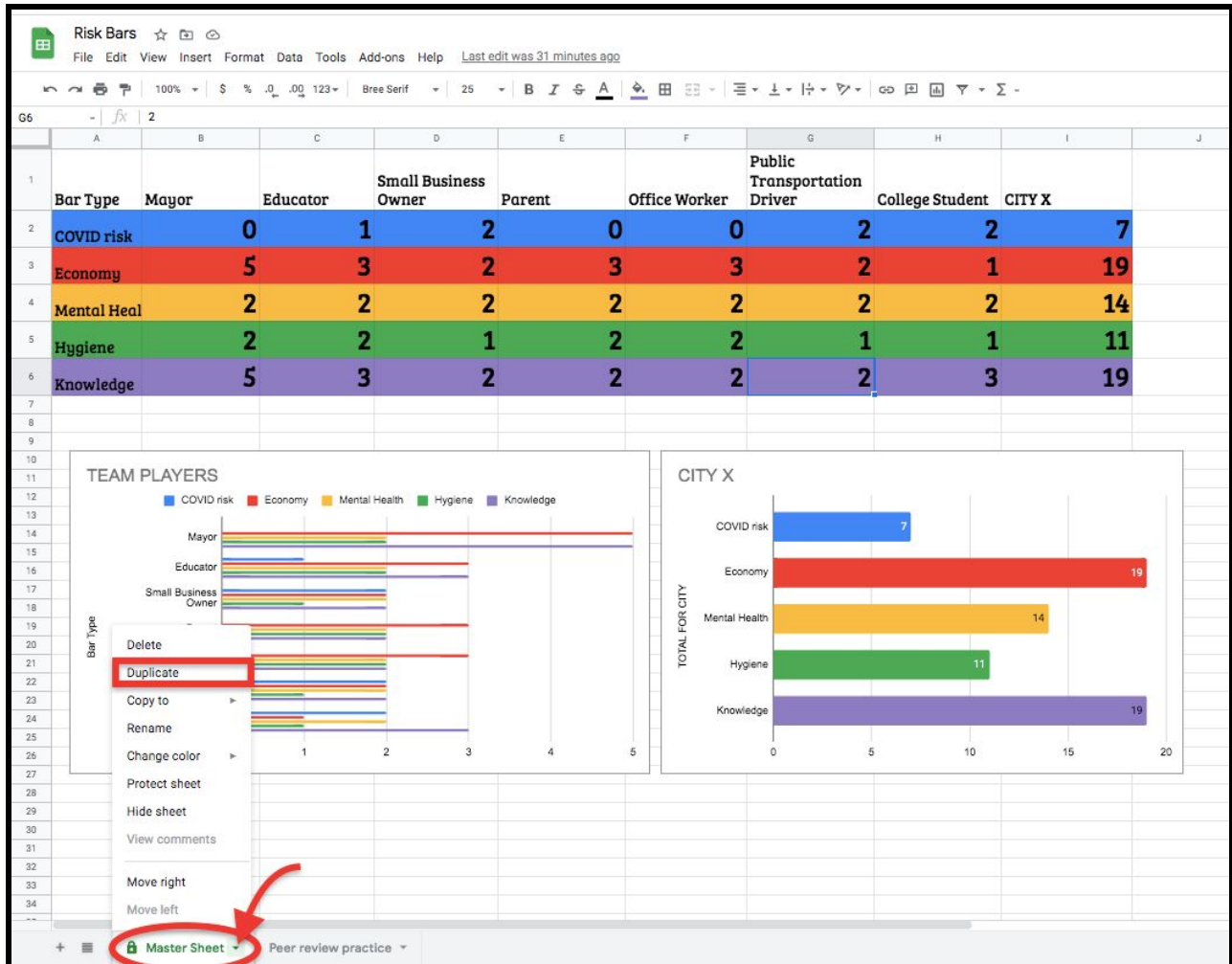   - https://drive.google.com/drive/folders/1YcrzXIezIM9ORkiLkKOy7KqJQzYM7L22?usp=sharing

SETTING UP

- [Master Copy] Board Game Slides - https://docs.google.com/presentation/d/1dSjQIif29m0h4gwwrVHviQbRL83LuCHA1rFs8z5EvQY/edit#slide=id.gc1ba334f32_0_43
    - 1. The link will lead you to a "View Only" form of the Board Game Slides

- ○ **2. Click on the "File" tab, and navigate to the "Make a Copy" option, and select "Entire Presentations"**
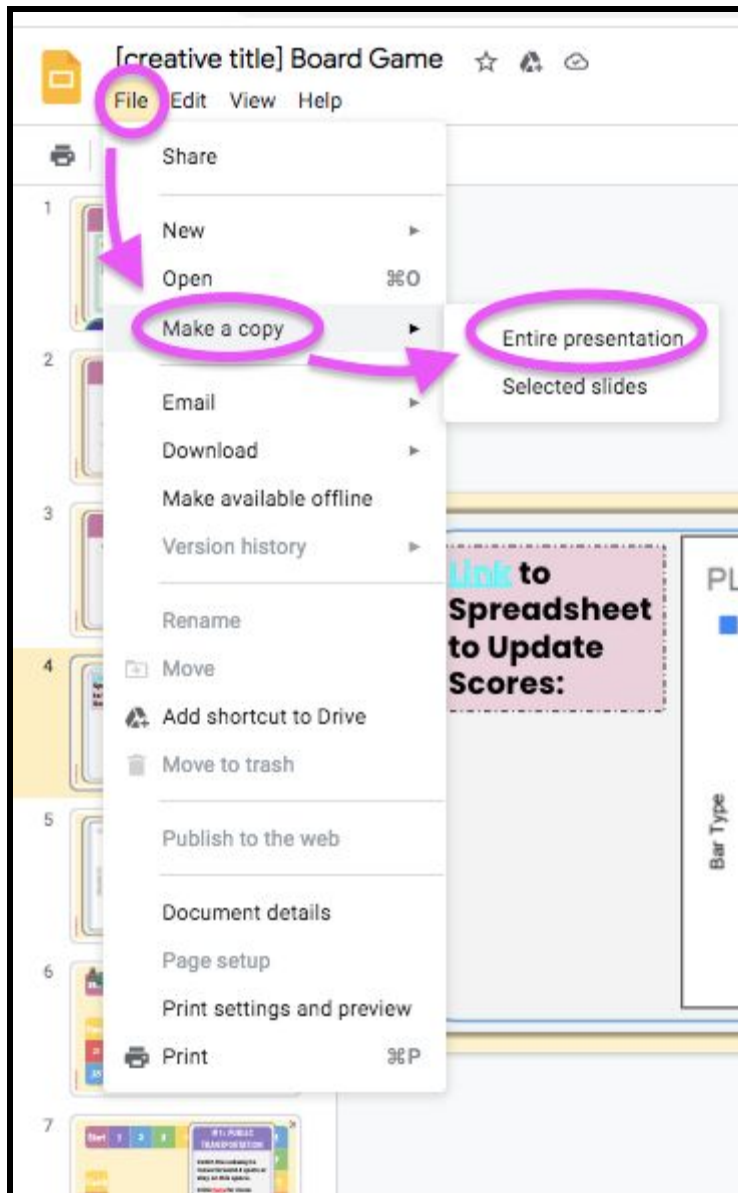

- ○ **3. Now you have your own game board for your team!**
- **Risk Bar Spreadsheet -** https://docs.google.com/spreadsheets/d/1HP976rNQFEBenG2qYhn0HEfkErb_MJ3dAc-T42mHqyQ/edit?usp=sharing
  - ○ **Make a copy of the "Master Sheet" tab found at the bottom of the Google Spreadsheet (Click on the dropdown arrow of the locked "Master Sheet" tab, and select "Duplicate") -- This will represent your team's "scoreboard" throughout the game.**

| Bar Type	Mayor	Educator	Small Business Owner	Parent	Office Worker	Public Transportation Driver	College Student	CITY X
COVID risk	0	1	2	0	0	2	2	7
Economy	5	3	2	3	3	2	1	19
Mental Heal	2	2	2	2	2	2	2	14
Hygiene	2	2	1	2	2	1	1	11
Knowledge	5	3	2	2	2	2	3	19

- ■ (Column B - Column H) Each player has their individual column that corresponds to their individual progress throughout the game.
  - ● Throughout your game, you should return to your individual player's column, and update the respective space.
    - ○ This will automatically propagate in the team bars of Column I
- ■ (Column I) This represents the collective progress of your team as a whole.
  - ● Column I will constitute the 'winning' values at the end of the game, as the purpose of the game is to work as a TEAM.
- ○ When you update your bars' values, this should automatically be reflected on the two graphs found on the copy of your spreadsheet.

-
  - Feel free to change the B1 - H1 cells with your team members' names and roles instead of "Player #."
  - For both graphs on the duplicated tab for your team, you can copy these charts to your copy of the board game slides!
    - 1. Click on the graph.
    - 2. Navigate to the three dot icon at the top right of the graph, and select "Copy chart."
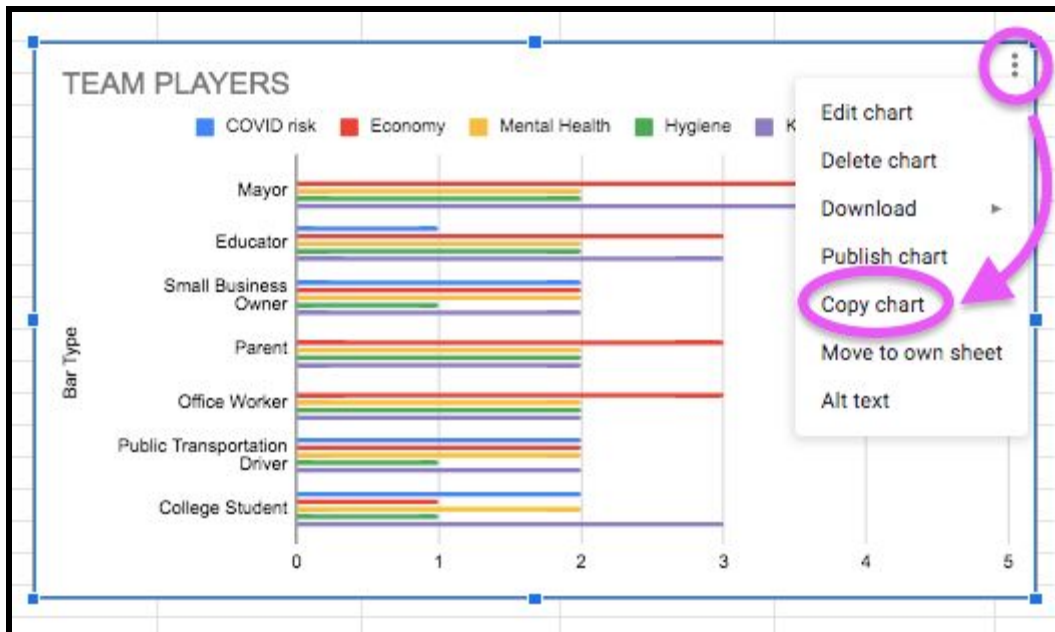
- 3. Paste the respective graph to the respective slides on the Google Slides
  - Slide 4: Individual Players Graph
  - Slide 5: Team Bar Graph
  - Select "Link to spreadsheet" when pasting the chart
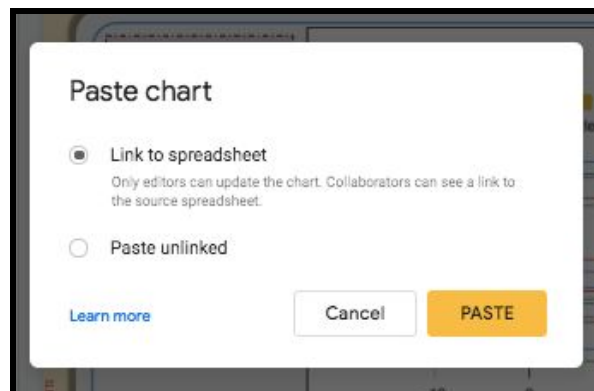
■ 4. Now, whenever you update the cells on the spreadsheet, you can see the updated graph on both the spreadsheet and the game board.
- While both graphs on the spreadsheet automatically update, you will have to manually click on the "Update" option on both graphs in the Google Slides whenever you do update the scores on the spreadsheet.
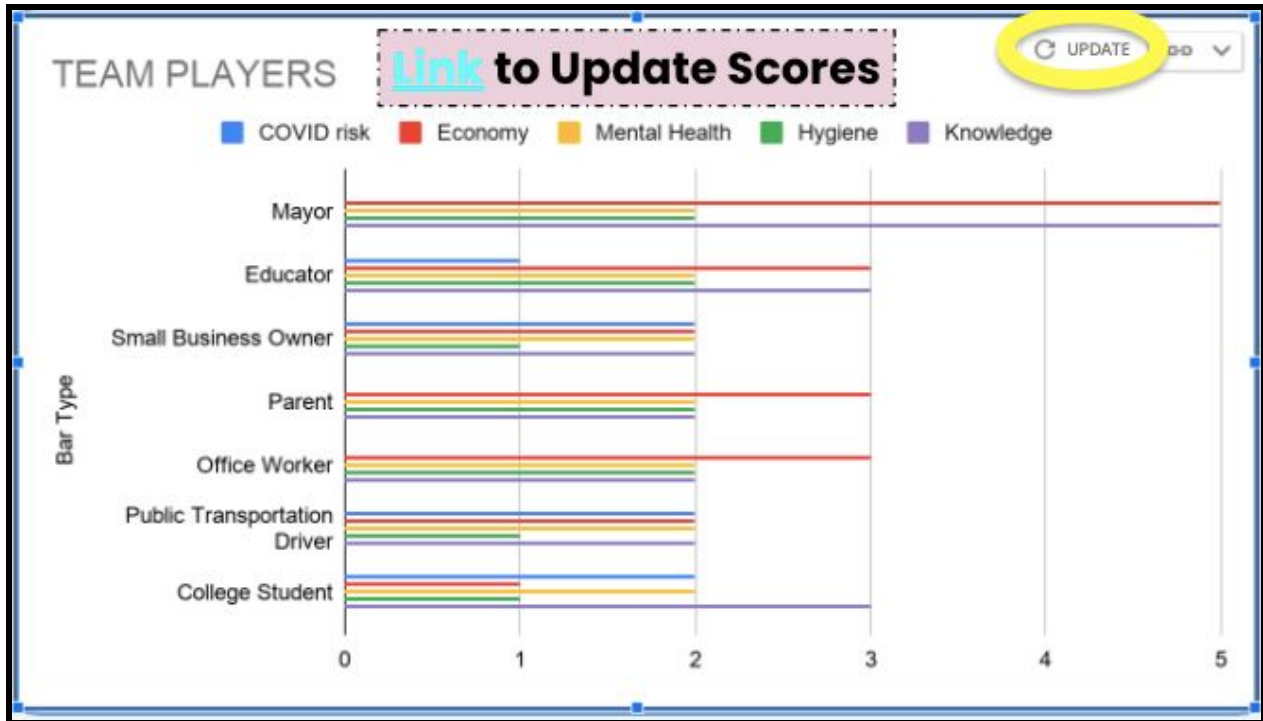
LEARNING OUTCOMES

Through our game, the game board creators wish to relay the message: Stop the "Show and Tell."

Amid the COVID-19 response, there is a concern about how governments and institutions create knowledge and relay information to the public, and how this information manifests in actions taken by the public players. To mitigate fears of COVID-19, there have been "show and tell" acts, such as hygiene theater or even, at times, contact tracing that "lure" -- rather than "protect" -- citizens into the outside society from their homes.

While increasing research and updated CDC guidelines suggest that surface transmission of COVID-19 is not how the virus primarily spends (CDC, 2000), deep cleaning in schools or restaurants and businesses has the public feeling safe -- a "show and tell" -- when the risk of transmission persists. Relaying a sense of false security, the "hygiene theater" thrives (Thompson, 2020; Johns Hopkins Bloomberg School of Public Health, 2020)

So how does COVID-19 spread? The air. There's still much to research and uncover with regards to airborne transmission, as we contrast, for instance, person-to-person transmission from lingering aerosols in the room. And, hand-washing, avoiding face-touching, social distancing or deep cleaning in hospitals are all still important practices to combat the spread of COVID-19 (Thompson, 2020). But, when deciding where to put resources, as money and time, in societal efforts to protect community spread, ventilation and filtration also need to be put at the forefront of attention (Mandavilli, 2020; Morawska et al., 2020).

By exploring the idea of the "hygiene theater" and contact tracing, there are questions in biology and society raised, as an accurate awareness of how the virus acts and spreads has direct implications on the guidelines, as well as interventions and technologies put in place for the safety of the general public. In times of misinformation and uncertainty, the individual is only as powerful as the community that surrounds oneself. In the critical and sensitive interaction between public health and individual health, COVID-19 calls on federal, state, and local officials to uphold policies that will promise real safety -- not a feeling of safety -- of individuals and their communities.

The engines of discovery around COVID-19 that also define the public health prevention efforts around COVID-19 are contingent on bureaucratized actors. However, there is also a paradoxical element. While hygiene theaters may be created by group actors, hygiene theaters are engaged by individualized actors, raising an important mission of our game to not blame the individual, but empower with knowledge and action.

By engaging in our interactive game board with fellow team members, the game board creators wish to relay key information that pertains to COVID risk, economy, mental health, hygiene, and knowledge in an effort to empower players as both citizens of City X in the game, and citizens of their local environment in the real world.

Initial Sources to Explore More:
CDC. (2020, February 11). Coronavirus Disease 2019 (COVID-19). Centers for Disease Control and Prevention.
https://www.cdc.gov/coronavirus/2019-ncov/more/scientific-brief-sars-cov-2.html
Johns Hopkins Bloomberg School of Public Health. (2020, September 28). 167: Hygiene Theater: The Deep Cleaning Performances That Offer Little Protection from COVID-19.
https://www.youtube.com/watch?v=qz6auTh2RnA
Mandavilli, Apoorva. (2020, September 27). How to Keep the Coronavirus at Bay Indoors. The New York Times.
https://www.nytimes.com/2020/09/27/health/coronavirus-transmission-indoors.html?searchResultPosition=1
Morawska, L., Tang, J. W., Bahnfleth, W., Bluyssen, P. M., Boerstra, A., Buonanno, G., Cao, J., Dancer, S., Floto, A., Franchimon, F., Haworth, C., Hogeling, J., Isaxon, C., Jimenez, J. L., Kurnitski, J., Li, Y., Loomans, M., Marks, G., Marr, L. C., … Yao, M. (2020). How can airborne transmission of COVID-19 indoors be minimised? Environment International, 142, 105832. https://doi.org/10.1016/j.envint.2020.105832
Thompson, D. (2020, July 27). Hygiene Theater Is a Huge Waste of Time. The Atlantic.
https://www.theatlantic.com/ideas/archive/2020/07/scourge-hygiene-theater/614599/

- Players will recognize the importance of air ventilation, filtration, and sanitization efforts to prevent the transmission of COVID-19 in restaurants and small businesses. Additionally, the importance of updating or maintaining HVAC units will be addressed.
- Players will be encouraged to consider the impact of COVID-19 on mental health across varying contexts, including physical distancing and stay-at-home orders or stigmatization against those infected with COVID-19. Players will also recognize the role that contact tracing can play in mitigating some of these contexts that harm mental health.
- Players will unpack the central scientific debate of COVID-19 transmission routes that contributed to the development of the hygiene theater.
  - Particularly, players will learn to distinguish surface or fomite transmission from airborne transmission, and become critical of "show and tell" hygiene acts that focus on mitigating surface transmission with little done to reduce risk of airborne transmission.

- Players will understand the role of institutional government centralized and decentralized powers in the COVID-19 response, particularly in considering the debate of school closures versus school reopenings.
  - Players evaluate the consequences of the politicization of the U.S. COVID-19 response amidst different federal, state, and local regulations and authorities. With more than 2000 state, local, and tribal public health departments transitioning from a disorganized, incompetent federal governemnt and administration to a new presidential administration amid a global pandemic, the delicate balance between decentralized and centralized powers is necessary, yet has often been unsuccessful.
- Players will recognize different stakeholders involved in the central debate between reopenings versus physical distance closures.
  - By no means is this debate a simple one, and even when considering schools, we have the interests and perspectives of teachers (and teacher unions), school board officials, intergovernmental officials, parents, teachers, or local communities at play.
- Players will unpack the various safety measures corporations put in place to keep their onground businesses running.
  - Players will learn particularly how businesses use their understanding of risk decision making in people and how they extinguish a person's fear through safety measures such as wiping down surfaces and mandating mask wearing.
- Players will explore the various neural pathways that form in response to risky decision making.
  - Players will see how certain decisions mold the brain and reinforce similar types of behavior amidst the pandemic. They will see how the "appearance" of being safe influences the brain more than "actually" being safe, a predicament highlighted by the hygiene theatre principle.
- Players will understand the basic concept of contact tracing and its importance in controlling/mitigating the spread of future epidemics/pandemics
- Players will play as either an affected individual who will be contacted by contact tracers *or* play as the contact tracer

- - Players will learn the complexities behind contact tracing, including the ethical issues/implications surrounding the concept of contact-tracing-based phone apps/digital technologies
- Players will have learned the general biology knowledge of the virus including virus structure, the transmission pathway, mutation, and how it causes people illness.
- Players will have learned the general biology knowledge of antibiotics including the common antibiotic, and the antibiotic resistance.

GAMEPLAY

- **HOW-TO-WIN:**
 - "Winning" Thresholds for Team Risk Bar Values → City Reopening
    - COVID risk (ranges from negative to positive values; more positive values represent greater COVID risk)
      - +7 points
    - Economy (ranges from zero to positive values; increasing positive values represent a productive economy)
      - +50 points
    - Mental Health (ranges from zero to positive values; increasing positive values represent improving mental health)
      - +60 points
    - Hygiene (ranges from zero to positive values; increasing positive values represent better hygiene)
      - +25-50 points
        - ** To win, your team should not exceed the threshold of +50 in the hygiene bar, as there are not only concerns about antimicrobial resistance, but also our efforts to promote our central message surrounding the hygiene theater.
    - Knowledge (ranges from zero to positive values; increasing positive values represent more knowledge)
      - +60 points
  - As stated in the "Object" of the game above, you will win if your TEAM bars (total of all the individual players' risk bars) meet these specified

threshold values at the end of the game when all players have successfully reached the end of the game board.

- At the end of the game, if your team successfully reopened City X, then you can determine ONE player to have won based on whoever performed the best on all of their individual bars.
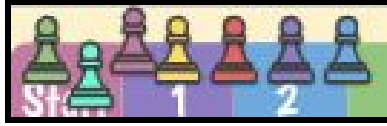
- **PLAYERS:**
  - While this game has been designed to be a 7-player game, you are also welcome to play this game as a team of a minimum of 4 players.
    - Instructions on assigning roles detailed below.
  - Different stakeholders involved in the reopening vs stay-at-home debate:
    - 1) Mayor
    - 2) College student
    - 3) Office worker
    - 4) Public transportation driver
    - 5) Parent
    - 6) Educator
    - 7) Small business owner
  - Assign each player a role - https://drive.google.com/file/d/1kboTcoEpU1P5YCXlHb3Gs96fp2dABCah/view?usp=sharing
    - Each player will be characterized with varying amounts of the different risk bars filled in before proceeding through the game.
    - Select the roll "2 Dice" function on the Game Board, and whoever rolls the highest value will:
      - 1) SELECT their own player role
      - 2) ASSIGN roles to the rest of their team members
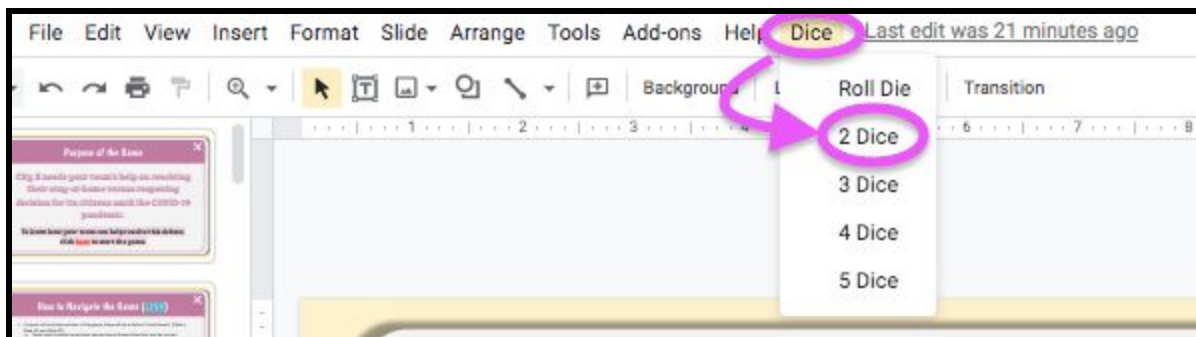
- If you do not have 7 players in your team (but have at least 4 players), select from the following role options:
  - **4 PLAYERS:**
    - 1. Mayor
    - 2. College student / parent / educator
    - 3. Office worker
    - 4. Small business owner
  - **5 PLAYERS:**
    - 1. Mayor
    - 2. College student / parent / educator
    - 3. Office worker
    - 4. Small business owner
    - 5. Public transportation driver
  - **6 PLAYERS:**
    - 1. Mayor
    - 2. College student
    - 3. Parent / educator
    - 4. Office worker
    - 5. Small business owner
    - 6. Public transportation driver
  - **7 PLAYERS:**
    - Each player will be assigned one role.
- If you are playing with 4-6 players, delete their risk bar values in the spreadsheet under any unassigned players BEFORE you start, as shown below:

Bar Type	Mayor - ashley	Educator	Small Business Owner - judy	Parent - ruizhi	Office Worker - tyler	Public Transportation Driver -	College Student -	CITY X
COVID risk	-3		14	0	6			17
Economy	14		15	3	21			53
Mental Heal	13		16	2	20			51
Hygiene	-1		6	2	9			16
Knowledge	5		14	2	14			35

TEAM PLAYERS
COVID risk   Economy   Mental Health   Hygiene   Knowledge

CITY X

- Assign each player a player piece found at the top of each MAIN BOARD slide

  - More information and <mark>PRO-TIP</mark> provided in the following section.

- <mark>**NAVIGATING THE BOARD:**</mark>
  - The three sections of the game board correspond to **THREE KEY PUBLIC SPACES** that have been critical in the response to COVID-19.
    - When you, as an individual player, finish one section, move onto the next public space (i.e. if you finish restaurants/small businesses, then move on to schools).
      - **You do not need to wait for your team players to complete that section of the game board to move on.**
    - For each of the three sections of the game, there will be a distinct <mark>"MAIN BOARD"</mark> (Slide 6, Slide 29, and Slide 52).
      - These main boards have player pieces above these slides that can be moved throughout the main board slides to record your progress.
        - As directed above, assign each player one of these player pieces.
        - <mark>**PRO-TIP:**</mark>
          - Customize your player piece by:
            - 1) Picking your own color!
              - Click on the different parts of each player piece, and change the color of each part.
            - 2) Add a new player piece!
              - You may want to find an image/clip art/etc. from a Google search, and copy and paste this to the MAIN BOARD slides to serve as your unique player piece!

- You can always return to the respective main board by clicking on the top right "X" found on each of the game board space slides.

- For each of the game board space slides (Slides 7-27; Slides 30-50; Slides 53-73), you will follow the directions guided on the activity card.
    - After completing your activity or decision, click the hyperlinked "BACKSIDE" bar to identify how your individual risk bars will be affected from your action.
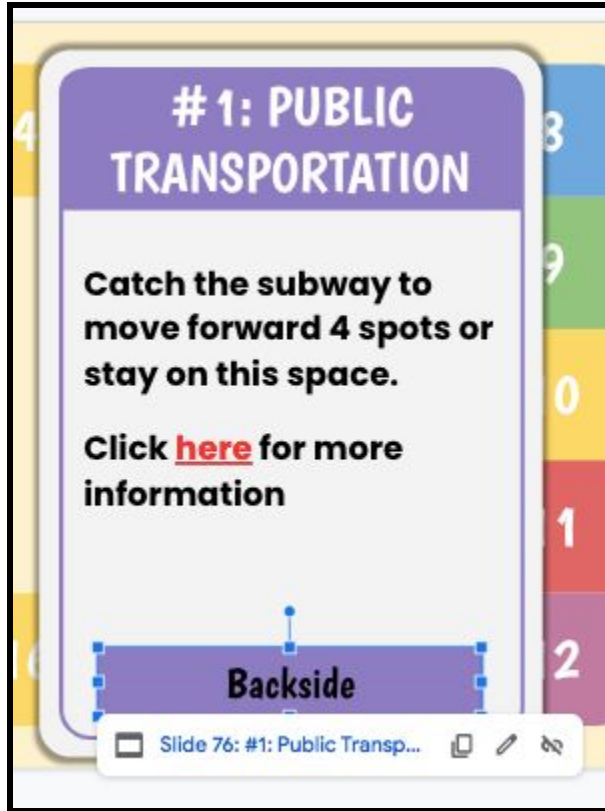
- For each of the "backside" of the card slides (Slides 76-96; Slides 98-118; slides 120-140), you will identify the consequences of your action.
  - After recording these changes to your risk bars in the spreadsheet, you can click on the smaller "X" at the top right of the CARD to return to the "frontside" of the card, or the bigger "X" at the top right of the SLIDE to return to the corresponding main board.
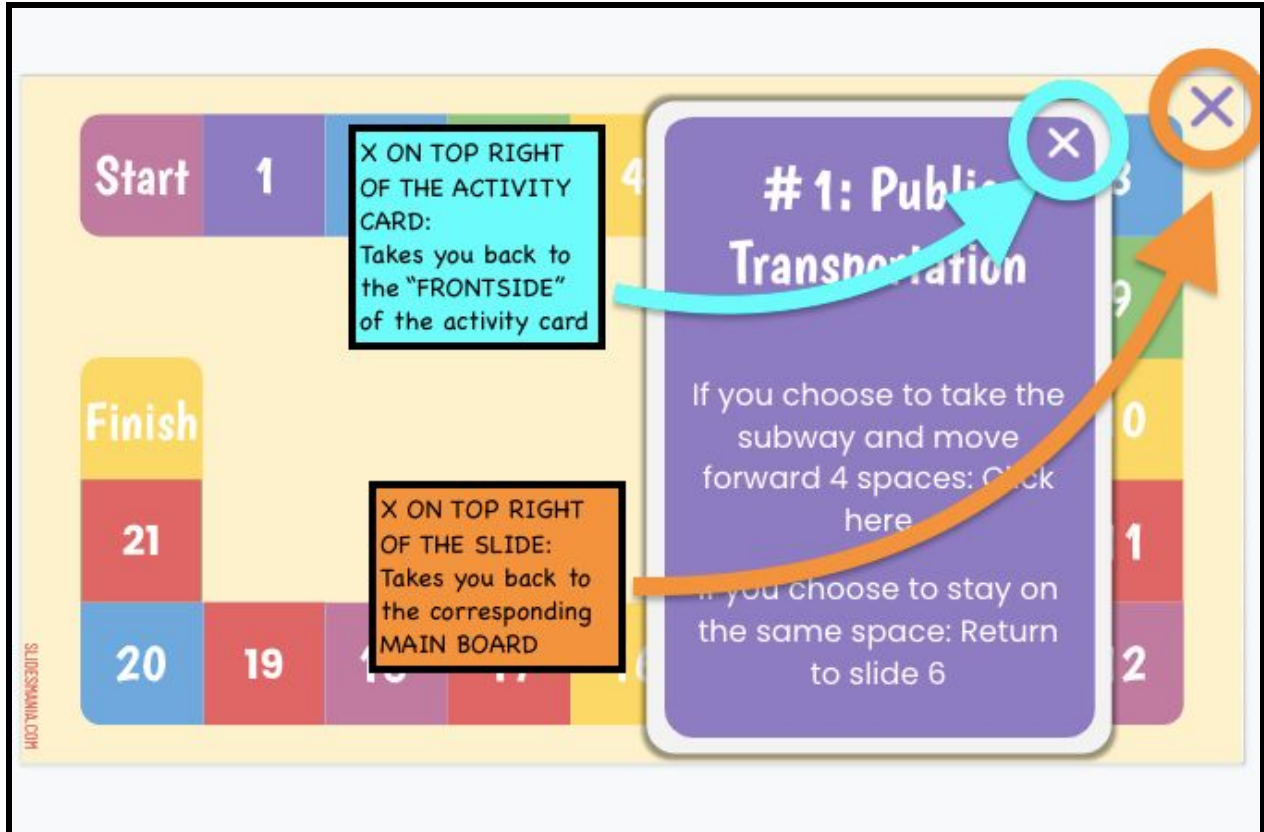
- **WHAT YOU DO ON A TURN:**
  - On your turn, click on the "Dice" tab to roll one die on your turn.
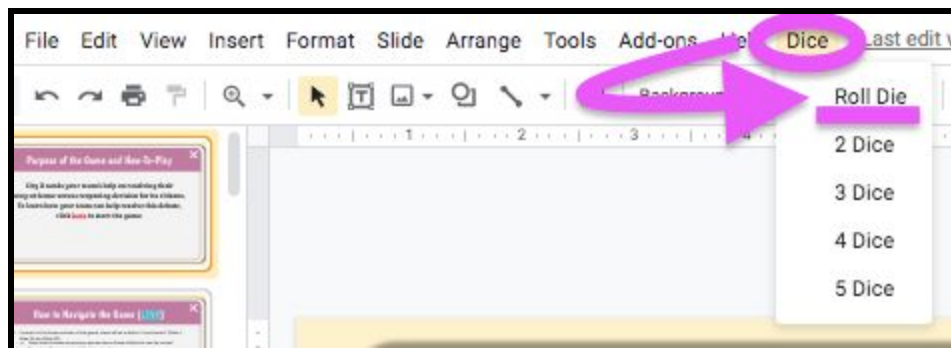
  - **YOU CAN ONLY MOVE FORWARD, AND NOT BACKWARDS.**
  - Before beginning your first round, your team should establish an order for taking turns rolling the die each round.
    - Each player should select the roll "2 Dice" function on the Game Board, and the order for taking turns rolling the die in each round during the game will be established by the chronological order from highest to lowest value.

- For example, if Player 1 rolls a 10, Player 2 rolls a 5, Player 3 rolls a 7, and Player 4 rolls a 2, then the order for taking turns rolling the die in each round would be:
  - 1) Player 1 (10)
  - 2) Player 3 (7)
  - 3) Player 2 (5)
  - 4) Player 4 (2)
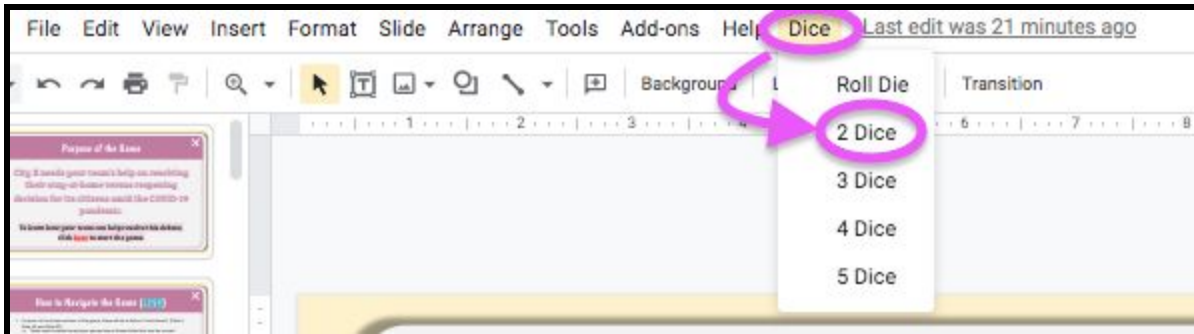
- **THE SPACES:**
  - **Activity Card Colors**
    - **Green** - Collect Resources
      - Collect resources that influence the values of your bars.
    - **Yellow** - Team Activity
      - Come together as a team to work together! All players have to collaborate and complete a "mini-game" or activity
    - **Red**
      - Decision spaces where players have to make an individual decision that can increase/decrease risk bars
    - **Magenta**
      - Checkpoints with contact tracers to assess your COVID risk bar
    - **Purple**
      - Public transportation cards
    - **Blue** Function Cards
      - "COVID breakout"
      - "Vaccination"
  - **Additional Clarification**

- **General Notes:**
  - **Each "Start" and "Finish" space should be regarded as one game space each.
  - **If you land on a card that does not pertain to your specific role, then you may regard this space as a "free space," and proceed through the game.
  - **If you are playing with 4-6 players, and you land on a card that is specific to a role you were unable to assign, then you may regard this space as a "free space," as well, and proceed through the game.
  - ****PRO-TIP**: You may want to have a "banker" system (think Monopoly!) where one player (perhaps the Mayor) is responsible for sharing screen on Zoom, and updating scores for each player after each turn. However, we also value the honor system, so feel free to simply have each player update their own scores after each turn!
- **Team Activity Card:**
  - **Regardless of where every team member may be located in the game board, when a team member lands on the yellow "Team Activity" space, the entire team should come together to complete this activity.
  - **If one team member has already landed on a yellow "Team Activity" space in a previous round, then the following team members who may land on this same space may regard this as a "free space."
  - **If a player reaches the end of the gameboard (finished with all three sections) OR a player is sitting out due to a COVID Breakout Card/Contact Tracing Card, then the only things that will change their bar values are the Team Activity points.

Make sure to get on a group call for your team, and you're set to start Xposure now. The remaining information will have to be learned as you play…
Best of Luck to Your Team in Reopening City X!