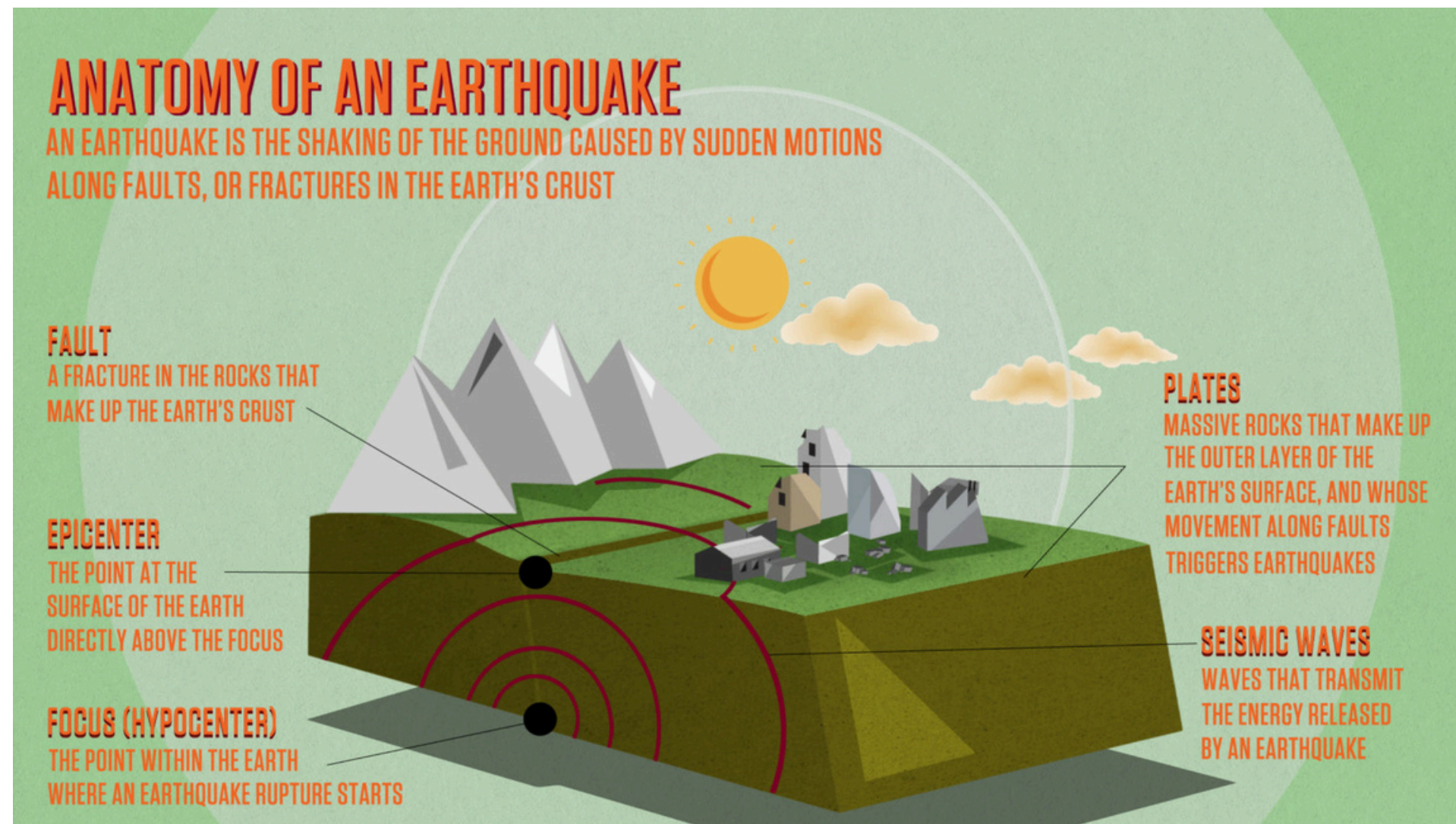


TECTONIC!

Keep Calm and Quake On!

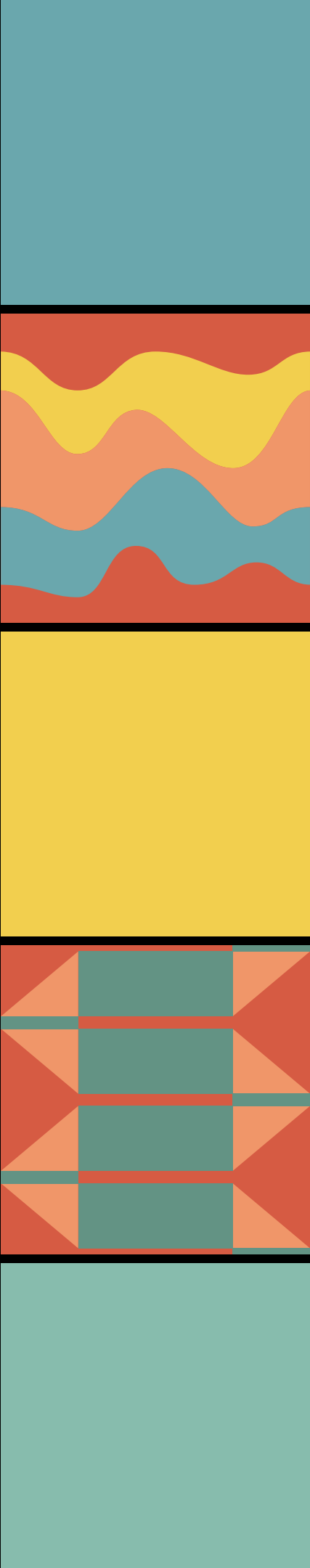


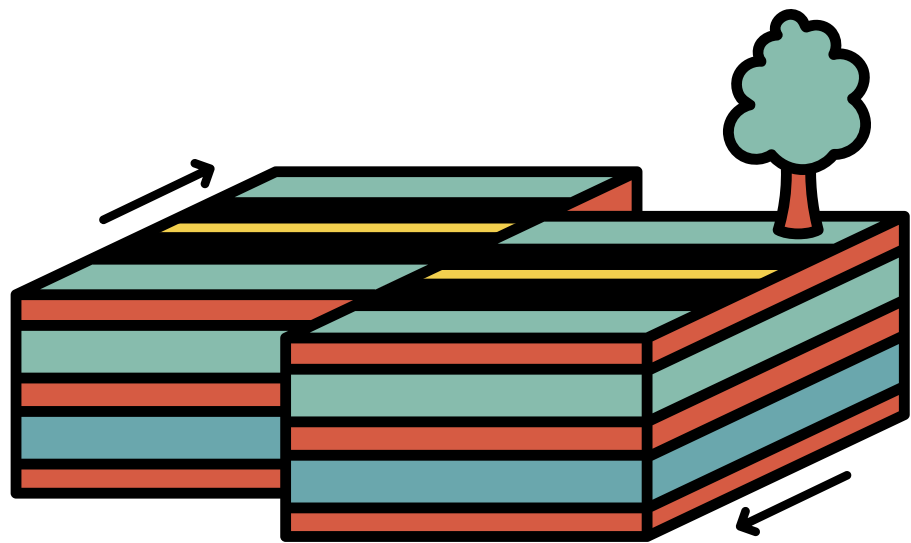
By: Priyanshu Pokhrel, Bella Balmaseda, & Olina Jin



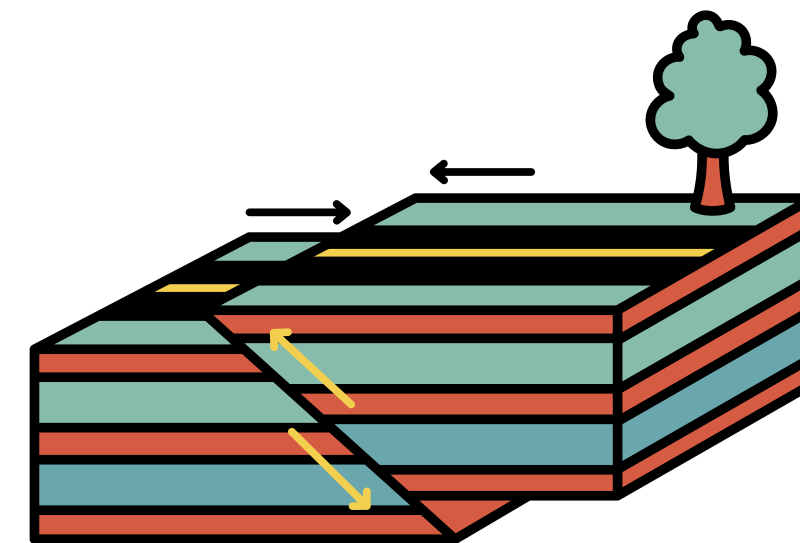
Oh no! A scientist has predicted that an earthquake (a possible 6.0+ on the Richter Scale) will hit your city.

In *Tectonic*, a collaborative survival card game with role play elements, you must simultaneously work together with your community to survive this disaster by sharing resources and boosting community morale. In your efforts to rebuild the city, you must endure three stages of the earthquake – bracing, survival, and rehabilitation.





Quick Facts!



13+

The minimum age of
our intended audience.

6

Preferred number of
players

45

Approximate full
gameplay time in
minutes

THREE STAGES OF THE GAME



Bracing
stage

Bracing

The city is preparing for an upcoming earthquake.



Survival
stage

Survival

The quake hits and lives are at stake.



Rehabilitation
stage

Rehabilitation

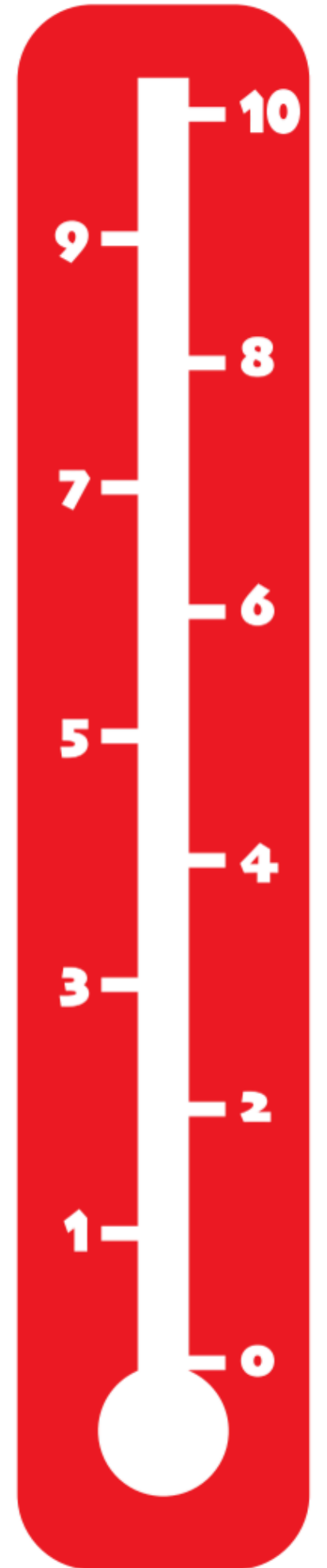
The ground stops shaking but there's a lot of damage to handle.

Game Board



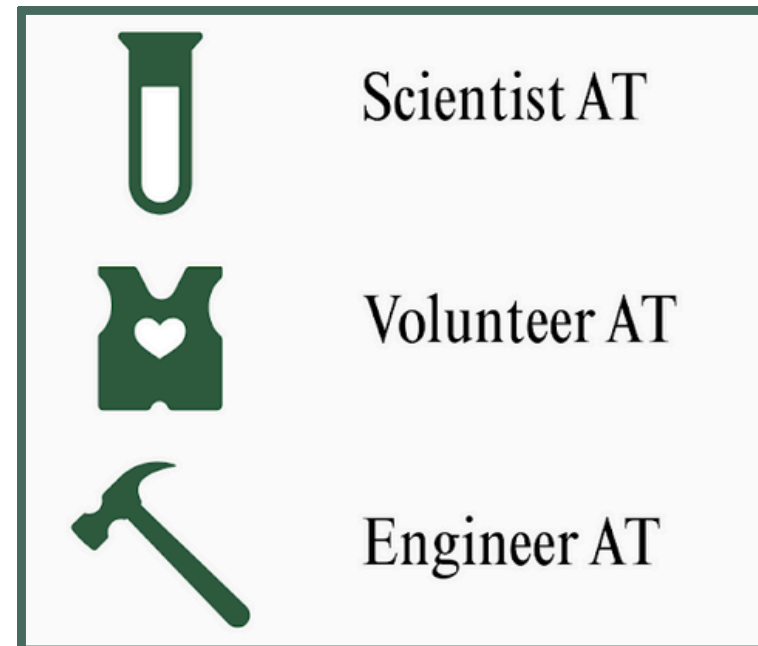
Community Morale Meter

- Players must maintain their community's morale (measured by the meter) as they move through the game
- Actions and outcomes from the situation cards can + or - affect morale
 - +: tackle harmful situations successfully
 - -: fail to address disaster well
- Start of Bracing Stage
 - The morale meter must be placed at the lowest level of 0
- Between Bracing and Survival Stages
 - The morale meter must be lowered by 2 as a result of the earthquake
- During Rehabilitation Stage
 - If morale is ever at a 3 or below, players aren't allowed to use their role abilities
 - Actions can only include rolling D6 until the morale is boosted above 3
- Morale affects the win conditions
 - A morale level of 6 or above is the threshold for winning



Ability Tokens

- Engineer: 4 tokens WG
- Mayor: 3 tokens WG
- Community Organizer: 3 tokens WG
- Doctor: 4 tokens WG
- Scientist: 1 token PS
- Firefighter: 3 tokens (Surv. Stage only)



Resource Kits

Starting Kits:

- Doctor: 2 Medical
- Scientist: 1 Food
- Mayor: 1 Food, 1 Repair, 1 Medical
- Engineer: 1 Repair
- Community Organizer: 1 Food
- Firefighter: 2 Rescue



Role Cards

These are the roles the members of your team will play as you move through the game. Each role has a special ability and specific resource kits that are allotted to them.

Doctor



You provide essential medical care during disasters. You assess injuries, stabilize patients, manage limited medical supplies, and help reduce community panic by offering accurate health information.

Available Kits & Tokens



1 Medical kit to start



4 Ability Tokens per game

When using a Medical Kit, the Doctor may spend 1 token to add +1 community morale.

- Doctor – treats immediate medical needs and addresses long-term public health concerns
- Scientist – analyzes magnitude and location of the earthquake using seismic data
- Mayor – politically leads the city through the disaster preparations and events
- Firefighter – acts as emergency responder and extinguishes fires
- Engineer – assesses buildings and city infrastructure for structural damages
- Community Organizer – works as an advocate and communicates with the public

Difficulty Levels

Easy

4 cards per stage

Medium

6 cards per stage

Hard

8 cards per stage

Situation Cards

Every Situation Card presents a problem the community faces. After reading the card text, the players must decide how to respond.

Each card will consist of:

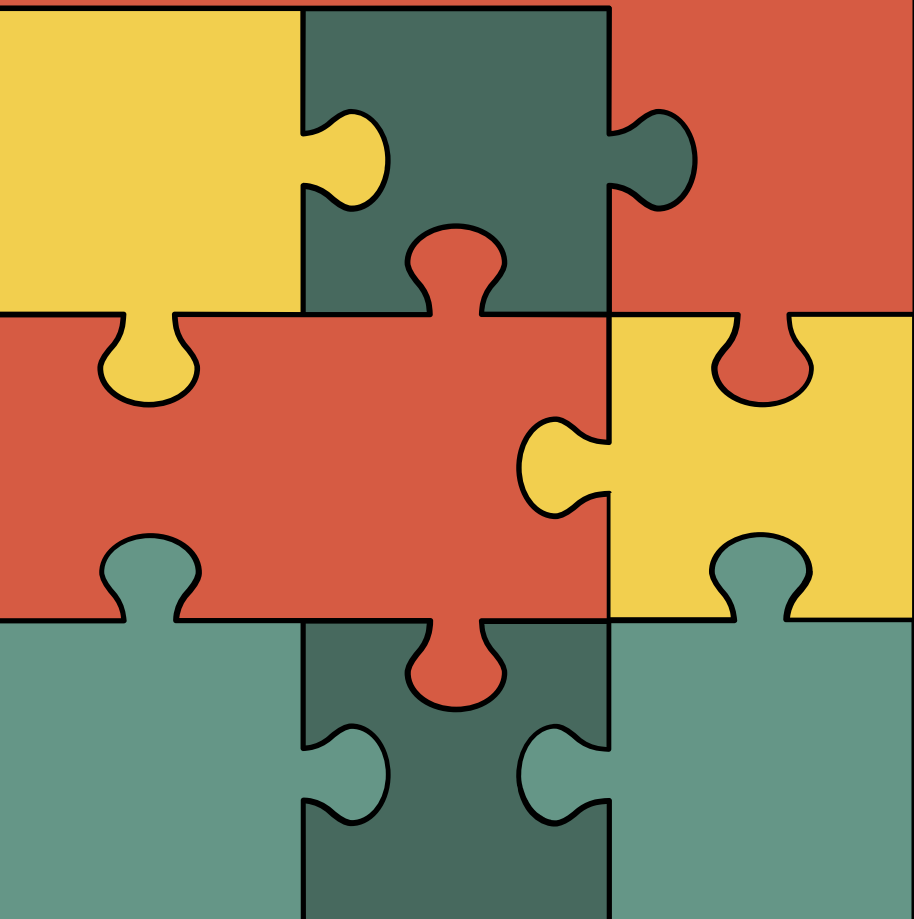
- Situation
- Actions
 - Spend the required kit
 - Roll the D6
 - Spend an ability token
- Outcome

After choosing an action, you will have a set of consequences described on the card including successful repairs, cleared hazards, lost/gained resources, added/removed cards for the next stage, and increase/decrease in community morale.



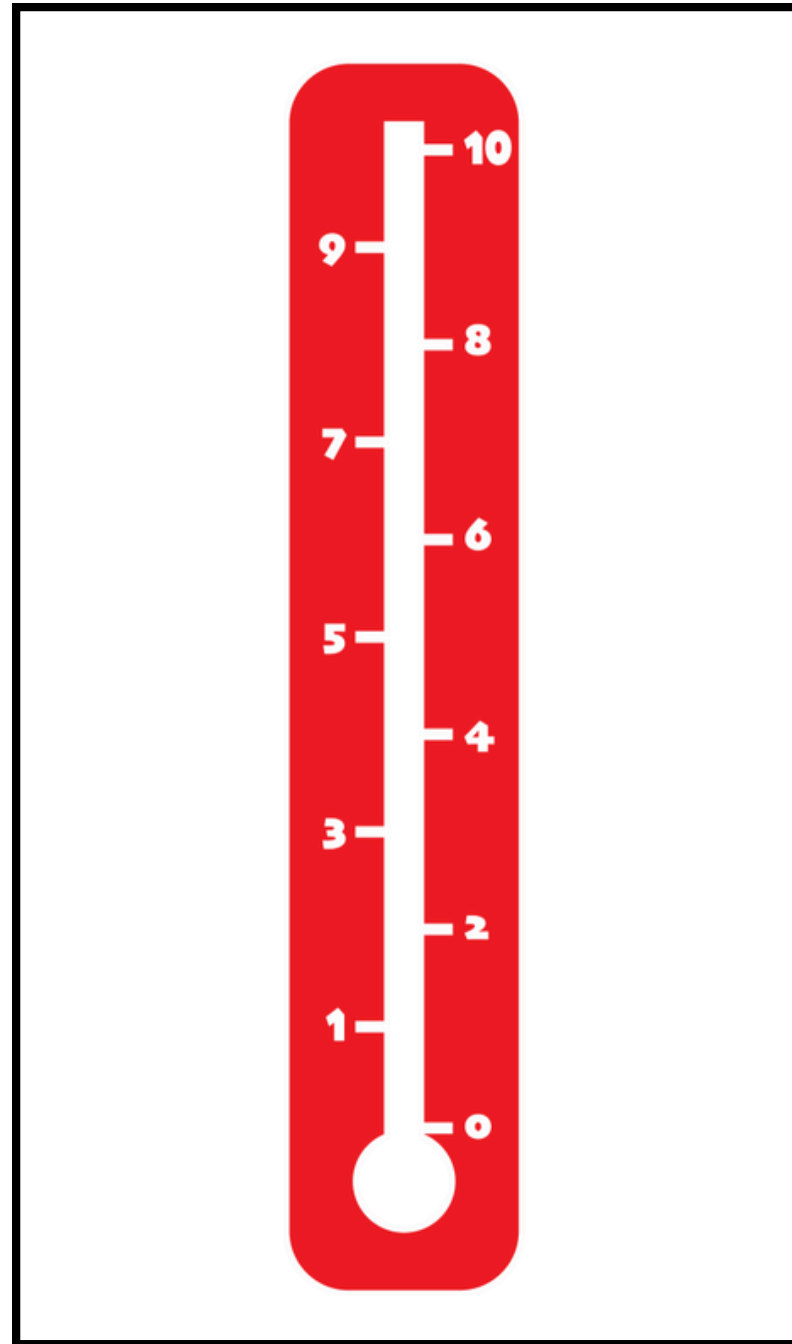
Flow of Play

- Draw a Situation Card.
 - Mayor draws first → clockwise order
- Read the scenario aloud.
- Decide whether to spend a kit, roll the die, or optionally spend an ability token.
 - Table decision
 - Voting → player who drew card is tie breaker
 - Player who drew card rolls, if action chosen
- Apply the outcome.
- Continue until the deck for your chosen difficulty is complete.

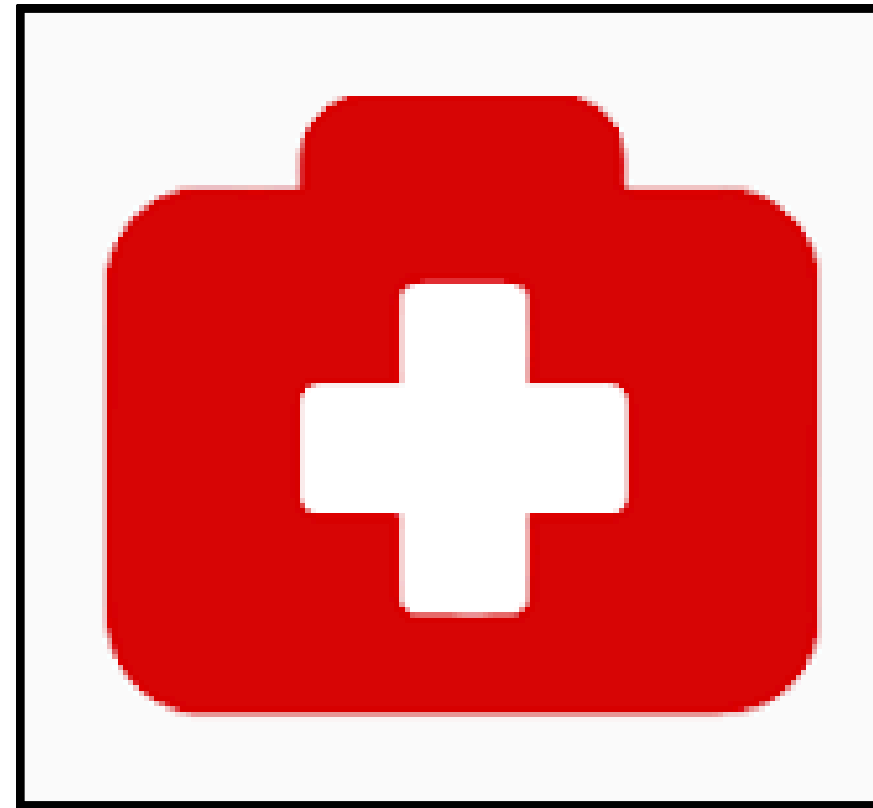


Transition Between Stages

Strategize with your team as you transition through the stages of the disaster!



Update Morale Meter



Replenish Ability Tokens
and Review Kits



Draw New Deck

Win Conditions

- Complete all Situation Cards in all three stages
- Community Morale Meter ends at a 6 or above

Your city survives the quake and begins the journey toward long-term recovery.

Loss Conditions

- Community Morale Meter ends below a 6 after all Situation Cards have been completed

Your team has not successfully led your community through the disaster.

Debrief Q's

After the game ends, players should answer the debrief questions written in the rules (concerning the game and its educational nature) or come up with your own discussions questions!

- **Stages:** Which stage did you feel your team did best/worst in?
- **Cards:** Which cards did you table have the easiest/difficult time making a decision on? Why were certain cards more divisive for your team?
- **Tokens:** How many ability and resource tokens did you use in each stage?
- **Morale:** How did your community's morale change over the course of the game? What moment or stage was it at its highest/lowest? How would community morale be measured in a real life scenario? What is its importance?
- **Roles:** Which roles seemed most beneficial? Can you think of any other roles that could be added to the game? Who is most helpful in a natural disaster? Did any role have the most/least power?
- **Outcome:** If you won the game, what steps did you take to get this outcome? If you lost, what occurred during game play to get this outcome? What would you change?
- **Education:** Did this game enhance your understanding of earthquake disaster management? Why or why not? If you were in a real earthquake, how would you approach the disaster? Would it be similar or different to that of your approaches in the game?

Learning Objective



- Upper middle-high school-aged classrooms
- Natural sciences curriculum
- Social studies element
 - Disaster preparedness
 - Policy and crisis management
 - City leadership
- Hands-on (and safe) earthquake experience
- Skills: teamwork, planning, strategy, resilience, decision-making

Diversity/ Accessibilities Considerations



- Considering the age gap and the variety of identities, we made efforts to incorporate as much identities as possible.
- Glossary, token design & player avatar design, language usage, situation/ role selection
- Can use objects from your house or other games as tokens (in lieu of 3D or 2D printing)

Creative Process

- The game idea came from the “Rapid Game Inventor” workshop
 - The current game remains quite similar to the first version
- $\frac{2}{3}$ of us lived in earthquake-prone areas
 - However we still had to teach ourselves quite a bit about earthquakes and disaster management
 - We were able to learn alongside the game!
- Changes after play testing
 - Community morale meter, actions/outcomes on situation cards, number of ability and resource tokens, losing conditions, added example earthquake