



Nothing Left Game Rules

Object of the Game: Once all the locations have been destroyed, the player with the most points wins.

How to Claim Locations & points: Locations are claimed by the player who destroys them. All locations start with 8 health points and players try to inflict tectonic disasters on the locations to take away the health points. The player who takes away the final points claims the location and the amount of points associated with it. Location cards list the points that the played location gives when destroyed.

Inflicting tectonic disasters: Playing cards allow you to inflict tectonic disasters, which do different amounts of damage;

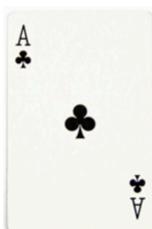
Earthquake - 1
Tsunami - 2
Volcano - 3



Diamonds - Volcano
Spades - Earthquake
Hearts - Tsunami
Clubs - Chain Reaction
Joker - Full Destruction

Special Moves

Chain Reaction: Chain reaction is a more common special move that is initiated when you draw a club card. If you pull a club card, four damage is dealt to the drawn location and one damage to all the surrounding locations listed on the location cards.



Four of a Kind: Four of a kind is where you save up four cards of the same suit. (the max amount of cards you can save up is four). Then you can use all of the cards on one location. In some instances, that exceeds the amount of health that a location has, so the affect is spread out to some of the surrounding locations.

Hot Spots: Hot spots are represented by the joker card and take away all drawn locations health.



Travel, Research, Evidence, and Research Stations: Travel allows you to travel to different research stations around the world. You travel by rolling a d20 (a 20 sided die). Research stations can only be used once and must be x'ed out with the neutral marker after use. When at a research station, you can roll a d20 to get evidence. Evidence allows you to play two cards on one location in a turn, or one card on said location and another in one of the surrounding locations. You research using a *seismograph*, and must wait for an *earthquake* to happen before you can use your evidence. You can play where you can use the evidence in the next turn, regardless of the *earthquake*. Note: travel and research can be done in the same turn, but research and evidence cannot be used in the same turn. Another Note: Research stations are represented by the yellow house.



Bringing Back Research Stations: Research stations can be resurrected when an *earthquake* happens, and the *S+P+L waves* reach the station next turn. Roll a d10 (a 10 sided die), and if you get an odd number, and draw a spade, one of the fallen research stations is resurrected. Note: This is not a part of your turn. It is an extra action.

Setup, Marking, and Starting/Ending the game

Set up and marking: Set up begins with the game board on the table in front of the people. The location cards, and playing cards are placed on the side the game board. The two 20 sided dice can also be put aside. Give one marker to each player, and put the neutral marker somewhere where all players can reach it. Give one pawn to each player, the same colour as their chosen marker. Now we are ready to play.



Starting the game: Whoever has been to the most countries goes first.

On your turn:

If you want to travel: Roll one of the d20. If you roll a 1-10 you may travel to your research station of choice. If you have successfully made it to one of the research stations, you are ready to try your luck at finding evidence. Roll another d20. If you land on an odd number, congratulations you have found evidence!

If you want to destroy locations: Draw one playing card from the deck (Note: If you have evidence you draw two cards). You can now choose if you want to save the card to try and get 4 of a kind or if you want to play it. If you wish to play the card, draw a location card. Now you must inflict the drawn location with the damage of your card.

Ending the game: Once there is only one location is left, one player spins the neutral marker. Whoever the marker lands on claims the last locations points. Note: The games are often close, so this could decide the fate of the game.

Probability's:

-Travel, Research, and Evidence: You have a 1/2 chance of travelling to a research station, a 1/2 chance of getting evidence using research, and you have a 1/4 chance of getting them both in the same turn.

$$1/2 + 1/2 = 1/4$$

Drawing a playing card: We changed the deck of cards to have more probability of drawing a weaker card so that the game can last longer.

Spades: 20/59 about 34%

Hearts: 17/59 about 28%

Diamonds 13/59 about 22%

Clubs: 7/59 about 11%

Jokers: 2/59 about 3%

We came to this conclusion by counting up the total amount of cards and writing the total amounts of each suit and wrote those as a fraction. We found out the percentages by dividing the numerator by the denominator and multiplying by 100.

Drawing a location card: The locations with the most active tectonic plate boundaries have more cards in the deck.

Canada: 6/70 about 8%

USA: 5/70 about 7%

Mexico: 5/70 about 7%

Greenland: 2/70 about 0.1%

Russia: 3/70 about 4%

China: 4/70 about 5%

Japan: 3/70 about 4%

India: 3/70 about 4%

Australia: 4/70 about 5%
New Zealand: 3/70 about 4%
Europe: 3/70 about 4%
South Africa: 3/70 about 4%
North Africa: 3/70 about 4%
Saudi Arabia: 3/70 about 4%
Brazil: 3/70 about 4%
South America: 4/70 about 5%
Antarctica: 4/70 about 5%
Kazakhstan: 4/70 about 5%
Madagascar: 2/70 about 0.1%
Scandinavia: 3/70 about 4%

We came to this conclusion by counting up the total amount of location cards and writing the total amounts of each location and wrote those as a fraction. We found out the percentages by dividing the numerator by the denominator and multiplying by 100 and then rounding

-Reviving Research Station: You have a 5/10 chance of rolling a an odd number, and you have a 20/59 chance of pulling a spade. Therefore, you have a 4/59 chance of reviving a research station.

$$5/10 \times 20/59 = 100/590 > 10/295 > 5/59$$

Vocabulary definitions:

Earthquakes

Definition: When pressure builds up along a plate boundary and then suddenly slips, releasing the pressure an earthquake is caused.

Game: The suit of spades represents earthquakes in gameplay. Earthquakes deal 1 damage to the afflicted location.

Tsunamis

Definition: A shift in plate boundaries in the middle of the ocean causes a giant swell to hurdle towards shore causing a tsunami. Sometimes the swell loses power and momentum and ends up being normal sized waves once it reaches shore.

Game: The suit of hearts represents tsunamis in gameplay. Tsunamis deal 2 damage to the afflicted location.

Volcanos

Definition: A volcano is formed when oceanic crust subducts underneath continental crust creating a weak spot in the continental crust where magma reaches the surface.

Game: The suit of diamonds represents volcanos in gameplay. Volcanos deal 3 damage to the afflicted location

Chain Reaction(Dynamic Stress Transfer)

Definition: This is when an earthquake happens and the energy from the seismic wave passing through the earth can cause a new earthquake.

Game: The suit of clubs represents Chain Reaction in gameplay. Chain Reaction deals 4 damage to the drawn location and 1 damage to all surrounding locations.

Seismograph

Definition: A seismograph is a device used to measure the strength of earthquakes by recording the motion of the ground.

Game: You need to wait for an earthquake to happen before you can use evidence collected by a seismograph.

S+P+L Waves

Definition: S+P+L Waves are seismic waves given off by an earthquake. P waves(primary waves) make the ground move horizontally, and can travel through both liquids and solids. S Waves (secondary waves) make the ground move vertically and can only move through solids. L waves(surface waves) make the ground move horizontally and vertically, and can only travel through the earth's surface and not the interior.

Hot spots

Definition: A hot spot occurs at a particularly weak point in the crust of a tectonic plate. The magma from the mantle rises up to the surface forming volcanos that turn into volcanic islands as the plate slowly moves.

Game: Joker cards represent hotspots in gameplay. Hot spots deal complete destruction to the afflicted location.

Tectonic Plates

Definition: Tectonic plates is the theory that theorized that there are tectonic plates floating along the asthenosphere, and they hold up the ground. When they move break or slip, they cause tectonic disasters.

Game: Tectonic plates are used in the way that the places along more active tectonic plates have more location cards in the deck.

Plate Boundaries

Definition: Plate boundaries is the boundaries along tectonic plates.

Game: Plate boundaries are used in the way that the places along more active plates boundaries have more location cards in the deck.