

Niche: A Game of Survival and Adaptation

Introduction

Niche is a game about survival and adaptation. The goal of the game is to adapt to environments by acquiring different traits that help you survive.

Game contents:

12 environment cards: Environment cards represent your habitat and show the challenges that you have to adapt to in order to win the game.

52 trait cards: Trait cards represent features that will help you adapt to your environment.

Game objective and overview

The goal of Niche is to become the master of adaptation. You play as creatures who find themselves in curious, challenging new environments. You must learn to survive, and even thrive here, to make sure that your legacy will be passed down through the eons. **The first player to adapt to 3 environments wins!** You obtain the skills needed to survive by drawing and playing **trait cards**. Every draw represents 10,000 years of evolution that shape you to better fit your environment. If you successfully adapt to an environment by mastering all of its challenges, you may briefly bask in glory, but don't get too comfortable - on your next turn, you will find yourself in a **brand new environment** and your struggle to survive will resume! Once you demonstrate that you are truly a master of adaptation by overcoming the challenges in your third environment, you win the game!

Game setup

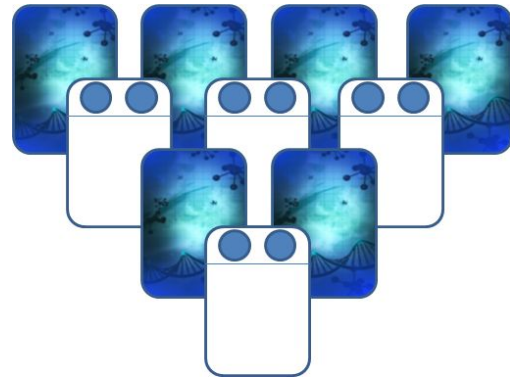
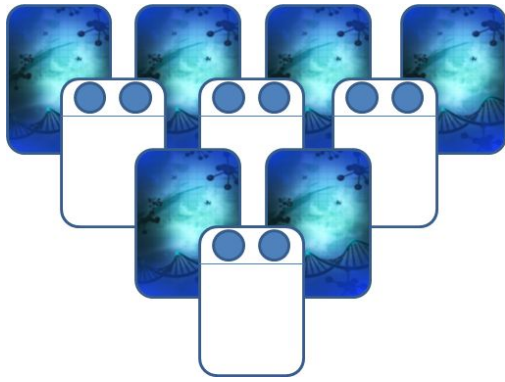
Shuffle the **12 environment cards** into an **environment deck**.

Shuffle the **52 trait cards** into a **trait deck**.

Form the '**gene pool**' by placing cards from the **trait deck** on the table in two stacks, starting with 4 face down cards, covered by 3 face up cards, followed by 2 face down card placing the final cards face up (**see picture below**).

Deal **2 environment cards** to each player. After looking at the board, each player chooses **1 environment to keep** and shuffles the other environment back into the **environment deck**.

Finally, deal **3 trait cards** to each player from the **trait deck**.



How to play

Choose a first player (for example, the player who last touched and animal). Players will resolve their turns in **clockwise** order. During the turn, a player will draw an **available card** from the **gene pool** and play a card from their **hand**. A card is **available to draw** if it is not covered by any other card in the **gene pool** (See “Card availability in the gene pool” below). **Trait cards** are always placed in front of the player who played them (see “Your play area” below). **Special event cards** are a type of **trait card** that have a special effect and may be placed in front of you, another player, or they may get discarded after playing them. After playing a card, there are several actions which may need to be resolved:

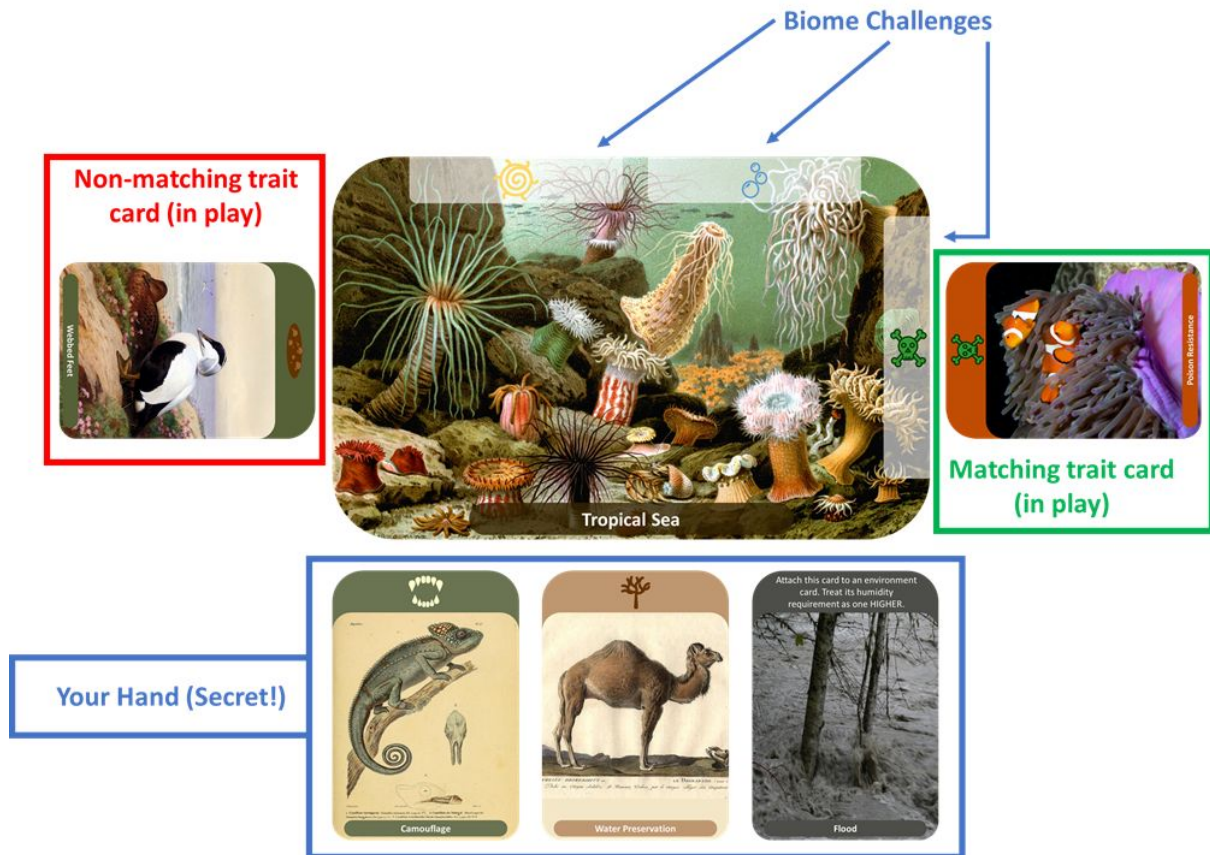
- Resolve event card effects (if an event card has an effect, this is written on the card).
- Make sure that you have **3 cards in your hand** (if you have fewer, or more, cards after drawing and playing 1 card, chances are that something has gone wrong!).
- If you have exceeded the **trait card limit of 4** (check “Trait card limit” below), discard trait cards previously played on the table until you have 4 trait cards left.
- Flip the cards in the **gene pool** that are face down but not covered by any other card (usually this happens when you pick the last card covering one or more face down cards).
- If the last card from a stack in the **gene pool** has been drawn, create a new stack stack from the **trait deck** (see “Running out of cards” below)
- Check if you have adapted to your environment. (See “Completing environments” below)
 - If a player completely adapts to their environment, and this was **NOT** the third environment they have adapted to, set aside the **environment card** (but keep all **trait cards** in place!). On their next turn, this player will draw a new **environment card** and place it in front of them, instead of drawing and playing a **trait card**. This is the new environment they must adapt to.
 - If a player adapts to their **third** environment, **they win the game!**

After all actions are resolved, the next player’s turn begins. Players keep drawing and playing cards until one of them wins by adapting to 3 environments.

Here's a quick summary of the rules:

- Draw 1 card, play 1 card.
- There should be **2 stacks of trait cards** on the board. This is the **gene pool**.
- The **hand size** limit is **3**.
- There can be up to **4 trait cards** in play in your play area.
- You need to learn to survive in **3 environments** to win.

Your play area



Detailed rules

Trait card limit

Each player plays trait cards and keeps these in the play area in front of themselves. Each player can keep up to 4 trait cards. If a player plays a card which would exceed the limit of 4 trait cards, they must discard one of the trait cards currently in their play area.

However, cards with two traits and other special cards still count as a single card.

It is possible for a creature to be adapted to two or even more challenges of the same *type* (e.g. hot and cold environment); it is also possible to have two copies of the same trait card in play (this just means you are *extra* good at overcoming that challenge!).

Rule of 4: to help remember the rules, the 4 trait card limit is called a rule of 4.

Completing environments

When a player has every trait card necessary to overcome the challenges of their current environment in play, they put the environment aside (but keep all trait cards in play!) and on their next turn, they draw a new environment card, placing it in front of them (this happens instead of drawing and playing a trait card). If the player completes their 3rd environment, they immediately win the game.

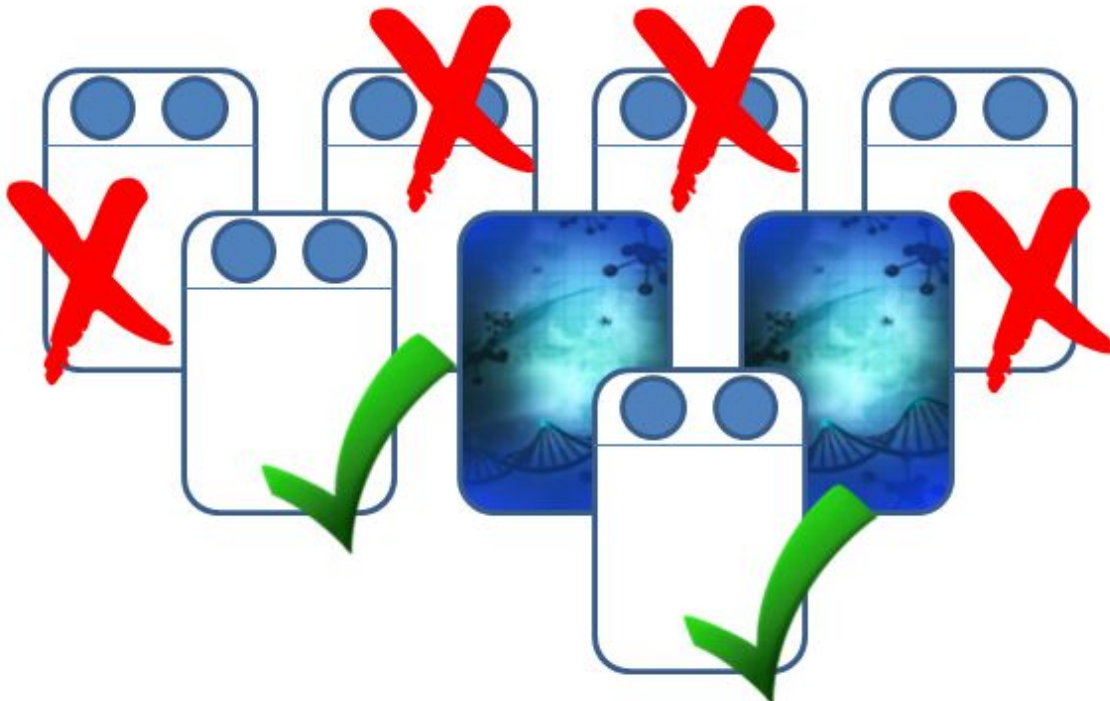
Running out of cards

When all 10 cards from a stack in the gene pool have been drawn, create a new stack by drawing cards from the trait card deck. If there are not enough cards in the trait card deck, shuffle the discard pile to create a new trait deck.

When a card tells you to draw a random card but there are no trait cards left in the trait deck, shuffle the discard pile to form a new trait deck.

Card availability in the gene pool

The cards with the green tick mark are available to be drawn, as they are face up and not covered by any other cards. The cards with the red x are not available to be drawn, as they are face down and/or are covered by at least one card.



Open Source Game

This game was created with the help of 'open source' images that have been labelled free to reuse with modification. For a full list of links to these images (as well as some images that ended up not making it to the final version of the game), see https://docs.google.com/spreadsheets/d/1vKLD_N6W7-yYLuWBp8ik2w4UgZwFCLYrojPW2tEVH9k/edit?usp=sharing .

The game and the materials used to create it are under a [CC BY 3.0](https://creativecommons.org/licenses/by/3.0/) license. You are free to share, reuse and adapt the game as long as you give appropriate attributions.

The PowerPoint templates for the cards (for use in digital copies, as well as for printing), these rules, and the list of images mentioned above are all available at <https://drive.google.com/drive/folders/0BwLb7uHrWCZTLXdIbEJMYnN0M28?usp=sharing> .

The game can be played for free, online, on Tabletopia.

Acknowledgements

This game was originally developed by Réka Nagy ([@RekaGene](https://twitter.com/RekaGene) on Twitter) and Jakub Krakowiak ([@Krackus](https://twitter.com/Krackus) on Twitter) while they were PhD students at the University of Edinburgh and Newcastle University, respectively. Thank you to our friends for helping us playtest the game, and thank you to Craig Nicol and Craig Warnock at the MRC Institute of Genetics and Molecular Medicine for helping create physical copies of the cards.

The development of this game was made possible by prize money from the 'I'm a Scientist, Get Me Out of Here!' competition. If you are a scientist and you would like to chat to children about yourself, your work and quite possibly space and dinosaurs (regardless of what your actual speciality is), consider [applying!](#) If you are a teacher and you would like to sign your class up for an upcoming 'I'm a Scientist, Get Me Out of Here!' event, you can do so [here](#).

