

The Fox
Experiment

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Introduction

In 1958, Dmitri Belyaev and Lyudmila Trut started a risky experiment on animal domestication. From a large group of Russian silver foxes, they selected the ones that showed the most interest in humans.

In each generation, they selected only the friendliest pups to become parents – hoping to recreate the process that originally led to the domestication of dogs thousands of years ago.

At the time the geneticists started their fox experiment, the Soviet Union had officially rejected Mendelian genetics, instead promoting the pseudoscientific theories of Trofim Lysenko. Thousands of scientists who refused to go along with Lysenko's theories were fired. Some, including Belyaev's older brother Nikolai, were executed as enemies of the state.

The experiment made stunning progress. Even though the foxes were chosen only for their friendliness, they soon started to display many of the physical traits that we associate with domesticated animals – like spots, floppy ears, and curly tails. The Belyaev-Trut fox experiment made major contributions to our understanding of how these traits are expressed, and continues to this day.

In **The Fox Experiment**, you'll breed your own domesticated foxes over the course of the game. Each round represents one breeding generation, in which each player will select a pair of fox parents and roll dice to make their pups, who may then become parents in the next generation. The right foxes will help you finish studies and please your patrons to score points and win the game!

Introduction

Components

* The back of the main board requires the 5-6 player expansion sold separately.



Main board
(5/6 Players on Back)*



Player mats
(4 player colors)

4 Dry erasable markers





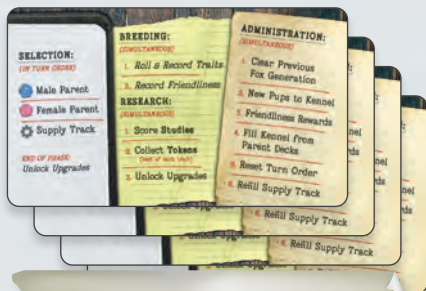
48 Blank fox cards
(12 per player color)



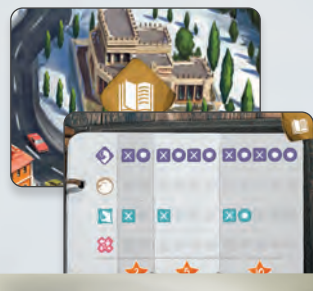
36 Parent fox cards
(male & female)



Turn order
tokens



4 Reference cards



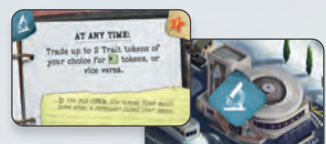
24 Study cards



6 Patron cards



Score card



30 Science cards



Supply, Trait, Point
& Friendly tokens



40 Fox meeples & 4 Gear tokens
(10 fox meeples & 1 gear token per player color)

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12 A.I.
study cards



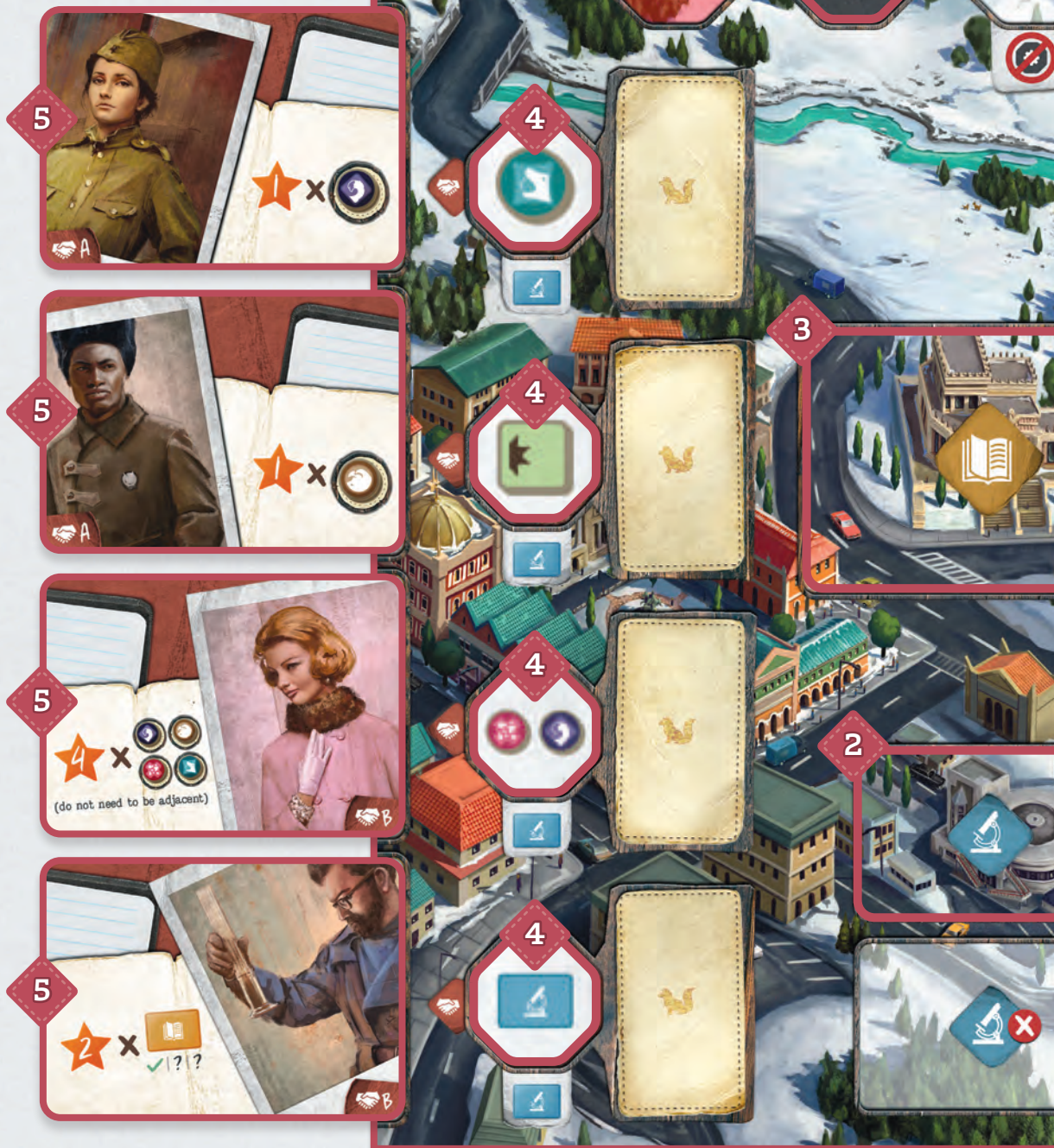
6 A.I.
selection cards

Setup

BOARD & KENNEL SETUP

- 1 **Game Board:** Place the board in the center of the table, with the 1-4 player side faceup (with 5 spaces on the supply track). *Use the other side of the board if you are playing with the 5-6 player expansion.*
- 2 **Science Cards:** Shuffle the Science deck and place it facedown in the marked space on the board.
- 3 **Study Cards:** Shuffle the Study deck and place it facedown in the marked space on the board.
- 4 **Supply Tiles:** Mix up the octagonal Supply tiles and stack them facedown on the space with a gear icon at the top of the board (the red space on the left is for discards). Then deal faceup tiles in the following locations:
 - ↳ **Supply Track:** Leave the first space to the right of the stack empty (it has a red  to indicate that it does not get a tile). Then fill each following space down the row with 1 faceup Supply tile, until you have filled the space marked with your player count. *For example, in a 3-player game, you will place tiles on the second, third, and fourth spaces.*
 - ↳ **Patron Spaces:** Place 1 faceup Supply tile on each of the 4 patron spaces down the left side of the board.
- 5 **Patron Cards:** Shuffle the deck of Patron cards and draw 4 Patron cards. Place the first 2 with side A faceup to the left of board, next to the top 2 patron spaces. Place the next 2 with side B faceup next to the bottom 2 patron spaces.
- 6 **Fox Kennel:**
 - ↳ Separately shuffle the decks of female  parents and male  parents.

3 player setup example



7

Friendly tokens

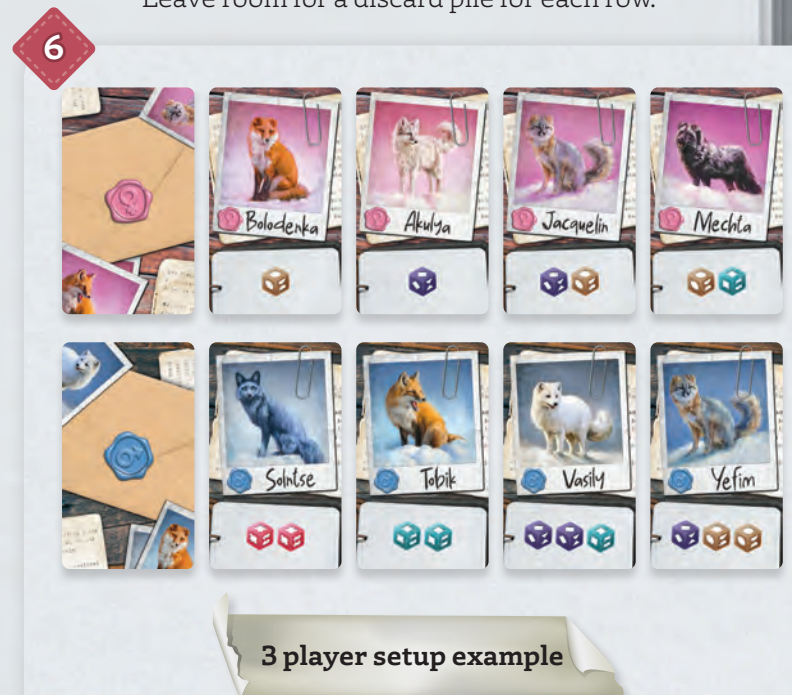
7

Dice





- 4 Make sure you have enough space, then deal out a faceup row of male ♀ parents and a faceup row of female ♂ parents. Each row should have 1 more card than the number of players. *For example, in a 3-player game, there should be 4 males and 4 females.*
- 4 Place the decks at the end of each row. Leave room for a discard pile for each row.



- 7 **Public Components:** Pile the following components near the board, where all players can reach them. You may want to split these into separate piles.

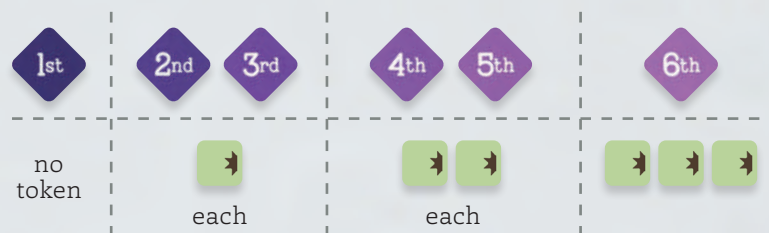
- 4 Trait dice
- 4 Friendly dice
- 4 Trait tokens
- 4 Friendly tokens
- 4 Point tokens

- 8 **Scorecard:** Set aside the dry-erase scorecard. It will not be used until scoring at the end of the game.

PLAYER SETUP

- 1 **Player Components:** Each player chooses a color and takes the following components:
 - ↳ Their player mat
 - ↳ 1 player color gear token
 - ↳ 10 player color fox meeples
 - ↳ 12 player color blank fox cards
 - ↳ 1 green friendly die
 - ↳ 1 dry-erase marker
 - ↳ 1 player aid card
- 2 **Player Foxes:** Each player shuffles their blank foxes and places them in a facedown pile on the right side of their player mat.
- 3 **Starting Turn Order:** Give the “1st” turn order token to the player who has the friendliest pet (or choose randomly). Going clockwise around the table from the 1st player, give each player the next-numbered turn token. Return any leftover tokens to the box.

- 4 **Starting Friendly Tokens:** Players receive starting friendly tokens based on their position in turn order.



- 5 **Starting Studies:** If this is your first game, deal 1 study card to each player. Otherwise, deal each player 3 study cards. Each player chooses 1 to keep, then returns the other 2 to the bottom of the deck. Place your study card faceup near your player mat.

2 PLAYER & SOLO SETUP:

For a 2-player game, set up the board and kennel as if you were playing with 4 players. For a solo game, set up the board and kennel for 3 players. Additional setup and special rules for 2-player and solo games are on p. 24 and p. 28.



*5-6 PLAYER SETUP:

To play with 5 or 6 players, you will need the extra player components from the 5-6 player expansion. Use the 5-6 player side of the board (with 7 supply track spaces). All other setup steps are unchanged.



A SUPPLY TILE DISCARD PILE

B SUPPLY TILE STACK

C SUPPLY TRACK

1/3 players - 4 spaces.

2/4 players - 5 spaces.

5 players - 6 spaces on back.*

6 players - 7 spaces on back.*

D PATRON SPACES


Available patrons accessed via upgrades. Scores at the end of game.

E STUDY DECK


F SCIENCE DECK

G SCIENCE DISCARD PILE

H FRIENDLINESS REWARD TRACK & ROUND COUNTER

Player fox meeple  on the track at the end of the game score points above.

I RED REWARD TRACK

Reward for players who did not place a fox meeple  on the friendliness reward track above that round.

Overview

The goal of the game is to score the most points by the end of the 5th round (generation). You'll do this by breeding the friendliest **foxes**, completing the most **studies**, and attracting **patrons**.

Each round has 4 phases:

- 1 **Selection Phase:** Players take turns choosing parent foxes and supplies.
- 2 **Breeding Phase:** Players roll dice to make new fox pups, trying to complete **trait symbols**. Each different symbol on the dice represents one of the traits that foxes developed during the experiment:



Tails: Foxes' tails curled up, and some started wagging their tails in reaction to humans.



Ears: Foxes' ears stayed floppy longer after birth.



Barking: Foxes started to bark and whimper in reaction to humans.



Spots: Foxes started getting spots, often in the middle of their foreheads.

- 3 **Research Phase:** Players use the completed trait symbols on their new pups to:
 - 📌 Complete **studies** to score points; and
 - 📌 Gain **trait tokens** that can be combined to unlock **upgrades**.
- 4 **Administration Phase:** Pups are judged for their overall **friendliness** (number of completed trait symbols), and then are made available as parents in the next generation.

FIRST GAME TIP: The **Breeding** and **Research phases** are normally **simultaneous**. During your **first round**, you may want to **take turns** doing each step to be sure that everyone understands the rules.

Phase 1: Selection

Each year, scientists chose the foxes they would breed from the previous year's pups. They selected only based on personality: the friendliest 10 percent of foxes became parents for the next generation.

During the **Selection phase**, players take turns in order, according to their **turn order tokens**. Turn order is clockwise in the first round, but may not be in future rounds.

Each player will take a total of **3 turns** during each **Selection phase**. Each time you take a turn, you will select **ONE** of the following items:

- 📌 A female fox parent (👩); **OR**
- 📌 A male fox parent (👨); **OR**
- 📌 A supply track position (🎯).

You must select **one of each item** over the course of your 3 turns, but you may select items in the **order of your choice**. *For example, one player might select turn order then parents, and another might do the opposite.*

After everyone is finished selecting items, all players have an opportunity to **unlock upgrades** before moving on to the **Breeding phase** (see p. 10 and p. 19).

SELECTING FOX PARENTS

To select a male 🧑 or female 👩 parent, take the desired fox card from the kennel and place it to the **left** of your player mat. Do not draw a new fox to replace the fox you selected (the kennel will refresh at the end of the round).

DRAWING A RANDOM FOX: If you do not like any of the foxes on offer, you may instead draw a **random fox** from the deck of male 🧑 or female 👩 parents. All foxes in the parent decks have between **1 and 3** random trait dice (2 dice is most common). All traits are equally represented in each deck.




TIP: When selecting parents, foxes that give more dice are generally better for you. You especially want parents with dice that match the traits on your study card(s)!

SELECTING A SUPPLY TRACK POSITION

Claiming a position on the supply track provides you with immediate supplies and determines your place in **turn order** for the next round.

When you claim a space on the track:

- 1 Immediately collect all supplies shown on that space from the public piles (including **ALL** icons shown on the supply tile **AND** any printed on the board underneath). *Place the supplies you gain in a personal stash near your player board.*
- 2 Discard the supply tile (place it faceup in the discard pile to the left of the stack).
- 3 Place your gear  token on the space the tile occupied.
- 4 Keep your current turn order token for now (the token that says "1st," "2nd," etc). These will be redistributed during the **Administration phase** (see Reset Turn Order on p. 18).



SUPPLIES



Draw 1 **science card** from the top of the deck. You may look at it and keep it secret until you decide to use it. Science cards provide one-time-use bonus actions. *See p. 34 for more details on each card.*



Take 1 **friendly token** from the public pile. Friendly tokens can be spent when breeding fox pups to finish additional trait symbols (p. 11). **Note:** *Supply tiles never give you dice, only tokens.*



Take 1 **trait token** of the type shown from the public pile. Trait tokens can be spent to unlock upgrades on your player mat at the end of the Selection phase or the Research phase, so that you can make more pups, work on more studies, roll more dice, and score more patrons (p. 35). **TIP:** *Early game, if you don't know what supplies you want, try to collect trait tokens that match the dice on your parents. This may help you unlock an upgrade later!*



Take 1 **trait token** of your choice from the public pile.


END OF SELECTION PHASE: UNLOCK UPGRADES

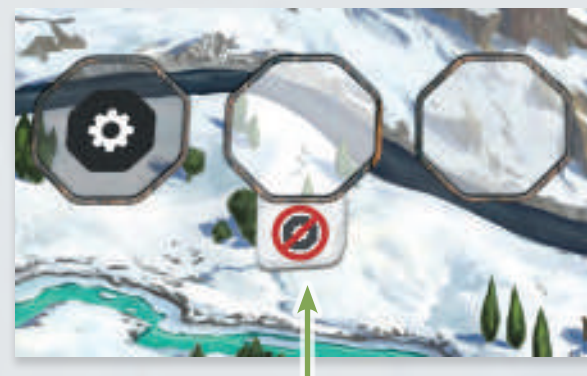
At the end of the **Selection phase**, after each player has taken 3 turns, players may simultaneously decide whether to spend sets of matching trait tokens to **unlock upgrades** on their player mats.

Upgrades can be unlocked at the end of the **Selection phase** **AND** at the end of the **Research phase**. This is explained in more detail in the section on the **Research phase** (p. 13).

TIP: You won't have any full sets of matching tokens at the end of the **Selection phase** in the first round, but in future rounds unlocking upgrades **before you start breeding** can be very important!



Red places their gear  token on the 3rd space on the supply track. They gain the supplies shown, and discard the tile from that space.



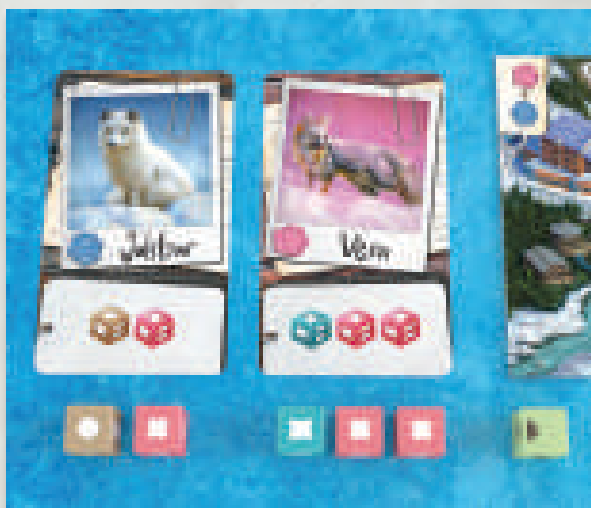
FIRST SUPPLY SPACE: The first space on the supply track does **NOT** have a supply tile. Taking this space grants you **no supplies**, but guarantees that you will be **1st in turn order** next round.



EXTRA SUPPLY ICONS: Positions further right on the supply track have **extra supplies** printed below the tile. When you claim a position, you gain **both** the icons printed on the supply tile **AND** any printed below it.



All blank pups in your deck are the same, except that half are male ♀ and half are female ♂.



This player gathers:

- 🔑 **From their father fox (Julsbar ♀):**
1 **ear** 🎲 die and 1 **spot** 🎲 die.
- 🔑 **From their mother fox (Vera ♂):**
1 **bark** 🎲 die and 2 **spot** 🎲 dice.
- 🔑 **From their player mat:** 1 **friendly** 🎲 die.

PLAYER FOXES: Beginning in the second round, the kennel will include foxes that were **made by players**. Player-made foxes provide 1 **trait die** per **marked square** with a die icon underneath it (see example on p. 19).

Breeding

Phase 2: Breeding

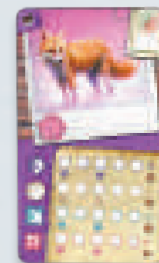
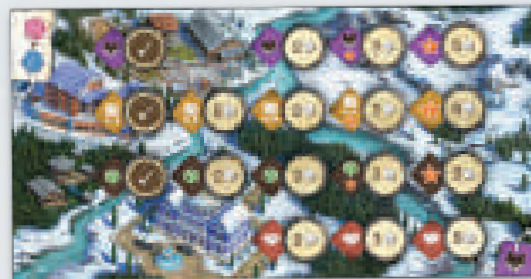
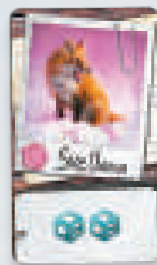
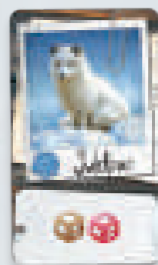
The friendly foxes started showing new traits like spots much more frequently than you would expect from random mutations. The scientists hypothesised – and later showed through DNA analysis – that wild foxes had the genes for these traits all along. The difference was that friendly foxes had much lower levels of stress-related hormones and higher levels of serotonin. These hormonal changes and gene expression caused many of the changes the scientists were seeing.

During the **Breeding phase**, all players **simultaneously** roll dice to make pups from the parents they selected. To make each of your fox pups, follow the steps listed below (detailed in the following sections). You do not have to wait for other players to complete a step to move on to the next one.

- 1 **Draw a Blank Pup**
- 2 **Gather Dice**
- 3 **Roll Traits**
- 4 **Record Traits**
- 5 **Record Friendliness**
- 6 **Name Pup**

BREEDING MULTIPLE PUPS: Some upgrades you can unlock allow you to make **multiple pups** each round. See Making Multiple Pups on p. 19 for details.

TIP: Don't forget your **friendly** 🎲 dice. They are very helpful!



1 DRAW A BLANK PUP

Reveal the top card from your **blank fox deck** and place it to the **right** of your player board (don't mix it up with your parents, which are placed on the left).

2 GATHER DICE

Next, gather together the following **dice** from the public pile:

- 🔑 **Friendly Dice:** If you have not already, gather **friendly** 🎲 dice so you have the number you have unlocked on your player mat. You start the game with 1 die unlocked, and can unlock more through upgrades.
- 🔑 **Parent Dice:** Gather **ALL** trait dice shown on **BOTH** parent foxes you selected.

3 ROLL TRAITS

Roll all the dice you gathered and sort them by **trait**. Arrange them to complete as many **trait symbols** as you can.



These dice can be arranged to make 1 complete **tail** symbol and 3 complete **bark** symbols.

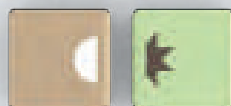


A die showing 2 half-symbols does not have a completed symbol by itself. You must match each half-symbol to another die to complete a symbol.



Friendly Dice and Tokens:

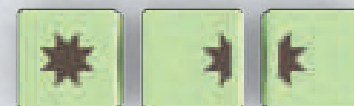
As the experiment progressed, friendlier foxes developed more physical domestic traits. **Friendly** dice and tokens are wild, helping you complete symbols of **any trait**.



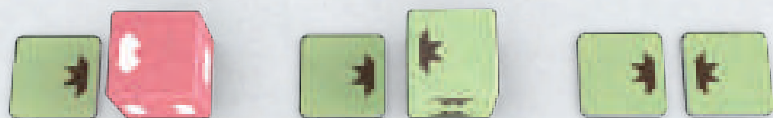
Friendly dice are wild and can be matched with **any other trait dice** to complete symbols. This counts as 1 **ear** symbol.



A **friendly** die with 2 half-symbols can be matched to 2 **different trait dice**. This counts as 1 **tail** and 2 **spot** symbols.



When you make a **complete symbol** using **ONLY friendly** dice (or tokens), it counts as 1 symbol of **any trait** of your choice.



If you have any **friendly** tokens in your personal stash, you can spend them **exactly** as if they were **friendly** dice with half-symbols on them, **except** that you must discard each token you use after you finish breeding your pup. You can spend **any number** of **friendly** tokens on a single pup. You can even spend 2 tokens **together** as 1 complete symbol of any trait. The dice and tokens shown here count as 1 **spot** and 2 of **any trait(s)**.

NOTE: Round **trait tokens** are the **rewards** you get for having trait symbols on your pups. They are not used to influence your roll results in any way (see Collect Trait Tokens on p. 14)





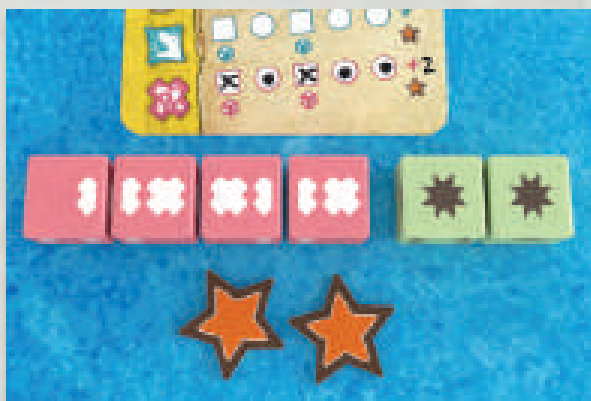
The Red player rolled 1 complete **tail** symbol, so they mark 1 space on the **tail** track. A half symbol is never recorded.

Red made 3 complete **bark** symbols, so they mark 3 spaces on the **bark** track.

At future points in the game, this will mean:

In the Research Phase: Zelda has 1 marked circle, on her **bark** track. This means Red will collect 1 **bark** token (unless they have another fox with a better bark track).

In the Breeding Phase of the NEXT generation: Zelda has 3 marked squares. This means that if someone selects Zelda as their female parent, she will contribute 3 dice to their roll (1 **tail** die and 2 **bark** dice).



Yellow completed 7 **spot** symbols. They fill in the 5 **spot** spaces on their card, then take 2 point tokens and write a 2 to the side.

Breeding

4 RECORD TRAITS

Once you have finished arranging your dice, record the results on your blank fox card. For each **complete symbol**, mark 1 space on the corresponding trait track, going from left to right.

- Mark each square with an **X**. When the pup becomes a parent in the next generation, whoever selects it will gain 1 trait die for each marked square.
- Mark each circle with a dot. In the **Research phase**, you will gain trait tokens based on your **best row** of marked circles for each trait (see Collect Trait Tokens on p. 14). *Do not gain these tokens yet.*
- Do not record any **incomplete** half-symbols.

MORE THAN 5 OF A TRAIT: Each trait track has only 5 spaces. If you manage to make **more than 5** symbols of a single trait type (such that you fill up the track), you gain 1 point token for each **extra** symbol you were not able to mark. You also write down the **number** of point tokens you collected to the right of the track (this will be included in the pup's **friendliness** total; see below).

5 RECORD FRIENDLINESS

After you have marked your pup's traits, count the **total number** of trait symbols your pup has (on all 4 tracks) and write this number in the box in the **top right** of the card. This is your pup's total **friendliness score**. The fox with the highest score will win an award for being friendliest during the **Administration phase**.

If you filled a trait track and earned **point tokens**, include the number at the end of the track in your friendliness total.

6 NAME

After filling in your pup's traits and friendliness, you may give it any name you like.



Yellow's pup Lulu has a total of 7 marked spaces (3 **ears** and 4 **barks**). This gives her a friendliness score of 7.

Phase 3: Research

Throughout the life of the Belyaev-Trut experiment, researchers have conducted studies to understand the biochemistry and genes involved in domestication. Their ground-breaking work has earned them a great deal of prestige.

During the **Research phase**, all players simultaneously take the following steps in order (detailed in the following sections). You do not have to wait for other players to complete a step to move on to the next one.

- 1 **Score Studies**
- 2 **Collect Trait Tokens**
- 3 **Unlock Upgrades**

1 SCORE STUDIES

Completing studies with your pups is an important way to gain points. Each study card is divided into **3 levels** (shown as **columns**) which can be completed over the course of the game. At the end of the game, you will add up the points printed at the bottom of the **highest completed level** on each of your studies.

In order to **complete** a study level, you must assign **ONE** of your pups to the study that meets the following requirements:

- ↳ Each study level shows a **minimum** number of **marked spaces** on 2 or more specific **trait tracks**. In order to complete a study level, your pup must have **at least** the marked spaces shown. *It may have **more** marked spaces (on any tracks) and still complete the study level.*
- ↳ The pup must be sufficient to complete the level **on its own**. *You cannot add together multiple pups to complete a study level, or use trait tokens.*
- ↳ Each pup you make can only complete **1 level of 1 study**. *You cannot complete multiple levels of a study card with a single pup, and you cannot assign a single pup to multiple study cards.*
- ↳ Each study's levels must be completed **in order**, left to right. *You cannot "skip ahead" if your pup qualifies for a level you haven't reached yet.*
- ↳ Once you have **completed** a study level, you **can't** complete it again. *You can only complete the next level of the study, if there is one. Once you've completed the third level of a study, it is finished and can't be completed again.*

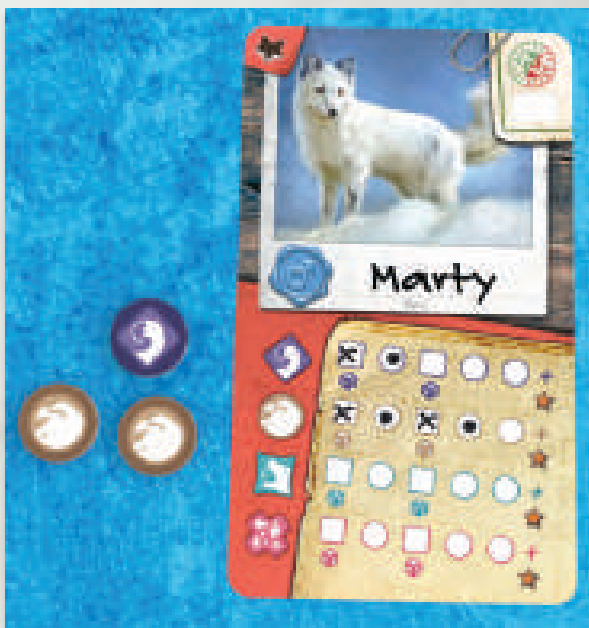
NOTE: Do not take any **point** ★ tokens when you complete study levels. The fox meeples 🦊 tracks your points, which will be scored at the end of the game.



JoJo 🦊 has 1 **ear** 🦊 space and 2 **bark** 🦊 spaces marked, which is just enough to complete **LEVEL 1** of Red's study. Red places a 🦊 meeples on **LEVEL 1** to show they've completed it.



Although Yellow's pup Pearl 🦊 qualifies for **LEVEL 3** of their study, Yellow has only completed **LEVEL 1** so far. This means Pearl can only complete **LEVEL 2**. Yellow must hope to make another good pup next round to get to **LEVEL 3**.



The Red player gains 1 **tail** token and 2 **ear** tokens.



Unlocked starting abilities

Unlockable upgrades

Unlockable upgrade effect

Cost (in matching trait tokens)

Research

1 SCORE STUDIES CONTINUED

When you complete the **first level** of a study, place one of your **fox meeples** on top of the first column to show you've completed it. When you complete the **next level** of that study, you **move** the fox meeple there up to cover the next level. Once you complete the **third level** of a study, you've finished it and reached the maximum points it will score (10 points).

2 COLLECT TRAIT TOKENS

After you finish breeding and scoring studies, you collect **trait tokens** that you can spend to unlock **upgrades**.

If you bred 1 **pup**, go through each of its **4 trait tracks** and collect 1 trait token of the matching type for each **marked circle**.

IMPORTANT: If you made multiple pups, you do **NOT** get trait tokens from every trait on every pup. See Making Multiple Pups on p. 19.

3 UNLOCK UPGRADES

Upgrades on your player mat can be **unlocked** at the end of the **Selection phase** (p. 8) and at the end of the **Research phase** (now). Unlocking upgrades follows the same rules in both phases.

Your available upgrades are divided into **4 tracks** on your player mat. You must unlock upgrades from ***left to right*** on each track.

The **circle** on the right side of each upgrade shows the cost to unlock it, which is always a number of **matching trait tokens**. The **diamond** shows the benefit that you unlock. (See p. 15 for a list of available upgrades.)

Each upgrade can be unlocked with trait tokens of **any type**, as long as **they all match** (for example, an upgrade that costs "2" can be unlocked with 2 **tail** tokens, 2 **ear** tokens, 2 **bark** tokens, **OR** 2 **spot** tokens). When you spend tokens to unlock an upgrade, place 1 of the **tokens you spent** on the **upgrade circle**, covering up the cost, to show that you have unlocked it. Return the rest of the tokens you spent to the public piles.

You must have a ***full set*** of matching tokens to unlock an upgrade; you cannot partially unlock one. Whenever you unlock upgrades (either at the end of the **Selection** or **Research phase**), you may unlock **any number** of spaces, across **any combination** of tracks.

TIP: Unlocking more pups can be powerful! It will help you complete more studies each round, and improves your chances for getting trait tokens. It can also improve the parents on offer in the kennel – the more pups you make, the more foxes there will be to select from next round!

THE 4 UPGRADE TRACKS:



As the fox population got friendlier, they began having larger litters with more pups.

More Pups:

Each pup upgrade you unlock lets you breed **1 additional** pup each round. *See p. 19 for detailed rules on breeding and scoring multiple pups.*

You can breed up to **3 pups** each round if you have unlocked all of your pup upgrades.



The experiment led to many published studies over the decades.

Studies:




When you unlock a study upgrade, immediately draw **3 new studies** and **choose 1** to keep. Return the rest to the bottom of the deck. You can acquire up to **4 studies** each game (including the one you started with).

TIP: The study track is the only way to gain new studies. You always want to be working on at least one study, so don't neglect this track!



Friendlier foxes underwent biochemical changes that led to the other domestic traits.

Friendly Dice:

Each friendly die upgrade you unlock lets you roll **1 more friendly**  die each time you make a pup. When you unlock a new **friendly**  die, take a **friendly**  die from the public pile and add it to your stash (as a reminder to roll it each time you make a pup).



You can roll a total of **4 friendly**  dice for each pup if you have unlocked all of your dice upgrades.



The scientists' success helped them attract patronage and support from both inside and outside the Soviet Union.


Patrons:

When you unlock a patron upgrade, you gain some supplies immediately, and unlock an end-of-game scoring bonus (see Patrons on p. 35).



- Choose 1 of the 4 patrons and place 1 of your **fox meeple**  on the space next to them.
- Immediately gain the **supplies** on their supply tile, plus **1 science card** (shown below the tile).
- At the end of the game, you will score **points**  as described on the patron card.







Points:

When you unlock an upgrade space with a **star**  next to it, you will score points at the end of the game. *Do not take point tokens immediately; you will simply add up these points in final scoring (see p. 22).*



At the end of the **Research phase**, Yellow has 2 **ear**  tokens and 2 **bark**  tokens. They decide they want to spend them on upgrades that will let them breed more pups and work on more studies.

Yellow first spends their 2 **ear**  tokens on a pup upgrade, placing 1 **ear**  token on the upgrade and discarding the other. They then spend their 2 **bark**  tokens on a study upgrade, placing 1 **bark**  token on the upgrade and discarding the other. The study upgrade allows them to immediately draw 3 new studies and choose 1 to keep, so they do this now. The pup upgrade will not come into play until their next **Breeding phase**.



At the end of Round 1, Red has made the friendliest fox (Paddy ♀ with a score of 4). Red places their fox meeples on the track and Yellow and Blue each get 1 friendly token from the red reward track below.

Administration

Phase 4: Administration

During the **Administration phase**, players take the following steps in order (detailed in the sections below).

- 1 **Clear Previous Generation**
- 2 **Move New Pups to Kennel**
- 3 **Give Friendliness Awards**
- 4 **Fill Kennel from Decks**
- 5 **Reset Turn Order**
- 6 **Refill Supply Track**

1 CLEAR PREVIOUS GENERATION

At the end of the **Research phase**, players discard all foxes from the previous generation and return all trait dice they rolled to the public piles.




- 👉 **Unselected Foxes:** All foxes remaining in the kennel are discarded (both male ♀ and female ♂).
- 👉 **Parent Foxes:** Each player discards **BOTH** foxes they used as parents during the **Breeding phase**.
- 👉 **Trait Dice:** Each player returns all trait dice they rolled to the public piles (but does **NOT** return unlocked friendly 🟢 dice; these can be kept near their mat for the following round).





DISCARDING FOXES: Whenever a fox from one of the **parent decks** (that does **NOT** have a player color background) is discarded, place it faceup in a discard pile near the appropriate deck (male ♀ or female ♂). Whenever a fox that was **made by a player** is discarded, it is returned to its owner to be placed in a private discard pile near their blank foxes. (If space is limited, you may erase and put them on the bottom of your deck.)




2 MOVE NEW PUPS TO KENNEL


All players place **all new pups** they made this round in the kennel, in the appropriate rows (male ♀ or female ♂). The order that pups are placed in each row does not matter.

3 GIVE FRIENDLINESS REWARDS

Find the single fox (male  or female ) that has the **highest friendliness score** (written in the top right corner of each fox card) of all the pups made this round. The player who made the friendliest fox places one of their fox meeples on the **next empty space** on the **friendliness rewards track**  (going left to right). This indicates that they will score the points printed above the space at the end of the game (they do not take any point tokens immediately).

- 🔪 The friendliest fox can be either male  or female .
Do not evaluate male and female foxes separately.
- 🔪 If 2 or more foxes are **tied** for friendliest, every player who made one of the tied foxes places a meeple  on the track, sharing the next empty space.
All tied players earn full points at the end of the game.
- 🔪 If a single player has 2 or more foxes that are tied for friendliest, that player still only places 1 fox meeple .

Once the friendliest fox has been awarded, all players who did not place a fox meeple  receive the number of **friendly**  tokens shown on the red reward track below the space where the winner placed their fox meeple .

TIP: The friendliness rewards track  also serves as a **round counter** for the game. The number of **spaces with no fox meeples**  shows the number of **rounds left in the game** (including the current one).



4 FILL KENNEL FROM DECKS

Each row in the kennel should have a **minimum of 1 more fox than the number of players**.

- 🔪 If a row does not have enough foxes, **fill it up to the minimum** by drawing foxes from the appropriate parent deck.
- 🔪 If a row has **at least** the minimum number of foxes, do not add any new foxes from the deck.

NOTE: Remember that leftover foxes from the previous **Selection phase** must **ALL** be discarded. At the beginning of this step, the only foxes in the kennel should be the ones **players made this round**.



In Round 2, Red and Yellow tie for the friendliest fox with a score of 7, so they **both** place their fox meeples  on the same space. Only Blue receives a **friendly**  token as consolation.

FOX LIMIT: In the unlikely event that there are **more than 8 foxes** in one row of the kennel, you must discard foxes until there are 8 or fewer. Start by discarding the fox(es) with the **lowest friendliness score** from the row with too many (if there is a tie, discard **ALL** foxes with the lowest score). Repeat this until there are fewer than 8.

If a large number of foxes are tied, it is possible to end up with fewer than the **minimum** number of foxes for your player count; if this happens, add wild foxes from the deck until you are at the minimum number.



Administration

5 RESET TURN ORDER

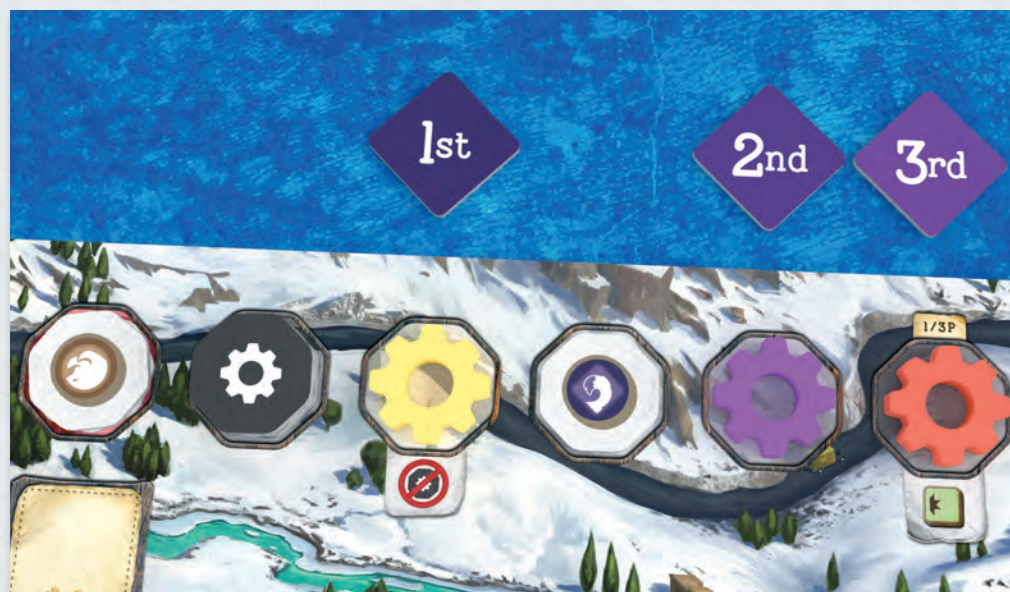
Next, players redistribute their **turn order tokens** to match the player order on the **supply track**. Follow these steps:

- 📌 Discard any **unclaimed supply tiles** left on the supply track.
- 📌 Each player **returns the turn order token** they have had since the beginning of the round, placing it above the **gear** ⚙️ token that is in that position on the track. *For example, if you have the "2nd" token from this round, place your token above the 2nd gear ⚙️ on the track.*
- 📌 Each player takes back their **gear** ⚙️ token **AND their new turn order token** above it. Your new token indicates your position in turn order for the next **Selection phase**.

6 REFILL SUPPLY TRACK

Once all players have taken back their gear ⚙️ tokens, deal new **faceup supply tiles** from the stack. As during setup, leave the **first space** on the supply track empty, then fill each space with a tile until you reach the space with your **player count**.

If the stack of supply tiles is ever **empty**, shuffle the discards to create a new pile.



During the **Selection phase**, Yellow chose space 1, Purple chose space 3, and Red chose space 4. At the end of the round, they discard the supply tile on space 2 and put their turn order tokens back in the middle, above the appropriate gears ⚙️. Yellow then takes their gear ⚙️ and the "1st" token, Purple takes their gear ⚙️ and "2nd," and Red takes their gear ⚙️ and "3rd."

The Next Generations

Once players have finished the **Administration phase**, they begin the next **Selection phase**, starting with the player who has the “1st” turn order token and going in the new turn order. A few things will be different after the first generation:

- 👉 **Player-made foxes will be in the kennel.**
- 👉 **Some players may have unlocked the ability to make multiple pups.**

The following sections explain both of these changes in more detail.

SELECTION PHASE

From the **2nd round** onward, the kennel will contain foxes that were **made by other players** in the previous round. When a player selects a parent, they may choose **ANY** of the faceup foxes in the respective row of the kennel. You might or might not get the pup you made last round back as a parent.

Foxes that were made by players give 1 **trait die** for each marked **square** on the card (with a die icon printed underneath). Marked **circles** do not give any dice. The parent's **friendliness** also has no impact on breeding.

MAKING MULTIPLE PUPS

Unlocking **pup upgrades** on your player mat allows you to make **multiple pups** each round. This section covers how to breed, score, and collect tokens from multiple pups.

BREEDING MULTIPLE PUPS:

When you breed more than one pup, follow all steps to roll and record your first pup, then draw a new blank fox card and **repeat all the steps** for your second pup (and then third, if you have unlocked 2 pup upgrades).

You must fully complete breeding each pup **before** starting on the next pup. If you use **friendly** 🐾 tokens or science cards when making a pup, you must discard them before rolling the next pup. Only move on to the **Research phase** once you have made all pups you're going to make.



TIP: For each pup you make, you roll the same parent dice **AND friendly** 🐾 dice (unless you used a science card to roll additional dice). This means you can re-use the dice you gathered for your first pup when making each subsequent pup.



When selected as a mother, Lady 🐾 contributes 2 **ear** 🐾 dice and 2 **bark** 🐾 dice.



Red has unlocked 1 pup upgrade, so they can now breed 2 pups. They draw their first pup, roll and record traits, and name him Smudge 🐾. They spend 1 friendly 🟢 token and must discard it before rolling their 2nd pup.



Red then draws a 2nd pup and re-rolls all their dice. This time, they decide to use a science card to roll 1 extra bark 🐾 die.

The Next Generations

SCORING STUDIES FOR MULTIPLE PUPS

During the **Research phase**, each pup you made may complete 1 level of 1 study. You may assign your pups to studies in **any order**, and you may assign them to **different studies** (if you have also unlocked a study upgrade) or to multiple levels of the **same study**.

COLLECTING TOKENS FROM MULTIPLE PUPS

If you rolled **multiple pups**, you do **NOT** gain trait tokens from every marked circle on every pup you made. Instead, You gain trait tokens for each trait from **only** the fox that **best expresses that trait**.

To do this, first find the fox that has the **most marked circles** on the **tail** 🐾 track (the first row). Collect 1 **tail** 🐾 token for each marked circle **on that fox's tail** 🐾 track (ignore any marked **tail** 🐾 on your other pups). Next, find the fox that has the most marked circles on the **ear** 🐾 track (second row), and collect 1 **ear** 🐾 token for each marked circle on that track. Repeat this until you've gone through all 4 traits.

If 2 of your foxes are **TIED** for the most marked circles of a trait, it **doesn't matter** which one you choose to gain tokens from (but you still only get tokens from **one of them**).

PENALTY FOR BREEDING SIBLINGS (OPTIONAL RULE)

This rule can be easy for new players to forget, so we recommend only using it with experienced players.

Breeding foxes that are **too closely related** can cause genetic problems for their offspring. If players agree before playing to represent this in the game, then any time a player breeds 2 parents that have the **same player color** (they came from the same player's parents in the previous round), they receive a **penalty**. After they collect trait tokens in the **Research phase**, they must immediately **discard 2 tokens** of their choice that they gained (before unlocking upgrades).

NOTE: Foxes that were dealt from the **parent decks** do not have a player color, so they may be bred together with no penalty.



If Yellow selects Red's 2 foxes Smudge 🐾 and Luna 🐾 and breeds them together, they must discard 2 trait tokens.



Red made 2 foxes this round. Smudge 🐾 has enough traits to qualify for **LEVEL 2** of Red's study, and Luna 🐾 has enough to qualify for **LEVEL 3** – so Red can complete both this round!



In a later round, Red makes 2 pups, Flopsy 🐾 and Mopsy 🐾. After scoring studies, Red must go through each of the 4 different traits and determine whether they get tokens from Flopsy **OR** Mopsy.

They gain the following:

- 🐾 1 tail 🐾 token (from either Flopsy or Mopsy)
- 🐾 2 ear 🐾 tokens (from Mopsy)
- 🐾 3 bark 🐾 tokens (from Flopsy)

Game End & Scoring

After players earn friendliness rewards at the end of the 5th round (and the friendliness rewards track has fox meeples on all 5 spaces), the game ends.

Use the **scorecard** and a dry erase marker to tally players' final scores. Players score points as follows:

	Red	Blue
	24	25
	14	12
	13	16
	9	8
	3	2
	2	1
Total	65	64

Studies: Score the points printed at the bottom of the **highest level** you've completed on each of your studies.

Patrons: Score the points as described on each patron where you have a fox meeple (see Patrons p. 35).

Upgrades: Score the points printed on each upgrade you've unlocked.

Friendliness: Score the points printed above each space on the friendliness rewards track where you have a fox meeple.

Supplies: Score points for your point tokens and leftover supplies in your personal stash:

- 1 pt per **point token**
- 1 pt per **science card**
- 1 pt per 2 **trait/friendly** tokens (added together)

WINNING

The player with the **most points** wins. In the case of a tie, the player closest to the beginning of the **supply track** wins.

End of Game Scoring Example





Red Player		
	* 4 studies (10 + 10 + 2 + 2 pts)	24
	* 2 sets of 4 on player mat (2 x 4 pts) * 2 full columns on player mat (2 x 3 pts)	14
	* More Pups track (2 pts) * Studies track (3 + 5 pts) * Friendly Dice track (3 pts)	13
	* Rounds 1, 2, 5 (2 + 2 + 5 pts)	9
	* 3 science cards (3 pts)	3
	* 4 trait/friendly tokens (2 pts)	2
Total		65

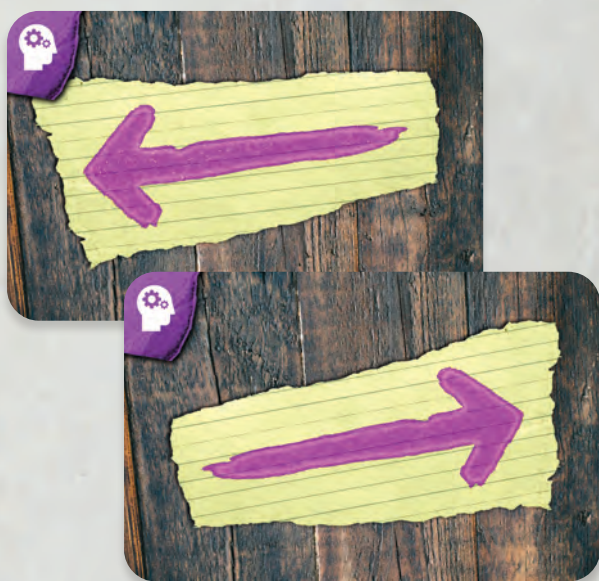
Blue Player		
	* 3 studies (10 + 10 + 5 pts)	25
	* 4 spot tokens on player mat: (4 x 1 pt) * 4 sets of 2 matching vertical tokens on player mat: (4 x 2 pts)	12
	* Studies track (3 + 5 pts) * Friendly Dice track (3 + 5 pts)	16
	* Rounds 2, 3, 4 (2 + 3 + 3 pts)	8
	* 2 point tokens (2 pts)	2
	* 3 trait/friendly tokens (1 pt)	1
Total		64



With this card, the A.I. would select 1 supply track position and one female fox.



With this card, the A.I. would select one male and one female fox.



Card backs of the A.I. selection deck feature an arrow to the left or right. These are used when the A.I. is tied when selecting foxes from the kennel.

2-Player Mode

2-Player Mode

When playing 2-player, you will use a simple automated opponent to make the **Selection phase** more interesting. It competes against you for foxes and supplies, and adds improved foxes to the kennel, but it does not score points.

EXTRA COMPONENTS

- 📌 6 A.I. selection cards
- 📌 12 A.I. study cards



SETUP

Set up the board and kennel as if you are playing a 4-player game (draw rows of 5 male and 5 female foxes, and add 4 supply tiles to spaces 2-5 on the supply track).

Assign an **unused player color** to the A.I. and set it up as follows. The A.I. does not use a player mat; this can be left in the box.

- 1 Shuffle the A.I.'s **selection deck** and place it within reach of the players.
- 2 Shuffle the A.I.'s **study deck** and place it near the selection deck. Reveal the top study and place it faceup next to the deck.
- 3 Place the A.I.'s **gear token** and 5 of its **fox meeples** near its selection deck. Return its remaining fox meeples to the box.
- 4 Give the A.I. the "3rd" turn order token.

PHASE 1: SELECTION

During each **Selection phase**, the A.I. will take 3 turns, in turn order, as if it were a third player. However, each time it takes a turn, it selects **2 items** instead of just one. Over the course of the round, the A.I. will select a total of **2 of each item** (2 male foxes, 2 female foxes, and 2 positions on the supply track).

At the start of the A.I.'s turn, flip over the top card on the **A.I. selection deck**. The A.I. selects the **2 items** shown on the card, once each.

- 📌 **3rd A.I. Turn:** On its third turn, it is possible that one of the icons on the selection card will be something that the A.I. has **already** selected twice. If that happens, the A.I. uses this card to select the item it still needs, then flips a 2nd card to find the final item it needs.

SELECTING FOXES

To select foxes, the A.I. uses its **study card**. Each A.I. study card has 1 trait marked as the A.I.'s **#1 priority**, and a second trait marked as the A.I.'s **#2 priority**.

The A.I. always chooses:

- 1 The fox with the **most dice** of its study card's **#1 preference**.
If tied;
- 2 The fox with the **most dice** of its study card's **#2 preference**.
If tied;
- 3 The first fox indicated by the **arrow** showing on the **top** of the A.I. **selection deck**. *For an arrow pointing left ←, start from the right hand side and pick the tied first fox that you come to.*

When the A.I. selects a fox, do **NOT** remove it from the kennel. Instead, place one of its **fox meeples** 🐾 on the bottom half of the card (lying down to cover the trait dice). Players may not select foxes the A.I. has claimed.



NOTE: The A.I.'s study cards have other information that is used in **solo mode only**. You can ignore this in a 2-player game.



The A.I. is selecting a mother. It first checks which fox has the most **tail** 🐾 dice. Jacquelin 🐾 and Laska 🐾 are tied, so it checks which has the most **bark** 🗣️ dice. Neither has any **bark** 🗣️ dice, so the A.I. checks the top of the **selection deck** and claims the ← **rightmost** tied card (Laska).



Following the example above, the A.I. claims its first supply track position. The arrow on the selection deck shows that it should start from the right and pick the first open position on the supply track. Position 4 on the track has been claimed by the Red player, so the A.I. places its blue fox meeple on position 3. It discards the supply tile without taking any supplies.



On the A.I.'s next turn, the arrow on the deck shows that it should select the leftmost open position. It places its blue gear on position 1.

CLAIMING A SUPPLY TRACK POSITION



When a **gear icon** appears, the A.I. claims the rightmost or leftmost available space on the **supply track**, based on the **arrow** showing on the top of its **selection deck** (the back of the top card).

The A.I. does not collect any supplies from the supply track. It instead blocks players from choosing certain spaces.

- 📌 The **first time** the A.I. selects a supply track position each **Selection phase**, discard the supply tile and replace it with the A.I.'s **fox meeple** 🦊. This does **not** determine its **turn order**; it only **blocks** this position.
- 📌 The **second time** the A.I. selects a supply track position each **Selection phase**, discard the supply tile and replace it with the A.I.'s **gear** ⚙️ **token**. This determines its **turn order** in the next round and **blocks** this position.

PHASE 2: BREEDING

After the players have made their foxes, the A.I. simulates breeding new pups by **adding extra trait dice** to the foxes it selected and **leaving them in the kennel** to be selected next round.

Go through each of the **4 foxes** the A.I. selected and add dice as follows:

- 📌 If it is a fox from the **deck**, take **1 die** of each of the A.I.'s **2 priority traits** from the public pile and place them **on the fox card**, next to its printed dice.
- 📌 If it is a **player fox**, mark the next empty **SQUARE** (die space) on each of the **2 trait tracks** that match the A.I.'s **priority traits**. *If needed, you may skip over a circle to do so. If both squares on a track are already marked, do not mark any additional spaces.*
- 📌 Each fox (either from the deck or a player) can have a **maximum of 2 dice** of each trait. If a fox **already** has 2 dice matching one of the A.I.'s **priority traits** (either printed/placed on the fox card or marked on its trait track), the fox does **not** get another die of that trait.
- 📌 Do **not** remove the fox meeples 🦊 from the A.I.'s foxes (this will be done during **Administration**).

During the next **Selection phase**, both players and A.I. treat any **extra dice** placed on a fox as if they were **printed on the card**.

PHASE 3: RESEARCH

If any player completes the 3rd level of a study card during this phase, place the A.I.'s study card on the bottom of the deck and reveal a new one to replace it. This changes the A.I.'s priorities going forward.

The A.I. does not participate in any other **Research phase** activities.

PHASE 4: ADMINISTRATION

Follow the normal **Administration** steps, with these exceptions:

- 🔪 **Clear Previous Generation:** When clearing foxes from the kennel, do not clear any fox cards that have fox meeples 🐾 on them. Instead shift them to the left end of the row.
- 🔪 **Friendliness Rewards:** The A.I. does not participate in friendliness rewards 🟢 (ignore friendliness scores on foxes that have A.I. meeples).
 - 🔪 After giving friendliness rewards 🟢, **remove** the A.I.'s meeples from all foxes and return them to its stash.
- 🔪 **Reset Turn Order:** When resetting turn order, the A.I. gets a turn order token based on where its gear token is. Return both its gear ⚙️ token and its fox meeple 🐾 to the A.I.'s stash.

END GAME & SCORING

Score as normal. The A.I. does not score any points.



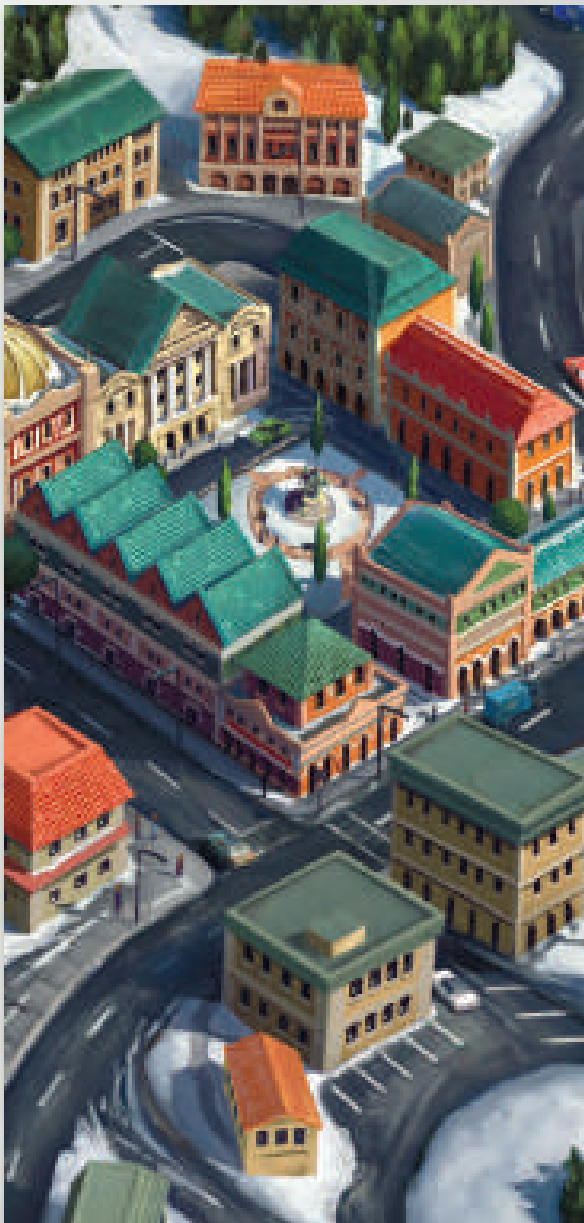
The A.I.'s priorities are ears 🟡 and spots 🟠.

Joey 🟠: Mark Joey's 2nd ear 🟡 square to add 1 ear 🟡 die. Since both spot 🟠 squares are marked, do not add another spot 🟠 die.



Pushok 🟠: Place 1 ear 🟡 die and 1 spot 🟠 die from the public pile on this card.

Rachel 🟠: Rachel already has 2 ear 🟡 dice and 2 spot 🟠 squares marked, so do not add anything.

Kukla 🟠: Kukla was selected by the A.I. in the previous round, so she already has 2 ear 🟡 and 2 spot 🟠 dice (counting both her printed and placed dice). Do not add anything.



FOX MEEPLES:



Each player has 10 fox meeples  in five different shapes. Sometimes this symbol  is used to represent a fox meeple on the board. You can use any fox shape and it does not need to match.

Solo Mode

Solo Mode



When playing solo, you will compete against a simple automated opponent. It competes against you for foxes and supplies, marks its own fox cards, **AND** scores points based on its study cards. You must beat the A.I.'s score to win!

EXTRA COMPONENTS










-  6 A.I. selection cards
-  12 A.I. study cards



SETUP

Set up the board and kennel as if you are playing a **3-player game** (draw rows of 4 male  and 4 female  foxes, and add 3 supply tiles to spaces 2-4 on the supply track).

Assign an **unused player color** to the A.I. and set it up as follows. The A.I. does **not** use a **player mat**; this can be left in the box.

-  1 Shuffle the A.I.'s **selection deck** and place it within reach.
-  2 Shuffle the A.I.'s **study deck** and place it near the selection deck. Reveal the top study and place it faceup next to the deck.
-  3 Place 1 **friendly**  token from the public pile on the faceup study card.
-  4 Place the A.I.'s **gear**  token and **ALL** of its **fox meeples**  near its selection deck.
-  5 Give the A.I. the "2nd" turn order token.
-  6 Give the A.I. a deck of **blank foxes** in its player color. Shuffle them and place them facedown next to its decks.



PHASE 1: SELECTION

The A.I. selects parent foxes and a supply track position as it did in 2-player mode (see p. 24), with the following exception:

- 📌 **Trait Priorities:** Unlike in 2-player mode, in solo mode the A.I. can have multiple **uncompleted studies** at the same time (see Phases 2 & 3). As the A.I. draws new studies, it arranges them in a **row**. Only the **leftmost study** in the row is used to determine the A.I.'s **trait priorities** during the **Selection phase**.

As in 2-player mode, the A.I. does **not** gain any supplies from the supply track.

PHASES 2 & 3: BREEDING & RESEARCH

At the end of the **Selection phase**, you must **first** fully resolve the A.I.'s **Breeding** and **Research phases**, before resolving your own **Breeding** and **Research**.




The A.I. always makes 2 pups. Unlike a player, it breeds **AND** researches each pup **BEFORE** moving on to its next pup.

1 Make a new pup:



- Draw a new blank fox card from the A.I.'s deck.
- Find the **leftmost** male 🐺 fox and the **leftmost** female 🐺 fox that the A.I. selected in the kennel (with the A.I.'s fox meeple 🐺).
- For each trait die on both parent foxes, mark 1 space on the corresponding trait track on the blank fox card. *For example, if the father has 2 tail dice and the mother has 1 tail die, mark 3 spaces on the pup's tail track.*
- If the A.I. has any **friendly** 🐾 tokens on its study cards, mark extra spaces on the pup as follows. *Do not spend or discard any friendly tokens when you do this.*
 - 📌 For the **first friendly** 🐾 token, mark 1 space of the **#1 priority trait** from that study.
 - 📌 If the card has a **second friendly** 🐾 token, also mark 1 space for the **#2 trait** from that study.
- Write the pup's total **friendliness score** and give it a **name**.
- If the A.I. **fills up a trait track** during this process, it gains **point** ⭐ tokens and writes the excess number on its pup, just like a player.






2 Assign pup to studies:

- a. Check if the pup can complete the **next study level** on any of the A.I.'s uncompleted study cards. If it can, place or move a fox meeple  on the study, as a player would. **Unlike players, each of the A.I.'s pups can complete 1 level of ANY NUMBER of different studies.**
- b. If the A.I. completed **LEVEL 3** of any study, set that study card aside and shift the A.I.'s remaining studies to the left (if it has any). Take any **friendly**  tokens on the completed study and distribute them onto its remaining uncompleted studies, going down the row from the left.
- c. If the A.I. completed **LEVEL 1** of a study, draw 1 new study and place it to the right of its other uncompleted studies. If the A.I. has **friendly**  tokens that are not currently on an uncompleted study, place **up to 2** of them on the new study. The pup that was just scored cannot complete this study. *Do not draw new studies when the A.I. completes **LEVEL 2** or **3** of a study.*
- d. The A.I. does not collect any trait tokens.

3 Repeat for second pup:

- a. Repeat steps 1 and 2 for the A.I.'s second pup, using the **rightmost father**  and **rightmost mother**  it selected.

BREEDING SIBLINGS: If the A.I. ever tries to breed 2 foxes of the **same player color**, it instead swaps its choices, breeding the leftmost mother  with rightmost father  and vice versa. If this would still breed 2 foxes of the same player color, the A.I. does so without penalty.

RUNNING OUT OF MEEPLES: If the A.I. ever runs out of fox meeples , use another player color from the box.

PLAYER BREEDING & RESEARCH

Once you have resolved breeding and research for **both** the A.I.'s foxes, proceed to make and score your own pups exactly as you would in a standard game.

NOTE: Unlike the 2-player game, the solo A.I. does not draw a new study when you complete **LEVEL 3** of a study.

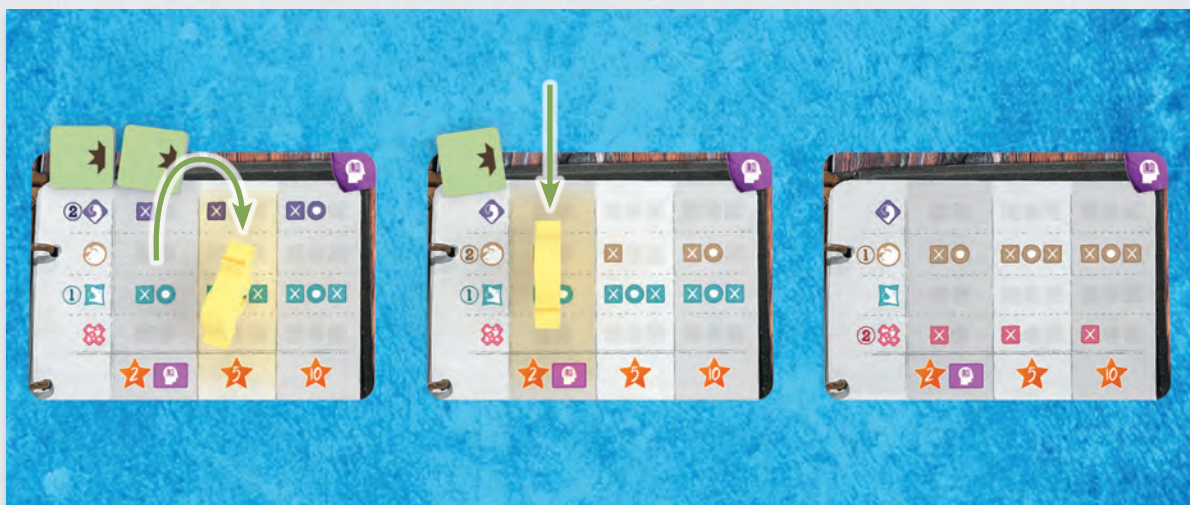
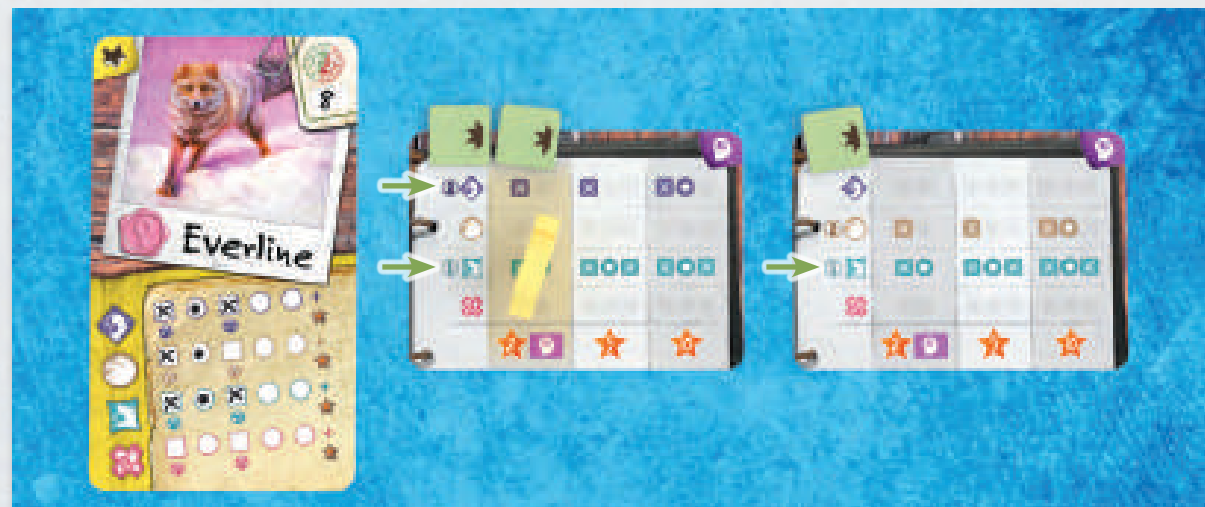




The A.I.'s player color is yellow. To make its first pup, first identify its leftmost mother (Pavlina 🌸) and leftmost father (Vasily 💙). Between them, they have 2 **tail** 🎲 dice, 2 **ear** 🎲 dice, and 1 **bark** 🎲 die, so the A.I. marks 2 **tails** 🐾, 2 **ears** 🐾, and 1 **bark** 🐾 on the pup.

Next check the A.I.'s studies. Its first study has 2 **friendly** 🐾 tokens, so it marks 1 additional space on the pup card for both of the study's priority traits: 1 **tail** 🐾 and 1 **bark** 🐾. The second study only has 1 **friendly** 🐾 token, so it only marks a space for the study's #1 priority: 1 **bark** 🐾.

This gives the A.I.'s first pup a total of 3 **tails** 🐾, 2 **ears** 🐾, and 3 **barks** 🐾. It has a friendliness score of 8.











The A.I. then scores this pup on its studies before making its second pup. The pup has enough traits marked to complete **LEVEL 2** of its first study and **LEVEL 1** of its second, so it scores both.

Because it completed **LEVEL 1** of a study, it draws 1 new study and places it on the right. (This pup is not allowed to complete a level of the newly drawn study.) Once the new study is drawn, the A.I. repeats the process to make and score its 2nd pup.









PHASE 4: ADMINISTRATION

Follow the steps for **Administration phase**, with the following exceptions:



- 1 **Clear Previous Generation:** Discard all parents and all foxes in the kennel, including the A.I.'s selected parents. Return the A.I.'s fox meeples .
- 2 **Move New Pups to Kennel:** When moving foxes to the kennel, place the A.I.'s first pup at the **left** end of its row (1st position). Place its **second** pup at the **right** end of its row (4th position). Then place **your pups** in between, in the order of your choice. *If you end up with more than 4 pups in a row, place your remaining pups to the right of the A.I.'s second pup.*
- 3 **Give Friendliness Rewards:** The A.I. competes for friendliness rewards  as a player would. If the A.I. does not win a friendliness reward , it receives the number of **friendly**  tokens shown below on the red friendliness track. These tokens are placed on the A.I.'s **uncompleted studies**. The A.I. will place tokens on its **leftmost study** until it has **2 tokens**, then place the remaining tokens on the next study until it has 2 tokens, and so on. If it fills all its uncompleted studies and has tokens remaining, it keeps these until it draws a new study, then immediately adds them to that study.
- 4 **Fill Kennel from Decks:** Fill the male  and female  rows up to a minimum of 4 foxes each, as in the standard game.
- 5 **Reset Turn Order:** As in a 2-player game, the A.I. gets a turn order token based on where its **gear**  token is. Return both its gear token and its fox meeple  to the A.I.'s stash.
- 6 **Refill Supply Track:** Refill the supply track as in the standard game.

END GAME & SCORING

At the end of the game, you score as normal. The A.I. scores:

-  The points  printed on the **highest level** it completed on each of its **studies**.
-  The points  printed above each space on the **friendliness rewards track**  where it has a fox meeple .
-  Points for **point**  tokens it earned from filling trait tracks.

HARD MODE

For a more challenging solo experience, change one rule: whenever the A.I. places in a position on the supply track that would gain them **friendly**  tokens, it takes them immediately, and adds them to its study cards in the same way it does when taking friendliness rewards .

Notes & Credits

This game was inspired by the Belyaev-Trut experiment in Novosibirsk, Siberia, but it is fictionalized: we are not attempting to depict actual individuals or events. To learn more about the actual experiment, we highly recommend the book *How to Tame a Fox (and Build a Dog)* by Lee Alan Dugatkin and Lyudmila Trut, which we have drawn on heavily.

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Playtesters

Many thanks to the people who generously playtested this game, including:











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Appendix

SCIENCE CARDS

Science cards can be gained from the **supply track** and **patrons**. You may keep them hidden from other players until you play them. Each card indicates when it can be played and what effect it has.

There is no limit to the number of science cards you can have at a time. Unplayed science cards are worth **1 point each** at the end of the game.

Condition	Effect	Clarifications & Tips
Before rolling a pup:	Draw 3 foxes (from either deck). You may choose 1 to replace 1 of your parents.	Use this card when you want to try for better parents than what you selected. If you do not like the cards you drew with this card, you may discard them and keep the parents you originally selected.
When placing your gear  token OR unlocking a patron:	You may first swap the supply tile on your space with any tile in the discard pile.	Use these cards to improve the supplies you get.
	You may first swap the supply tile on your space with any other faceup tile on the board.	
At any time:	Trade up to 2 trait tokens of your choice for that many friendly  tokens, or vice versa.	You can use this card to get friendly  tokens when you need them to complete symbols, or to get trait tokens to complete upgrades.
After rolling a pup:	Change 1 die to any face.	These cards let you change dice, reroll dice, or add an extra die to your roll. They all can help you make a better pup.
	Reroll all your dice showing only half a trait.	
	Roll 1 extra tail  , ear  , bark  , or spot  die.	
After rolling a pup:	Add +1 tail  to this pup.	These cards are used to add a trait symbol to your pup. Simply mark one extra space on the corresponding track on your pup.
When you unlock upgrades:	You may pay for an upgrade with trait tokens that don't match.	As usual, choose one token to leave on your player mat, and discard the rest. You may choose which token to keep (consider any patrons that score tokens at the end of the game).
After rolling ALL pups:	Keep 1 of your pups as a parent for the next round. It cannot earn the friendliest pup reward.	If you use this card, do not put the pup you are keeping in the kennel. Instead move it to the left of your mat, and keep it as a parent. It does not qualify for the friendliest reward  . (You can still earn the reward from other pups you send to the kennel, or friendly  tokens if you do not earn the reward.) During the next Selection phase , you will take only two turns, because you already have 1 parent.

PATRONS

Ability

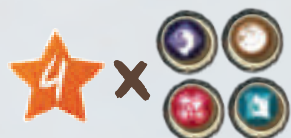


Clarifications & Tips

1 point ★ per tail token on your player mat
(similar goals work the same)



2 points ★ for each of your fox meeples on the
friendliness rewards track.

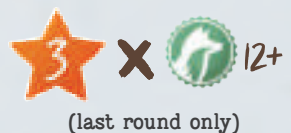


(do not need to be adjacent)

4 points ★ per set of all 4 traits on your player mat.
(the 4 traits do not need to be adjacent)



2 points ★ per 2 matching horizontally adjacent tokens
on your player mat. One token can be part of more than
one pair. (there is also a goal for matching vertically
adjacent tokens)



(last round only)

For the fox pups you make in the last round,
3 points ★ per fox pup with a friendliness score
of at least 12.



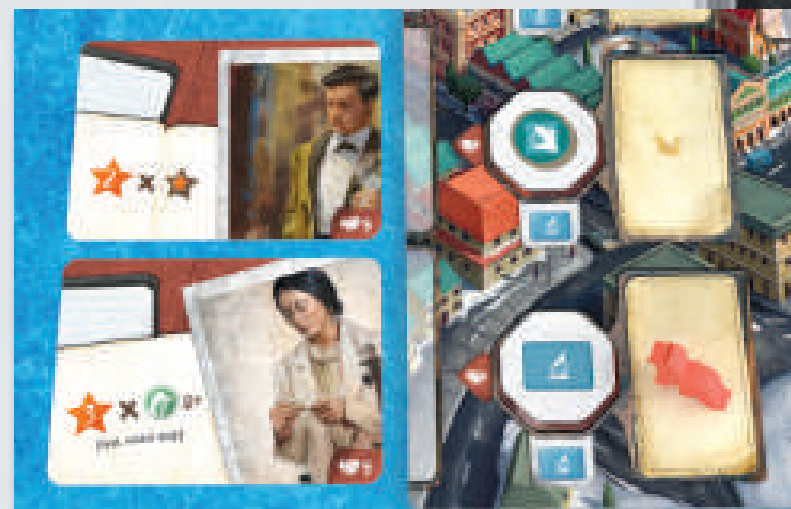
2 points ★ for each of your study cards with at least
1 completed level.



2 points ★ per bonus point token
that you have at the end of the game.
(in addition to the normal score for each)



3 points ★ for each column on your player mat where
you unlocked 4 upgrades. (The column with only 2 upgrade
spaces does not score any points.)



You may place a fox meeple on a patron where other players already have meeples. All players gain both supplies and points for patrons they unlock, no matter how many meeples are already on the space.

You may not place a second fox meeple on a patron where you already have a meeple.

You may spend the supplies you gain immediately, including to unlock another upgrade during this phase.

Turn Summary

1 PHASE 1: SELECTION (p. 8-9) (TURN ORDER)

Over 3 turns, select:

- ◆ Male parent
- ◆ Female parent
- ◆ A supply track position
- ◆ After selecting, you may unlock upgrades (p. 13-14).

2 PHASE 2: BREEDING (SIMULTANEOUS)

- ◆ Draw a blank pup
- ◆ Gather dice (p. 10)
- ◆ Roll traits (p. 11)
- ◆ Record traits (p. 12)
- ◆ Record friendliness (p. 12)
- ◆ Name your pup

If you have unlocked the ability to make multiple pups, finish all of these steps for one pup before starting the next (p.19).

3 PHASE 3: RESEARCH (SIMULTANEOUS)

- ◆ Score studies (p. 13-14)
 - └ Each pup can complete one level of one study.
- ◆ Collect trait tokens (p. 14)
 - └ Gain tokens only for your **BEST** fox in each trait. (p. 20)
- ◆ Unlock upgrades (p. 14-15)

4 PHASE 4: ADMINISTRATION (SIMULTANEOUS)

- ◆ Clear previous generation (p. 16)
- ◆ Move new pups to kennel (p. 16)
- ◆ Give friendliness rewards (p. 17)
 - └ The player(s) with the friendliest fox place meeples on the friendliness reward track; others gain friendly tokens
- ◆ Fill kennel from decks (p. 17)
- ◆ Reset turn order (p. 18)
- ◆ Refill supply track (p. 18)



x GAME END AND SCORING (p. 22)

See also:

- ◆ 2-player mode (p. 24)
- ◆ Solo mode (p. 27)
- ◆ Patrons (p. 35)
- ◆ Science cards (p. 34)

