SCHRÖDINGER'S CATS

RULES OF PLAY

2-6

14+

<:30

SCHRÖDINGER'S CATS is a pseudo-scientific card game of strategic uncertainty for 2-6 players. It's fast, fun, and full of bluffing, deduction, and cute cat pictures!

Cats are a curious lot, **CAT PHYSICISTS** doubly so! Their desire to discover the secrets of the universe overwhelms their already shaky catnip-influenced ethics. While Erwin Schrödinger is away, the **CAT PHYSICISTS** will play… in his lab… with their colleagues.

In **SCHRÖDINGER'S CATS** players run experiments, form hypotheses, and try to one-up each other's research. Using the special abilities of **CAT PHYSICISTS**, such as Albert Felinestein, Sally Prride, or Neil deGrasse Tabby, to help prove their **HYPOTHESIS**, or at least debunk someone else's. In the scientific challenge to conclusively determine the total number of **ALIVE CATS**, **DEAD CATS**, or **EMPTY BOXES** in Schrödinger's lab.

Science Cat Terminology

Box = Pink backed cards from the Research Deck
Doctorate = Yellow Backed Cards marked Cat Physicist
Scientist = A player
Active = The current player
Research Deck = Draw pile
Experiment = A round of play
My Research = My Hand
Findings = Face up cards on the table
Hypothesis = A Bid of Alive Cats, Dead Cats, or Empty Boxes
Prove It! = To "call" another scientist's hypothesis into question
Observe = Revealing all research in the experiment, the end of a round of play
Validated = Bid confirmed
Debunked = Bid not confirmed

Setting Up the Lab

The Scientist who most recently watched a documentary is named the **First Scientist**. The **First Scientist** has the honor of shuffling and dealing the cards for the first experiment, as well as being the **Active Scientist** at the start of the game. Before the game starts, the **First Scientist** shuffles the **Doctorate Cards** and deals one to each Scientist. The **Doctorate** is a special power that can only be used once each game (explained later in the rules).Then the **First Scientist** should shuffle the **Research Deck** and deal a number of **Boxes** (cards with the pink backs) equal to the number of players to each player, and then set the **Research Deck** (the remaining cards)in easy reach of all the Scientists.

Science Pro Tip: Schrödinger's Cats is even more fun to play if you pretend that you are all serious scientists. FOR SCIENCE!!!

Playing the Game

A game of **Schrödinger's Cats** consists of a series of **Experiments** (rounds of play) in Schrödinger's lab. Each game will consist of a number of rounds equal to one less than the number of starting Scientists (players) - so if there are 4 players there will be 3 rounds. In each experiment, there are a number of boxes (cards), equal to the square of the number of players, since each player is dealt one card per player.

> In a game starting with 6 players, their will be 5 experiments, and the first round would have 36 boxes as each player will be dealt 6 boxes (Cards).

A "box" in the experiment.

Or, if you prefer, here it is as a pseudo-sciencey equation:

N Scientists =
N Boxes in Hand =
N^2 Boxes in Experiment

Before the round begins, the **First Scientist** should announce how many **total boxes** are in the **current experiment**.

> There are currently 3 players. Each Scientist is dealt 3 cards. The First Scientist begins play by announcing, "There are 9 Boxes in this Experiment."

THE EXPERIMENT

The cards in your hand each represent a box in Erwin Schrödinger's famous experiment (or at least a version of that experiment being carried out by cats). Each card exhibits a quantum state that the cats might be in - because we won't really know the outcome of the experiment until we **OBSERVE IT!**

THE FOUR QUANTUM STATES OF SCHRÖDINGER'S CATS

The possible states are **ALIVE CAT**, **DEAD CAT**, **EMPTY BOX**, or the wily **HEISENBERG UNCERTAINTY PRINCIPLE**. The **HEISENBERG** is an especially powerful card because it is always what you expect it to be **ALIVE**, **DEAD**, or **EMPTY**! So, if the **HYPOTHESIS** is about **ALIVE CATS**, the **HEISENBERG** counts as an **ALIVE CAT**. If your **HYPOTHESIS** is that the cats are **DEAD**, then it counts as a **DEAD CAT**.

BOX DISTRIBUTION
20 ALIVE CATS
20 DEAD CATS
8 EMPTY BOXES
4 HEISENBERGS

IMPORTANT NOTE: A **HYPOTHESIS** of **HEISENBERGS** (*those wacky quantum wildcards*) is never allowed, because even you can't see the inner workings of the cosmos, silly kitty!

PROPOSE A HYPOTHESIS

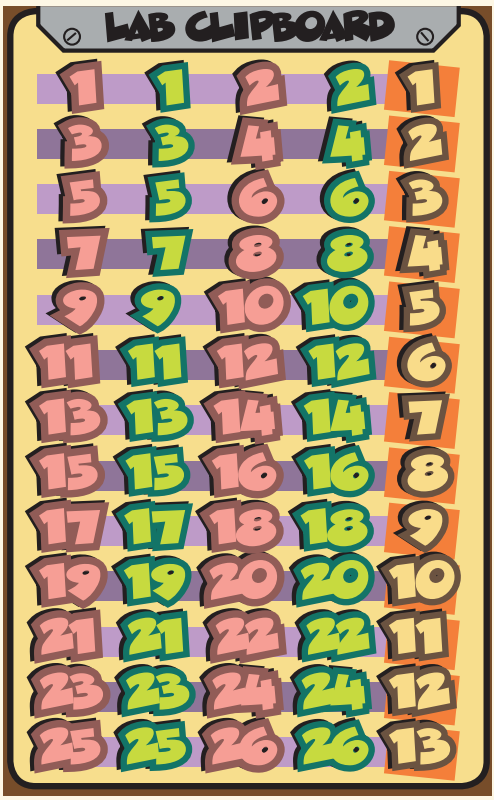
The **ACTIVE SCIENTIST** must make a **HYPOTHESIS** to the group after reviewing the cards in their hand by stating the number of either **ALIVE CATS**, **DEAD CATS**, or **EMPTY BOXES** amongst all boxes in play (the total number of cards between all players). Remember, a **HYPOTHESIS** of **HEISENBERGS** is never allowed.

> **IF YOU HAVE 4 DEAD CATS IN YOUR HAND THEN YOU CAN FEEL COMFORTABLE STARTING WITH A HYPOTHESIS (OR BID) OF AT LEAST 4 DEAD CATS. IF YOU ALSO HAVE HEISENBERGS (WILD CARDS) IN YOUR HAND REMEMBER THAT THEY ALWAYS COUNT AS WHATEVER THE CURRENT HYPOTHESIS IS.**

Each Scientist's **HYPOTHESIS** must be (at least) incrementally higher than the last Scientist's **HYPOTHESIS** (*except for the* **FIRST SCIENTIST** *who may start the bidding at any value*). While bidding, **DEAD CATS** have a higher bidding value than **ALIVE CATS** and **EMPTY BOXES** are worth double the bidding value of both **ALIVE** or **DEAD CATS**. To help you out, we've included a handy **LAB CLIPBOARD** on which you can track the current **HYPOTHESIS** and see the next possible **HYPOTHESIS**.

HERE'S THE MATH:

N **EMPTY BOXES** >
2N **DEAD CATS** >
2N **ALIVE CATS**



So, the incremental bidding order goes: 1 ALIVE CAT, 1 DEAD CAT, 2 ALIVE CATS, 2 DEAD CATS, 1 EMPTY BOX, 3 ALIVE CATS, 3 DEAD CATS ... and so on (see the LAB CLIPBOARD). Remember, EMPTY BOXES are worth double the value of ALIVE or DEAD CATS.

> IF STEPHEN PAWKING BIDS 3 ALIVE CATS, THEN THE NEXT PLAYER, MARIA GOEPPERT-MEOWER, MUST BID 3 (OR MORE) DEAD CATS, 4 (OR MORE) ALIVE CATS, OR 2 (OR MORE) EMPTY BOXES. THE FOLLOWING BID WOULD BE 5 ALIVE OR DEAD CATS, OR 3 EMPTY BOXES. ALTERNATIVELY IF STEPHEN HAD BID 2 EMPTY BOXES MARIA MUST BID 3 EMPTY BOXES, 5 ALIVE CATS, OR 5 DEAD CATS.

CONTINUING THE EXPERIMENT

As part of their HYPOTHESIS the ACTIVE SCIENTIST may reveal their DOCTORATE or SHOW FINDINGS (explained later). Once complete, the next Scientist clockwise becomes the ACTIVE SCIENTIST, and the experiment continues.

Each Scientist must in turn try to prove their own HYPOTHESIS by increasing the previous Scientist's bid or calling the last Scientist's HYPOTHESIS into question (PROVE IT!) - if they believe that the declared HYPOTHESIS is highly unlikely (or just a pack of outright lies).

Showing Findings

As part of their **Hypothesis**, the **Active Scientist** may decide to exhibit some evidence of their research by showing face-up any number of boxes of the type stated in their **Hypothesis**, called **Showing Findings**, to further prove that their research is valid. Since **Heisenbergs** always count as the current **Hypothesis** you could choose to show **Heisenbergs** as **Findings** as well as the type called. Remember, **Heisenbergs** are always the current **Hypothesis** even when they are **Findings**!

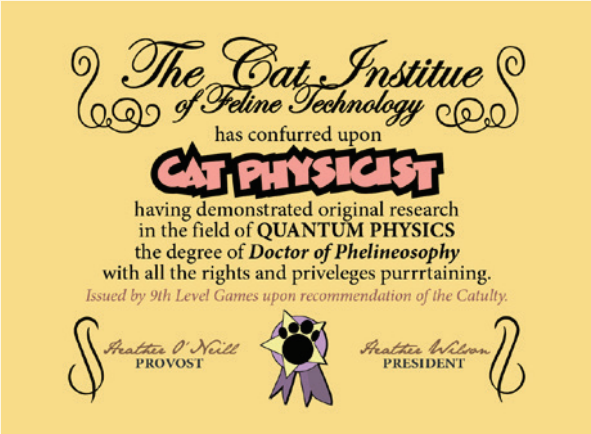
When a Scientist **Shows Findings**, they may discard from their remaining hand up to as many boxes as they placed face-up, and then draw the same number of new boxes from the **Research Deck** to replace them. Discarded boxes form a face-down **Discard Pile** next to the **Research Deck**.

Findings (the face-up cards) stay on the table for the duration of that experiment. If a Scientist wants to show additional **Findings** on a future turn they may do so, and again may cycle some of the boxes in their hand, drawing new ones.

> Madame Purrie states that there are 15 Alive Cats out of the 36 boxes in play. She has 3 Alive Cats in her hand so she reveals them to the group and places them face up on the table. Then she recycles 2 of her 3 remaining cards in hopes of obtaining more Alive Cats or Heisenbergs to help back up her hypothesis.

DOCTORATE IN CAT PHYSICS

Each **DOCTORATE** showcases a **CAT PHYSICIST**, their research specialty, and a unique ability. At the start of the game each Scientist is dealt a secret **DOCTORATE**, and they keep this ability hidden (face down) from the other Scientists until they are ready to use the ability on the card.



THE DOCTORATE CARD BACK

While you are the **ACTIVE SCIENTIST**, you may reveal your **DOCTORATE** at any time, by flipping it face up to show the **CAT PHYSICIST** side. When you reveal your **CAT PHYSICIST** you may perform the action listed on the card. Each **DOCTORATE** can only be used **ONCE PER GAME!** So, be very careful when you use it! Some abilities are better at different points in the game.

SOME CAT PHYSICIST CARDS

> Mittens Faraday is sitting to your right and just made a hypothesis of 16 Alive Cats out of 36 boxes. You are now the Active Scientist. You may activate your Doctorate at this time. You don't have any Alive cats so you decide to use your Doctorate. Your special ability is to discard all Alive cat findings (face up cards). You activate your ability, which wipes away 6 of the Alive cat findings showing and call Mittens Faraday's hypothesis unfounded! All research is observed and there are only 15 Alive Cats, including the Heisenbergs. DEBUNKED!

PROVE IT!

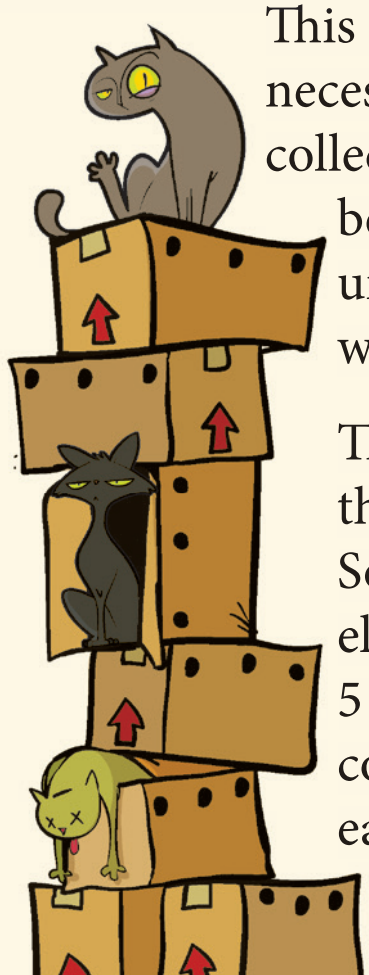
The **Active Scientist** will eventually reach a point where they feel that the current **hypothesis** is invalid, or that increasing the **hypothesis** would be ludicrous. When this happens, they call the **hypothesis unfounded** and say **"Prove it!"**

> Albert Felinestein bids 12 Alive Cats. Of the 25 boxes in the experiment, 6 Alive Cats are shown as findings. Madame Purrie becomes the Active Scientist with a hand full of Dead Cats, and tries to DEBUNK Albert's Hypothesis, "UNFOUNDED! Prove it!"

When asked to **prove it!**, we **observe the experiment** - all boxes in hand are revealed and placed face-up on the table. Discard all of the boxes that do not meet the **final hypothesis**, and count the remaining **findings**. The Scientist that is found to have the **wrong hypothesis** is out of the game (and disgraced in the Science Cat Community for thier bad science!)

The Scientist whose science prevails (either because they debunked or were confirmed) becomes the new **FIRST SCIENTIST** in the next experiment, wins the deal, and bids first in the new round.

> **NEIL DEGRASSE TABBY MAKES A HYPOTHESIS OF 5 ALIVE CATS OUT OF 9 BOXES. THE NEXT SCIENTIST, SALLY PRRIDE, CALLS THIS INTO QUESTION AND ALL BOXES ARE PLACED FACE UP. ALL FINDINGS THAT ARE NOT ALIVE CATS, HEISENBERGS, OR ACTIVE DOCTORATE POWERS THAT COUNT AS ALIVE CATS, ARE DISCARDED. IT TURNS OUT THAT THERE ARE ACTUALLY 7 ALIVE CATS AND THE HYPOTHESIS IS DEEMED VALID! SALLY PRRIDE, THE SCIENTIST THAT CALLED THIS RESEARCH INTO QUESTION, IS NOW KICKED OUT OF THE LAB AND OUT OF THE GAME. SHE DECIDES THIS A GOOD TIME TO GET SOME MILK.**



This is the end of this experiment (but not necessarily the game). All the cards are collected, shuffled, and the next experiment begins (now with one less Scientist). All unused **DOCTORATES** remain face down with their respective Scientist.

The number of cards dealt is equal to the number of players left in the game. So, in a 6 player game with one player eliminated, there are now 5 players and 5 cards are dealt to each player. Play continues with the remaining Scientists each having 1 fewer box in their hand.

Ending the Game

The game ends when the **Final Experiment** is complete and the last Scientist either successfully debunks her peer or has her research proven valid. That Scientist is the winner and receives an honorary **PhD** from **Cat Tech University** in Quantum Physics!

Alternative Rules

Schrödinger's Cats is fun for 2-6 Scientists, but the basic game plays best with 4-6. When you only have 2 or 3 Scientists - or if your game group isn't into elimination style games - instead of eliminating a Scientist at the end of each round (and then reducing the hand size), utilize the following rules.

If a Scientist wins 3 experiments, they are the winner; conversely a Scientist is eliminated after they have lost 2 experiments. Cards are dealt to each Scientist equal to the **Experiment Number** (*according to the chart here*) instead of the number of players.

Experiment Number	Hand Size
1	6
2	5
3	4
4	3
5	2

F.A.Q.

Why would I want to show findings?
First, you may want to try to convince the Scientist to your left that your hypothesis is valid by showing them some proof. Secondly, you may have a hand full of DEAD cats when everyone is making hypotheses of ALIVE cats and want to exchange your research. You could make a hypothesis of ALIVE cats, show 1 ALIVE cat and exchange one of your DEAD cats in hopes of getting another ALIVE or a HEISENBERG. Lastly, you might want to help your cause by trying to pull more of the type of card you called or HEISENBERGS.

When findings are discarded are they out of the experiment?
Yes. If a DOCTORATE's ability is to discard all findings of a type (ALIVE, DEAD, EMPTY) then all of those findings are removed from that experiment. All Scientists who placed those findings on the table now only have the research boxes in their hand and the number of boxes in the experiment goes down by the number of findings eliminated.

When I skip my hypothesis what happens?
When you play a DOCTORATE that allows you to skip your hypothesis that turn the Scientist to your left is forced to make the next hypothesis. Example: If Madame Purrie just made a hypothesis of 16 DEAD cats out of 25 boxes and you have a lot of DEAD cats you made decided to activate your DOCTORATE and skip your hypothesis. When you do the Scientist to your left now has to make a hypothesis higher than 16 DEAD cats or call Madame Purrie's hypothesis unfounded.

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A Hunter & Scout Game
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