Contamination Rulebook

Game Objective

Choose your experimental materials carefully—they may be hiding a contamination accident in the lab! Survive to the end and win the game!

Game Setup

Shuffle all Experiment cards. For n players, place n−1 Contamination accident cards, then lay out a 5×5 grid (including Contamination) in the center of the table.

Shuffle all Tool cards and place them beside the Experiment cards to form the Tool deck.

Give each player one Starting Funds card (3 points).

How to Play

On your turn, take actions in the following order:

1. Use Tool card(s) and resolve the result(s). Some life-saving Tool cards have special timing; follow the effect printed on the card.

2. Flip over one Experiment card on the field and resolve its effect. When you flip a "Contamination," you are immediately eliminated unless you hold and use an item that grants immunity.

3. Buy a Tool card: pay 5 points, draw one Tool card, and keep it in your hand without showing it to others. Players may track scores manually.

⚠ You must act in this order: use tools first, then flip cards (life-saving Tool cards are the exception), and only then buy Tool cards.

Game End

When only one player has not been eliminated, that player wins.

When the only material cards left on the field are "Contamination" cards, each unused Tool card counts as 4 points; the player with the most points wins.

Tool Card Details (3 copies each)

Card Name	Effect
Data Theft	Steal one Experiment card from another player.
Gene Synthesis	Immediately gain 7 points.
Force Loading	Choose another player; you flip one Experiment card for them, and they take the effect.
Sterile Shield	Until the start of your next turn, you cannot be eliminated.
Library Screening	Draw the top 2 cards of the Tool deck, choose one to add to your hand, and put the other on the bottom of the deck.
Emergency Treatment	When you flip a "Contamination," avoid elimination once; then put it back face-down and reshuffle it with the other Experiment cards.
Sample Reshuffle	Secretly swap the positions of two Experiment cards.
Gel Imaging	Look at 3 Experiment cards.

Experiment Card Details

Card Name	Effect	Quantity
E. coli	Gain 1 point.	6
S. cerevisiae	Gain 2 points.	3
Protease	Gain 3 points.	2

Card Name	Effect	Quantity
CRISPR Cas 9	Gain 3 points.	2
GFP (Green Fluorescent Protein)	Gain 5 points.	1
Sequencing Report	Immediately look at one Experiment card on the field.	2
Inducer	Immediately flip over another Experiment card.	2
Enhancer	The next Experiment card's points are doubled.	2
Kit	Immediately take one Tool card.	2
Contamination	If flipped over, the player is eliminated.	3

Starting Funds Card

Card Name	Points	Quantity
Starting Funds	3 points	4

Fun Facts (Science Notes; No Rules Effect)

Card Name	Fun Fact
E. coli	The lab's "all-purpose workhorse bacterium," a cornerstone of genetic engineering.
S. cerevisiae	A eukaryotic organism used for brewing, drug production, and fuel-making.
Protease	A common tool in protein research that "cuts" target proteins.

Card Name	Fun Fact
CRISPR Cas 9	The “molecular scissors” of gene editing, cutting DNA with precision.
GFP	A glowing protein from jellyfish that makes gene expression easy to see.
Sequencing Report	The “quality-check slip” of an experiment, confirming whether the DNA sequence is correct.
Inducer	The “switch” for gene expression—add it and protein production turns on.
Enhancer	An “amplifier” of gene expression that makes the target gene easier to read.
Kit	The experiment’s “first-aid kit,” supplying whatever is missing.
Contamination (No. 1)	Biochemical crisis — the laboratory safety system fails and dangerous samples begin to spread.
Contamination (No. 2)	Virus leak — an infectious disease more devastating than the Black Death escapes from the lab.
Contamination (No. 3)	Sample contamination — a group of unknown bacteria sneaks onto the lab bench.

《实验事故》说明书

游戏目标：小心你选择的实验材料，它可能是实验室里隐藏的污染事故！坚持到最后，赢

得游戏！

游戏准备：将所有实验牌洗混，按人数 n 放置 n-1 张污染事故，以 5×5（含污染事故）铺在桌子中间。将所有工具牌洗混，放置在实验牌旁边，形成工具牌堆。给每名玩家发一张启动资金（3 积分）。

游戏玩法：到你的回合，按照以下顺序执行行动：

使用工具牌并结算结果，部分保命工具牌有特殊的使用时机，以牌上效果为准。

翻开场上一张实验牌并结算效果。当你翻出“污染事故”时，立即出局，除非你持有并使用能免疫出局的道具。

购买工具牌支付 5 点积分，抽取一张工具牌，保留在手中，不要给别人看。玩家可手动记分。

⚠ 必须按照顺序执行行动：先使用工具，再翻牌（保命的工具牌除外），最后才能买工具牌。

游戏结束：

两种不同的结束条件：

当场上剩下一名玩家还未出局，该玩家获胜。

当场上材料牌只剩下“污染事故”时，未使用的工具牌记作 4 积分，积分多的玩家获胜。

工具牌详情 （各三张）

卡牌名称	效果
数据窃取 Data Theft	从其他玩家处窃取一张实验牌
基因合成 Gene Synthesis	立即获得 7 点积分
强制上样 Force Loading	选择一名其他玩家，你来帮他翻开一张实验牌，效果

	由他承担
无菌护罩 Sterile Shield	在你的下一个回合开始之前，不会出局
文库筛选 Library Screening	摸取工具牌堆顶 2 张牌，然后选择一张加入手牌，另一张放回牌堆底
应急处理 Emergency Treatment	当你翻到“污染事故”时，免出局一次，随后将它盖回去和其他实验牌重新洗混
样本重排 Sample Reshuffle	选择两张实验牌偷偷交换位置
凝胶成像 Gel Imaging	查看 3 张实验牌

实验牌详情

卡牌名称	效果	数量
大肠杆菌 E. coli	获得 1 积分	6 张
酵母菌 S. cerevisiae	获得 2 积分	3 张
蛋白酶 Protease	获得 3 积分	2 张
CRISPR CRISPR Cas 9	获得 3 积分	2 张
GFP Green Fluorescent Protein	获得 5 积分	1 张
测序报告 Sequencing Report	立即查看场上一张实验牌	2 张
诱导剂 Inducer	立即再翻出一张实验牌	2 张
增强子 Enhancer	下一张实验牌的积分翻倍	2 张
试剂盒 Kit	立即拿取一张工具牌	2 张
污染事故 Contamination	翻开即出局	3 张

起始积分牌

卡牌名称	积分	数量
启动资金	3 积分	4 张

趣味简介（科普注释，不影响规则）

实验牌：

卡牌名称	趣味简介
大肠杆菌	实验室的“万能打工菌”，基因工程的基石。
酵母菌	真核模式生物，酿酒、产药、做燃料样样行。
蛋白酶	蛋白质研究的常用工具，负责“剪开”目标蛋白。
CRISPR	基因编辑的“分子剪刀”，精准切割 DNA。
GFP	来自水母的发光蛋白，让基因表达一目了然。
测序报告	实验的“质检单”，帮你确认 DNA 序列对不对。
诱导剂	基因表达的“开关”，一加就产蛋白。
增强子	基因表达的“放大器”，让目标基因更易被读取。
试剂盒	实验的“急救包”，缺啥补啥。
污染事故（序号 1）	生化危机 - 实验室安全系统失效，危险样本开始扩散
污染事故（序号 2）	病毒泄露 - 比黑死病更厉害的传染病从实验室传了开来
污染事故（序号 3）	样本污染 - 一组未知细菌偷偷潜入了实验台