

Herdles Game

Beast Academy Science 3B: Chapter 16, pages 308-309



In the game of Herdles, players compete for resources to survive.

Find complete rules in Beast Academy 3B.

RULE CLARIFICATIONS

Match Ups

In the **Match Up** phase of a turn, the first player lays all three cards down. The second player chooses one card at a time and matches it with an opponent's card before looking at the next one.

Reproduction

In the **Reproduction** phase of a turn, it's possible that both players have two or more surviving cards left. In that case, both players choose two survivors as parents and flip cards from their offspring pile until they find a suitable offspring card.

Offspring may be slightly stronger or weaker than their parents. This models mutations that can happen in nature. So, for example, a 9♥ and 10♥ can have a J♦ offspring if they are lucky (or an 8♦ if they are unlucky).

It is possible (but very unlikely) that there may be no suitable offspring for a pair of selected parent cards. For example, if a 9♥ and 10♥ are selected as parents and the 8♦, 9♦, 10♦, and J♦ are no longer in the offspring pile, then the 7♦ or Q♦ may be selected to join the herd.

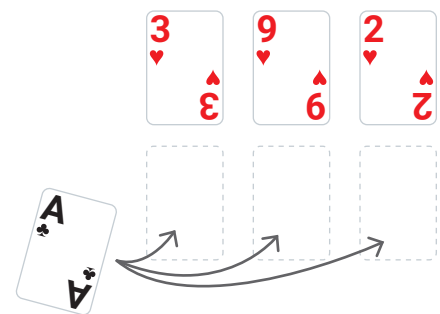
Remember to return the unused offspring cards to the offspring pile. Only the suitable offspring card becomes part of the herd pile.

STRATEGIES

Consider Match Ups

Your opponent is playing red and has flipped the 3♥, 9♥, and 2♥. Your first card is the A♣. Which card do you pair it with?

If you pair it against the 3♥ or the 2♥, it will have a chance of winning and remaining in the herd. But, it might make sense instead to match your Ace against the 9. This will give your other two cards a much better chance of victory in their matchups.



Probabilities

There are 36 possible outcomes when red rolls against black, shown in the table on the right. You can use the table to see how often you will beat your opponent. For example, if you pair your a A♣ against a 2♥, you will tie in 5 of the 36 possible rolls (these show a black +1 in the chart). You will beat them in 10 of the 36 rolls (+2 or more), and they will beat you in 21 of the 36 rolls.

A card that is 2 more than its opponent will only lose in 6 of the 36 possible rolls, but it can still happen!

		Black Roll					
		0	1	2	3	4	5
Red Roll	0	0	+1	+2	+3	+4	+5
	1	+1	0	+1	+2	+3	+4
	2	+2	+1	0	+1	+2	+3
	3	+3	+2	+1	0	+1	+2
	4	+4	+3	+2	+1	0	+1
	5	+5	+4	+3	+2	+1	0

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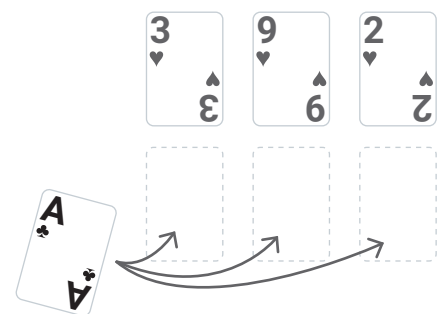
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		Black Roll					
		1	2	3	4	5	6
Red Roll	1	0	+1	+2	+3	+4	+5
	2	+1	0	+1	+2	+3	+4
	3	+2	+1	0	+1	+2	+3
	4	+3	+2	+1	0	+1	+2
	5	+4	+3	+2	+1	0	+1
	6	+5	+4	+3	+2	+1	0