

Hungry chicken game

Scenario: You are a chicken. You are hungry. All day long you look for food.

Take turns drawing a card to see how you interact with the environment. For example, if you find food, your card will tell you to collect tokens and gain weight. If you use a lot of energy searching for food, you may be told to return tokens to the bowl and you will lose weight. If you do not have enough tokens, you will not have enough energy to look for food or a mate and reproduce. The tokens represent the weight/energy that is **gained** when a chicken eats food or is **consumed** when the chicken moves around.

Procedure

1. Each round will last 2 minutes.
2. Round one: Draw a card and read it aloud.
3. Follow the instructions on the card to either collect tokens from the bowl or return the tokens to the bag.
4. Record the action in the environment that caused your chicken to gain weight or lose weight. Use the chart below to record your data.
5. After recording your relationship, discard the card into a separate pile. When the original pile is depleted, add shuffled cards to the pile.
6. Next player repeats steps 1–4.
7. Continue taking turns until the 2 minutes are up.
8. Round two: Repeat steps 1–6, but give one player in the group the agility trait card.

Agility trait card

The player with the agility trait card is allowed to collect two extra tokens each time he/she draws a card that allows him/her to eat or give up two less tokens if predation is involved. This chicken is more agile than the other chickens, allowing it to collect food faster as well as evade predation.

ROUND 1

Turn number	Card action description	Tokens gained or lost
0	Game start	10

ROUND 2

Turn number	Card action description	Tokens gained or lost
0	Game start	10

Analysis

1. How much food did your chicken gain after round 1 and round 2?
2. How did the addition of the agility trait alter the environmental influence over the expression of your chicken's inherited traits? Explain.
3. Collect classroom data on each chicken's final token total and calculate the average. Does this total change from round 1 to round 2? How did the inclusion of the agility trait alter the average? Why?