

Hot Science

Evolution of Beauty



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Cool Activities

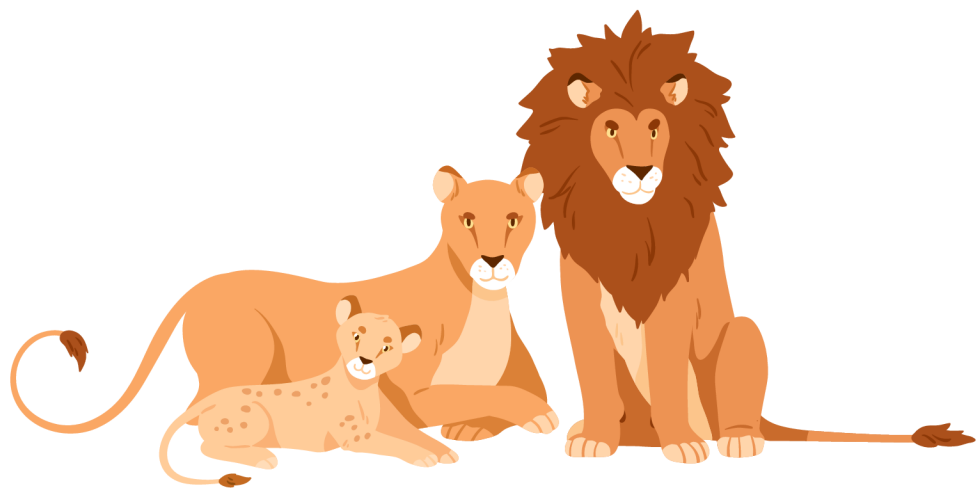
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Reference Sheet



Terms to Know

- **Evolution:** The process by which the genetic code of species changes overtime.
- **Natural selection:** A mechanism of evolution by which, organisms better adapted to their environment tend to survive and pass on their traits.
- **Sexual selection:** A mechanism of evolution by which the organisms better at attracting mates tend to produce more offspring, passing on their traits.
- **Predation:** The act of an animal (a predator) eating another animal (the prey)
- **Reproduction:** The process by which an organism passes on its traits though the creation of offspring.



Feeding Frenzy Experiment

Name

Date

Directions: Explore an example where beauty kills by observing M&M's in their natural habitat. Pour about 20 M&M's on the construction paper. Record the number of M&M's there are of each color in your table under the "Before Predation" row. Biologist: set a timer for 20 seconds for the feeding frenzy. Predator: During the 20-second timer, use your fingers to grab M&M's and and set them in a pile in front of you. Remember, you strike the first critter you see with speed and precision. When the timer goes off, STOP!

Table 1: Predation and Reproduction

	Before Predation	After Predation
Red		
Orange		
Yellow		
Blue		
Green		
Brown		
TOTAL		

2

Answer Brainstorm



Context Questions:

1. Which colors of M&M's were most likely to get eaten by the predator? Why?
2. Which colors were least likely to be eaten. Why?
3. Did any colors go extinct (completely disappear from an environment)?

Reflection Questions:

1. How would you expect the population of M&Ms to change over time? (Hint: Remember the process of natural selection.)
2. How might your data change if this experiment was performed with brown construction paper instead? How about green?