

ADAPTATIONS AND SURVIVAL: REPRODUCTIVE STRATEGIES

Have you ever marveled at the size and power of elephants? These intelligent creatures invest lots of time and energy into caring for their young. Elephants organize themselves into complex social structures led by a matriarch. All of the females in the herd care for the young calves, protecting them from predators and teaching them how to survive. These protective behaviors increase the odds that the calves will survive to adulthood. Many species of plants and animals have similar reproductive strategies.

A **reproductive strategy** is a specific type of behavioral or physical adaptation that:

- increases the odds that an organism will successfully reproduce
- increases the odds that an organism's offspring will survive to adulthood.



Let's explore! Read the passage below, and explain in your own words how each behavior described is an example of a reproductive strategy. **Sample answers**

1. Male peafowl, referred to as peacocks, spread out and shake their beautiful feathers to attract a mate. Female peafowl, referred to as peahens, often choose their mate by the size, shape, and design of his tail. Scientists who study peafowl have found that the offspring of peacocks with more colorful eyespots on their tails are bigger at birth and better at surviving than the offspring of peacocks with fewer eyespots.

- a.** Explain how the mating ritual of a peacock is an example of a reproductive strategy.



The peacock spreads out and shakes his feathers during his mating ritual. This increases the likelihood that he will attract a peahen to be his mate, and therefore increases the odds that the peacock will successfully reproduce.

- b.** Explain how peahens selectively choosing a mate is an example of a reproductive strategy.

By choosing the peacock with the most attractive tail to be her mate, the peahen is increasing the odds that her offspring will survive to adulthood because peacocks with more colorful eyespots on their tails are more likely to have healthy offspring.

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Keep going! Read the passages and answer the questions below. **Sample answers**

2. A peahen creates a nest for her eggs by scraping out a shallow depression in the ground and lining it with grass or other vegetation. She then sits on the eggs for about a month to keep them warm. Peafowl eggs need to be incubated at a specific temperature to develop into healthy peachicks. If the temperature is too cold, the eggs will hatch late or not at all.



Explain how the peahen’s nesting behavior is an example of a reproductive strategy.

By creating a nest and sitting on her eggs for a month, the peahen incubates her eggs at the perfect temperature. This increases the odds that the eggs will develop into healthy peachicks and hatch at the appropriate time.

3. A peahen will usually lay three to eight eggs in her nest. Once hatched, peachicks are very vulnerable. Out of every six peachicks that hatch, typically only two survive to adulthood.

Explain how laying multiple eggs at a time is an example of a reproductive strategy.

By laying multiple eggs at a time, the peahen increases the odds that at least one of the peachicks will survive to adulthood.

4. Once hatched, peachicks stay with their mother for several months. A peahen will protect her peachicks from predators and teach them how to find food, care for their feathers, and communicate.

Explain how the parental care that a peahen provides to her peachicks is an example of a reproductive strategy.

By providing parental care to her peachicks for the first several months of their lives, the peahen protects her peachicks from harm and increases their odds of survival.