

## Passage II

Most newly hatched ducks are covered with a dull *plumage* (feathers). When the ducks reach maturity, the females in some species retain the dull plumage but the males develop brightly colored plumage. Adult males remain brightly colored during the fall and winter of each year. During spring their plumage becomes dull again.

Several theories exist concerning the purpose of the unique appearance of the male ducks. Two scientists discuss their theories.

### *Scientist 1*

The distinct color and pattern of the males enable females to identify males of their own species. Males of each species have a characteristic plumage that differs from that of males of other species. Females mate only with males of their own species. They reject males of all other species.

Females tend to prefer to mate with those males within their species that have the brightest plumage. These selected males tend to have an intimidating effect on other males, who are inclined to stay away and not mate with the females.

In addition, the brightly colored males tend to be healthier than the less brightly colored males. This gives them an advantage in attracting females and producing offspring. Their offspring also tend to be healthy.

### *Scientist 2*

The distinct color of the male plumage helps them defend their territories against others of their own species and own sex. They warn other males to stay out of their territories by singing and displaying their plumage.

If this theory is correct, the males fight primarily for territory and not over mates. After mating, the males stand guard over the females. If an intruder enters the territory, the males display their bright feathers to distract the intruder and lure it away. Occasionally the males may resort to physical combat to defend their territories.

The brightly colored males typically own territories with abundant food supplies. They are able to provide sufficient food for their offspring, whose chances of survival are excellent.

5. According to Scientist 1, brightly colored males differ from dull-colored males in that brightly colored males are:
  - A. unhealthy.
  - B. better able to attract mates.
  - C. better able to lure away males of the same species.
  - D. unable to defend large territories.
6. According to Scientist 2, when an intruder approaches a male duck's territory, the male duck may:
  - F. hide from the intruder.
  - G. sneak away with the offspring.
  - H. fly to the nest to attack his mate.
  - J. sing loudly and flap his wings at the intruder.
7. All of the following behaviors of male ducks are consistent with Scientist 2's viewpoint EXCEPT that the males:
  - A. stand guard over the nests.
  - B. fight the intruders that enter their territories.
  - C. sit on the eggs while the females guard the territory.
  - D. distract intruders away from the location of the young.

8. The most important idea that underlies both scientists' theories about ducks is that the:
- F. external appearance of the male and female ducks is similar.
  - G. external appearance of the male and female ducks is different.
  - H. males are colored to blend in with their surroundings.
  - J. females are larger and more striking in color and patterning than males.
9. The discovery that females prefer to mate with dull-colored males would have which of the following effects on the theories of Scientists 1 and 2 ?
- A. It would lend support to Scientist 1's theory only.
  - B. It would disprove Scientist 1's theory.
  - C. It would lend support to Scientist 2's theory only.
  - D. The effect it would have on either scientist's theory could not be determined.
10. Scientist 1 would predict that female ducks select their mates during which of the following seasons?
- F. Spring or summer
  - G. Fall or winter
  - H. Fall or summer
  - J. Spring, summer, or fall