Quiz 6 - Evolutionary Mechanisms

Due Mar 5 at 11:59pm **Points** 15 **Questions** 6
Available until Mar 6 at 2am **Time Limit** None **Allowed Attempts** 2

Instructions

This quiz asks questions about evolutionary mechanisms (mutations, natural selection, genetic drift, gene flow). We should have covered all mechanisms.

Targeted Readings - Evolutionary Mechanisms - Part I.pdf (https://canvas.ubc.ca/courses/105572/files/25659232?wrap=1) (https://canvas.ubc.ca/courses/105572/files/25659232/download?download_frd=1)

You have 2 attempts to complete this attempt.

This quiz will remain open until 11:59 pm, Sunday, March 5th

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	11 minutes	15 out of 15

ⓘ Correct answers will be available Mar 6 at 12pm - Mar 14 at 10am.

Score for this attempt: **15** out of 15
Submitted Mar 2 at 6:15pm
This attempt took 11 minutes.

Question 1 — 1 / 1 pts

Which population would not be affected by a founder effect?

- Ashkenazi Jews that settled in Eastern Europe
- Tahitians and English mutineers on the Pitcairn Islands
- (•) survivors of a typhoon in the Pingelap Atoll
- finches that colonized the Galápagos Islands

Question 2

1 / 1 pts

Which populations would be affected most by random genetic drift?

- fixed populations
- (•) small populations
- large populations
- migrating populations

Question 3

5 / 5 pts

Match the following terms to the appropriate description.

Population	Localised group of individu
Gene pool	The total of all the alleles a
Species	

A group of individuals with

Genetic drift — The random fluctuation of

Allele frequency — The proportion an allele oc

Question 4

6 / 6 pts

Use the following terms to fill in the blanks in the paragraph below.

There are several mechanisms of microevolution. ___(1)___ can be described as sampling error of a small population, which changes the allele frequencies. There are two situations which can shrink populations enough such that this sort of sampling error can have a profound effect. The first is caused by reduction in population size due to environmental disasters or similar events. This is called ___(2)___ and the remaining individuals may not be in the same phenotypic proportions as before. The _____(3)_____ occurs when a small number of individuals, who may not be representative of the original population, colonise a new area. The movement of gametes such as pollen or reproductive individuals themselves into a new population is called __(4)__ and can change the allele frequency of a population. ___(5)___, is a change in an organism's DNA and is how new alleles arise, though it is rare. ___(6)___ works through differential reproductive success, which changes the allele frequency from generation to generation, and is the mechanism of microevolution which adapts organisms to their environment.

1 — genetic drift

2	bottleneck effect
3	founder effect
4	gene flow
5	mutation
6	natural selection

Question 5

1 / 1 pts

Which of the following is FALSE with respect to natural selection and genetic drift?

- (●) Both natural selection and genetic drift involve differences in fitness.
- ( ) Both natural selection and genetic drift result in allele frequency changes.
- ( ) Both natural selection and genetic drift require genetically inherited traits.

Question 6

1 / 1 pts

Male turkeys have a snood, a flap of skin that hangs across their beak. Snood length is negatively correlated with parasite load (e.g., males with longer snoods have fewer parasites), and females prefer to mate with long-snooded males. This is an example of

- ○ the fundamental asymmetry of sex.
- ◉ sexual selection via female choice.
- ○ sexual selection via male-male competition.
- ○ a genetic marker.

Quiz Score: **15** out of 15