Topic: Speciation and Genetic Drift Worksheet

Summary: Students match genetic drift, speciation and extinction vocabulary terms with their definitions.

Goals & Objectives: Students will be able to define key words for speciation and extinction.

Standards: CA Biology 8c. *Students know* the effects of genetic drift on the diversity of organisms in a population. 8d. *Students know* reproductive or geographic isolation affects speciation.

Time Length: 10 minutes

Materials:

- Class textbook
- Photocopied worksheets
- Pencils or pens

Procedures:
1. Tell the students which section they are to use in the textbook. Students are then going to read the section and answer the questions on the worksheet.

Accommodations:
Give students with a modification IEP two free answers per section. Students with an IEP can take the handout home if they need extra time.

Evaluation:
Each question is worth ½ point. The assignment is worth a total of 7 points.

Name: _____ Row: _____

Date:_____ Period:_____

Speciation & Genetic Drift Worksheet

Speciation: Write the letter of the correct definition in the blank space on the left.

1. _____ reproductive isolation
2. _____ behavioral isolation
3. _____ geographic isolation
4. _____ temporal isolation
5. _____ subspecies

a) physical barrier that keeps two populations separate

b) populations of the same species differ genetically from each other

c) different reproduction times

d) differences in courtship or mating behaviors

e) individuals from different populations can no longer mate successfully with each other

Extinction: Write the letter of the correct definition in the blank space on the left.

6. _____ mass extinction
7. _____ episodic speciation
8. _____ biodiversity
9. _____ fossil record
10. _____ variation

a) difference between individuals

b) new species that form right after a mass extinction

c) destruction of many species that occurs suddenly in geologic time.

d) many different species living in the same ecosystem

e) organic matter that turned into rock. Used to record evolution

Gene Flow: Write the letter of the correct definition in the blank space on the left.

11. _____ allele frequency
12. _____ genetic drift
13. _____ founder effect
14. _____ bottleneck effect
15. _____ gene pool

a) all the alleles in a population

b) change in allele frequencies caused by random chance

c) great reduction in the size of a population with a great loss of variation

d) small number of individuals who colonize a new area

e) how common an allele is in a population