Topic: Types of Evolution Worksheet

Summary: Students are introduced to vocabulary about the different types of evolution, and they use that vocabulary to answer evolution questions.

Time Length: 20 minutes

NGSS Standards:
HS-LS4-3. Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait.

Materials:
Class notes or textbook or online textbook:
- https://flexbooks.ck12.org/cbook/ck-12-biology-flexbook-2.0/section/5.18/primary/lesson/population-genetics-bio/
- https://flexbooks.ck12.org/cbook/ck-12-biology-flexbook-2.0/section/5.20/primary/lesson/forces-of-evolution-bio/
- https://flexbooks.ck12.org/cbook/ck-12-biology-flexbook-2.0/section/5.21/primary/lesson/natural-selection-bio/

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 fewer questions to answer in the matching sections. Students with an IEP can take the handout home if they need extra time.

**Editable DOCX File and Answer Key:**
Available at www.ngsslifescience.com

Types of Evolution Worksheet

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

1. _____ allele frequency   a) all the alleles (traits) in a population

2. _____ gene pool   b) how common a trait is in a population

3. _____ directional selection   c) both extreme phenotypes thrive, intermediate phenotype has a reduced population size

4. _____ disruptive selection   d) intermediate phenotypes thrive, both extreme phenotypes have reduced population size

5. _____ stabilizing selection   e) one extreme phenotype thrives

Label each population size bar graph based on the type of selection of the bird beaks.
(disruptive, directional, stabilizing)
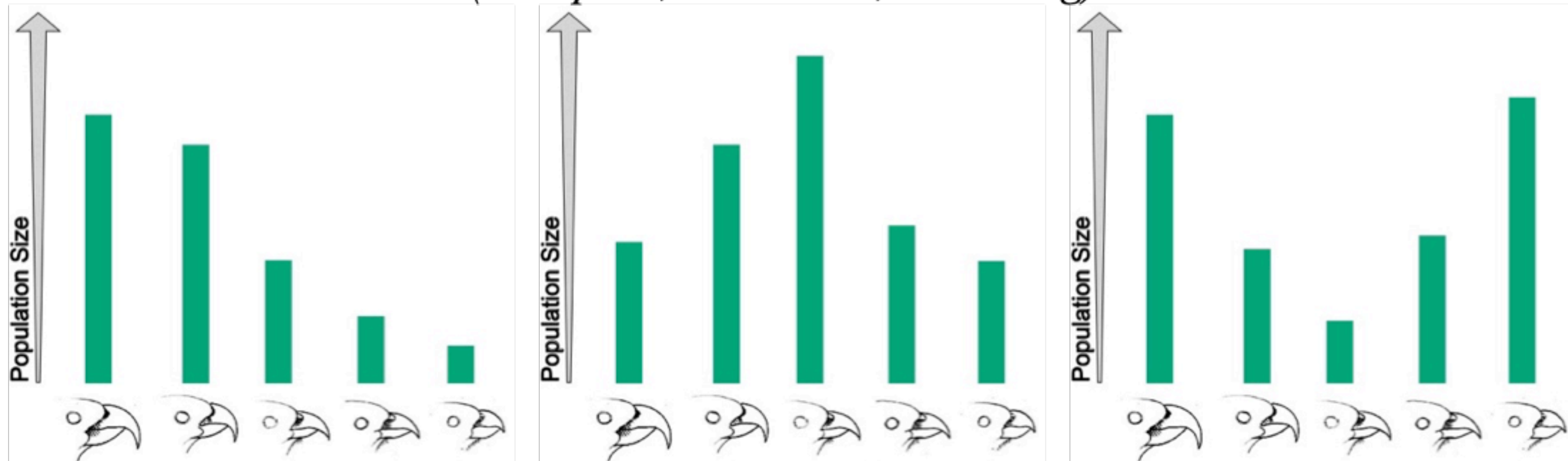
6. _____   7. _____   8. _____

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

9. _____ artificial selection   a) small number of individuals who colonize a new area

10. _____ sexual selection   b) accumulation of differences between two populations

11. _____ natural selection   c) selection of traits by humans

12. _____ convergent evolution   d) selection of traits that are advantageous for reproduction

13. _____ divergent evolution   e) migration

14. _____ bottleneck effect   f) environment selects what is advantageous for survival

15. _____ gene flow   g) independent evolution of similar features within a species

16. _____ genetic drift   h) change in allele frequencies caused by random chance

17. _____ founder effect   i) great reduction in the size of a population with a great loss of variation