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**Topic:** Speciation and Extinction Worksheet

**Summary:** Students match causes of environmental change, speciation, and extinction vocabulary terms with their definitions.

**Goals & Objectives:** Students will be able to define keywords for speciation and extinction.

**NGSS Standards:** *HS-LS4-5.* Evaluate the evidence supporting claims that changes in environmental conditions may result in (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.

**Time Length:** 10 minutes

**Materials:**

Class notes or textbook or online textbook:

- <https://flexbooks.ck12.org/cbook/ck-12-biology-flexbook-2.0/section/5.22/primary/lesson/origin-of-species-bio/>
- <https://flexbooks.ck12.org/cbook/ck-12-biology-flexbook-2.0/section/5.6/primary/lesson/late-precambrian-period-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 two free answers per section. 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](http://www.ngsslifescience.com)

## Speciation & Extinction Worksheet

Speciation: Write the letter of the correct definition on the underlined space.

- |                                 |   |
|---------------------------------|---|
| 1. _____ reproductive isolation | a) physical barrier that keeps two populations separate                                   |
| 2. _____ behavioral isolation   | b) populations of the same species differ genetically from each other                     |
| 3. _____ geographic isolation   | c) different reproduction times   |
| 4. _____ temporal isolation     | d) differences in courtship or mating behaviors   |
| 5. _____ subspecies             | e) individuals from different populations can no longer mate successfully with each other |

Extinction: Write the letter of the correct definition on the underlined space.

- |                              |   |
|------------------------------|---|
| 6. _____ mass extinction     | a) difference between individuals                                     |
| 7. _____ episodic speciation | b) new species that form right after a mass extinction                |
| 8. _____ biodiversity        | c) destruction of many species that occurs suddenly in geologic time. |
| 9. _____ fossil record       | d) many different species living in the same ecosystem                |
| 10. _____ variation          | e) organic matter that turned into rock. Used to record evolution     |

Environmental Conditions: Write the letter of the correct definition on the underlined space.

- |                         |  |
|-------------------------|--|
| 11. _____ drought       | a) when nutrients are applied to agricultural crops            |
| 12. _____ fertilizers   | b) when too many aquatic animals are removed from the food web |
| 13. _____ fishing       | c) too much water in a short period of time                    |
| 14. _____ flood         | d) when too many trees are removed from an ecosystem           |
| 15. _____ deforestation | e) a prolonged period of time with no water                    |