

MS-LS2-2 Ecosystems: Interactions, Energy, and Dynamics

California Alternate Assessment for Science—Item Content Specifications

# MS-LS2-2 Ecosystems: Interactions, Energy, and Dynamics

| California Science Connector | Focal Knowledge, Skills, and Abilities | Essential Understanding |
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| Describe examples of competitive, predatory, or symbiotic relationships by using models of interactions between organisms in an ecosystem. | 1. Ability to identify a competitive relationship by using a model of interactions between organisms in an ecosystem. 2. Ability to identify a predatory relationship by using a model of interactions between organisms in an ecosystem. 3. Ability to identify a symbiotic relationship by using a model of interactions between organisms in an ecosystem. | Identify that animals compete for food. |

## **CA NGSS Performance Expectation**

Students who demonstrate understanding can:

**Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.** [Clarification Statement: Emphasis is on predicting consistent patterns of interactions in different ecosystems in terms of the relationships among and between organisms and abiotic components of ecosystems. Examples of types of interactions could include competitive, predatory, and mutually beneficial.]

## Mastery Statements

Students will be able to:

* Identify that animals compete for food
* Recognize that organisms compete for resources in an ecosystem
* Recognize that organisms may have a predatory relationship in an ecosystem
* Recognize that organisms may have a symbiotic relationship in an ecosystem
* Identify organisms that have a predatory or symbiotic relationship
* Identify the predator and prey in a predatory relationship

## Possible Phenomena or Contexts

*Note that the list in this section is not exhaustive or prescriptive.*

**Possible contexts include the following:**

* Relationship between two animals that eat the same kind of plant
* Relationship between one animal that eats another animal
* Relationship in which two organisms help each other

## Additional Assessment Boundaries

* None listed at this time

## Additional References

California Science Test Item Specification for MS-LS2-2

<https://www.cde.ca.gov/ta/tg/ca/documents/itemspecs-ms-ls2-2.docx>

Environmental Principles and Concepts <http://californiaeei.org/abouteei/epc/>

The *2016 Science Framework for California Public Schools Kindergarten through Grade Twelve* <https://www.cde.ca.gov/ci/sc/cf/cascienceframework2016.asp>

Appendix 1: Progression of the Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts in Kindergarten through Grade Twelve

<https://www.cde.ca.gov/ci/sc/cf/documents/scifwappendix1.pdf>

Appendix 2: Connections to Environmental Principles and Concepts

<https://www.cde.ca.gov/ci/sc/cf/documents/scifwappendix2.pdf>

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