

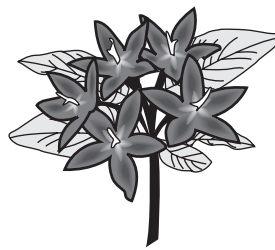
BENCHMARK SC.5.L.14.2

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| Reporting Category | Life Science |
| Standard | Big Idea 14 Organization and Development of Living Organisms |
| Benchmark | SC.5.L.14.2 Compare and contrast the function of organs and other physical structures of plants and animals, including humans, for example: some animals have skeletons for support—some with internal skeletons, others with exoskeletons—while some plants have stems for support. (Also assesses SC.3.L.15.1 and SC.3.L.15.2.) |
| Also Assesses | <p>SC.3.L.15.1 Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors.</p> <p>SC.3.L.15.2 Classify flowering and nonflowering plants into major groups such as those that produce seeds, or those like ferns and mosses that produce spores, according to their physical characteristics.</p> |
| Benchmark Clarifications | <p>Students will compare and/or contrast the function of organs and/or other physical structures of plants and/or animals.</p> <p>Students will classify animals into major groups according to their physical characteristics and behaviors.</p> <p>Students will classify flowering and/or nonflowering plants into major groups according to their physical characteristics.</p> |
| Content Limits | <p>Items will not require the classification of animals beyond the initial invertebrates grouping.</p> <p>Items referring to classification of vertebrates will only assess general physical characteristics and/or behaviors of mammals, birds, reptiles, amphibians, and fish.</p> <p>Items addressing and/or assessing the functions of organs or the comparison of physical structures are limited to the brain, heart, lungs, gills, stomach, liver, intestines, pancreas, muscles, bones, exoskeleton, testes, ovaries, kidneys, bladder, skin or body covering, eyes, ears, nose, and tongue.</p> <p>Items referring to the functions of plant structures are limited to flower, fruit, leaf, root, stem, seed, and spore.</p> <p>Items addressing the comparison of the structure and/or function of plants and animals are limited to skin compared to plant covering, skeleton compared to stem, and reproductive organs compared to flower.</p> |

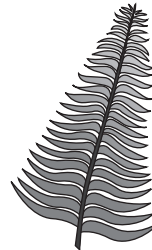
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| Content Limits | Items will not require specific knowledge of the parts of organs. |
| Stimulus Attributes | Scenarios will use common names of organisms and will not include scientific names. Scenarios requiring the classification of organisms as vertebrates or invertebrates must include a description or picture of the organisms. |
| Response Attributes | None specified |
| Prior Knowledge | Items may require the student to apply science knowledge described in the NGSSS from lower grades. This benchmark requires prerequisite knowledge from SC.K.L.14.3, SC.1.L.14.3, and SC.2.L.14.1. |

Sample Item 22 **SC.3.L.15.2**

The drawings below show two plants that grow in Florida, a penta and a sword fern.

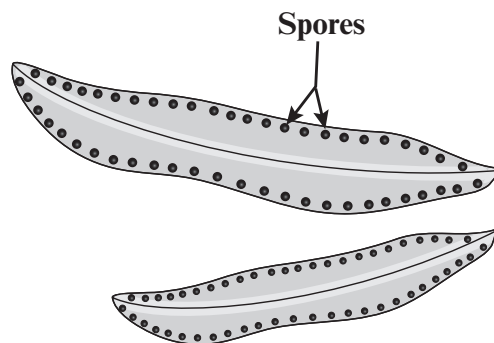


Penta



Sword Fern

The drawing below shows the spores that appear on the underside of the sword fern's leaves.



Which of the following is present in the penta but NOT in the sword fern?

- A. root growth
- ★ B. flower production
- C. ability to reproduce
- D. ability to make food