

8th Grade

Life Science Ch. 2 Lesson 2

Page	Question	Answer(s)	Links/Sources
59	What advantages do plants that reproduce via spores enjoy?	They use very little energy to produce spores in comparison to producing seeds.	https://www.newworldencyclopedia.org/entry/S_pore
59	What challenges do these plants face?	Spores need to go through a reproduction process before they can grow, seeds have an embryo. Spores don't have protection (seed coat) or nourishment as seeds do.	https://sciencing.com/advantages-do-seeds-over-spores-8447491.html
59	How tall are the mosses you see in your neighborhood?	Answers may vary: They may range between 0.04in-8in.	https://www.britannica.com/plant/bryophyte
59	Do you think distributing nutrients throughout the plant through diffusion and osmosis without having a structured transport system makes it difficult for a moss plant to thrive? Explain your reasoning.	It would make it difficult if the plant grows to a large size. If it is small, the rate of diffusion and osmosis is faster.	Bryophytes - Biology Encyclopedia - cells, plant, body, different, organisms, chromosomes, cycle, life, structure
60	How do you think moss plants are affected by having fewer cells conducting photosynthesis than other plants, such as oak trees have?	They may have a lower rate of photosynthesis. They don't produce as much glucose.	
60	What may cause a piece of the moss to break off?	Animals disturbing it or humans.	
60	What information do you think scientists learned that caused them to change the classification of liverworts and hornworts?	Differences in their leaves and rhizoids.	Page 60 last sentence.
61	Why is there such a difference in the size of ferns and mosses?	Ferns have sturdy support structures that have allowed them to adapt to their environments.	Page 61 second paragraph.
61	How do the roots and rhizomes work together to help the plant?	Roots absorb water and nutrients and rhizomes transport them throughout the plant.	Page 61 third paragraph.
61	How do the roots and rhizomes help the ecosystem?	They help make channels in the ground to increase a balance between runoff and water absorption.	https://academic.oup.com/bioscience/article/61/11/869/223555
62	What purpose do think fiddleheads serve?	It protects the delicate tip that is still developing.	https://nearbynature.fwni.org/2018/10/23/ferns-and-fiddleheads-background/

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62	Why do you think the small size of the spores is important to the success of fern production?	The plant is able to produce many due to their small size. This increases their chance for survival as a species.	
64	How do you think having just one vein affects the plants in division Lycopphyta?	May cause their small size since they don't have a more complex vein system to transport nutrients and water.	
64	What advantages might this rough texture give to horsetails?	They can survive harsh environments.	http://www.biology4kids.com/files/plants_fern.html