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Bureau of Land Management

# Assessment

## Module 3: Creek Critters

1. Which of these pictures is of a riparian ecosystem?

a.



b.



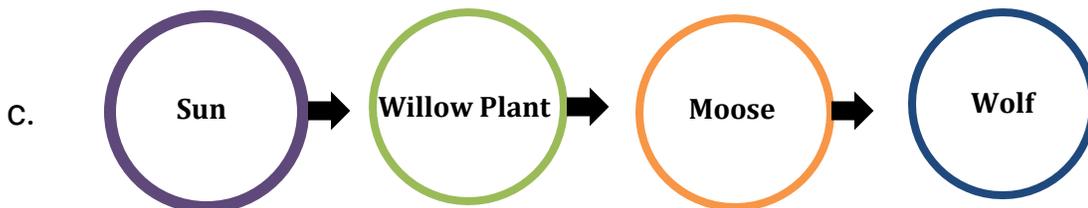
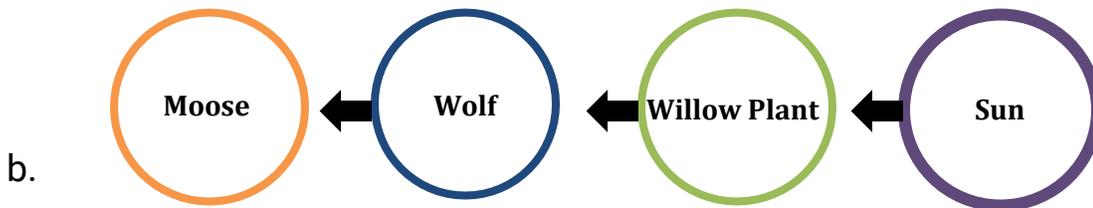
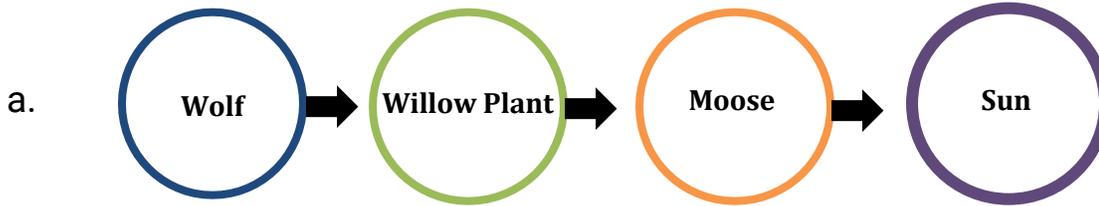
c.



Top: CCSC Staff, BLM , Middle: J. Schock, NPS, Bottom: Kim Mincer, BLM



2. Select the correct order and flow of energy in this riparian food chain.





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3. Adaptations are body parts or behaviors that help living things survive.

Look at the picture below. What is one adaptation of the mayfly? Explain how it helps the mayfly survive.



Macroinvertebrates.org and NSF

Answer:



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4. In the image below, which of the following critters might you expect to find in the creek?



USGS Staff, USGS

Answer:

- a. stoneflies
- b. leeches
- c. mayflies
- d. caddisflies



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5. Maddy traveled to an imaginary in Alaska called Crooked Creek. She recorded an observation and measured temperature, dissolved oxygen, and aquatic macroinvertebrate biodiversity. Here are her results:

**Observation:**

- the water is moving slowly
- algae is growing on surface of the water
- there are not many trees or plants along the bank

**Temperature:** 75 degrees

**Dissolved Oxygen:** Test water turned light blue, indicating low dissolved oxygen

**Aquatic Macroinvertebrates:** 6 leeches; 3 black fly larvae; NO mayflies, stoneflies, or caddisflies

Do you think Crooked Creek is a healthy waterway? Why or why not? Use the information Maddy collected to explain your answer.

Answer:



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6. What does finding many types of mayflies, stoneflies, and caddisflies indicate about the health of a waterway?

Answer:

- a. The waterway is healthy.
- b. The waterway is not healthy.
- c. None of the above.