Prairie Ecology

Text Source: CUE@2009

Above the prairie, you will see the skipper butterfly. It <u>depends</u> on the plants here in the prairie throughout its entire life. Butterflies begin life as an egg. The female butterfly lays eggs on a plant. She lays them inside a shell to protect them. Then something <u>remarkable</u> happens: the larva of a butterfly then eats through that shell.

What is a larva? It looks like a hairy worm. Its outside is flexible but tough. Scientists also call it a grub. It has no wings; it looks like a fuzzy short worm. It also is called a caterpillar. The larva eats the plant leaves. As it eats, the larva grows very quickly. Then the larva molts. That means that it sheds its outer layer of skin. It breaks through the skin and discards it because it needs to grow and the old skin is too tight. After some time, the larva makes a pupa. A pupa is a kind of shell. Inside that shell, it does something really surprising and wonderful. It turns into a butterfly with wings. That takes about two weeks.

The butterfly starts out with damp wings that have been crumpled inside the pupa. So the first thing it does is spread its wings. They are damp from being inside the pupa and at that time the butterfly is vulnerable to predators. It can walk but it cannot fly until the dampness has evaporated from the wings. It takes the butterfly about twenty minutes to spread its wings and let them dry. Then after about two hours have elapsed, the butterfly is ready to fly. Once it is dry, the skipper flies away because it wants to find food in the prairie. There are other butterflies that are so <u>iridescent</u> you would think it is easy to find them. But they look like shiny flowers. In summer when they land on a plant you can't see them.

On the ground and below it, you will find ground squirrels. This animal is about one foot long and lives in big families. It has a brown coat to <u>camouflage</u> it when it moves along the ground. Animals use the color of their fur, hair, or scales as <u>camouflage</u> to blend into what is around them. That coloration protects them because other animals can't see them. The ground squirrel is an herbivore, which means it only eats plants. It has access to a lot of food on the prairie because it eats grass. Sometimes it also eats insects, but the grass is easiest to consume. It sleeps in a hole or in the ground in winter to stay warm.

Hundreds of years ago, you would have also seen thousands of bison on the prairie. This big herbivore ate plants and was like a gardener for the prairie. It ate weeds and that kept the prairie thriving. A weed is a plant that is not native to an environment. It has come from another place. So when weeds would start to grow in the prairie, the bison would get rid of them. Without the bison, the weeds might take over the land that the prairie plants needed. So the bison helped the prairie to maintain balance. A balanced environment is a place where plants and animals have what they need to survive. It is a harmonious part of nature. All of the animals and plants of the prairie contribute to the balance of that environment.

Infer Meaning of Word from Context – Nonfiction

Questions developed for Chicago Public Schools by CUE, 2009.

Choose the best answer for each question.

sentence?	2. What does remarkable mean in the passage?					
a. lives	a. interesting					
b. eats	b. new					
c. needs	c. natural					
d. deep	d. change					
3. What does camouflage mean in the passage?	4. What does harmonious mean in the passage?					
a. hide	a. fitting together					
b. colorful	b. sounding good					
c. fur	c. big environment					
d. scales	d. changing place					
5. Write your own answer to this question. What does <u>iridescent</u> mean in the passage?						

TEACHER NOTES: Develop Students' Skills: Exercise Thinking

These questions have not been validated, so decisions about student's achievement should not be made based on their responses. They are intended to exercise skills. Recommended activities include: students work in pairs to choose the best response; give students the questions without the responses so they generate their own answers; students make up additional questions; students make up questions like these for another passage.

Answers: You can remove this answer key and then give it to students and ask them to figure out the basis for the correct response.

	Item	1	2	3	4
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Question 5 is open-ended. Here is a suggested response. Iridescent means bright and shiny.