

FUN FACTS ABOUT BUTTERFLIES

Directions: Read the article below and use close reading strategies as often as possible: highlight, underline, and take notes.

Butterflies are some of the most beautiful and enchanting creatures on Earth. With their gorgeous colors and graceful flight, they are truly a feast for our senses!

One of the most interesting things about butterflies is that they undergo a transformation or metamorphosis. In fact, it's one that's *quite* incredible. Butterflies begin their lives as tiny eggs, which later hatch into caterpillars. These caterpillars then eat many leaves, causing them to grow bigger and bigger. After a while, they form a chrysalis or cocoon, where they undergo the transformation from a caterpillar into a beautiful butterfly. It's both amazing and beautiful. Depending on the type of butterfly, this process can take anywhere from days to weeks.

Butterflies come in a wide variety of colors and patterns. From bright oranges and yellows to deep blues and purples, their wings are a *true* work of art. Some butterflies, like the iconic Monarch butterfly, have black and orange patterns that warn predators to stay away. We see orange in the real world to also signal danger or warning: think of traffic cones and signs—they're orange! Anyhow, this is a butterfly's way of saying, "I'm not tasty, so don't eat me! (Please!)"

Speaking of taste, did you know that butterflies taste with their feet? Yes, that's right! Butterflies have taste receptors on their feet, allowing them to "taste" the plants they land on. This helps them find the right food, which is mostly nectar from flowers, to keep them nourished and thriving. While (most) humans would never even consider eating with their feet, for butterflies, it's totally normal. Yum!

Butterflies are also incredible fliers. Despite their delicate and dainty appearance, they can fly long distances and reach impressive speeds. Some species of butterflies migrate, which means they travel long distances from one place to another. The Monarch butterfly, for instance, travels from North America to Mexico each year. Such a great distance for such a tiny being. In terms of speed, there are butterflies called Skippers which can travel nearly 40 miles per hour. They're nearly competitive with cars on the roadway!

Also, butterflies can see colors that humans can't! They have a special ability called ultraviolet vision. This helps them find flowers and locate potential mates. So while we may see a beautiful garden, butterflies see a world filled with even more vibrant colors and potential companions. Wild!

Butterflies' are certainly a source of wonder and awe. Next time you see a butterfly flutter by, take a moment to appreciate the magic of nature!

MULTIPLE CHOICE QUESTIONS

1. What is the process called when a caterpillar transforms into a butterfly?

- a) metamorphosis
- b) evolution
- c) molt
- d) photosynthesis

2. How do butterflies taste their food?

- a) with their wings
- b) with their mouths
- c) with their feet
- d) with their antennae

3. Why do some butterflies have bright colors and patterns?

- a) to camouflage with their surroundings
- b) to warn predators to keep away
- c) to attract predators
- d) for no specific reason

4. Which line below provides the best support for the correct answer for Question 3?

- a) "Butterflies come in a wide variety of colors and patterns."
- b) "Despite their delicate and dainty appearance, they can fly long distances and reach impressive speeds."
- c) "We see orange in the real world to also signal danger or warning: think of traffic cones and signs."
- d) "Anyhow, this is a butterfly's way of saying, 'I'm not tasty, so don't eat me!'"

5. What is the special ability that allows butterflies to see ultraviolet colors?

- a) x-ray vision
- b) night vision
- c) ultrasonic vision
- d) ultraviolet vision

MULTIPLE CHOICE ANSWER KEY

Answer Key:

1. A
2. C
3. B
4. D
5. D

EXTENSION ACTIVITIES

Writing Prompt: Get creative and pretend you are a butterfly on a thrilling adventure. Write a short story about beginning your life as a tiny but mighty caterpillar to a fully-grown butterfly. Describe the challenges you face and the magnificent wonders you discover along the way.

Butterfly Conservation Poster: Design and create a colorful butterfly poster to promote butterfly conservation. Include information about the importance of butterflies in the ecosystem, their life cycle, and the types of plants that attract them. Use a combination of details and statistics to help your audience understand the information. Use bright colors to represent the vibrant beauty of butterflies and highlight their role as pollinators.

Butterfly Garden at School: Organize the building of a butterfly garden at your school or a nearby park. Identify the different butterfly species that could survive, their colors, and behaviors, and the plants that will be needed to help them thrive. Share your plans with classmates and discuss the importance of establishing butterfly habitats to protect these incredible creatures for future generations. You may need to do some research in order to gain inspiration and knowledge about what it takes to create a butterfly garden.

CONNECTION TO THE UNITED NATIONS' SUSTAINABLE DEVELOPMENT GOALS (SDGS)

The United Nations (UN) is an international organization composed of countries working together to address global issues. One important focus of the UN is sustainability, which means taking actions to meet the needs of the present without compromising the ability of future generations to meet their own needs. To promote sustainability, the UN developed "The 17 Goals," also known as the Sustainable Development Goals (SDGs). These goals will help us create a better world by the year 2030. These goals are essential for all people because they address the challenges our planet and people face.

Butterflies can be connected to Sustainable Development Goal (SDG) Goal 15: Life on Land

Task: In order to gain a deeper understanding of the important role butterflies play in biodiversity conservation, ecosystem health, and the overall importance of Goal 15 in achieving sustainable development, complete the following steps:

1. First, investigate butterflies and their role in maintaining biodiversity, their significance as pollinators, and the impact they have on the ecosystem.
2. Then, explore the threats faced by butterflies, such as habitat destruction, climate change, pesticides, and other human-created factors.
3. Finally, Identify a specific butterfly species, explain its ecological significance, and propose potential solutions and actions to protect butterflies and their habitats.

Helpful Vocabulary

Biodiversity: Biodiversity means the variety of living things on Earth.

Ecosystem: An ecosystem is a community of living things (plants, animals, and more) and their home (soil, water, and air).

Pesticides: Pesticides keep plants safe from bugs and weeds.

Sustainability: Sustainability is about caring for our planet and using its resources wisely.

DIGITAL LITERACY: CREATING A BUTTERFLY AND BUG BLOG

In order to promote awareness about butterflies and their significance in the ecosystem, make plans to create a butterfly and bug-themed blog.

Sketch or design the blog's layout on paper or digitally *first* so that you and a team can determine the best way to share and organize information. Determine a list of three different topics or sections, a diverse array of resources (videos, books, etc.) to engage audience members of all ages and backgrounds, and ensure your blog is informative, visually appealing, and shares messages about environmental conservation. Be sure to give your blog a catchy and memorable title!