Lesson Plan

Grade: 4th (Ages 9-10)

Theme: Helping Butterflies: Conservation for Kids

Theme:Bella Brown–Grandma's Missing Butterfly Locket by J.W. Zarek

Learning Objective/s

At the end of this lesson, students will be able to:

1. Identify the habitats of the four butterflies in the story (China, Japan, Colombia, Arkansas).
2. Describe at least two challenges butterflies face in their habitats.
3. Explain how human actions affect butterfly populations using simple research.
4. Connect the story's theme of caring for butterflies to real conservation actions kids can take.
5. Create a poster explaining why butterflies are important and need protection.
6. Construct a simple graph showing changes in butterfly numbers over time.
7. Work in groups to develop a butterfly protection plan for their school or community.
8. Use new vocabulary related to butterflies, habitats, and conservation (e.g., habitat, population, pesticide)

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Materials Needed

- Bella Brown–Grandma's Missing Butterfly Locket book
- Simple research handouts: one-page fact sheets on Red Wing (China), White (Japan), Blue Morpho (Colombia), and Monarch (Arkansas) butterflies, including habitat challenges and human impacts (e.g., habitat loss, pesticides)
- Chart paper and markers
- Graph paper and pencils (for population graphs)
- Poster paper, markers, and crayons (for conservation posters)
- Word bank cards: vocabulary (e.g., habitat, population, pesticide, conservation, pollinator)
- Visual schedule cards showing each activity (e.g., pictures for reading, graphing, poster-making)

Vocabulary Focus

- Habitat
- Population
- Pesticide
- Conservation
- Pollinator
- Migration
- Ecosystem
- Protect

Morning Circle & Introduction (5 minutes)

Gather students in a circle and show the visual schedule cards.
Say, Today we're going to learn how to help butterflies, just like Bella and her grandma care for them in their story!

Show the cover of Bella Brown–Grandma's Missing Butterfly Locket and ask, What might make life hard for butterflies?

Introduce the topic: We'll explore butterfly homes, find out what challenges they face, and make a plan to protect them!

Define key vocabulary: A habitat is where a butterfly lives, and conservation means protecting them.

Read-Aloud & Habitat Challenges (10 minutes)

Read the parts of the book highlighting the butterfly locations: Red Wing butterflies in China (mountains), white butterflies in Japan (forests), Blue Morpho in Colombia (jungle), and Monarchs in Arkansas (gardens).

After each location, use the research handouts to discuss challenges: In China, Red Wing butterflies lose their mountain habitat because of building. In Colombia, the jungle is cut down for farms, affecting Blue Morphos.

On chart paper, list the butterflies, their habitats, and one challenge each (e.g., Monarchs – pesticides in gardens).

Ask, How do people's actions, like building or using pesticides, affect butterflies?

Graphing Butterfly Populations (10 minutes)

Distribute graph paper and the Monarch population data set (e.g., Year 1: 100, Year 2: 90, Year 3: 80, Year 4: 70, Year 5: 60).
Say, Let's make a simple graph to see how butterfly numbers change over time.

Model plotting the data as a line graph: label the x-axis (Years 1-5) and y-axis (Number of Butterflies, 0-100, in increments of 10).

Students create their own graphs and discuss: What do you notice? The numbers are going down–why might that be?
Connect to the challenges: Pesticides and habitat loss make it harder for Monarchs to survive.

Conservation Actions & Poster Creation (10 minutes)

Say, Bella and Grandma love butterflies—we can help them too!

Brainstorm kid-friendly actions: plant flowers (pollinators need nectar), avoid pesticides, make butterfly gardens.

Students create individual posters titled "Why Butterflies Matter." Model a poster: Butterflies are important pollinators—they help plants grow! We need to protect them from pesticides.

Students draw a butterfly and write 1-2 sentences about why butterflies are important and one way to help (e.g., Plant flowers to help butterflies!).

Use the word bank for support (e.g., pollinator, protect).

Group Work: Butterfly Protection Plan (10 minutes)

Divide students into small groups (3-4 students each).
Say, Let's make a butterfly protection plan for our school or community!

Assign each group one action (e.g., plant a butterfly garden, educate others, reduce pesticide use).
Groups discuss and write a simple plan: What will we do? Where? Who will help?
Model: We'll plant flowers in the school garden to make a butterfly habitat. We'll ask the principal and parents to help.
Groups share their plans with the class, focusing on how their action helps butterflies.

Closing Circle: Reflection (5 minutes)

Gather students with their posters and graphs.
Ask, Why are butterflies important to our ecosystem?
What's one way we can help them?

Celebrate their efforts: You're butterfly protectors, just like Bella and Grandma!

Distribute butterfly stickers as a reward, saying, This is a reminder to keep helping butterflies!

Assessment and Extension

Assessment

- Formative: Observe if students identify habitat challenges during the read-aloud discussion and connect human actions to butterfly populations. Check understanding of vocabulary (e.g., habitat, pesticide) in discussions. Monitor group collaboration during the protection plan activity.
- Summative: Review posters for accuracy (why butterflies matter, one conservation action) and clarity. Assess graphs for correct plotting of population data. Evaluate group protection plans for a feasible action, location, and helper identification.

Extension

- Create a class Butterfly Conservation Guide by compiling posters and protection plans.
- Research a local butterfly species and its challenges, adding to the graph and protection plan.
- Plant a small butterfly garden at school as a follow-up activity.

Modifications for Different Learners

- For Students Who Need Additional Support

Provide pre-labeled graph paper (axes and increments). Simplify posters to one sentence (e.g., Butterflies help plants). Offer sentence starters for the protection plan (e.g., We will…).

- For Advanced Learners

Include a second data set to graph and compare (e.g., Blue Morpho numbers). Add a second conservation action to their poster. Challenge them to calculate the percentage decrease in butterfly population (e.g., from 100 to 60).

- For English Language Learners (ELLs)

Pair vocabulary with visuals (e.g., show a flower for pollinator). Offer a bilingual word bank if possible. Allow drawing or verbal contributions during group work.

- For Kinesthetic Learners

Add a movement break (e.g., Flutter like a butterfly to your group!). Let them act out their protection plan (e.g., pretend to plant flowers!). Use physical objects (e.g., blocks) to represent population numbers before graphing.