

Bug Blitz: Data Analysis & Research

Name _____

EACH PERSON NEEDS TO COMPLETE THIS PAGE!

Part 1: Data Sets - How many different species of bugs did each class find? Analyze each class set to fill in the chart as accurately as possible and add details of interesting data you find.

ALL SPECIES	1	2	3	Observations or Notes
2nd Hour				
6th Hour				
7th Hour				
8th Hour				
All Classes (No duplicates)				

Think About It: How does your class data compare with the other classes? Explain using at least 3 specific examples.

Part 2: Butterfly Biodiversity - Butterflies can be used to determine the biodiversity of a habitat. How many species of Lepidoptera (butterflies, skippers, and moths) were found by each class. Analyze the class sets to fill in this chart.

	2nd Hour	6th Hour	7th Hour	8th Hour	Overall
# of Species					

Think About It:

2.1) How would you rate the biodiversity of the butterfly species from 1 (poor) to 5 (excellent)? Which were seen the most often? Least often? Not seen at all, but common to Illinois? Write a paragraph to summarize the data and answer all of these questions.

2.2) Butterflies depend on host plants for the larva and nectar/food sources for adults as well as other resources in their habitats. Each person on your team needs to choose three butterfly species that were observed and two species that were not seen. and use online resources to find out their food sources and other requirements they need to survive. Note: No one on your team can do the same ones! Staple the completed papers to this worksheet.

Butterflies observed:	Host Plants	Nectar	Other Requirements

I want to see:	Host Plants	Nectar	Other Requirements

BUG BLITZ - CONCLUSION & RECOMMENDATIONS

Team Members _____

1. What factors may have affected the number of species each class was able to document, i.e. why did some classes have more than others? Explain using at least 3 specific examples. (+3 each)

1 - _____

2 - _____

3 - _____

2. How would you rate the accuracy and reliability of the data we collected? Include at least 2 examples in your answer. (+4)

3. We will be repeating this activity next year. How would you improve the process? What would have made our data more accurate and reliable? List at least 2 changes, strategies, or tips your team thinks would be helpful for next year's classes. (+2 each)

1 - _____

2 - _____

Challenge: *Each spring, the 8th graders and the Science Club members work to improve the garden and get it ready for another growing season. What should we do in the spring to increase the biodiversity of the butterfly species in the school garden next fall? Based on your observations and research, develop 3 different strategies to improve the diversity of the butterfly species in the school garden. Be specific and descriptive! (+6 points each)*

Strategy #	What will we need to do?	What materials will we need?	How will this help the biodiversity rating?
1			
2			
3			

Done? *Staple your worksheets to this page and turn in to the bin in order to receive a grade (team and individual).*

BUG BLITZ - CONCLUSION & RECOMMENDATIONS

Name _____

1. Which class had the lowest amount of species (on one blitz)? Why? Give at least 2 reasons that could explain why it was lower than the other classes.

2. Which class had the highest amount of species (on one blitz)? Why? Give at least 2 reasons that could explain why it was higher than the other classes.

3. On a scale of 1 (poor) to 5 (great), how well did your classmates do in identifying the bugs we found? Explain.

4. We will be repeating this activity next year. How would you improve the process? Complete each statement to give me ideas for changes, different strategies, or tips you think would be helpful for next year's blitzes. (+2 each)

I think we should _____

I think we should _____

Challenge: Each spring, the 8th graders and the Science Club members work to improve the garden and get it ready for another growing season. What should we do in the spring to increase the biodiversity of the butterfly species in the school garden next fall? Based on your observations and research, develop 3 different strategies to improve the diversity of the butterfly species in the school garden. Be specific and descriptive! (+6 points each)

Strategy #	What will we need to do?	What materials will we need?	How will this help the biodiversity rating?
1			
2			
3			

Done? Staple your data analysis worksheet to this page and turn in to the bin in order to receive a grade.