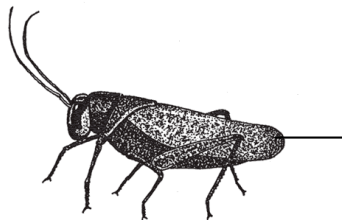


The World of Crickets



Name _____

Partner _____

Period _____

PART I: Making Observations of Crickets in Petri dishes

A. You and a partner weigh an empty Petri dish and record the weight (grams). Put a cricket in the Petri dish and weigh it. Calculate the cricket's mass (dish plus cricket weight minus dish only weight).

B. Measure the cricket's length (cm) using a ruler. Place the ruler under the Petri dish determine the length. Measure only from the front of the head to the end of the abdomen. ***Do not include the cerci, antennae, or ovipositor in the length!***

Include the units!

1. Cricket mass = _____ (g)

2. Cricket length = _____ (cm)

C. Look at the organism inside the Petri dish carefully without the microscope.

Make 5 good observations of the cricket in the observation column (this can include detailed drawings). Observations may be both **quantitative** (numerical) and **qualitative** (color, shape, sight, smell, touch, taste, hearing). Discuss these with your partner.

Observations	Inferences
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

PART II: The Difference Between An Observation And An Inference

Put a * next to all the “true” observations in the Observation Column from Part I and cross off any inferences. An Inference is “what you think” or is based on prior knowledge.

Recopy the inferences into the Inference Column on the other side of your paper.
Make an inference for as many (*) observations as possible, i.e., because it has flowers, it makes a fruit.

1. How does this organism fit into the food chain of the community in which it lives?
Is it a *consumer* or a *producer*? (See pages 6 - 10 in your text for help!)

2. What might it eat, or what might eat it?

PART III: Observations Using The Dissecting Microscope

A. Plug the microscope into the outlet. Place the Petri dish with the cricket on the circular display area. Adjust the light to the setting that allows you to best see the specimen. Turn the lens to 2x to get the most magnification.

1. Record **5 new observations** in the table in Part I.

Note: you should have more than 5 observations by now!

PART IV: Specific Questions About The Cricket

A. Write down the mass & length of your cricket in the table below with the student’s name.

B. Collect the mass & length from **four other groups’** cricket. Record this in the table.

Student	Length (cm)	Mass (g)
1.		
2.		
3.		
4.		
5.		

C. **On a separate piece of graph paper** make an XY graph (line-of-best fit graph) using the data from your 5 crickets. Include a title, label the axes, indicate units (g and cm), and number the axes increments.

1. Based on the graph, what is the relationship between *cricket mass* and *cricket length*?
Is it *positive direct*, *negative (inverse)*, or *neutral*?

2. Do crickets have wings?
3. How many legs does a cricket have?
4. Are there any differences in their legs? If yes, how are they different?
5. Where do you think crickets live? Explain why.
6. List and describe **3 adaptations** that the cricket has and **how** they help it survive in its environment.

Conclusions

1. What are **2 observations** you made that you did not know about crickets before?
2. Make a **food chain** with at least 3 steps that includes the cricket. (See your book for help – be sure to **use arrows** pointing in the right direction)
3. What were **2 difficulties** with observing a cricket out of its natural habitat?