**What makes Grasshoppers Swarm** \_\_\_\_\_\_/3

1. In paragraph 1, the author states: “Similar to the foreboding locusts warned about in the Bible, grasshoppers can also swarm…”

Why does the author use this analogy comparing a grasshopper to a locust?

1. grasshoppers and locust are very similar
2. grasshoppers can wipe out entire crops and devastate farms
3. grasshoppers and locusts are related
4. there are over 10,000 species of grasshoppers

2. Which sentence uses a negative connotation to describe grasshoppers?

a. Other grasshopper species simply do not develop wings

b. Most species of grasshoppers have wings and can fly pretty well.

c. Some grasshoppers can be major crop pests and can completely destroy crops during an outbreak.

d. Weather conditions impact swarming patterns.

3. What is the tone of this article?

 a. humorous

 b. academic

 c. sad

 d. hypothetical

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Use this table paper, the dissection guide and the “category” that you were assigned to take notes on the grasshopper. You are one of the designated experts on this organism. You will be responsible for presenting this information to others that are not experts for this organism. **\_\_\_\_\_\_\_\_\_/35 points**

1 point for each question: 24 points, diagram: 11 points

**Things to know: Grasshoppers A-Z**

1. How many species of grasshoppers are there?
2. What phyla (body system) is it in?
3. What class?
4. List the 3 main body parts that all insects have?
5. How many legs does it have?
6. How many wings?
7. How many antennae?
8. What do grasshoppers eat?
9. How many grasshopper eggs are in a pod?
10. Where is the pod deposited and in what season?
11. How long does it take the baby grasshoppers to hatch?
12. What is a baby grasshopper called?

**Things to know: Grasshoppers**

1. How many eyes do grasshoppers have?
2. Does the male or female make noise? How? Why?
3. How does a grasshopper breathe?
4. How do females deposit eggs?
5. What is a ovipositor?
6. After mating, how many eggs does a female lay?
7. What is a group of eggs called?
8. Do young grasshoppers have wings?
9. How long does it take to go from nymph (baby) to adult?
10. What is it called when they shed their exoskeleton?
11. How many times do they have to molt before they are adults?
12. When do they get their wings?

**Things to know: Dissection Guide**

Use page 4 to make a sketch of the head and label the following: **antennae, compound eyes, simple eyes, clypeus, mandible, labrum, labium, maxillary palp, labial palp.**