

Lesson Plan: Vectors and Venn Diagrams

Prep Time: Minimal

Age Level: Can be modified for any grade

Materials Needed: Blank Venn diagrams can be printed for students to complete (included in this document), or if you have a document camera you can project the image so the entire class can see the diagram, or simply draw the circles on a whiteboard.

Background Information:

[Venn diagrams](#) can be used to compare organisms, and can help students build upon what they have already learned. Consider using this lesson as a follow-up activity to the vector presentation(s) about mosquitoes, yellowjackets or ticks. If your class has recently studied another insect or arthropod (butterflies, pill bugs, mealworms, silkworms, honey bees, ladybugs, etc.), use the blank Venn diagrams to compare them to the vector(s) that you have already studied. Students can complete the worksheets independently or in small groups, or you can simply draw the circles on a whiteboard to have the entire class help complete the diagram.

The following pages contain blank Venn diagrams (2 and 3 circle versions) for you to print out, as well as a few completed diagrams to give you an idea of some possible answers. If students have difficulty thinking of attributes for comparison, here are a few ideas:

- **Classification** (insect, arachnid, crustacean, etc.)
- Number of **legs** or **wings** (as an adult)
- **Ecological role(s)** (predator, parasite, scavenger, pollinator, etc.)
- How the organism **impacts humans** (beneficial, pest, vector, etc.)
- **Metamorphosis** (complete, incomplete or none)
- **Sociality** (does it live alone or as part of a colony?)
- Can the organism **communicate** with others in some way? (sound, pheromones, warning signals, etc.)
- **Defense** (how does the organism defend itself from predators?)

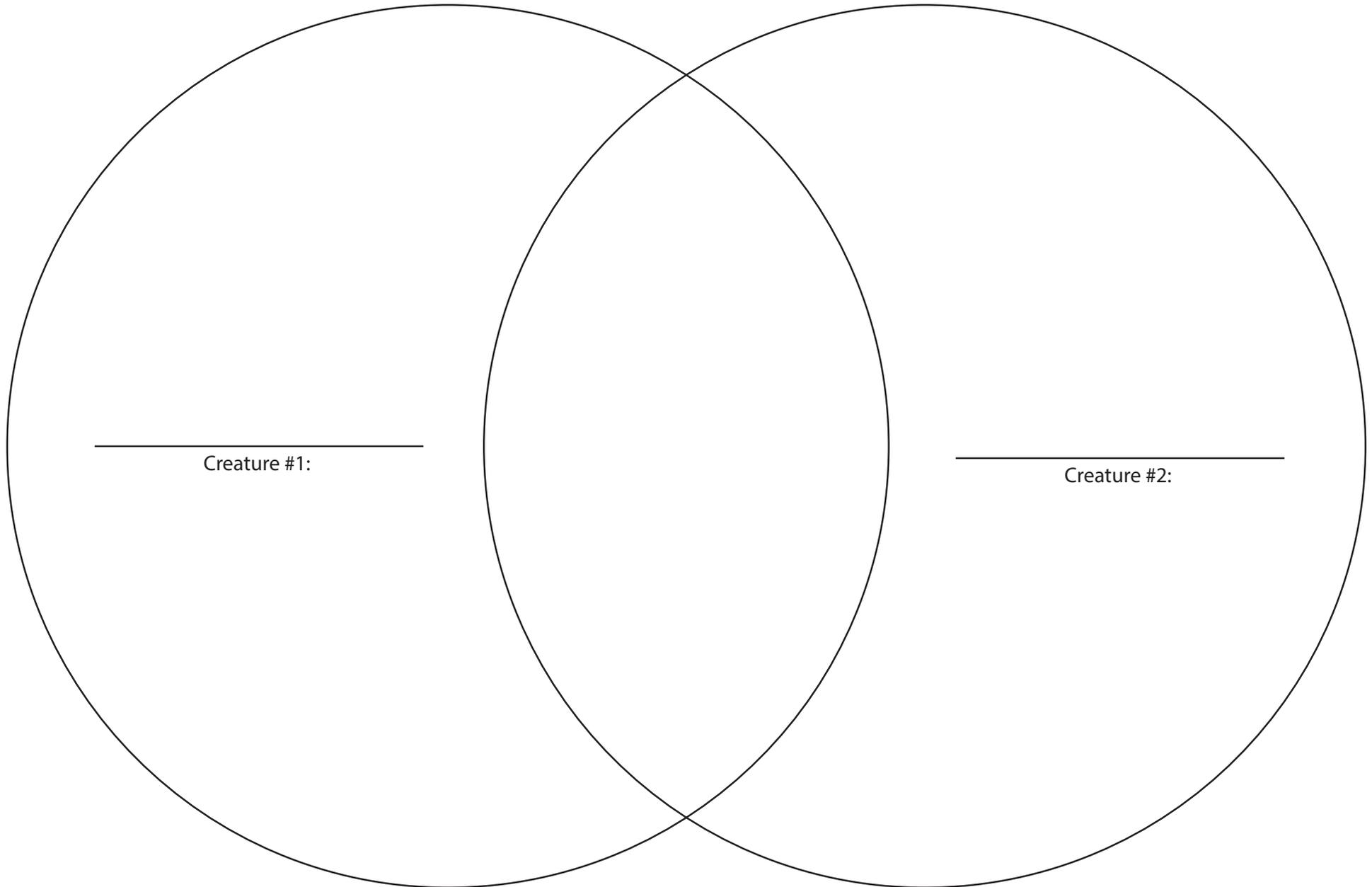
If you think of any questions, email erice@msmosquito.com.

Venn Diagram (Comparing 2 Creatures)

Name: _____

1. Choose 2 creatures to compare.
2. Label each circle with the name of one of the creatures.
3. Write similarities in the overlapping parts of the circles and differences in the parts that do not overlap.

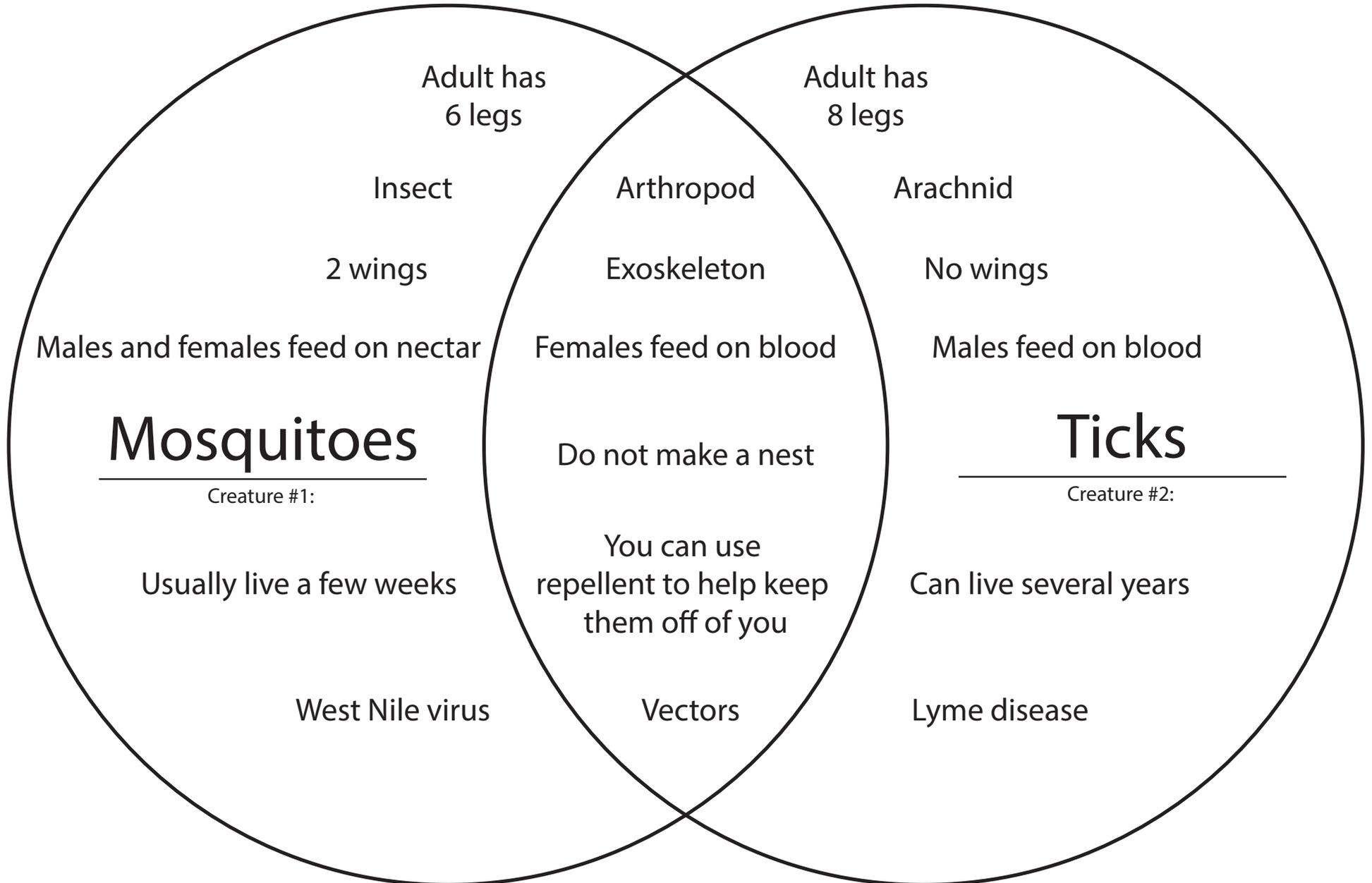
Date: _____



Venn Diagram (Comparing 2 Creatures)

Completed Example

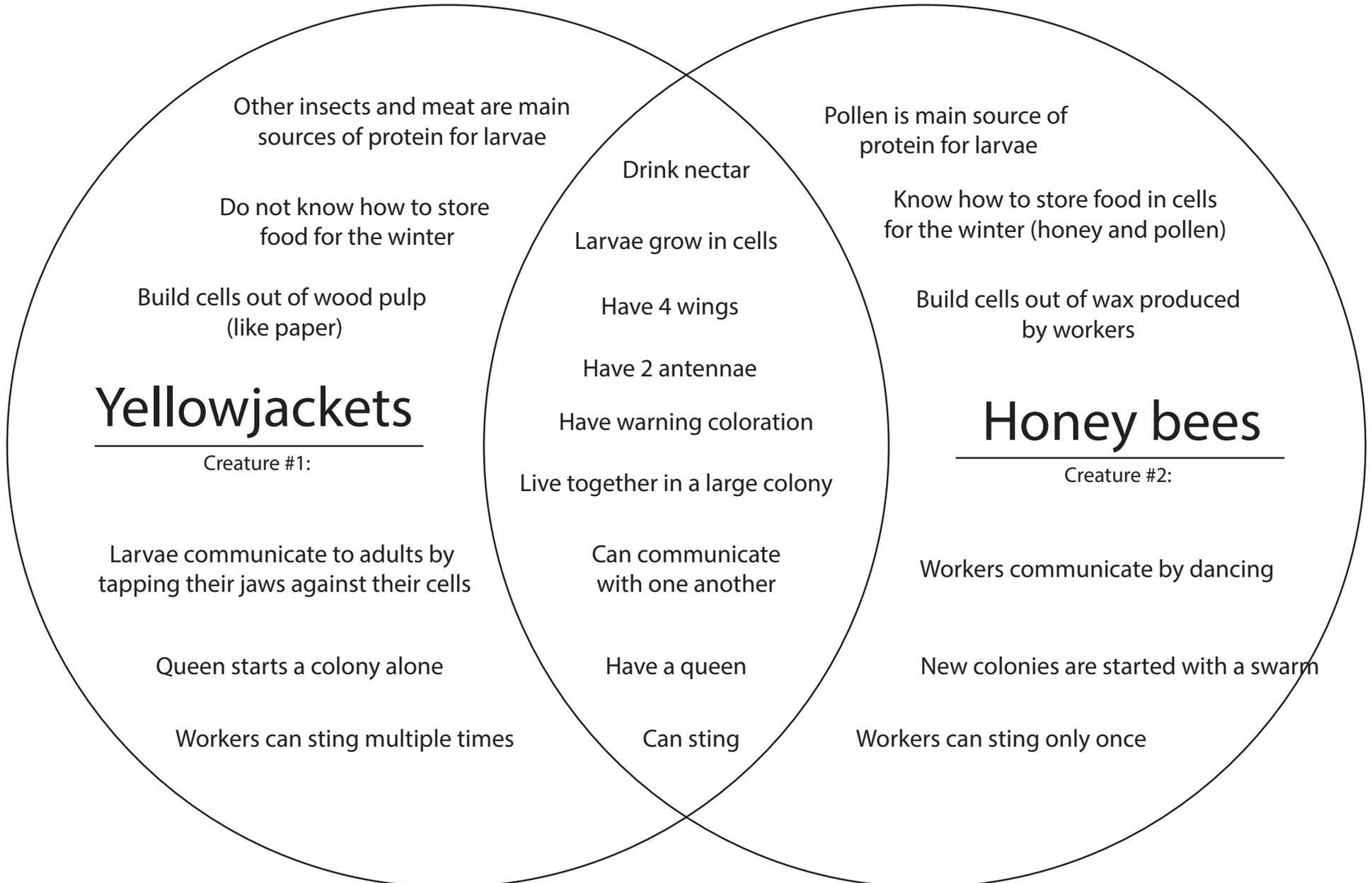
1. Choose 2 creatures to compare.
2. Label each circle with the name of one of the creatures.
3. Write similarities in the overlapping parts of the circles and differences in the parts that do not overlap.



Venn Diagram (Comparing 2 Creatures)

Completed Example

1. Choose 2 creatures to compare.
2. Label each circle with the name of one of the creatures.
3. Write similarities in the overlapping parts of the circles and differences in the parts that do not overlap.

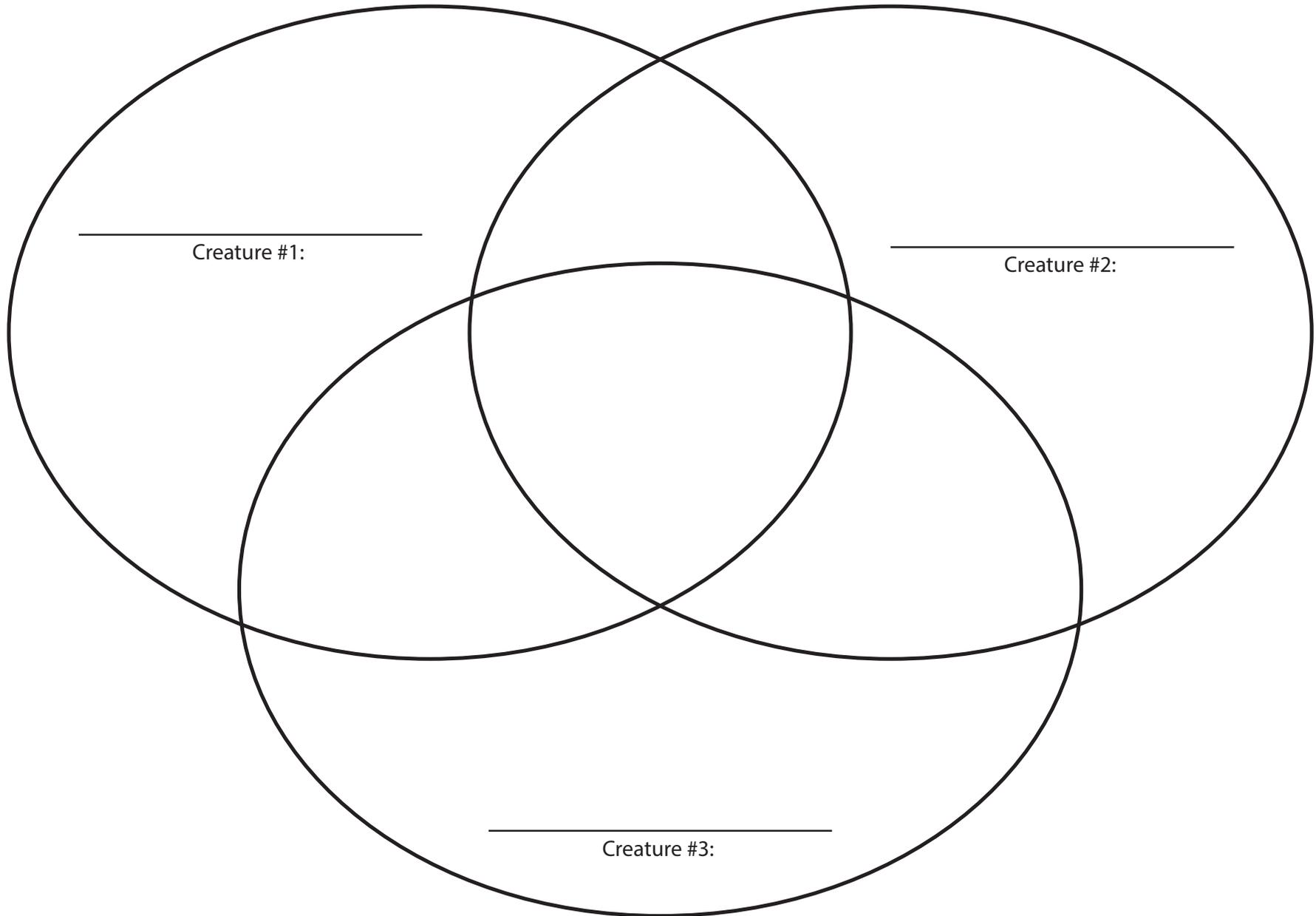


Venn Diagram (Comparing 3 Creatures)

Name: _____

1. Choose 3 creatures to compare.
2. Label each circle with the name of one of the creatures.
3. Write similarities in the overlapping parts of the ovals and differences in the parts that do not overlap.

Date: _____



Venn Diagram (Comparing 3 Creatures)

Completed Example

1. Choose 3 creatures to compare.
2. Label each circle with the name of one of the creatures.
3. Write similarities in the overlapping parts of the ovals and differences in the parts that do not overlap.

