

Student Comprehension Worksheet

Directions: Read the online *Science News* article "[Scientists have mapped an insect brain in greater detail than ever before](#)" and answer the following questions. A version of the article, "The fruit fly brain in exquisite detail," appears in the April 22, 2023 issue of *Science News*.

- 1. What is a neuron, and what is a synapse?**

- 2. In your own words, explain what neuroscientist Marta Zlatic and her colleagues accomplished.**

- 3. What methods did the researchers use to conduct their research? How long did the research project take?**

- 4. How many neurons and synapses did the researchers map in the larval fruit fly? What do you think it means that there are more synapses than neurons?**

- 5. Visualizing a living system is difficult. How did the scientists present their findings to make their findings easier to understand?**

- 6. Why did the scientists use larval fruit flies instead of adult fruit flies in their neuron study?**

- 7. Many scientists use fruit flies in their research. Why do you think scientists consider fruit flies a good model organism to study? How was the fruit fly useful in Zlatic's study?**