

## Student Comprehension Worksheet

**Directions**: Read the online *Science News* article "<u>New high-speed video reveals the physics of a finger</u> <u>snap</u>," which details scientists' exploration of the friction required for finger snapping, and answer the following questions. A version of the article, "Camera captures physics in a snap," appears in the December 18, 2021 & January 1, 2022 issue of *Science News*. If reading the version of the article that appears in print, skip question No. 2.

**1**. What is needed for a successful finger snap? Explain the physics of a finger snap.

2. What is the duration, rotational rate and acceleration of a finger snap? Why might the article's author compare those measurements with a blinking eye and a baseball pitcher's arm?

3. What equipment did scientists use to study finger snapping, and what variables did they test?

4. What did scientists learn from studying snapping fingers covered in lubricant?

5. What did scientists learn from studying snapping fingers covered in high-friction rubber?

6. Based on the researchers' findings, would Thanos — the villain in the movie *Avengers: Infinity War* — have been able to snap his fingers while wearing a metal glove? Explain.