

### Student Comprehension Worksheet

**Directions:** Watch the *Science News* TikTok "[Crashing into an asteroid on purpose?!](#)" and read the online *Science News* article "[NASA's DART mission successfully shoved an asteroid.](#)" Then answer the following questions as directed by your teacher. A version of the article, "NASA's DART mission is a success," appears in the November 5, 2022 issue of *Science News*.

- 1. In your own words, describe the goal of NASA's DART mission. What does DART stand for?**
- 2. What was the DART spacecraft's target? Is the target a threat to Earth? Explain.**
- 3. How fast was DART traveling through space when it hit its target? Don't forget to include appropriate units of measure.**
- 4. What was the result of the impact on the asteroid's orbit? How did the result compare with scientists' expectations?**
- 5. What do scientists think contributed to the difference between their expectations and the results?**
- 6. How did scientists figure out that the DART mission was successful?**
- 7. What do the results suggest about the success of a future planetary defense program? If a large asteroid were headed toward Earth, how far in advance would a spacecraft need to crash into it to avert disaster?**