

**Student Comprehension Worksheet**

**Directions:** Read the online *Science News* article "[Grainy ice cream is unpleasant. Plant-based nanocrystals might help](#)," and answer the following questions. A version of the article, "Cellulose helps ice cream go down smooth," appears in the May 7, 2022 & May 21, 2022 issue of *Science News*.

- 1. Why does ice cream sometimes develop a grainy texture?**
- 2. How do ice cream manufacturers currently keep ice cream from getting grainy? How well does this solution work?**
- 3. What new potential solution are scientists investigating?**
- 4. In your own words, describe food scientist Tao Wu and colleagues' experimental setup. What did they use as a substitute for ice cream in their study, and what were the components of each test solution?**
- 5. What did the experiments reveal?**
- 6. What does food engineer Richard Hartel say about the findings? Why do you think the author of the *Science News* article included Hartel's perspective in the story?**