

### Student Comprehension Worksheet

**Directions:** Read the online *Science News* article "[How the laws of physics constrain the size of alien raindrops](#)," which explores a new model for rain on planets across the Milky Way, and answer the following questions. A version of the story, "Physics helps alien rain stay in shape," appears in the May 8, 2021 & May 22, 2021 issue of *Science News*.

1. What is the first generalized model of alien rain?
2. What does the model suggest about the shape of raindrops across the Milky Way?
3. Why is this model important, according to astronomer Tristan Guillot?
4. What role does rain play in planets' atmospheres?
5. What types of rain did scientists consider when making the model? What celestial objects is the rain found on?
6. What does the model indicate about raindrops' size? How does a planet's gravity affect raindrop size?
7. What happens to small and large raindrops that fall beyond the size range determined by the model?
8. Why do the different raindrops behave similarly, according to planetary scientist Kaitlyn Loftus?

**9. What do the researchers want to use the model to study next?**

**10. What goal does this model bring scientists a step closer to achieving?**