

Student Discussion Worksheet

Directions: Read the online *Science News* article "[When James Webb launches, it will have a bigger to-do list than 1980s researchers suspected.](#)" Then discuss and answer the following prompts with a partner. A version of the article, "The origami satellite," appears in the October 9, 2021 & October 23, 2021 issue of *Science News*.

Making a scientific to-do list

1. List the main questions that scientists hope to answer with help from the James Webb Space Telescope.
2. Explain how the James Webb Space Telescope could be used to help answer one of the scientific questions. What type of data is needed to answer the question, and how will the telescope collect the data?
3. Choose one scientific discovery that was made during the development of the James Webb Space Telescope and explain how that discovery shaped the telescope's mission.

Discussing diagrams

Study one of the following diagrams that appears in the *Science News* article: "Mixed views," "A novel design," "Getting there" and "Transit advantages." After answering the questions below on your own, explain the diagram to a partner and have your partner explain their chosen diagram to you. Make sure you and your partner choose different diagrams.

1. What diagram did you choose and what does the diagram depict? Be sure to indicate units as appropriate.
2. How does the diagram help your understanding of the James Webb Space Telescope and its importance?
3. What is one science concept that is covered in the diagram that relates to something you've studied in science class? How does understanding that science concept affect your understanding of the *Science News* article?