

Task: Developing Questions About the MESSENGER Mission to Mercury

1. Watch the Video:

- View the video "Why is the Closest Planet Also the Most Difficult to Visit?" about NASA's MESSENGER mission to Mercury. Pay close attention to the details about the mission, its operations, and the scientific challenges.

2. Use the Provided Pointers:

- Refer to the main pointers below to help guide your understanding and focus your thinking as you watch the video. These pointers will help you create your questions.

Mercury Overview:

- Characteristics of Mercury as the closest planet to the Sun
- Environmental conditions: extreme temperatures, lack of atmosphere

Challenges of Visiting Mercury:

- Difficulties in reaching and orbiting Mercury
- The impact of the Sun's gravity on spacecraft
- Harsh conditions that spacecraft must endure

MESSENGER Mission:

- Objectives and achievements of NASA's MESSENGER probe
- Timeline of the MESSENGER mission from launch to its end
- Discoveries made by MESSENGER about Mercury

Scientific Goals:

- What scientists hoped to learn from studying Mercury
- Importance of understanding Mercury's composition and magnetic field
- How findings from Mercury contribute to our knowledge of the Solar System

Technological Solutions:

- Innovations used in the MESSENGER probe to overcome challenges
- Techniques for navigating and orbiting close to the Sun
- Instruments on board MESSENGER and their purposes