

The Challenger Space Shuttle Disaster Teacher Packet (Grades 4–8)

Provided by OC Astronomy

Lesson Overview

This lesson helps students understand the Challenger Space Shuttle disaster, why it happened, and what was learned from it. Students explore science, engineering, safety, and the importance of learning from mistakes.

Student Reading

On January 28, 1986, NASA launched the Space Shuttle Challenger. Just 73 seconds after liftoff, the shuttle broke apart, and all seven astronauts on board lost their lives. One crew member, Christa McAuliffe, was a teacher, which is why millions of students watched the launch live in classrooms across the country.

Later investigations found that a rubber seal called an O-ring failed due to cold temperatures. NASA used this tragedy to make major safety improvements and changes in how decisions are made.

Student Worksheet

Part 1 Answers: 1. It included a teacher and was watched live in classrooms. 2. Christa McAuliffe was a teacher chosen to represent educators in space. 3. An O-ring failed due to cold temperatures.

Vocabulary Match Answers: 1-C, 2-B, 3-D, 4-A

Critical Thinking Sample Answers: NASA needed to improve safety and listen to engineers. Students can learn about responsibility, safety, and learning from mistakes.

Quiz Answer Key

1. C 2. B 3. C 4. D 5. False 6. True 7. Sample answer: Improve safety rules, listen to engineers. 8. Sample answer: To prevent accidents and keep people safe. 9. Sample answer: It helps make future missions safer and better planned.