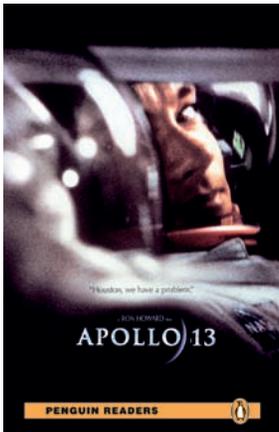




Apollo 13

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Summary

Apollo 13 is based on a true story about the American astronauts whose mission into space in April 1970 nearly ended in disaster.

Chapters 1–3: The story begins on July 20, 1969, when Neil Armstrong became the first man to walk on the Moon. Astronaut Jim Lovell is sitting at home with his family watching. His five-year-old son, Jeffrey, asks him if he is really going to the Moon. Jim reminds him that he had been around the Moon on Apollo 8 and that he will be going to the Moon on Apollo 14. In Chapter 2, the initial plan changes when astronaut Alan Shepard develops an ear infection and Jim Lovell is asked to go in his place on Apollo 13, together with Fred Haise and Ken Mattingly. The three astronauts get inside the module simulator and they go over the procedures that will take place in both the lunar module, Aquarius, and the command module, Odyssey, for the moonlanding. Jeffrey wants his father to bring back a Moon rock for him, and Jim promises to try. In Chapter 3, just two days before the scheduled lift-off, one of the controllers, Ken Mattingly, falls ill with the measles. He is taken off the mission. Jack Swigert replaces Mattingly. Jim Lovell is not happy about this, since he knows Jack has no experience on spacecraft.

Chapter 4: After long hours in the simulator, the astronauts are ready for their launch. Everybody at Mission Control in Houston is excited as Apollo 13 successfully skyrockets. Yet, once in space, the astronauts notice that one of the engines is failing. Mission Control tells Apollo 13 that the other engines are working properly and that they can continue with their trip to the Moon as planned. The astronauts achieve docking Odyssey with Aquarius and they move forward.

Chapters 5–6: In Chapter 5, the astronauts start broadcasting their trip live. Their families watch them at Mission Control and they see them work on the command module, cook and get inside the lunar module. In Chapter 6, as Mission Control guides the men on Odyssey through changing the oxygen tanks, the astronauts notice that Apollo 13 is losing oxygen. This will leave Odyssey without power and the men without oxygen. Houston tells Odyssey that they cannot land. They have to return to the Earth.

Chapters 7–9: In Chapter 7, Odyssey was running out of oxygen and the men needed to do something for the sake of their lives. Houston tells the astronauts to leave Odyssey and to get on Aquarius, which still had oxygen. They have only fifteen minutes to get it done. In Chapter 8, guided by Houston, Jim starts Aquarius while Jack remains at Odyssey trying to turn the power off. In Chapter 9, the three men are already inside the lunar module and they will remain there for four or five days. Houston is worried because there is enough oxygen for only two men for two days. Mission Control decides that, though dangerous, the astronauts will have to go around the moon and then start the lunar module's engines. There is no other way.

Chapters 10–12: In Chapter 10, Aquarius is left in the darkness, behind the moon, and falls out of contact with Houston. There is tension but soon they are headed back to Earth. In Chapter 11, Houston decides to switch off all the power and use gravity to throw the men back to Earth, while they get experienced men into the simulator to find solutions to the problems in the spacecraft. In Chapter 12, Ken Mattingly, who did not get the measles, enters the simulator and starts putting all his effort into saving his fellow astronauts.

Chapters 13–14: In Chapter 13, Jack starts working with numbers and he realizes that Mission Control has made some mistakes. If they do not solve it, the lunar module will fly past the Earth towards the sun. In Chapter 14, the astronauts are tired and cold and there is no gravity at all. Mission Control tells the astronauts that Jim will have to fly Apollo back to Earth himself – without the engines or the computers. In space, Jim struggles to get Apollo back on its trajectory, while on Earth, Ken tries to find new solutions in the simulator.

Chapters 15–18: In Chapter 15, Ken finds the way out. The men are to move the power to the command module, then get inside, start the power and fly back home. Ken personally contacts Aquarius and guides them men



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through the whole procedure. They have to move quickly into Odyssey taking all heavy things into the command module with them. In Chapter 16, the astronauts rush from Aquarius into Odyssey. Jack is now to fly them back to Earth. He pushes a button and the lunar module flies away from the command module. The astronauts tell Houston that they are back on track but the men in Mission Control know that Odyssey did not turn right. The only thing to do now is wait and hope. In Chapter 17, gravity pulls the command module back to Earth. The Iwo Jima, a big ship on the Pacific Ocean, is waiting for the astronauts to fall into the sea. Suddenly, they see the parachutes. The men are alive. In Chapter 18, the astronauts' families celebrate the return of their heroes. The three astronauts have not landed on the moon but they have come back home safe.

About the movie

The 1995 movie *Apollo 13* was directed by Ron Howard, a former child actor of the early 1960s. Tom Hanks played Jim Lovell, Kevin Bacon was Jack Swigert, Bill Paxton was Fred Haise, Gary Sinise was Ken Mattingly and Ed Harris played Gene Kranz. Jim Lovell, the real Mission Commander of Apollo 13, played the part of the captain of the USS Iwo Jima, and his wife, Marilyn, is one of the people in the grandstands at the launch in the movie. Harris and Kathleen Quinlin were nominated for Oscars in the categories of Best Supporting Actor and Best Supporting Actress, but neither won. However, the movie won Oscars for Best Film Editing and Best Sound.

Background and themes

Apollo 13 was the thirteenth in a series of missions called Apollo and it was supposed to have been the third lunar landing. The crew for this mission was James Lovell, Jr., Mission Commander, John Swigert, Jr., Command Module Pilot, and Fred Haise, Jr. Lunar Module Pilot. The mission was not able to explore the Moon, make a survey and take samples, nor use "the Apollo Lunar Surface Experiments Package." After the oxygen tank explosion, the astronauts and Ground Control had to work quickly to get safely back to Earth. They were able, however, to photograph the Earth and take some lunar surface photos. It was the first Apollo mission requiring an emergency abort.

Jim Lovell was selected as an astronaut for NASA in 1962 and was the first man to journey to the Moon twice. Jack

Swigert was one of the nineteen astronauts selected by NASA in 1966. From April 1973 to September 1977, he was Executive Director of the Committee on Science and Technology in the United States House of Representatives. Fred Haise was also selected by NASA in 1966. He contributed much to NASA research until 1979. All three were awarded the Presidential Medal of Freedom in 1970.

Discussion activities

Before reading

- Discuss:** Find out how much your students know about Apollo 13. Write the words "astronaut," "spacecraft," and "moonlanding" on the board and explain to them what they mean. Then ask them the following questions: *What does an astronaut do? What are their spacecraft like? Do you know the names of any famous astronauts and spacecraft? What do you know about Apollo 13?*
- Role play:** Find out which students would like to be astronauts. Put the "astronauts" in front of the rest of the class. (Or choose two or three students.) Guide them with the following instructions: *The "astronauts" imagine they are going into space in thirty minutes. The class asks the astronauts questions about how they feel, how their families feel, what will they miss, etc.*
- Discuss:** Tell your students that the Apollo 13 mission left Earth on April 13. The time was 13:13. This mission had problems in space. Ask students the following questions: *Are there any worries about the number 13, or another number your country? Are some numbers bad luck?*
- Pair work:** Find out how many of your students have seen the movie *Apollo 13*. Put students into pairs, if possible, so that those who have seen the movie are with those who have not. Then write these words on the board and ask students to talk about them in pairs and say as much as they know about them to each other. Guide them with these instructions: *In pairs, discuss how much you know about the movie Apollo 13. Use as many of the words on the board as possible. Neil Armstrong – Apollo 13 – Cape Kennedy – Florida – Mission Control – Houston*
- Tie in with films:** If you have access to video or DVD, watch the first three to five scenes of *Apollo 13* with the sound off. Tell students to choose one of the scenes and imagine what the characters say. Play the film again and check whose guess was closest to the original.

While reading

Chapters 1–3

- Discuss:** Tell students to work in pair and to discuss the following: *Is Jim a good astronaut? How many times did he go to the moon? What does his son want?*



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- 7 **Read and check:** Tell students to re-read pages 2 and 3 finding as much information as they can about the astronauts: *In groups, fill in the chart with everything you learn about the three astronauts on pages 2 and 3:*

Ken Mattingly	Fred Haise	Jim Lovell

After reading

- 8 **Write:** Ask students to work in groups. They imagine they are Jim Lovell on April 9. Guide them with these instructions: *You are Jim Lovell on April 9. Write down in your diary everything that happened from April 2 up to this day. Say what you think, what you feel, what you are afraid of, etc.*

Chapter 4

While reading

- 9 **Group work:** Make two photocopies of the five pictures in this chapter and cut them out. Cut out the captions separately. Put the students into two groups. Guide them with these instructions: *The group with the captions read out one caption at a time, and the other group has to find the correct picture. When they are finished, the other group checks to see if they are correct.*

After reading

- 10 **Pair work:** Tell students to retell the whole story on pages 6–13 from the point of view of someone from Mission Control. Guide them with these instructions: *In pairs, imagine you are a man from Mission Control in Houston who is in touch with Apollo 13. Describe everything you heard the astronauts were saying or doing. Choose three pairs to read their retellings out loud.*

Chapters 5–6

While reading

- 11 **Write:** Ask students to work in pairs. Tell them to imagine they are Jeffrey as they read pages 13–15 and to work on the following activity: *In pairs, as you read pages 13 to 15, imagine you are Jim Lovell's son Jeffrey. Then write down everything you saw or heard your father do. Also say how you feel.*
- 12 **Role play:** Ask students to work in groups and role-play the events in Chapter 6 on pages 15–18: *In groups, play the part in which three mission controllers, Jack, Fred, Jim and Gene Kranz talk about what is happening on Apollo 13 and decide what to do and how to help them.*

After reading

- 13 **Discuss:** Ask students to work in groups. They discuss and take down notes on the following: *In groups, discuss what problems Apollo 13 has in Chapter 6. Make notes of everything that went wrong. What is the most terrible thing? When you finish the activity, get together with another group and read your notes to one another.*

Chapters 7–9

While reading

- 14 **Read and complete:** Ask students to work in pairs on the following activity as they read pages 19–21: *In twos, fill in the chart with all the problems on Aquarius and Odyssey on pages 19 to 21:*

Aquarius	Odyssey

- 15 **Discuss:** Ask students to work in groups as they read Chapter 9: *While you read pages 21 and 22, imagine you are Mission Control men and discuss what you are afraid of.*

After reading

- 16 **Group work:** Put students into two groups to work on the following role play activity: *Work in two groups. One is Mission Control and the other is Odyssey. Talk to each other trying to find a quick solution to the problems.*

Chapters 10–12

While reading

- 17 **Write:** Ask students to work in threes and to work on the following activity: *Read up to page 23. Look at the picture and decide who is who. Then write down what each man is thinking and feeling.*
- 18 **Role play:** Ask students to work in pairs on the following activity as they read pages 24 to 25: *In twos, imagine you are Arthur and Kranz. Talk about all the problems Apollo 13 has and how you can find solutions.*

After reading

- 19 **Discuss:** Ask students to discuss the following after reading Chapter 12: *What has changed? Is there any hope now?*

Chapters 13–14

While reading

- 20 **Read and write:** Ask student to do the following activity in pairs as they read Chapters 13 and 14: *In twos as you read pages 26–30, imagine you are Ken. You can listen to everything the men on Odyssey say. Write down what worries you.*

After reading

- 21 **Role play:** Tell students to imagine they are Ken and Arthur: *You are Ken and Arthur at the end of Chapter 14. What do they say? What plan have they got? What will they do?*

Chapters 15–18

While reading

- 22 **Discuss:** Students work in groups on the following activity: *As you read pages 32–35, discuss who has saved Apollo 13. How did every man help?*

Vocabulary activities

For the Word List and vocabulary activities, go to www.penguinreaders.com.