APOLLO 13 – The Movie (Tom Hanks)

1. What was a major reason why NASA so strongly promoted space exploration to the moon?

2. Name at least 3 space flights mentioned in the movie.

# 

3. Who first walked on the moon?

4. What was the famous quote from the man who first took a step on the moon?

5. Where is the space center for launching in the U.S.?

6. Where did the astronauts prepare for the space missions?

# 

7. What draws the space craft into an orbit around the moon?

8. Where is mission control?

## 

9. How long were the rockets & boosters firing before they were cut off?

10. What is the LEM?

## 

### 11. How far from the earth was the space craft when they had the broadcast on television?

12. How big was LEM?

13. What famous quote by Jim Lovell woke up the whole world?

## 

14. What did the support crew on earth use for Calculating the numbers for the space flight?

15. Name the three astronauts who were actually on the space mission Apollo 13.

## 

16. Draw a picture of the flight plan to get the astronaut’s home.

17. How close did the Apollo 13 flight come to the moon’s surface.

18. Under normal flight circumstances, the LEM uses about 60 amps of power to run. At that rate they would run out of power in how many hours?

19. What was the first life and death concern for the astronaut’s requiring the ground crew to build a filter?

20. Once the CO2 was under control, what was the next major health problem?

21. What level of CO2 did the astronauts approach before it began to fall?

22. What were the conditions in the space craft by day 6?

23. Why was the navigational course correction needed in their trajectory?

24. If the earth was a Basketball and the moon was a softball, how much room would the astronauts have when correcting their trajectory to NOT miss the corridor of reentry?

25. Draw a diagram of the entire mission in space showing the earth, the moon and travel path from lift off to splash down?

26. What was the maximum amperage allowed for the spacecraft to have enough power to get back to earth?

27. Why was the spacecraft too light therefore throwing off their trajectory?

28. Who was staying with Jim Lovell’s family during the ordeal?

## 

29. What heat build-up (in degrees) could occur during reentry?

30. How long did it take the spacecraft to go though “black out” as they reentered the atmosphere?

31. How many days was Apollo 13 in space?

APOLLO 13 – The Movie (Tom Hanks)

1. What was a major reason why NASA so strongly promoted space exploration to the moon?

**beat Russia**

2. Name at least 3 space flights mentioned in the movie.

# Gemini 7,12 Apollo 8 Mercury

3. Who first walked on the moon?

# Neil Armstrong

4. What was the famous quote from the man who first took a step on the moon?

**one small step for man, one giant leap for mankind**

5. Where is the space center for launching in the U.S.?

## Cape Kennedy

6. Where did the astronauts prepare for the space missions?

# Houston

7. What draws the space craft into an orbit around the moon?

**the Moon’s gravity**

8. Where is mission control?

## Houston

9. How long were the rockets & boosters firing before they were cut off?

**12:34 (twelve minutes and 34 seconds)**

10. What is the LEM?

## Lunar Module

11. How far from the earth was the space craft when they had the broadcast on television?

**200,000 miles**

12. How big was LEM?

**~2 telephone booths in size**

13. What famous quote by Jim Lovell woke up the whole world?

## Houston, we have a problem

14. What did the support crew on earth use for Calculating the numbers for the space flight?

**slide rules**

15. Name the three astronauts who were actually on the space mission Apollo 13.

## Jim Lovell, Fred Haise, & Jack Swaggert

16. Draw a picture of the flight plan to get the astronaut’s home.

17. How close did the Apollo 13 flight come to the moon’s surface.

**56 nautical miles from the moon**

18. Under normal flight circumstances, the LEM uses about 60 amps of power to run. At that rate they would run out of power in how many hours?

**16 hours**

19. What was the first life and death concern for the astronaut’s requiring the ground crew to build a filter?

**too much CO2**

20. Once the CO2 was under control, what was the next major health problem?

**no heat**

21. What level of CO2 did the astronauts approach before it began to fall?

**15**

22. What were the conditions in the space craft by day 6?

**frozen**

23. Why was the navigational course correction needed in their trajectory?

**they would bounce of the earth’s atmosphere into outer space**

24. If the earth was a Basketball and the moon was a softball, how much room would the astronauts have when correcting their trajectory to NOT miss the corridor of reentry?

**thickness of piece of paper**

25. Draw a diagram of the entire mission in space showing the earth, the moon and travel path from lift off to splash down?

26. What was the maximum amperage allowed for the spacecraft to have enough power to get back to earth?

**20 amps**

27. Why was the spacecraft too light therefore throwing off their trajectory?

**no rocks**

28. Who was staying with Jim Lovell’s family during the ordeal?

## Neil Armstrong Buzz Aldrin

29. What heat buildup (in degrees) could occur during reentry?

**3000-4000 F**

30. How long did it take the spacecraft to go though “black out” as they reentered the atmosphere?

**over 4 minutes**

31. How many days was Apollo 13 in space? **7**