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| **An *Apollo* Tragedy  by Jane Runyon** |  | Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

1     The United States space program advanced in stages. The *Mercury* missions were designed to carry one man into orbit around the Earth. The *Gemini* missions moved the payload up to two men orbiting the Earth. The *Apollo* program was designed to carry three men into space. The goal was to land humans on the moon and bring them safely back to Earth. Six *Apollo* missions accomplished this goal. Two were test flights to see if the equipment created for the mission would work properly. One flight was not able to land on the moon because of mechanical malfunctions. It was able to take pictures that were valuable assets to the scientific experiments being conducted.

2     The *Apollo* program, however, got off to a very shaky beginning. The first *Apollo* manned mission was scheduled to be launched on February 21, 1967. The astronauts assigned to this flight were Gus Grissom, Roger Chaffee, and Edward White. Each of these astronauts had trained long and hard for the opportunity to reach the moon. Each was experienced with the hazards of space travel.

3     Gus Grissom had been the second man launched into space in the *Mercury* program. He was almost lost when the hinges of his escape hatch had exploded upon landing in the Atlantic Ocean. The capsule in which he had made his short flight and all the equipment on board had been lost as it sank to the bottom of the sea. Grissom had been able to crawl out of the capsule into a flotation device. It was in this raft he waited to be picked up by NASA.

4     A test of equipment was scheduled on January 27, 1967. The astronauts would climb aboard the capsule and a **simulation** of the take-off would be run. As the crew entered the spacecraft, they were to hook their oxygen hoses to the oxygen supply on the spacecraft. Grissom noticed an odd smell. He dismissed it and proceeded to make ready for the launch sequence. When Grissom tried to contact the control room, he found that his communication system was not working properly. Adjustments were made in the cockpit, and they proceeded.

5     Just four seconds later, Roger Chaffee was heard over the radio saying that he smelled fire somewhere. Two seconds after that, Edward White yelled, "Fire in the cockpit." The spacecraft had been sealed for take-off. By the time NASA technicians could reach the astronauts, they were all dead. Fire had destroyed 70% of Gus Grissom's space suit. In all, 27 other NASA employees had to be treated for smoke inhalation.

6     An investigation into the cause of this terrible accident was immediately begun. All future plans for the *Apollo* missions were put on hold until the investigation was completed. This was the first loss of life associated with the space program. It was not the wish of anyone that there be further loss of life in the pursuit of space travel.

7     The results of the investigation into the tragedy of *Apollo* AS204 were mixed. A review board determined that the test conditions surrounding this simulation were extremely hazardous. They believed the fire could have been caused by a faulty circuit that had ignited the atmosphere of pure oxygen. NASA and the builder of the equipment disagreed. They maintained that there was no possibility of a fire being ignited by any of the equipment.

8     A fire needs three things in order to burn. It needs oxygen, a fuel to burn, and something to ignite it. NASA believed that they had eliminated all sources of ignition in their planning of the spacecraft. Whether or not they were correct will probably never be known to the public.

9     Each of these men knew the danger involved in space travel. They thought it was worth the effort. This can, perhaps, be shown best in a quote by Gus Grissom upon becoming an astronaut. "If we die, we want people to accept it. We're in a risky business, and we hope that if anything happens to us it will not delay the program. The conquest of space is worth the risk of life."

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| 1.   | The *Apollo* program was designed to take astronauts to the moon and back.http://stories.edhelperclipart.com/clipart/bubblea.jpg  Falsehttp://stories.edhelperclipart.com/clipart/bubbleb.jpg  True |

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| 2.   | How many astronauts were on each *Gemini* flight?http://stories.edhelperclipart.com/clipart/bubblea.jpg  Fourhttp://stories.edhelperclipart.com/clipart/bubbleb.jpg  Twohttp://stories.edhelperclipart.com/clipart/bubblec.jpg  Threehttp://stories.edhelperclipart.com/clipart/bubbled.jpg  One |

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| 3.   | In which program had Gus Grissom first flown?http://stories.edhelperclipart.com/clipart/bubblea.jpg  *Challenger*http://stories.edhelperclipart.com/clipart/bubbleb.jpg  *Gemini*http://stories.edhelperclipart.com/clipart/bubblec.jpg  *Apollo*http://stories.edhelperclipart.com/clipart/bubbled.jpg  *Mercury* |

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| 4.   | What is a simulation? Why might one be used?http://stories.edhelperclipart.com/clipart/wordline.gifhttp://stories.edhelperclipart.com/clipart/wordline.gif |

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| 5.   | What was the first sign that something was wrong on this simulation?http://stories.edhelperclipart.com/clipart/bubblea.jpg  Grissom couldn't talk to the control room.http://stories.edhelperclipart.com/clipart/bubbleb.jpg  White said there was a fire.http://stories.edhelperclipart.com/clipart/bubblec.jpg  Grissom smelled something funny when he connected his oxygen.http://stories.edhelperclipart.com/clipart/bubbled.jpg  Chaffee smelled smoke. |

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| 6.   | What does fire need in order to burn?http://stories.edhelperclipart.com/clipart/wordline.gifhttp://stories.edhelperclipart.com/clipart/wordline.gif |

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| 7.   | Who took the blame for this fire?http://stories.edhelperclipart.com/clipart/bubblea.jpg  The buildershttp://stories.edhelperclipart.com/clipart/bubbleb.jpg  The astronautshttp://stories.edhelperclipart.com/clipart/bubblec.jpg  No onehttp://stories.edhelperclipart.com/clipart/bubbled.jpg  NASA |

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| 8.   | Gus Grissom knew there was danger involved with space travel and accepted the fact.http://stories.edhelperclipart.com/clipart/bubblea.jpg  Falsehttp://stories.edhelperclipart.com/clipart/bubbleb.jpg  True |

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