

Space

Source 1: Life in Space

1060L

1 Have you ever wondered what it is like to be an astronaut and travel in space? Before traveling to space, astronauts have to go through a lot of training and preparations. They have to make sure they are prepared to adapt to the environment and conditions in space. Astronauts participate in mock-ups and simulators to practice the different parts of their space trip, including launch, docking to the space station, releasing satellites, spacewalks, and landing. They demonstrate the saying, “Practice makes perfect,” as they practice all possible scenarios, so they are fully prepared for their space mission.



2 While on their mission, astronauts work and live in close quarters on the space ship with three to seven people onboard. Therefore, air management on the ship is very important. The life system supports on the International Space Station have several important functions. They must supply oxygen and remove carbon dioxide from the cabin’s atmosphere and prevent gases like ammonia and acetone from accumulating inside the ship. Without life support systems, breathing on the same ship would be very difficult.

3 On a space ship, water is a luxury. While onboard the space ship, astronauts can only take sponge baths. You may be surprised to find that the water comes from water distilled from places like their crewmates breath. Rationing and recycling are very important on the International Space Station to ensure that there is always enough power, clean water, and breathable air.

4 Astronauts eat three balanced meals a day filled with important vitamins and minerals. All food must be non-perishable, so the food does not spoil on the space ship. Their food is packaged in materials that are designed to be flexible and easy to use and also in a way that will take up the least amount of space as possible to make storing and disposing of the containers easier. There is a trash compactor on space ships so astronauts can throw away their packages when they are done eating. All space ships have an oven so their food can be heated properly. Interestingly, salt and pepper on the space ship are in liquid form, so it does not float away and clog the air vents on the ship.

5 Sleeping is also different in space than on Earth. Since there is no gravity in space, astronauts must strap themselves to a wall, seat, or bunk bed when it is time for bed, so they do not float around at night and hurt themselves. Typically, crew members sleep in a sleeping bag. Astronauts are typically scheduled to get eight hours of sleep each night. However, this can be challenging due to the close quarters, motion sickness, or hearing other crew members snoring. Every morning the Mission Control Center in Texas sends wake up music to the crew. They will pick a different song each day to send to different astronauts. Sometimes families will choose the song to send to their family member in space.

6 What do you think about life in space? Do you think you would like to experience life as an astronaut someday?

“Life in Space” written for educational purposes.



Source 2: Meteor Shower

7 Have you ever seen a meteor shower? Some peak times to see meteor showers on Earth are December, January, April, August, October, and November. Peak viewing times vary depending on the year. If there is a full moon around the time of a meteor shower, it may make it difficult to see the meteors. If you want to see an amazing show in the sky, mark your calendars so that you can see the beautiful spectacle. You will be amazed!

8 A meteor is a space rock that enters Earth's atmosphere. Another name for a space rock is a meteoroid. As the space rock falls towards Earth, the resistance of the air makes the rock extremely hot, and it creates a shooting star. A meteor shower occurs when Earth encounters several meteors at one time.

9 What causes several meteors to fall at once? The answer is comets. Comets orbit the sun just like planets. However, comets usually have a more lopsided orbit. When comets get close to the sun, parts of their icy surface boil off, and debris such as dust and particles fly off the comets. Several times a year when the Earth crosses the orbit of a comet, a bunch of comet debris collides into Earth. As a result, we have meteor showers.

10 You may be thinking debris from comets colliding with Earth sounds dangerous and scary, but there is no need to be alarmed. During a meteor shower, the meteoroids are typically the size of dust particles to boulders. The majority of the time, they are small enough to burn up in our Earth's atmosphere, so the chance of them hitting Earth's surface is extremely rare. So, when you see meteor showers, stay calm and enjoy the magnificent display of shooting stars.

11 Interestingly enough, the tails of shooting stars might be seen anywhere in the night sky, but their tails always seem to point back at the same spot in the sky. This happens because meteors are coming towards us at the same angle, and when they get closer towards our planet, it starts to look like they are getting farther apart.

12 Be sure to check out the next meteor shower! As you gaze up into the sky, think about all the amazing things happening in our solar system that create the sight. Maybe someday you'll be intrigued to work for NASA and learn more about meteors and how they are created.

"Meteor Shower" written for educational purposes.



Excerpt from the “I Have a Dream” Speech

1120L

1 Five score years ago, a great American, in whose symbolic shadow we stand today, signed the Emancipation Proclamation. This momentous decree came as a great beacon light of hope to millions of Negro slaves who had been seared in the flames of withering injustice. It came as a joyous daybreak to end the long night of their captivity.

2 But there is something that I must say to my people, who stand on the warm threshold which leads into the palace of justice: In the process of gaining our rightful place, we must not be guilty of wrongful deeds. Let us not seek to satisfy our thirst for freedom by drinking from the cup of bitterness and hatred. We must forever conduct our struggle on the high plane of dignity and discipline. We must not allow our creative protest to degenerate into physical violence. Again and again, we must rise to the majestic heights of meeting physical force with soul force.



3 We cannot walk alone.

4 And as we walk, we must make the pledge that we shall always march ahead.

5 We cannot turn back.

6 Let us not wallow in the valley of despair, I say to you today, my friends.

7 And so even though we face the difficulties of today and tomorrow, I still have a dream. It is a deeply rooted in the American dream.

8 I have a dream that one day this nation will rise up and live out the true meaning of its creed: "We hold these truths to be self-evident, that all men are created equal."

9 I have a dream that one day on the red hills of Georgia, the sons of former slaves and the sons of former slave owners will be able to sit down together at the table of brotherhood.

10 I have a dream that one day even the state of Mississippi, a state sweltering with the heat of injustice, sweltering with the heat of oppression, will be transformed into an oasis of freedom and justice.

11 I have a dream that my four little children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character.

12 I have a *dream* today!



13 I have a dream that one day, down in Alabama, with its vicious racists, with its governor having his lips dripping with the words of "interposition" and "nullification" -- one day right there in Alabama little black boys and black girls will be able to join hands with little white boys and white girls as sisters and brothers.

14 I have a *dream* today!

15 I have a dream that one day every valley shall be exalted, and every hill and mountain shall be made low, the rough places will be made plain, and the crooked places will be made straight; "and the glory of the Lord shall be revealed and all flesh shall see it together."

16 This is our hope, and this is the faith that I go back to the South with.

17 With this faith, we will be able to hew out of the mountain of despair a stone of hope. With this faith, we will be able to transform the jangling discords of our nation into a beautiful symphony of brotherhood. With this faith, we will be able to work together, to pray together, to struggle together, to go to jail together, to stand up for freedom together, knowing that we will be free one day.

18 And this will be the day -- this will be the day when all of God's children will be able to sing with new meaning:

19 *My country 'tis of thee, sweet land of liberty, of thee I sing. Land where my fathers died, land of the Pilgrim's pride, from every mountainside, let freedom ring!*

20 And if America is to be a great nation, this must become true.

21 And when this happens, and when we allow freedom to ring, when we let it ring from every village and every hamlet, from every state and every city, we will be able to speed up that day when *all* of God's children, black men and white men, Jews and Gentiles, Protestants and Catholics, will be able to join hands and sing in the words of the old Negro spiritual:

22 *Free at last! Free at last! Thank God Almighty, we are free at last!*

Celebrating His Legacy



National Holiday

23 Martin Luther King Jr. Day is a national holiday marking the birthday of Martin Luther King Jr. It is observed on the third Monday of January each year, which is around King's birthday, January 15. Only two other figures have national holidays in the U.S. honoring them: George Washington and Christopher Columbus.

24 Honoring Martin Luther King Jr. with a national holiday was not easy. It took 15 years to create the holiday. The campaign for a federal holiday in King's honor began soon after his assassination in 1968. President Ronald Reagan did not sign the holiday into law until 1983, and it was first observed three years later in 1986. At first, some states resisted observing the holiday. They gave it alternative names or combined it with other holidays. It was not until 2000 that Martin Luther King Jr. Day was officially observed in all 50 states for the first time.

National Memorial

25 The Martin Luther King Jr. Memorial is located in Washington, D.C. The Memorial covers four acres and includes a granite statue of Martin Luther King carved by sculptor Lei Yixin. The memorial opened to the public on August 22, 2011. The official address of the monument, 1964 Independence Avenue, S.W., commemorates the year the Civil Rights Act of 1964 became law.

26 The centerpiece for the memorial is based on a quote from King's "I Have A Dream" speech: "Out of a mountain of despair, a stone of hope." A 30 foot high statue of King is named the Stone of Hope. It stands past two other pieces of granite that symbolize the "Mountain of Despair." When visitors come to the memorial, they pass through the Mountain of Despair on the way to the Stone of Hope, symbolically moving through the struggle as Dr. King did during his life. In addition to the statue, a 450 foot long inscription wall includes fourteen memorable quotes from King's sermons and speeches.

27 The statue of Martin Luther King Jr. was positioned so that he is looking over the water toward the horizon. The cherry trees around the memorial bloom every year during the anniversary of King's death. Although this is not the first memorial to an African American in Washington, D.C., King is the first African American honored with a memorial on or near the National Mall, and only the fourth non-President to have a memorial.

"Celebrating His Legacy" written for educational purposes.



Martin Luther King Jr.

Early Life

28 Martin Luther King Jr. was born as Michael King Jr. on January 15, 1929, in Atlanta, Georgia. Martin Luther King Jr. was the middle child of Michael King Sr. and Alberta Williams King. Martin Luther King Jr.'s father, Michael King Sr., was also a successful minister. He changed his name to Martin Luther King Sr. in honor of a German religious leader named Martin Luther. Later on, Michael Jr. followed his father's lead and changed his name to Martin Luther King Jr. Martin had one older sister and one younger brother. The King children grew up in a secure and loving environment but did experience racism in Atlanta.

29 King attended Morehouse College. He earned a sociology degree in 1948. Next, he attended Crozer Theological Seminary School in Chester, Pennsylvania. He was valedictorian of his class in 1951 and elected student body president. King then got his doctorate degree from Boston University, where he met Coretta Scott. She was studying at the New England Conservatory School in Boston. They were married in June 1953 and had four children: Yolanda, Martin Luther King III, Dexter Scott, and Bernice.

Civil Rights Movement

30 On December 1, 1955, Rosa Parks boarded the bus to go home from work when the bus driver demanded that Parks and several other African Americans give up their seats. Three other African-American passengers reluctantly gave up their places, but Parks refused. Rosa Parks was arrested. On the night that Rosa Parks was arrested, civil rights leaders met to plan a citywide bus boycott. NAACP leader E.D. Nixon elected Martin Luther King Jr. to lead the boycott. The bus boycott lasted 382 days. Both King's and E.D. Nixon's homes were attacked. Finally, the courts ruled that bus transportation could no longer be segregated.

“The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands at times of challenge and controversy.”

31 In January 1957, Martin Luther King Jr. and 60 ministers and civil rights activists founded the Southern Christian Leadership Conference to organize nonviolent protests for civil rights. King met with religious and civil rights leaders and lectured all over the country on race-related issues. Martin Luther King Jr. also encouraged college students to continue to use nonviolent methods during their protests. King and 36 students were arrested for peacefully sitting in the lunch counter area after the store refused to serve them. By August of 1960, the sit-ins had been successful in ending segregation at lunch counters in 27 southern cities.

32 On August 28, 1963, the historic March on Washington drew more than 200,000 people in the shadow of the Lincoln Memorial. It was here that King made his famous "I Have a Dream" speech, emphasizing his belief that someday all men could be brothers. This resulted in the passage of the Civil Rights Act of 1964 authorizing the federal government to enforce desegregation of public accommodations and outlawing discrimination in publicly owned facilities. This also led to Martin Luther King, Jr. receiving the Nobel Peace Prize for 1964.



Assassination

33 On April 4, 1968, Martin Luther King Jr. was shot to death at a hotel in Memphis, Tennessee. A single shot fired by James Earl Ray from over 200 feet away at a nearby motel struck King in the neck. James Earl Ray assassinated King by firing a rifle from a bathroom window that looked out onto the hotel balcony where King was standing. He died one hour after being shot.

34 James Earl Ray was placed on the FBI's Ten Most Wanted Fugitives List. He used a fake name and escaped to Canada, stayed for a month, then flew to England. Ray was finally caught on June 8 at Heathrow Airport in London, England. Ray pleaded guilty in March 1969 and was sentenced to 99 years in prison. He died on April 23, 1998.

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