La Ruth Martin & Suzanne Horton Editors

REFERENCE NOTES

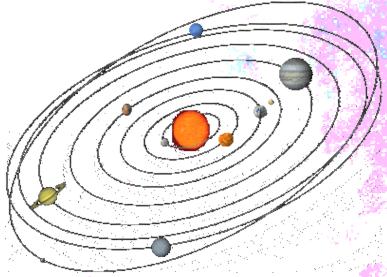
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Out of This World

Did you know that there are more than 500 Solar Systems in the Milky Way Galaxy, and astronomers are making new discoveries every year? Scientists believe there could be as many as 100 billion solar systems in our galaxy. Our Solar System formed from a gravitational collapse due to an exploding star referred to as Supernova 4.6 billion years ago. The Solar System consists of the Sun, the planets Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto, which is considered a dwarf planet over 200 moons and millions of meteoroids, asteroids, and comets which are pulled together by gravity. Claudius Ptolemaeus, an ancient astronomer, considered Earth to be the center of the Universe. Aristotle, also known as the grandfather of science, believed that earth was the center and that the sun, moon, stars and planets all revolved around it. It was not until the 16th century when Nicolaus a Renaissance mathematician Copernicus, astronomer, presented a mathematical model of a heliocentric system showing the earth circled the sun. A hundred years later in the 17th century, Italian Astronomer Galileo di Vincenzo Bonaiuti de' Galilei was able to discover that the sun was marked with sunspots and that the moon had craters with his improved telescope. He was also able to track the different phases of Venus. People continued the study of astronomy and have made many discoveries, but most of what we know now is based on the discoveries of the last century. We also have the development of telescopes and spacecraft to thank. Telescopes have revealed the weather and geography of other planets along with new planets and asteroids. These instruments also helped accurately measure the speed of light. In 1990, the first major optical telescope known as the Hubble Space Telescope, launched into space to orbit outside the Earth's atmosphere. The James Webb Space Telescope launched to help scientists learn more about other solar systems and other objects deep in space.

Spacecraft have been sent into space to explore our solar system and beyond since the 1960's. Spacecraft are machines or vehicles designed to fly in outer space. These machines can take close-up pictures or even transport humans and cargo. The National Aeronautics and Space Administration (NASA) is planning the launch of a new spacecraft named Orion which has the capabilities to provide an emergency abort, carry the crew further into space, and return to earth safely. Orion was tested in December 2014. You can visit the NASA Marshall Space Flight Center, or the U.S. Space and Rocket Center in Huntsville, Alabama. You can visit the W.A. Gayle Planetarium in Montgomery, Alabama. The library has plenty of resources to help you learn more about our solar system. You may also refer to the pathfinder below.

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Solar System Gif Transparent - Solar System Pics.

https://www.google.com/url?sa=i&url=https%3A%2F%
2Fsolarsystemdrawing.blogspot.com%2F2019%2F03%2Fsolar-system-gif-transparent.html&psig=AOvVaw1_snHyg82qrLxHcW2bs-F8&ust=1601666809638000&source=images&cd=vfe&ved=0CA0QjhxqFwoTCKCirYyQlOwCFQAAAAAAAAAAAAA

PATHFINDER

Adult Nonfiction:

Life Beyond Earth by Ferris, Timothy. 576.8 Ferris. Location: Coliseum Library.

Space Shuttle: the First 20 Years by Reichhardt, Tony. 629 Space. Location: Coliseum, Governor's Square, Morgan, Pintlala, Ramer & Rufus Lewis Libraries.

Lost in Space: the True Story by Shifres, Edward B. 791.45 Shifres. Location: Morgan Library.

Beyond: Our Future in Space by Impey, Chris. 629.401 Impey. Location: Morgan Library.

Stars & Planets by Ridpath, Ian. 523 Ridpat. Location: Governor's Square and Morgan Libraries.

A Universe From Nothing by Krause, Lawrence M. 523.1 Krauss. Location: Hampstead and Morgan Libraries.

Space Exploration: A History in 100 Objects by Odenwald, Sten. 520.9 Odenwal. Location: Morgan Library.

YA:

Space Exploration

YA Ref 503 Britann. Location: E.L. Lowder, Governor's Square, Pintlala, Ramer, Rosa Parks and Rufus Lewis Libraries.

Juvenile:

Outer Space by Grolier, Educational. JR 520. Location: Morgan Library.

Mysteries of Outer Space by Branley, Franklyn Manfield. J 500.5. Location: Governor's Square Library.

To Space and Back by Ride, Sally. J 629.459 Ride. Location: Governor's Square Library.

The Long View into Space by Seymour, Simon. J523.2. Location: Governor's Square Library.

Astronomy For Kids: How to Explore Outer Space by Betts, Bruce.

J 523 Betts. Location: Morgan Library.

The Solar System by Trammel, Howard. J 523.2 Trammel. Location: Governor's Square, Hampstead, Morgan, Pike Road, and Rufus Lewis Libraries.

Observatories in Space by World Book, Inc. J 522 Observa. Location: Morgan Library.

Exploring the Solar System by Carson, Mary Kay. J 523.2 Carson. Location: Morgan, Coliseum, EL Lowder, Governor's Square, and Rufus Lewis Libraries.

Online Resources:

The Solar System by Arthur E. Powell. (Hoopla)

The Unknown Universe by Richard Hammond. (Hoopla)

What's it Like in Space by Ariel Waldman. (Hoopla)

I'm From Outer Space! by Lisa Bullard. (Cloud Library)

The Outer Space Mystery by Gertrude Chandler Warner. (Cloud Library)

Lost in Outer Space by Tod Olson. (Cloud Library)

An Earthlings Guide to Outer Space by Bob McDonald. (Cloud Library)

NASA's Pioneer and Voyager Missions: The History and Legacy of the First Space Probes to Explore the Outer Solar System and Beyond by Charles River. (Cloud Library)

Solar System by Introbooks Team. (Cloud Library)

History of the Solar System by Introbooks Team. (Cloud Library)

How to Read the Solar System by Paul Abel. (Cloud Library)

A Space Traveler's Guide to the Solar System by Mark Thompson. (Cloud Library)

Solar System Amazing Space Adventure by Gene Lipen. (Cloud Library)

Are We Alone? Scientists Search For Life in Space by Gloria Skurzynski. (RB Digital)

Lucky 13 Survival in Space by Hillard Richard. (RB Digital)

Works Cited

Science Writer: Amanda Barnette.

Nasa.gov

Galileo Galilei by Nola Taylor Redd. Space.com



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