

Amanda Bennett

INTRODUCTION

From the time that I was a small child, my family would spend weekends camping, getting out to the middle of nowhere to enjoy the outdoors and have room to roam and have fun. Some of my fondest memories are from those evenings spent by the campfire with my family, gazing up at the millions of stars that decorated the evening sky—trying to count the stars as they came out, seeing who could find the constellations that my dad would call out, and watching for shooting stars. I also remember the beginnings of a desire to learn more about what was "out there" and hoping that one day, I could go travel with the astronauts. While I haven't made it to space yet, I have had the privilege of studying it with our children, meeting some of the astronauts, and watching plenty of the rocket and Shuttle launches. I have loved every minute of the adventure, but it can never match the sheer joy that I have seen in the children's faces as they experienced it all. They have learned to dream big and follow the dreams that God gives them. They have been absolutely wowed with wonder as they discovered one of God's greatest creations—the Universe.

This has been one of the main motivations in writing this book—to help your children feel the "WOW!" and experience the wonder of all that is out there to see. The whole Universe is there, waiting to be observed and studied—all from the comfort of the backyard. No special tools required—they can study the stars like those astronomers of ancient days, while learning the basics of astronomy. Where is the North Star, and why is it important? What do we mean when we talk about "phases of the Moon?" Which planets can we see in the night sky? All of these questions can be answered, and much can be learned. It is through the study of space and the heavens that we can begin to see just how great our Creator is, and how much there is left to be discovered and studied.

From this beautiful place called Earth, orbited by our night light called the Moon, circling our own star called the Sun, within our Solar System of planets, which is just a tiny spec within the magnificent galaxy called the Milky Way, which is but a particulate in the Universe that God created—we can learn so much! Take a minute and think of the last time that you all went outside in the evening to watch the stars. It doesn't take much, and the lifetime benefits are priceless.

So go outside with your family on a clear night—turn off the cell phones and the television, grab a blanket and some snacks. Spend an evening the old—fashioned way, finding the North Star, the Big Dipper, Orion's belt, and shooting stars. The memories and the knowledge will last a lifetime—learning about the heavens and sharing it with those that you love. To dream the impossible dream frequently begins with stargazing! Enjoy the adventure—the view is AWESOME!

Blessings, Amanda B.



Learning Objectives:

Space

- Develop an understanding of the Universe and the Earth's place in it.
- Learn about the Sun and the basics of our solar system.
- Study the planets Venus and Mercury.
- Study some of the early astronomers and the history of astronomy.

"Equipped with his five senses, man explores the universe around him and calls the adventure Science." Edwin Hubble

SPACE: Week One — Day One

LOWER LEVEL

Take Me There

Video: <u>The Sun</u>

Video: <u>The Hubble Space Telescope</u>

Today's Quote

Carefully copy today's quote into your Space Journal:

"In the beginning God created the heavens and the earth."

(Genesis 1:1)

Words of Wisdom (WOW Words)

Look up the following words in the dictionary and write the words and their definitions in your Space Journal. **Website suggestions**: Webster's 1828 Dictionary and Word Central

Sun fly space

Interesting People and Places

Using books or the Internet sites shown below, look up **Copernicus**. Who was Copernicus? Where did he live and what did he learn and discover about space? Write or narrate your answer for your journal. **Website suggestions**: Copernicus, Renaissance Astronomers, Copernicus, and Copernicus

Read and Discover

Using books or the Internet sites shown below, read the following questions and find the answers. Write your answers in your journal.

- 1. Describe where you live—what city, what state, what country, and which planet. This describes where you are in the world, but where do you think you are in space? If you have a world globe, find where you live on the globe. Spin the globe and watch how your spot on the world moves each day.
- 2. What does the Bible tell us that God created in the beginning? **Website suggestion**: <u>Genesis 1:1</u>
- 3. What is the **universe**? How big is the universe? **Website suggestions**: <u>Word Central</u> and <u>The Universe</u>
- 4. People have been studying and learning about the heavens since Creation. Long before there were things like television and computers, one of the favorite things to do at night was to go outside and watch the night sky. As people learned more about the heavens, a new name was made for the study of space. What do they call the study of space and the heavens? **Website suggestion**: <u>Studying the Heavens</u>
- 5. What is the name of the star that the Earth revolves around? How hot is it on the surface of this star? What is our star made of, and how far away is it from Earth? Website suggestions: Earth's Star, The Sun for Kids, Our Sun Our Star, The Sun, Sun Coloring Page, and The Sun
- 6. Take a few minutes each day to explore the Hubble photo websites, enjoying the amazing sites that this space telescope has captured for us! **Website suggestions**: <u>Hubble Gallery</u>, <u>Hubble Heritage Gallery</u>, and <u>Hubble Movie Theater</u>

Internet Resources

<u>Creation Coloring Pages</u> <u>Creation Bible Lesson</u> <u>Creation Bible Story and Word Puzzles</u> <u>Make Your Own Creation Blocks</u> <u>Solar System Coloring Book</u> <u>NASA Coloring Book</u>



Space

SPACE: Week One — Day Three

UPPER LEVEL

Take Me There

Video: Planets in Our Solar System

Video: <u>A Dwarf Planet</u>

Today's Quote

Copy today's quote into your Space Journal:

"God made two great lights—the greater light to govern the day and the lesser light to govern the night. He also made the stars."

(Genesis 1:16)

Words of Wisdom (WOW Words)

Look up the following words in the dictionary and write the words and their definitions in your Space Journal. **Website suggestions**: <u>Webster's 1828 Dictionary</u> and <u>Dictionary.com</u>

momentum navigate revolution

Interesting People and Places

Using books or the Internet sites shown below, look up **Tycho Brahe**. Who was he, where did he live, and how did he contribute to the study of astronomy? Add Tycho Brahe to your timeline, and summarize your investigation in your Space Journal in one to two paragraphs. **Website suggestions**: <u>Astronomical People</u>, <u>Tycho Brahe</u>, <u>Renaissance Astronomers</u>, and <u>Kepler and His Laws</u>

Read and Discover

Using books or the Internet sites shown below, find the answers to these questions and record your answers in your journal along with the source of your information (book, website, etc.).

- 1. What is an **astronomical unit** (AU)? How big is our solar system? **Website suggestions**: <u>Solar System</u>, <u>How Big is Our Solar System</u>, and <u>Amazing Space</u> <u>Glossary</u>
- 2. In your own words, explain why planets orbit the Sun, instead of the Sun orbiting our planet. **Website suggestion**: <u>Why Planets Orbit the Sun</u>
- 3. How many planets are in our solar system? What happened recently that changed this number? **Website suggestions**: <u>NASA—Our Planets</u> and <u>Planet Reclassification</u>
- 4. Study the first planet from the Sun, then describe and sketch it in your journal. Make sure that you include physical characteristics in your description, along with its distance from the Sun, if it has any moons, etc. **Website suggestions**: <u>Planet</u>, <u>Kid's Eye View</u>, and <u>Ask an Astronomer</u>
- 5. Add an important world event that occurred during Brahe's lifetime to your Space Journal. **Website suggestions**: <u>World History Timeline</u> and <u>History Explorer</u>

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Internet Resources

Space

<u>The Solar System in Pictures</u> <u>Solar System Interactive Online Game—NASA</u> <u>Tycho and Copernicus: Lunar Ray Craters Photo</u>