

The Newtons'
WORKSHOP
STUDY GUIDES

“World Building 101”

Episode 1
Days of Creation

Welcome to the unique world of Grandpa Newton’s workshop, where kids can experience exciting new adventures in God’s world. Each episode is power packed with science learning and exploration...the world as you’ve never seen it before. The quirky and lovable Newtons are certainly not your ordinary set of grandparents. In each adventure, the Newtons show their devotion to God and unusual ways to uncover more about God’s incredible world. And you are invited along!

“In the beginning you laid the foundations of the earth, and the heavens are the work of your hands.”

(Psalm 102:25) (NIV)

Exploring with the Newtons

How can two girls make a world for their science project—and 50% of their grade? What should they do about Wendell, their pesky partner in the project? How can the Bible help them? And what do a glass, a chair, and a pair of jeans have to do with creation?

Grandpa and Grandma are the best people to help with Trisha’s science project. But it’s hard for Trisha to be patient with Wendell and all his jokes, and it’s hard for her to see what the Bible has to do with their project. Using the lab and the Bible, Trisha’s grandparents show Trisha, her best friend Megan, and Wendell many of the reasons why the world is made the way it is. As you watch the video, look for answers to the following questions:

- What can we expect to find in creation since God made it? (Hint: See 1 Corinthians 14:33.)
- How does water help Earth stay warm?
- What are some different ways land is formed?
- What is God’s most important creation? Why did God make it?
- What did God make on each day of creation?
- What is your favorite day of creation? Why?

For Thought — and Action

Do you know anyone you usually treat the way Trisha and Megan treated Wendell at the beginning of their project? What do you think God would want you to change in the way you act toward that person? Will you do it? Tell someone what you decided.

Featured Scripture Passage — Genesis 1

More to Explore

As the Newtons explored with Trisha, Megan, and Wendell, God’s world is quite a fascinating place. Many of the Earth’s unique characteristics were lovingly illustrated by Grandpa Newton, and yet he just scratched the surface of planet Earth facts. If your appetite was whetted by Newton’s Workshop, you will really enjoy these Moody Videos: “The Awesome Forces of God’s Creation—Thundering Earth,” and “The Wonders of God’s Creation—Planet Earth.” Each of these great videos offers the opportunity to again marvel at the design of our great Creator.

“The Earth is the Lord’s, and everything in it, the world, and all who live in it” (Psalm 24:1).

Eagle Eye

Were you viewing with a watchful eye? Test your knowledge!

Grandpa Newton used an unusual contraption and an experiment to teach the kids about God's unique design of the Earth. What was the "glove" that God created to maintain the Earth's heat energy? Why is this characteristic of Earth so important?

If you didn't catch this fact the first time you watch, rewind and watch it again! You'll be amazed what you discover.

Devotional Reflection

"For God so loved the world that he gave his one and only Son, that whoever believes in him shall not perish but have eternal life." (John 3:16)

Like Trisha and Megan, people often overlook God's finest handiwork...people. Trisha and Megan viewed Wendell as odd because he seemed different. The "world" so loved by God is more than a sphere made of dirt and water and able to sustain life. It is a planet filled with beings created in God's own image. God places exceptional value on people...all kinds of people. When we choose to see all of mankind through the eyes of the Great Creator, we give God the honor and glory only He deserves.

After Thoughts (Post-Viewing Suggestions)

"...Holy, holy, holy is the Lord Almighty; the whole earth is full of his glory." (Isaiah 6:3b)

God's creation touches us each day! Reread the creation passages found in Genesis chapter one. Then, in class or at home, record in a journal how many times the gift of God's creation crosses your path on a daily basis. You may want to reenact Trisha's mother's "Post It" day in your home. See how your appreciation of God's creation grows as you look at the world around you through thankful eyes.

Words to Know

Atmosphere

The layer of gases surrounding a planet or a moon.

Continent

A large land mass. Earth has seven continents.

Ecology

The branch of biology that deals with the relationship between organisms and their environment.

Hydrologic System

One of the two major energy systems on the Earth. Hydrology deals with the science of the circulation, distribution, and properties of the water of the Earth. The hydrologic system is responsible for changes on Earth due to water energy, such as erosion.

Orbit

The curved path that a celestial body (a planet or moon) takes around another. Also the path of a man-made satellite or spaceship.

Sun

The shining celestial body around which the earth and other planets revolve and from which they receive light and heat.

Planet

A heavenly body that orbits the sun. Translated from Greek, the word planet literally means "wanderer."

Plate Tectonics System

One of the two major energy systems on the Earth. Tectonics is the branch of geology that deals with the structure of rocks. The plate tectonic system is responsible for changes on the Earth due to the movement of continents and land in general, such as the formation of mountains and earthquake activity

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The Newtons' WORKSHOP STUDY GUIDES

The Germinators

Episode 2
The Immune System

Welcome to the unique world of Grandpa Newton's workshop, where kids can experience exciting new adventures in God's world. Each episode is power packed with science learning and exploration...the world as you've never seen it before. The quirky and lovable Newtons are certainly not your ordinary set of grandparents. In each adventure, the Newtons show their devotion to God and unusual ways to uncover more about God's incredible world. And you are invited along!

"I praise you because I am fearfully and wonderfully made..."

(Psalm 139:14a(NIV)

Exploring with the Newtons

What has caused Trisha's cold that makes her have to stay in bed? How did that nasty green stuff get all over the kitchen? And what is Grandpa doing with all those balloons?

Tim's movie, "Invaders from Planet Chunk-O-Zord," has brought more to his sister Trisha than a chance to act. When she watches the film she discovers where she caught her cold—from Tim's friend Max. Grandpa decides it's time to act out a mission against a different kind of invader—germs. As you watch the video, look for answers to the following questions:

- How do germs spread?
- What is the difference between bacteria and viruses?
- How do bacteria get into a person's body?
- What are some of the cells that defend your body against sickness?
- How do God's commands about sickness show His love?

(Hint: See Leviticus 13:45-46.)

More to Explore

"Great are the works of the Lord; they are pondered by all who delight in them." (Psalm 111:2)

Grandpa and Grandma Newton came through once again with another learning adventure. God created the human body with an incredible immune system. Scientists and doctors have spent centuries studying how the human body deals with infection. If this episode of The Newton's Workshop fascinated you, then you might want to read more about Louis Pasteur, the famous French chemist and bacteriologist; Dr. Edward Jenner's work with the science and pioneering of vaccinations; or the work of Joseph Lister, whose contribution to medical research in the area of antiseptic revolutionized modern medicine.

God has always provided for His people, just as Dad told Trisha. Long before medical science discovered the method of germ transmission, God gave principles for His people for their health. Take a good look at the passages Dad referred to in Leviticus chapters 13–15. You'll be amazed at how God's laws for His people protected them both physically and morally.

For further exploration, check out these great Moody videos: "The Wonders of God's Creation-Human Life," "Moody Science Adventures-The Wonder of You," "Moody Science Classics-Red River of Life; and Windows of the Soul."

Eagle Eye

Were you viewing with a watchful eye? Test your knowledge!

Grandpa Newton described the function of the immune system as a battle. In this battle, who are the defenders, and who are the invaders? What does Grandma use to illustrate the production of white blood cells?

Miss it the first time? Rewind...watch it again. See what new facts you discover the second time around.

Devotional Reflection

“Do you not know that your body is a temple of the Holy Spirit, who is in you, whom you have received from God? You are not your own; you were bought at a price. Therefore honor God with your body.” (1 Corinthians 6:19-20)

It wasn't Trisha's fault that she got sick. All human bodies can get sick, yet Trisha made some choices that did delay her healing. Choosing healthy habits is one way to honor God with our bodies. We may also honor God by dedicating time to the study of His Word...to keep our spiritual bodies as fit as they can be.

After Thoughts (Post-Viewing Suggestions)

“My mouth is filled with your praise, declaring your splendor all day long.” (Psalm 71:8)

As beloved creations of our Heavenly Father, we have the privilege to draw others' attention to Him. After viewing this episode of Newton's Workshop, identify ways your body can be used to declare His splendor. Perhaps your way will be through personal testimony, through songs of praise, through the encouragement of others, or through praying for those in need. All of these choices will continue to keep God's words upon your lips.

For Thought— and Action

What are some other commands God has given that show His love for His people? Write down at least three, and write or say a prayer thanking God for His love.

Featured Scripture Passages:

Genesis 1:26-28 • Leviticus 13:1-46

Words to Know Antibody

Every type of antigen has a specialized antibody and T-cell to fight it. There are millions of different antigens in the world, so God created our bodies to make the millions of different kinds of T-cells and antibodies to match them.

Antigens

Antigens are the enemy to the immune system because they can make us sick. They stimulate the production of antibodies in the bloodstream. Antigens may come in the form of bacteria, parasites, fungi, or viruses.

Bone Marrow

All of the white blood cells that make up the immune system are born in the bone marrow.

Immune System

The system created by God to fight off infection in the human body.

Lymphocyte

Also called T-cells, lymphocytes are specialized white blood cells that attack particular types of germs. There are different kinds of lymphocyte cells, such as the T-8, T-4, and T-2 cells. The chemicals released by lymphocyte cells are called antibodies.

The Lymph System

The control center of the immune system where T-cells are based. Lymph is a liquid that runs around the body and carries germs to an area where white blood cells can destroy them. Your lymph glands (also called nodes) can be sore and painful when your body is fighting illness. Some of these glands are located in your throat and underneath your arms.

Macrophage

A type of white blood cell that devours harmful germs. The cells stand watch throughout the body looking for antigens of different types to consume.

Neutrophil

A type of white blood cell that carries chemicals that destroy germs. These cells patrol the bloodstream keeping it safe from invading bacteria by shooting bacteria with their special chemicals.

White Blood Cells

These are blood cells created in your bone marrow. Their primary job is to defend against any infection that may enter your bloodstream. These are different from red blood cells, which carry food and oxygen.

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