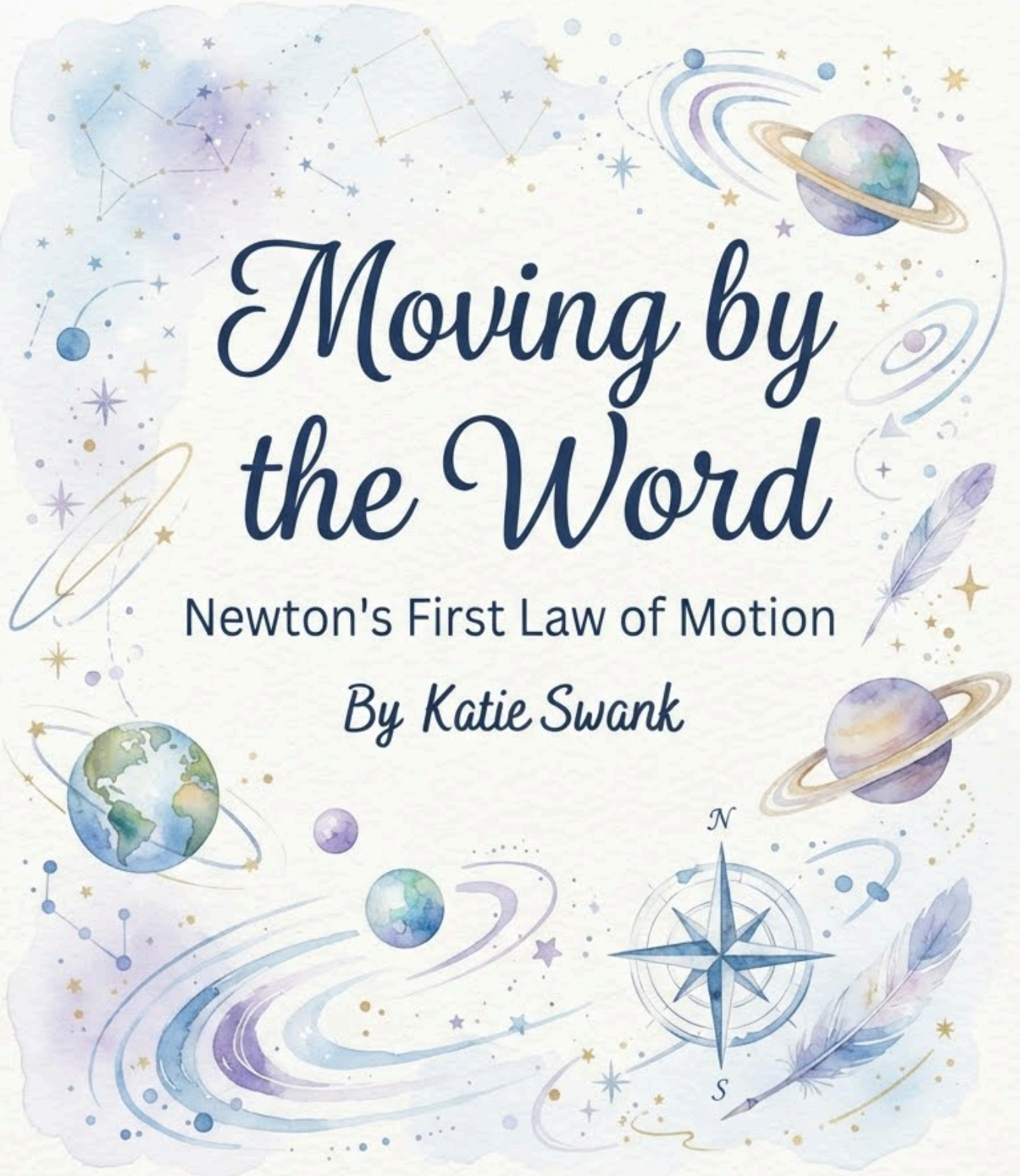
Moving by the Word

Newton's First Law of Motion

By Katie Swank



Student Name: _____

Name: _____
Date: _____

Moving by the Word: A Science Workbook on Newton's First Law

Part 1: Vocabulary & Definitions
Before we look at how the universe moves, let's learn the terms that scientists use to describe motion.

- Motion: A change in position over time relative to a reference point.
- Force: A push or a pull exerted on an object.
- Net Force: The combination of all the forces acting on an object at one time.
- Inertia: The tendency of an object to resist any change in its motion.
- Rest: The state of an object when it is not changing its position (standing still)

Part 2: The Science and the Scripture

God's Orderly Universe

In Genesis 1:1, the Bible tells us, "In the beginning God created the heavens and the earth." When God created our universe, He built it with physical laws so that it operates in an orderly, predictable way. One of these fundamental laws was discovered by a Christian scientist named Sir Isaac Newton. It is called Newton's First Law of Motion, or the Law of Inertia.

Newton's First Law Defined

An object at rest stays at rest, and an object in motion stays in motion at a constant speed and in a straight line, unless acted upon by an unbalanced force.
This means things cannot start moving, stop moving, or change direction by themselves. They need an outside force to change their status.

Connecting to the Word
We can see a beautiful spiritual parallel to this scientific law in the Bible. In the book of Hebrews, the writer describes the incredible power of Jesus Christ:

"The Son is the radiance of God's glory and the exact representation of his being, sustaining all things by his powerful word."
— Hebrews 1:3 (NIV)

Name: _____
Date: _____

Moving by the Word: A Science Workbook on Newton's First Law

Just as an object in motion requires physical laws to keep moving smoothly without collapsing into chaos, the entire universe relies on the constant, sustaining "force" of God's Word to exist and operate. Without His continuous power, everything would fall apart!

Think about a rolling soccer ball. On Earth, it eventually stops because of outside forces like friction and gravity. But in deep space, away from those forces, an object will travel forever in a straight line. God set the planets in motion, and by His powerful word, they keep moving exactly as He planned.

Similarly, consider an object at rest, like a heavy stone. It will sit there forever unless someone pushes it. In Matthew 28:2, we see an amazing example of an outside force changing an object's rest: "There was a violent earthquake, for an angel of the Lord came down from heaven and, going to the tomb, rolled back the stone and sat on it." The massive stone blocking Jesus' tomb could not move on its own; it required a physical force delivered by God's messenger to alter its state of rest!

Part 3: Fill in the Blanks

Directions: Use the words in the Word Bank below to complete the sentences based on what you have learned.

Word Bank

Rest | Inertia | Force | Hebrews | Sustaining | Motion | Unbalanced

- Newton's First Law states that an object at _____ stays at rest unless acted upon by an outside force.
- The property of an object to resist a change in its motion is called _____.
- According to _____ 1:3, Jesus is actively holding the universe together.
- An object in _____ will keep moving at a constant speed in a straight line unless a force interrupts it.
- God is described as _____ all things by His powerful word, ensuring the universe remains orderly.
- A push or a pull that changes an object's state of motion is known as a _____.
- An object will not change its speed or direction unless it is acted upon by an _____ force.