#### **SCALES OF JUSTICE**

### **INTRODUCTION:**

After the flood, God declared a new covenant with mankind (and animals) stating that there would never again be a worldwide flood to destroy the earth. As a reminder of this covenant, a bright rainbow of promise appeared to Noah and his family, including sons



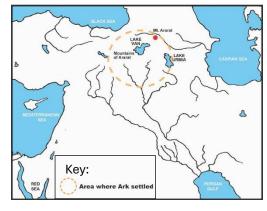
Ham, Shem, and Japheth. The landscape below the bow, however, was devastated by the flood and required time to regrow vegetation. If it weren't for the specific instructions God gave to Noah, he and his family would likely have faced starvation that first year.

Noah was to bring seven additional pairs of clean animals on the ark. These animals were provisions for sacrifice, breeding stock, and survival in the post-diluvial world. It's the first time that scriptures specifically record the use of animals for food.

**GENESIS 9:11,13** <sup>11</sup> I establish my covenant with you: Never again will all life be destroyed by the waters of a flood; never again will there be a flood to destroy the earth. <sup>13</sup>I have set my rainbow in the clouds, and it will be the sign of the covenant between me and the earth.

A little more than a century later, Noah's descendants had spread south to Sumer (modern-day Iraq) and west to the Mediterranean. Noah was still alive when his great-grandson

Nimrod led the charge to build a tower on the plain of Shinar (Sumer) where the cities of Akkad, Babylon, Uruk, and Kalneh were founded. Nimrod was the son of Cush and the grandson of Ham. The Bible records his motivation for building the Tower of Babel was "to reach heaven and make a name for themselves." Neither of these reasons align with God's intentions for his people.



Read GENESIS 10:8-12 to learn about Nimrod.

## **DEVOTIONS: GENESIS 11:1-9, ACTS 2:5-11**

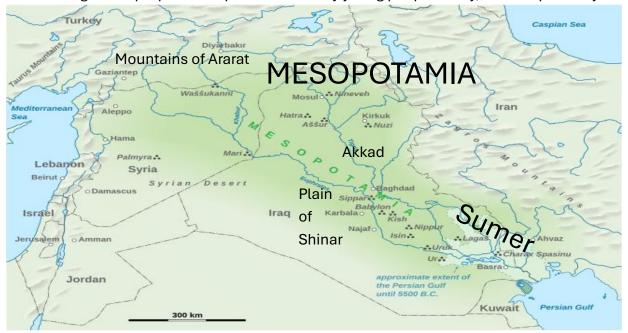
**GENESIS 11:5-7** <sup>5</sup>But the Lord came down to see the city and the tower the people were building. <sup>6</sup>The Lord said, "If as one people speaking the same language, they have begun to do this, then nothing they plan to do will be impossible for them. <sup>7</sup>Come, let us go down and confuse their language so they will not understand each other."

Language is an amazing gift we often take for granted. Think about taking on a large, joint project with hundreds of people who couldn't communicate with one another. Your project challenge just multiplied a "1000 times" over. Without a common language, leaders are of little value. Commands are reduced to grunts and groans, pictures, or a game of charades. There are two instances in the Bible where language was a major issue. The first one appears in Genesis Chapter 11 at the Tower of Babel. The second is in Acts Chapter 2 when numerous language groups were gathered for the Feast of Weeks (aka Pentecost, 50 days after Passover). In 33 AD (the year Christ died), 50-days after Passover, the Holy Spirit descended upon the crowds breaking the language barrier. Each person was able to hear and understand the Good News in their own tongue.

**ACTS 2:5-11** <sup>7</sup> And they were all amazed and marveled, saying one to another, "Behold, are not all these which speak, Galileans? <sup>8</sup> And how hear we every man in our own tongue, wherein we were born?"

The opposite occurred on the Plain of Shinar where Nimrod led a quest to build an immense tower to reach heaven. Although Shem (aka first inhabitants of Sumer) and Ham (Nimrod's grandfather) were united by a common language (Sumerian) and purpose, Nimrod's goal was in opposition to God. Their single language aided them in an unholy quest; therefore, God intervened and confounded their language. The workers were confused, unable to understand each other or their leaders.

Both events were miraculous and demonstrate the Holy Spirit's power over our amazing gift of language. Unlike the ark project, the Tower of Babel was contrary to God's desire. Although they had increased knowledge, capabilities, and tools, they had failed miserably in following God's purpose and plans. Like many young people today, Nimrod probably



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viewed his great-grandfather Noah as an "out-of-touch" old person far removed from their contemporary world. Nimrod's hope that a tower would attract people to "his kingdom" rather than see them scattered throughout the region/world may have been a good idea in his own eyes, it was not godly. God is known for sending out people, as He did with all those who were part of the Babel project, and as He later did with Abraham.

**GENESIS 11:3-4** <sup>3</sup> They said to each other, "Come, let's make bricks and bake them thoroughly." They used brick instead of stone, and tar for mortar. <sup>4</sup> Then they said, "Come, let us build ourselves a city, with a tower that reaches to the heavens, so that we may make a name for ourselves; otherwise, we will be scattered over the face of the whole earth."

In the *Epic of Gilgamesh* (a non-Biblical story written in Sumerian cuneiform), the king of Uruk believed his people could reach heaven's immortality on their own and build a tower high enough to avoid being swept away by flood waters. This story is widely believed to date back more than 4000 years ago as a compilation of tales by many authors. Most likely, real events inspired the story. Remember, nearly everyone who was alive during the time of Babel knew about the flood and the ark from their grandparents or great-grandparents.

By the time of Nimrod, the third and fourth generations were born to Noah's family. Many had grown complacent to events that happened in the past. Perhaps their times weren't much different than our own today. The past is forgotten over a generation or two. But, we

know God's Word can be trusted for 1000's of years and to eternity.

Making a name for ourselves or seeking immortality apart from God should never be our goal. It didn't work out well for Nimrod at Babel. His name is now synonymous with "fool or idiot." Today, the word babel is used to describe a child's sounds before they learn how to talk. The only "name" Nimrod made for himself or his tower, is memorialized as ignorance.



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Every time you look at a rainbow, remember how confident you can be in God's Word and His promises. There has never been another global flood and there is no way we can reach heaven on our own. Compare the difference between Noah and his great grandson Nimrod. One had great faith; the other believed in himself. Which one made the right choice? Which one is remembered for greatness in Hebrews 11's Hall of Fame? God weighs us not by our abilities or talents, but how we use them, how we listen to His instruction, and how we trust in Him – our faith in His Word over our own ideas about what makes sense or seems best.

## **DEFINE:**

**WEIGHT:** the force exerted on a body by gravity. **W = ma** 

**GRAVITY:** the universal force of attraction acting between all bodies of matter.

**DENSITY:** the mass per volume of a substance; p(density) = m(mass)/v(volume) or p = mv

**SPECIFIC GRAVITY:** the density of an object compared to water.

**WHEEL:** a circular object revolving around an axle; a pulley is a version of a wheel.

## THEME: REMEMBER THE SCALES OF JUSTICE

**Micah 6:11**: Is it possible for me to let wrong scales and the bag of false weights go without

punishment?

Weighing decisions rightly requires balance. Like a balance scale with two trays, one tray contains a known weight and the other tray a quantity of substance needed to balance. It's essential to have a correct known weight (a standard weight). The same is true for making decisions. Without God's Word as our standard, it's difficult to know how to weigh our choices or to make right decisions. Insights from



God's Word are essential for survival and for the successful pursuit of truth.

Untested weights, like unknown standards, lead to unknown results. Unjust weights are even worse as they're used to cheat or deceive. Choosing to do things our own way is like putting a finger on the scale to cheat. Our biases, wants, and desires will alter our decisions. The reason Lady Justice is blindfold is to symbolize the need for unbiased judgment based on truth, fairness, and righteousness in our laws. The same is true for God's laws – they just, unbiased, and best for us.

**Proverbs 16:11** A just weight and balance are the Lord's; all the weights of the bag are his work.

Balance scales are like equations having an equal sign between the two sides. The scale's framework is the balancing guide. Taking biases away from the equation should remove our tendencies to weigh in too much. Not OUR WILL, but GOD's WILL be done. Remember God is a just God. His justice requires wickedness to be judged, either in life or in death. He sees our motives, our future, and He wants even better for us than we do for ourselves.

# TIMELINE/Introduction (History): After the Flood

**2400-1500 BC** Bricks and Ovens, Metallurgy, Wheels, the Tower of Babel/Pyramids and Ziggurats. Establishing standards for measuring weight.

As flood waters receded, Noah's family (the only living humans) moved down from the mountains of Ararat (Turkey). Within a

few years, a cooling period and ice age began covering higher latitude and altitude regions with





snow and glaciers. The descendants of

Ham and Shem soon occupied the warmer, unglaciated region known as Sumer, which is a reference to Shem. In western Sumer, however, the city of Uruk was built by Nimrod, Ham's grandson. Uruk is known as the home of Gilgamesh (the hero-king in the *Epic of Gilgamesh*), the beginning of cuneiform writing, and the site of the first ziggurat temple.

In a relatively short time, Noah's family members were able to rebuild and recreate tools lost during the flood. Ingenuity fueled the progress. Communities and cities were soon founded by Noah's children and grandchildren. Ruins of cities/temples built more than 4000 years ago remain even today. The people made brick, some fired in ovens, and mortar to build walls, homes, temples, ziggurats, and cities.

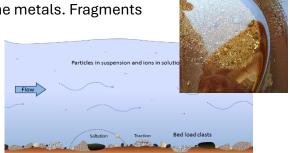


After the flood, it's likely that hydrothermal quartz veins with precious metals were more prominent at the surface. The

intense heat energy from the fountains of the deep and the fractures in the earth's crust (plate tectonics) released mantle elements into these fractured spaces or veins.

Rock ore was mined, then crushed to separate the metals. Fragments

were then subjected to high energy water processing. This occurs naturally in streams often isolating heavy metals in high energy pockets or depressions. Panning for gold or other metals is a similar, density-driven process. Early civilizations utilized these methods to find metals in streams and rivers.



# **EQUIPPED**/Science Principle:

**Weight** is a force. Remember, **F = ma or Newton's 2**<sup>nd</sup> **Law**. Some forces are primarily due to gravity, some are against gravity (such as lifting), and some are primarily horizontal like two cars ramming into each other. With horizontal acceleration, the acceleration is not due to gravity but due to the "gas or brake pedal." So, although acceleration is always involved in a force, it may or may not be due to gravity (g = 9.8 m/s2).

The downward force of mass, what we call **weight**, is due to gravity. Weight  $\rightarrow$  W = mg - "g" simply indicates the kind of acceleration.

**W = mg** (W = weight) (m = mass) (g = 
$$9.8 \text{ m/s}^2$$
)

# Density isn't weight, it's mass divided by volume.

Differences in density are caused by how close together atoms are packed, how many protons and neutrons are in the atom's nucleus, and how hot or cold an element or substance is. Weather and air flow patterns, metallurgical processing, ocean circulation,

mineral/rock and mantle differentiation, and sedimentary rock laminations/layers all depend on density.

$$p = m/v$$
 (p = density) (m = mass) (v = volume)

**Standard weights** (weights with known values) can be used to balance, calibrate, or counterbalance scales. Having uniform and accurate weight standards was a major challenge for early civilizations and trade. Today, most labs provide standards that can be used to calibrate/alter a scale's zero setting, if needed.

Common substances are frequently used as standards to compare other things. Water is compared for density, weight, volume, and heat capacity. **One milliliter and/or one cubic centimeter of volume equals 1 gram of water.** One cc or ml of most other elements (such as these below) or substances will not equal 1 gram.



Each element has a characteristic density and can be identified accordingly. Compare 1 cc of gold at 19.3

grams, to 1

cc of aluminum at 2.7 grams, to 1 cc of sodium at .97 grams. The density difference between water and other substances facilitates separation into layers, such as gravel, sand, fossils, and mud. This is especially true when water has varying degrees of movement such as during or after a flood or heavy rainfall. Mud particles stay in suspension the



longest resulting in an upper layer of mud, like the surface in this image.

"Final" volume = 19.8 mL

"Initial" volume

### **GEAR-UP**/Practical Illustration:

# Weight and Density

There are multiple scale types including digital, balance, triple beam, single or double lever arm scales, and Vernier scales. Each have different formats for reading weight quantities.

### THE TRIPLE BEAM



- 1. Start with all weights slide to the left.
- 2. With nothing on the scale, the beam should be at the balanced position.
- 3. Place object to be weighed on the scale.
- 4. Move the large weight first (middle beam).
- 5. Move the medium weight second (back beam).
- 6. Finally, use the front weight to achieve the

balance position. For small objects, the front weight may be all that is needed.

- 7. Make sure all weights are all in proper positions and the beam is balanced.
- 8. Record the weight.

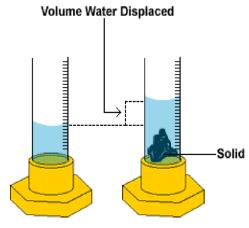
# **EXPERIMENT:** Find Density p = m/v

STEP ONE: Measure Weight

STEP TWO: Find or Measure Volume STEP THREE: Divide Weight by Volume

### **VOLUME DISPLACEMENT METHOD**

- Place an object in a known volume of water (generally using a beaker or graduated cylinder) and measure the combined volume.
- 2. Subtract the initial measure from the final measure to determine volume.



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**Problem #1**: An unknown solid weighing 24 grams was placed in 10 mL water. The final measure was 18 mL. What is the solid's density?

## Density = (weight)/(volume) p = m/v

Equation: 24 g/(18 mL - 10 mL) = 24 g/8 mL = 3 g/mLANSWER: 3 g/mL is the density of the substance

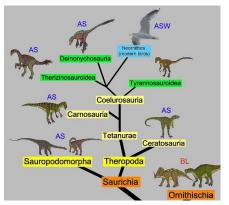
Comparing the substance to water (1 mL or 1 cc = 1 gram), this solid is 3 times more dense. The answer may be shown as a ratio: 3:1 (solid to water) or **Specific Gravity** =  $3_{sp}$ 

**Problem #2:** What is the Specific Gravity of gold rounded to the nearest whole number? 19:1 (gold/water) equals **Specific Gravity:** 19<sub>sp</sub> for gold

# **GOT-IT**/Apologetics:

Only 100 years after the flood, on the plain of Shinar, the Tower of Babel was under construction. Thousands lived nearby on the plain; whereas others had "scattered" or migrated. Nimrod may have worried that migration away from Shinar would weaken his power. Whatever he was thinking, it's clear Nimrod's goals were opposed to God. In his own mind, Nimrod's intentions may have been good, but they weren't godly. He was only three generations removed from Noah, yet his mindset had already "dethroned" God. God was not "in charge" in Nimrod's mind.

**Romans 1:21-22** Because that, when they knew God, they glorified him not as God, neither were thankful; but became vain in their imaginations, and their foolish heart was darkened. Professing themselves to be wise, they became fools...



Like Nimrod's quest to reach heaven on his own, science has a goal of explaining natural laws and nature without supernatural origin or cause. Its scales lack a true balancing framework or guide, which means an entire scientific paradigm could be wrong. Although science lacks a truth guide, the Holy Spirit can serve as a personal guide for believers. Both creationists and naturalists can do good science, but only a believer can access the wisdom, historical narrative, and truth God provides.

One of these faulty scientific paradigms is: "complexity evolved from simplicity" denying an original good creation full of complex and diverse organisms. This theory is based on human thought, "what I think and not what God thinks." Thinking we know what's best can lead to foolish imaginations such as, "humans were once monkeys and dinosaurs turned into birds." These theories were imagined because science forgets: "God created."

With supernatural causes deliberately "off the table" (in the 20-21<sup>st</sup> century), it's possible for an entire scientific community to be led astray like those at Babel. When an idea is conceived with a "finger on the scale" of human bias, true balance can't be achieved. While science is an important endeavor, one must keep in mind that not all scientific arguments or theories are in obedience to the knowledge of God.

**2 COR 10:5** We demolish arguments and every pretense that sets itself up against the knowledge of God, and we take captive every thought to make it obedient to Christ.

## **REFLECTION**/Devotion:

Whenever "man" ignores God, His laws, or His desires for mankind, foolishness takes over. The Tower of Babel is a prime example. Imagine if all man's creative talents, work,

knowledge, and understanding were applied to serving God and others. In Genesis 11:6, God declared "...nothing they plan to do will be impossible for them." Scriptures indicate that men using their ingenuity and working together can accomplish seemingly impossible tasks. Choosing to "make a name for themselves" over making God's ways known, or building a tower to heaven when God has clearly declared only sinlessness can bridge the gap between earth and heaven, is simply foolishness. In contrast, using faith-filled ingenuity like Noah to create the greatest wooden structure on earth that saved his family and all the creatures God brought to the ark.

Humans tend to repeat the same mistakes over and over again. God's solution, scattering and confusing languages, allowed remnants of faith to flourish while others were in utter rebellion. God knows the future and how to control it to accomplish His will. We become foolish when we try to control future events by disregarding God's desire for His people.

### **REMEMBER THESE THINGS**/Devotion:

God intended for man to use his mind creatively, but He requires remembering. Remember God is the Creator of All. Remember the Fall of Man and the consequence of man's choice to disobey. Remember the Flood, the result of man's refusal to repent. Remember the Tower of Babel and the consequence of trusting in your own "power, strength, knowledge" over believing God. Clearly, mankind needs reminders to avoid repeated forgetfulness, foolishness, and failing to honor God and His gifts.

Romans 1:10 None are righteous, no not one.

A rainbow reminds us of the flood, God's judgment and promise. An entirely different world awaited Noah's family, but because they listened to God's instruction, they were equipped to survive. We can be assured that God will never judge the earth with flood waters again; however, we can also be assured that righteous judgment will come to all.

**Matthew 7:2** For in the same way you judge others, you will be judged, and with the measure you use, it will be measured to you.

Lady Justice, blindfolded and holding scales, depicts man's Godgiven inner desire for justice (no matter what their status, skin color, or religion). Scales are symbols for justice, fairness, weight, and

measures. The framework needs to true and accurate. By weighing substances, chemical properties can be determined and identified. It's essential to know density and mass to calculate potential value, "For I, the LORD, love justice; I hate robbery and wrongdoing. In my faithfulness I will reward my people and make an everlasting covenant with them." God is just; therefore, man who is created in God's image has an innate desire for justice – both punishment and reward.