

Amazing Balance pg.1

Parents: please cover all the pictures on this page but this one. >>>>>

What is it? #1

This photo is one that we couldn't believe was true. **U-Think:** What is this >> a photo of? I'll give you a hint. The wall is a dam...a really steep dam in Europe, and it has something to do with salt. What are the specks?



Do you give up? Look look at the photo to the left. It is a bit closer? Have you figured it out?

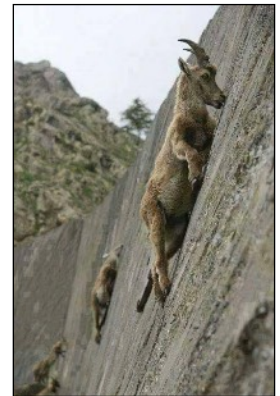
It'll be easy now. What is it? Looking at the other picture to the right. The specks are goats on a STEEP dam! Remember, I said it had to do with salt. What do a goat and salt share? The goats are looking for salt their bodies need and have found some on the rocks that make up the dam. Can you imagine climbing a wall like that to get salt??? Yet they do it quickly. God has given them remarkable feet and an incredible sense of balance.

What is it? #2

What is this pokey thing below? Have you ever seen one of these? Notice how the things sticking out are nearly the same distance from one another, except as you move down, they get a little wider. Do you know what it is? It's on the end of an animal! Kind of like a nose. Give up yet? It's a sawfish blade!



Sawfish can be giant fish— 15 feet long. They move into a school of fish and begin thrashing their "blade" back and forth. They hit a few fish and then go in and have them for a snack! What a way to get dinner!



This has something to do with Balance in a very sneaky way—first, another question. **U-Think:** You can see how the "teeth" are spaced a certain distance. What animal can you see outside while driving around town that spaces itself a little like the teeth do in this sawfish blade? Do you give up? You can see them on telephone wires.



Birds! Just like the DNA of the sawfish spaces the teeth out on the "blade," even so, God made it so the DNA of blackbirds would wire their brain to space themselves on things they perch on. If a bird tries to get in-between two other birds, they will harass it until it leaves.

What's this got to do with balance? Wires of power poles are an excellent place to look for the balancing techniques of the birds.

Watch a bunch of birds on a power wire, and see what they do when the wind blows on the wire they are sitting on. **U-Think:** How do birds keep their balance on wires?

They move their tail up and down to help them keep balance.

U-Think: Are there other ways you know about how animals balance themselves? What does a squirrel in a tree do?



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Tree squirrels move their tails like a high-wire walker does the big pole he carries. This helps the tree squirrel keep balance! Check out this gibbon using his arms like a squirrel uses his tail. [Gibbon on bridge](#)

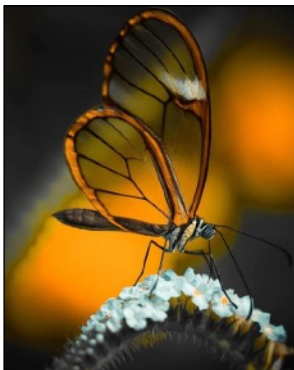
Romans 1:20

We love the Bible verse Romans 1:20! Part of it reads like this: "For since the creation of the world His invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made..."



This says that if you look at things in nature that God has made, like flowers, trees, birds, and puppies, you can see His attributes. One BIG attribute of God is that He is love. So God's nature should show this. And boy, does it!

Why are flowers so beautiful? Because God created them this way to bless us. They also serve other reasons and purposes too, but God making beauty for us to enjoy is a BIG one.



Why are butterflies so beautiful? The same reason. Oh, there are other reasons, but God, who is a master at dual-purposing things, surely created butterflies for beauty, too. Our teeth are dual-purposed, too. They have two purposes; one is to grind up our food. But God could have given us chimpanzee teeth! That wouldn't be so great. But God gave us beautiful teeth so we can smile and look nice for others. Your smile and your teeth are a great gift from God.



Agility

One of our daughters is a ballerina. We like to go to her ballet performances because they are exciting to watch...and beautiful, too! God knows we love to see graceful, powerful, fast, and majestic movements. This is why He created His creatures to give us many different shows.

Birds do all kinds of wild things in the air. The hummingbirds at our feeders are incredible to watch! The goats on the European dams are amazing to see! When you see beauty in movement, like a monkey swinging through a tree, or a lion making great leaps, realize that God created his animals and insects to bless us with their movements!



How We and Other Things Balance



Have you ever noticed puny little one-year-olds walking? It's amazing! They seem like they will fall, but they keep on going.

U-Think: How did God make human DNA wire a toddler's brain to fall while walking? They sit rather than fall. It is an automatic "instinct" like sneezing and coughing, and swallowing. No one learns to swallow ...we just do it. And it is the same with a baby sitting when he is about to fall. The sitting is automatic.

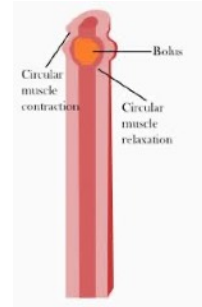
Amazing Balance

pg.3

Programmed to be able to Swallow

While we are at it, let's look at swallowing for a minute.

Swallowing is complicated. There is a movement in our throats called peristaltic movement. When we swallow, we can do it standing on our heads. Astronauts can do it on the Space Station, where there is no gravity. We can do this because specific muscles in our throats are "programmed" to fire in a specific order. Starting with the top of our throat, the muscles squeeze and push our food down a little. Then the next set of muscles will fire and squeeze, and then the next stage of muscles will do the same. This sequence of muscle firings will keep doing this until the food is all the way down our throats.



Programmed to Be Able to do Specific Movements

I say all this because our DNA programs our brains for particular movements. He does with animals too, but much more so. Part of God's wiring of animals' and insects' brains involves giving them the ability to twist, jump, and swing. When God gave the ability of mountain goats to climb just about anything, He had to program their brains to balance and make specific movements. Here is an example.



Habakkuk 3:19 says, "He makes my feet like hinds feet and makes me walk on my high places." This refers to when a deer climbs. When a deer or a mountain goat climbs challenging terrain, it can only see where to place its front feet. They place their front feet excellently, and then their hind feet, the back feet, land exactly where the front feet were. This way, the footing of the back feet is correct also. God gave deer and goats incredible balance, but He also had to give them the ability to have their hind feet land exactly where their front feet were placed. This helps them be great climbers! So having great balance, like deer and goats do, is a combination of being able

to balance in tricky situations AND being able to do certain other things, like—in this case—putting your back feet where your front feet were as you walk and run up a mountain—or climb a dam!

Your Balance Activity

That's it for now! Now go do your first balance activity. This a great one to challenge your friends with! And remember: To make animals and insects so fun to watch, God had to create their animal equipment: their feet, claws, and eyes—AND give them a fantastic ability to balance!



BTW:

When Habakkuk said that God gives him "*hind's feet*" and makes him "*walk on his high places*," this is figurative. He is saying that God guides him to step as He steps. And, because God helps him to follow Him day by day, he lives a blessed life. A "blessed life" is what the words "High Places" are symbolic of. So this verse means that as we follow Jesus in what He has us do each day, He helps us walk close to Him, which brings a lot of beauty into our lives!

A quick application is Jesus said, "*Forgive one another as I have forgiven you.*" To follow the Lord with hinds feet is to quickly forgive. Sometimes we get caught in the trap of, "They have offended me. I won't forgive until they ask for forgiveness." This completely short circuits our relationship with the Lord and His joy for us.



Experiments: Balance and More

30 min

SUPPLIES:

- ☐ Block of wood
- ☐ A large nail
- ☐ 10+ Smaller nails
- ☐ Sharpies



[Amazing Animal Balance](#)
(Check out the goat—unbelievable!)



[Goats in Trees Video](#): They are a bit crazy, but, boy can they balance!



PROCEDURE:

1. Nail Balance

First, you have to make your balance board. You have a wood block with a hole drilled in it. Have your parents help you nail in the BIG nail in your nail bag. Don't hit it too hard; you will split the block. Make it perfectly straight. (See the video below if you have any questions.) Design the block with sharpies.

Greet your audience with a challenge: "Can you get all these nails to stand on this one nail? But first, I want to give you some info on God's gift of balance to us and to all the animals and bugs He made." And give them a few juicy facts!

This video shows you how to do it. Have fun! [Nail Balance Technique](#)

2. Peristaltic Motion: Swallow Water While Upside Down

We mentioned how deer and mountain goats have hind feet that step where the front feet were. God programs the brains of the deer and mountain goats to do this. And to help you understand this prewiring, we mentioned peristaltic motion in the throat.

U-Think: What did we say the peristaltic motion of the throat is?

Test it out! Do a headstand against a wall and have your parents help you drink a few swallows of water. See if you can swallow the water upside down.

3. Bat Go-Round!

On a lawn, get 2+ baseball bats and have a relay contest. Divide into two+ teams. Line up 30 feet from the bat. The first people in each line run to the bat, and without lifting it off the ground, they stand it up and put their forehead on it and turn around it 10-15 times (U-decide how many turns). Everyone on the person's team counts out loud as they do each turn. Then they run back and touch the next runner. The first team to do all players wins some Dramamine :)

U-Think: Why do people run crazily crooked as they run back?

Because the fluids in their semi-circular canals are still moving from being turned around.