

# The Three Ingenious Pigs and Gale Force the Wolf



*Rewritten by Scientific Sue to spark curiosity in  
Science and Engineering.*

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Once upon a time, in a land where magical creatures roamed, there lived three little pigs, each an aspiring engineer. Their world was full of wonders and challenges, igniting their curiosity to explore science and technology.

Determined to build their own homes, the first pig, Penny, fascinated by lightweight materials, quickly constructed a house of straw. Penny was an inventor at heart—always tinkering with new designs, but sometimes a little too eager to test things before checking if they were, well, sturdy. Let's just say... her designs had a very low *critical wind speed*.



The second pig, Patrick, passionate about sustainability, carefully crafted his home from sticks, believing it to be strong and eco-friendly. Patrick was a dreamer, full of ideas for making the world greener, but occasionally got so caught up in big visions that he forgot minor details — like making sure his walls could handle, say, a *strong crosswind*. Some would say his house had a poor drag coefficient.

The third pig, Paige, the most studious of the three, applied sound engineering principles and built her house from sturdy bricks. Paige loved numbers, calculations, and above all — *stability*.

"Bricks are best," Paige always said — and her house proved it. She'd built it to resist Category 5 wolves and even had her own formula for testing load-bearing strength. She called it the 'Pig Newton' — a nod to her favourite force law.





Enter Gale-Force, the Wolf—an excitable creature with hurricane-force breath and a *lot* of energy. His fur always looked windblown, and he zipped from place to place as if he were being carried by a storm. Today, he had fantastic news! The pigs had won a magical lottery worth £300 million! Overcome with excitement, he *whooshed* towards Penny’s straw house to deliver the news.

As he arrived, he practically skidded to a stop, barely avoiding knocking over a tree. "Little pig, little pig, let me come in!" he called, bouncing on his paws.

"No, no, no! By the hairs on my chinny chin chin, I will not let you come in!" squealed Penny, startled by the commotion.

"But it's *amazing* news!" Gale insisted, vibrating with excitement. Unfortunately, controlling his breath when he was this enthusiastic was *not* his strong suit. He huffed, he puffed, and WHOOSH! The house of straw collapsed in a heap.

"Well, that was a textbook example of structural failure under variable pressure conditions," Gale muttered. "Oops..."

Panicked, Penny bolted to Patrick’s house, just as a storm cloud rumbled ominously above. In his flustered state, Gale rushed after her.

"Little pigs, little pigs, let me come in! I have *fantastic* news!" he called again, practically bouncing with anticipation.

"No, no, no! By the hairs on our chinny chin chins, we will not let you come in!" the two pigs chorused, peeking out nervously.

Gale sighed, trying really hard to stay calm. "Alright, okay, I’ll just breathe normally this time..." he muttered. "Think Bernoulli. Think laminar flow..."

But alas, his enthusiasm got the better of him—he huffed, he puffed, and CRASH! Down came Patrick’s house of sticks.

"Guess that structure didn’t have a great moment of inertia," he mumbled.

Shocked and dismayed, Gale took a step back. "Oh no! I didn’t mean to blow your houses down! I only wanted to tell you—"

But his troubles weren’t over. In his excitement, he had also blown down the bridge that connected them to Paige’s house of bricks. Now, Penny and Patrick were stranded on one side of a deep ravine, unable to reach safety.

With the bridge destroyed, the pigs needed a plan. Not only did they need to reach Paige, but they also had to find a way to transport vital supplies across the ravine.

In a panic, Penny and Patrick called Paige on their phones. After a quick brainstorming session, Paige, who used to swim for the Northern Ireland swim team, bravely dove into the icy river and swam across to town.

She quickly gathered supplies: ropes, pulleys, carabiners, and—most importantly—a shopping trolley. She returned with everything they needed and helped her siblings construct two pulley systems on either side of the ravine.



Once set up, they used the shopping trolley as a transport pod. First, they sent across food, hot chocolate, and extra warm socks (because *priorities*).

Next, came Penny's sketchbook of inventions, Patrick's favourite eco-friendly toolkit, and their emergency stash of gummy worms.

Finally, one by one, they zipped across, clinging to the trolley, landing safely at Paige's fortress-like house of bricks.

Meanwhile, Gale, feeling terribly guilty, retreated to his hotel for a calming chamomile tea. "I really need to work on my breathing exercises..." he mumbled to himself. "Or at least upgrade my personal airflow regulator."

But curiosity got the better of him. The next morning, he returned and was immediately faced with a new challenge—the ravine. To his surprise, he spotted the impressive pulley system spanning the gap. "Well, that's clever," he muttered, scratching his head. "Low friction wheels, high tension... someone's definitely been revising their GCSE physics."

But how was *he* supposed to get across?

Gale considered using the pulley system, but the idea of clinging to a shopping trolley while dangling over a ravine made him a little nervous. He needed another way. Luckily, being a magical creature, he had another trick—his breath wasn't just powerful, it was *strategic*.

He took a deep breath, aimed downward, and let out a controlled *whoosh*. Like a reverse rocket, the force propelled him upward, lifting his feet off the ground. Quick as a flash, he whipped out his trusty umbrella, angling it to catch the wind.

With his own breath giving him a boost, he was able to steer himself across the ravine, soaring like a very confused and slightly panicked kite.

"That's one small puff for a wolf, one giant leap in wind-assisted travel," he whispered mid-flight.

By the time he landed —somewhat ungracefully— on the other side, he was utterly exhausted. His legs wobbled, his fur was a mess, and his breath was all but gone. He trudged up to the house, panting, only to be met with a rather intimidating sight—Paige, Penny, and Patrick had worked through the night, reinforcing the brick house into a near -impenetrable *windproof* fortress.

"This place has more resistance than a classroom full of teenagers at 9am," he said.

Gale, still determined to share the good news— because as the news courier he earned himself a 10% cut of the winnings—stood before the house and pleaded, "Little pigs, little pigs, please let me come in!"

Inside, the three pigs braced themselves. "No, no, no! By the hairs on our chinny chin chins, we will not let you come in!"

Gale took a deep breath, prepared to huff and puff—not to blow the house down, but to at least get the door open so he could *finally* deliver the news. He focused, inhaled deeply, and... nothing.

Exhaustion set in. The previous day's chaos, combined with his struggles crossing the ravine, had drained him. Instead of a hurricane-force blast, he managed only a tired *wheeze*. His ears drooped as he gave one last feeble puff, which barely rustled a leaf on the doorstep.

"Looks like I've reached my energy transfer limit," he sighed, and plopped onto the ground, his tail drooping. "I just... wanted... to tell you..." he sniffled.

"You're *millionaires!*"

The pigs blinked at each other in disbelief. "We *what?!!*"

After a few moments of confusion, followed by celebratory squealing, the pigs realised that they had been mistaken about Gale. He wasn't a villain — just an overenthusiastic, slightly destructive messenger.

"You know," said Paige thoughtfully, "if we work together, we could achieve something incredible. Gale, you could help us test our buildings for wind resistance, while we use our skills to design better structures. With your *super breath*, we could create homes that withstand even the fiercest storms!"

And so, Gale, Penny, Patrick, and Paige formed **Gale-Force Engineering**, a revolutionary company specialising in hurricane-proof homes. Paige provided her engineering expertise, Gale became



their official wind tester, Patrick focused on sustainable materials, and Penny — ever mindful of their new fortune — ensured their finances were in order.

Together, they travelled to hurricane-prone regions, helping communities build safer homes. They even developed an improved pulley system, inspired by real-life engineers in Puerto Rico, who had used a similar system to transport food, water, and medicine across a river when a bridge had collapsed in 2017.

With their newfound purpose, the four friends lived happily ever after, proving that science, engineering, and a little collaboration could turn even the biggest disasters into ground breaking innovations.

This adaptation of *The Three Little Pigs* highlights the power of engineering in overcoming real-world challenges. The pulley system in this story was inspired by the incredible ingenuity of engineers and volunteers in Puerto Rico, who, after Hurricane Maria in 2017, built a makeshift cable system to transport essential supplies across a collapsed bridge. Natural disasters often push people to think outside the box, leading to innovative solutions that save lives and strengthen communities.

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Dear Teachers,

At *Science2Life*, we believe that storytelling is a powerful tool for engaging young minds in STEM (Science, Technology, Engineering, and Mathematics). By reimagining classic tales like *The Three Little Pigs*, we inspire curiosity, creativity, and critical thinking — key skills for future innovators.

As **Scientific Sue**, I've spent years developing exciting, interactive science shows and workshops that ignite enthusiasm in children and teachers alike. My performances and teaching resources align with curriculum goals while making science *irresistibly fun!*

I hope that reading this story with your students, along with the hands-on construction of the balloon pulley system in the classroom, will inspire them to see themselves as problem-solvers and future engineers. By engaging in storytelling and practical experimentation, children can develop the curiosity, creativity, and resilience needed to tackle real-world challenges with confidence!

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Let's work together to **bring science 2 life** for the next generation of scientists, engineers, and innovators!

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