The Dancing Lights in the Sky



Maya and Leo were on a winter trip with their parents in Fairbanks, Alaska.

That night, the sky surprised them.

“Look!” whispered Leo. “The sky is dancing!”

Maya stared up at green ribbons of light moving across the dark sky.

Their dad smiled. “Those are the Northern Lights.”

The snowy field, the tall pines, and the glowing cabin all seemed brighter under the shifting aurora.

The mystery had begun.

Science Fables

A Mystery in the Sky



Maya was full of questions. “Why do the lights dance?” she asked.

Leo pointed at the glowing ribbons curling over the snowy trees.

“And why are they green?”

Their dad laughed softly. “It is not magic,” he said.

“It is amazing science.”

Maya looked up again as the aurora rippled like silk in the wind.

“Then let’s solve the mystery,” she said.

Science Fables

The Sun Sends a Storm



Back inside the warm cabin, Dad pulled out a flashlight and a globe. "This flashlight is like the Sun," he said. He shined the light toward the globe and held up a small ball.

"Sometimes the Sun sends out tiny charged particles in a burst called a solar storm."

Leo leaned closer. "So those particles travel all the way to Earth?"

Dad nodded. "They race through space—and that is where the Northern Lights story begins."

Science Fables

Earth's Invisible Shield



Dad traced curved lines around the globe.

"Earth has a magnetic field," he explained. "Think of it as an invisible shield."

Maya watched the glowing arcs wrap around the planet.

"Does it protect us?" she asked.

"Yes," Dad said. "When particles from the Sun reach Earth,
the magnetic field guides many of them toward the North and South Poles."

Leo grinned. "So the lights like to visit the poles first."

Science Fables

The Particles Put on a Show



Outside again, the sky was alive with motion.

Dad pointed upward. “Near the poles, particles from the Sun crash into gases high in Earth’s atmosphere.”

Maya watched a wave of green light spread across the sky.

“And that makes the glow?”

“Exactly,” Dad said. “Those collisions release energy as light.”

Leo remembered the colors overhead.

“So the sky is shining because tiny particles are putting on a show.”

Science Fables

A Sky Full of Colors



The lights changed shape again, this time curling like ribbons
and spilling across the sky in green, purple, and pink.
Maya gasped. “It is even brighter now.”
Dad smiled. “Different gases can make different colors.
Green often comes from oxygen, and purples can come from nitrogen.”
Leo watched the colors ripple across the dark sky.
“It’s like the atmosphere is painting with light.”

Science Fables

Not Everywhere



Leo had one more question. “Why can’t we see this at home all the time?”
Dad turned the globe and pointed near the top and bottom.
“Northern Lights are most common near the North Pole, and similar lights appear near the South Pole too.”
Maya studied the glowing bands on the map.
“So where you are on Earth matters.”
Dad nodded. “Exactly. The best views are usually closer to the poles.”

Science Fables

A Memory to Keep



The lights danced for a long time.
Maya and Leo grew quiet, taking in every shimmering wave above them.
“It is science,” Leo said softly, “but it still feels magical.”
Maya smiled. “Maybe the best science does that.”
Their dad looked at the glowing sky and nodded.
Together they sat beneath the aurora,
knowing they would remember that night for years.

Science Fables

Science Element



The Northern Lights, also called the aurora borealis, happen when charged particles from the Sun travel toward Earth. Earth's magnetic field guides many of those particles toward the polar regions. There, the particles collide with gases high in the atmosphere and release energy as light. Different gases can create different colors, including green, purple, and pink. A similar light display near the South Pole is called the aurora australis.

Simple idea: the Northern Lights are a glowing result of the Sun, Earth's magnetic field, and Earth's atmosphere working together.

Science Fables