

Liv and the
Hidden
Diamond

— with your friends —
Liv, Milo, Pippa, Fips and Professor Owl



Hoofphysics
Kids



— — — — —

Welcome to Goldhain

— — — — —

It's wonderful to have you back!

Inside this book, you'll find an exciting story, tricky puzzles, **Discovery Mission 2** and lots of fascinating facts about horses and their hooves.

Join Liv, Milo, Pippa, Fips and Professor Owl on a walk filled with stories—and discover a very special treasure hidden right beneath their hooves!

— — — — —

Are you ready?
Then let's set off!

— — — — —





A warm ray of sunlight streamed through the treetops as the five friends strolled through Goldhain together. Liv carried Pippa carefully on her back, while Fips had made himself comfortable on Milo's back. Professor Owl flew gently through the air beside them.

"Did you know," he began mysteriously, "that horses have been travelling alongside humans for many, many years?"

The friends looked at him curiously and stopped to listen.

"The bond between humans and horses goes back thousands of years,"

Professor Owl explained.

He spread his wings dramatically.

"Some of these horses even crossed the endless steppes and scorching deserts of distant lands. One of them was so strong, so elegant and so extraordinarily beautiful that its coat shimmered like liquid gold in the sunlight."

Pippa's eyes grew wider and wider.

"Like gold?" she asked in amazement.

Professor Owl nodded.

"This extraordinary horse is called the Akhal-Teke."



The Akhal-Teke comes from the vast landscapes of Turkmenistan.

Its fine coat can reflect the sunlight so beautifully that it almost seems to shine like liquid gold. But it is not only its appearance that makes this horse extraordinary:

Akhal-Tekes are brave horses with remarkable endurance, capable of travelling long distances through hot, dry landscapes.

“A real golden desert horse,” Pippa whispered in awe.



“Exactly, Pippa!” said Professor Owl. “Another remarkable bond between humans and horses can be found deep in the forests of South Tyrol.”

There, strong and sturdily built Haflingers helped people with their daily work. Sure-footed, they made their way along narrow forest paths and pulled felled tree trunks out of the dense undergrowth. Their robust bodies allowed them to move heavy loads, even though they were not particularly tall themselves.

The hardworking horses were also harnessed to carriages. Patiently, they carried people and goods along bumpy tracks and through the mountainous landscape.

“It’s incredible how much strength they have!” Milo marvelled. Professor Owl nodded. “Sometimes the greatest strength can be found in a smaller body.”

Hoofphysics Kids



“Horses even accompanied explorers and conquerors on their journeys. When their ships reached distant shores, the horses carried their riders, provisions and equipment across vast beaches, through dense forests and along rocky mountain trails.

Their saddlebags held maps and compasses—and sometimes even clues leading to a legendary treasure. It is said that even pirates used horses to reach hidden places far beyond the coast.”

“A real treasure?” Pippa asked excitedly, pricking up her ears.



For a long while, Pippa thought about the mysterious maps and hidden treasures. Sitting on Liv's back, she gazed dreamily between the tall trees of Goldhain.

"I would love to find a real treasure of my own one day," she sighed softly.

Liv turned her head towards her with a smile. "I'm sure you will, Pippa. Sometimes a treasure is waiting right where you least expect to find it."

Professor Owl blinked knowingly. It seemed he knew something the others did not.



Professor Owl smiled and slowly spread his wings.
“Treasures can be found everywhere! Sometimes they are even
hiding in plain sight. Take a look beneath your hooves!”
The friends stopped in surprise.

“Beneath our hooves?” Milo asked, looking down in confusion.
“Is there really supposed to be a treasure hiding there?”
Professor Owl nodded wisely. “Anyone who wishes to discover a
treasure must learn to look very closely.”

Curiously, Liv, Milo, Pippa and Fips examined the undersides of
the horses’ hooves. At first, however, they could not see anything
unusual.



Curiously, Liv and Milo each lifted a hoof. Pippa and Fips bent down so far that their noses almost touched the forest floor.

“But where should we look?” Liv asked.

Professor Owl fluttered closer and pointed to the underside of the hoof. “Take a very close look at the frog and the two heel bulbs. For a moment, forget that you are looking at a hoof—and focus only on the shapes you can see.”

The friends tilted their heads to one side.

“Somehow, that shape looks familiar,” Fips murmured thoughtfully.

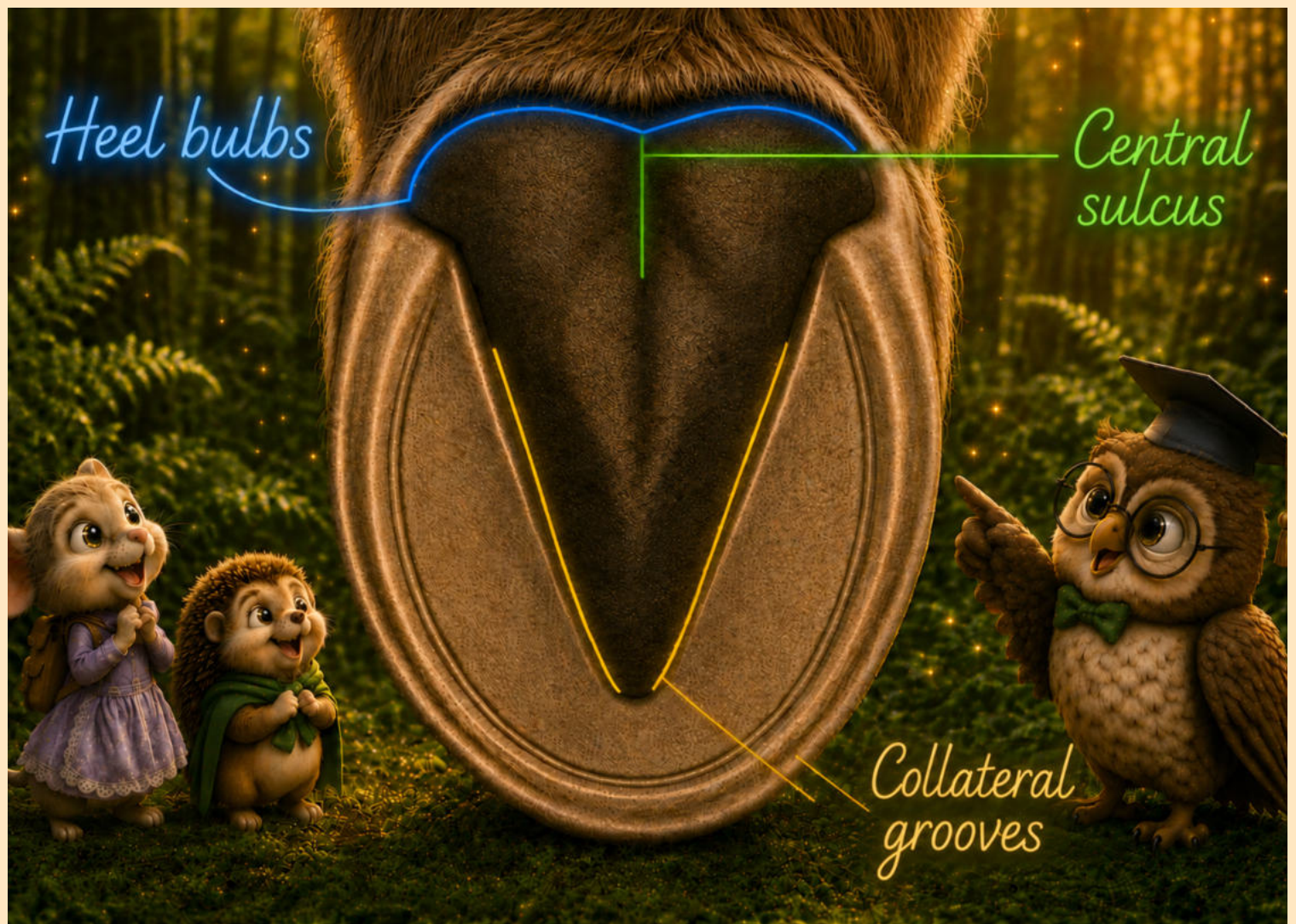
Pippa narrowed her eyes a little and studied Liv's hoof carefully. "I can see two scoops of ice cream!" she suddenly cried with delight. "And there's an ice cream cone underneath them!"

Professor Owl laughed. "That's exactly right! The two heel bulbs look like two scoops of ice cream—and the triangular frog resembles an ice cream cone."

Milo examined the unusual hoof-shaped ice cream and grinned. "Now I'm getting hungry!"

"This shape is very easy to remember," Professor Owl explained. "But there is another shape hidden in Liv's hoof. And this one really does look like a little treasure..."





“Your imagination never ceases to amaze me! But now, let’s take a closer look for a moment.”

Professor Owl pointed to the underside of the hoof. “Alongside the hoof wall and the sole, which you already know, we can also find the heel bulbs, the central sulcus of the frog and the two collateral grooves.”

Then he pointed to the back of the hoof. “This is where the two heel bulbs are located. They are softer and more flexible than the firm hoof wall.

When the hoof bears weight, the back of the hoof can expand slightly and then contract again. This movement helps to absorb shock and stabilise the hoof.

It also allows the hoof to adapt more easily to uneven ground.”



Professor Owl then pointed to the frog. “Take a look at its shape: it is wide at the back near the heel bulbs. Towards the front, it becomes narrower and narrower until it ends in a point.”

Gently, he traced the lines of the hoof with the tip of his wing. “The central sulcus of the frog runs down the middle. On either side, you can see the two collateral grooves.”

“And why does the hoof need these grooves?” Pippa asked.

“They give the frog room to move,” Professor Owl explained. “When Liv places her hoof on the ground, the back of the hoof can widen just a little. When she lifts it again, it contracts.”

Fips pressed both hands deep into the soft moss. Slowly, it sprang back into shape. “Then the hoof cushions each step—almost like this soft bed of moss!”

“Exactly! The frog and heel bulbs help to absorb the impact of each step. At the same time, Liv can use her hoof to feel the ground beneath her.”

Pippa beamed. “A soft cushion with a built-in ground sensor!” Professor Owl nodded mysteriously. “And if we now connect all the lines, another shape will appear. A shape that really does look like a little treasure...”

The friends were amazed. The longer they gazed at the lines in the hoof, the more clearly they could see the hidden shape.

The two heel bulbs formed the wide upper edge, while the frog narrowed to a fine point towards the toe. Suddenly, the central sulcus and the two collateral grooves looked like the shimmering facets of a precious gemstone.

Before their eyes, the shape began to glow with golden light, and a beautiful diamond appeared right in the centre of the hoof.

"There was a treasure beneath our hooves all along!" Milo cried excitedly.

Professor Owl smiled. "Not every treasure needs a treasure map. Sometimes, knowledge and a little imagination are all you need."





Suddenly, something wonderful happened: countless sparkling lights danced out from beneath Liv's hoof. They swirled through the air, glowing brighter and brighter, until they finally joined together to form a beautiful, floating diamond.

For a moment, no one said a word. Wide-eyed, the friends gazed at the sparkling wonder as it slowly turned before them, bathing the entire forest in golden light.

"There it is!" Pippa cried, overwhelmed with wonder. "A real hidden diamond!"



At last, Pippa held her treasure in her hands. The diamond sparkled so brightly that its golden light danced across the friends' astonished faces.

"You were right, Liv!" Pippa cried happily. "I really did find a treasure!"

Liv smiled. "And it had been closer than we thought all along." Pippa gazed at the glowing diamond and thought about everything they had discovered together.

But the most wonderful thing was not its sparkle. It was the adventure she had shared with her friends—and everything they had learned together. Professor Owl nodded contentedly. "Those who remain curious can discover little wonders everywhere."



Pippa gave the glowing diamond a gentle push towards the sky. Slowly, it rose into the air, turned one last time in the golden light—and suddenly dissolved into countless tiny, sparkling stars.

Like a warm shower of gold, they drifted over the friends, danced between the treetops and finally disappeared into the light of Goldhain.

Pippa watched them with a happy smile. She could no longer hold the diamond in her hands—but from now on, she would always recognise its special shape beneath a horse's hoof.



A gentle breeze whispered through the trees, and deep among the ferns, the familiar shape of a golden diamond shimmered for the briefest moment—as though Goldhain had not quite forgotten Pippa’s discovery...





**And so, another day filled with wonder
and little miracles came to an end in
Goldhain.**

**Pippa had not found an ordinary diamond.
But she took something home that was
every bit as precious: her new knowledge
about hooves.**

**Pippa waved cheerfully and winked at the
young explorers.**

**“See you soon! I can’t wait to find out
which secret we’ll discover next!”**

**Until our next
discovery mission!**

