



Alexei and Arkady travelled in their time-machine back to the Stone Age. The primitive people thought they came from the sky. The boys decided to help the Kvan tribe: they tamed wild dogs and showed tribesmen how to make bows and arrows.



A clever little girl named Kara ...



... and a very strong little boy named Nuv were good helpers.



Pok, the envious wizard arrived.







"Let there be a duel! It will take place at night so that the Sun cannot help his son Lan."

"I'll sacrifice these creatures to the gods!"









"I've got an idea!"

The duel began exactly at midnight.

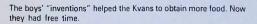






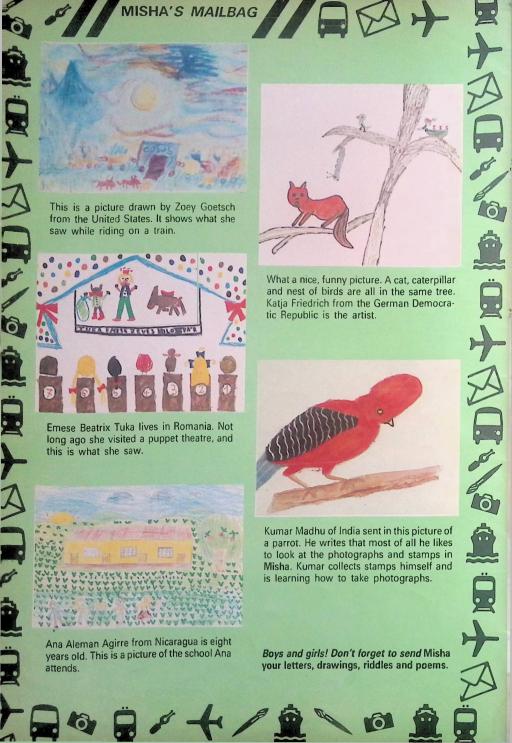
"Hail Lan, son of the Sun!" "Hail Poun, son of the Moon!"

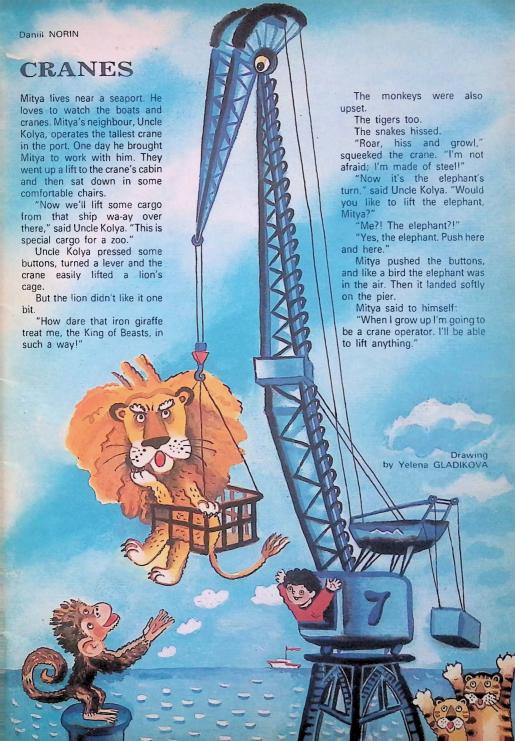






"What about holding first sports competitions in history?"







The Wolf and Rabbit are characters in the cartoon serial "Just You Wait". The toothy Wolf is always chasing the Rabbit, but can never catch him. And he usually winds up with a lot of bumps and bruises.

One day the two animals were running so fast that they ran out of the cartoon and raced down a street. The Rabbit dashed into a building with the Wolf close on his heels. If the ignorant Wolf had been able to read, he would have read the sign at the entrance: Cartoon Studios.

The Wolf chased down the corridors looking for the Rabbit. He darted into a room and then stopped short in amazement.

A cartoon artist was drawing a girl skipping rope. He had made several drawings on transparent paper: first the little girl was preparing to jump, then she bent her knees and jumped. The artist quickly flipped through the illustrations and the little girl came alive!

"He must be a magician," thought the frightened Wolf. "He might punish me." So off he ran.

In another room the Wolf saw a sculptor moulding a human figure out of plasticine. Suddenly the plasticine man was threatening the Wolf with a clenched fist.

"Another magician!" The Wolf was afraid and ran on.



He ran around the studio for a long time, looking at every marvel. Finally he came to a large room where his portrait was hanging on the wall. And right next to him stood the Rabbit. They were hugging each other like the best of friends.

"Didn't you know that we were cartoon characters as well?" asked a familiar voice, and the Rabbit jumped down from the picture. "Much to the delight of children, here at Cartoon Studios, 30 new cartoons are produced each year. This is the work of 600 cartoonist-magicians. After all, it takes 15,000 drawings to make a ten-minute story come alive. The Studios will soon be 50 years old. Just imagine how much happiness these cartoons have brought to millions of children during this time!"

"How do you know all this?" the Wolf asked in surprise.

"You have to study!" answered the Rabbit "or you'll remain a grey fool all your life."

"Me, a 'grey fool'?" the Wolf sputtered. "Alright Rabbit, just you wait!"

And they were off again.











Above: These photographs show the sequence in which a cartoon film is made

Left: Some of the characters of popular cartoons

Photographs by Vladimir TRIFONOV and Dmitry KRYLOV



THE LITTLE SPARROW

Sparrows and people are a lot alike: adult birds are dull and do everything according to the book, while the young think for themselves.

Once there was a yellow-beaked sparrow named Pudik. He lived in a warm nest made of sticks, moss and other soft things on the upper ledge of a bath-house window. He hadn't yet learned to fly, but he could flap his wings and observe everything from his nest: what was this wide world, and would he fit in?

"Cheep-what? Cheep-what?" asked his mother.

The little sparrow shook his wings and, looking at the ground, chirped:

"Chirrr-dark! Chirrr-dark!"

Papa bird flew up. Proud that he had brought Pudik a small insect, he asked:

"Chirp?"

Mama sparrow assured him:

"Chirp, chirp!"

But Pudik merely swallowed the insect and thought:

"What are you chirping about? What's so cheeping-fantastic about a worm with six legs?"

And he kept leaning out of his nest to look around.

"Child! Child," his mother anxiously called. "Look out or you'll chirr-tumble."

"Cheep, cheep?"

"Not cheep! You'll chirr-tumble, and chomp! The cat will eat you up!" said Papa sparrow as he flew off to catch more insects.

The days passed, but Pudik's wings didn't seem to be in any hurry to grow.

One day the wind was blowing. Pudik called out:

"Cheep, cheep?"

"The wind will blow—chuk! and throw you to the ground where the cat is waiting," his mother said.

Pudik didn't care for that.

"Well why are the trees moving?" he asked. "If they would stop there wouldn't be any wind."

His mother tried to explain that things didn't work that way, but he didn't believe her. He liked his own explanations.

A man walked by the bath-house waving his arms.

"A cat must have chomped off his wings," said Pudik. "Just the bones are left."

"That's a man," said Mama sparrow.
"They don't have wings."

"Why?"

"It's their custom to live without them.

They jump around on legs. Chirp?"

"Why-cheep?"

"If they had wings, they would catch us like Papa and I catch gnats."

"Chirr-stuff and nonsense," said Pudik.
"Nonsense! Everyone should have wings.
Cheep, cheep! It's better in the air than on
the ground. When I grow up I'll see to it that
everyone has wings."

Pudik didn't believe his mother. He hadn't yet learnt that things don't turn out so well for those who don't trust their mothers.

He sat on the very edge of the nest and began to sing a song he made up himself at the top of his lungs:

"You have two legs, But have no wings. You may be big, But feel gnats sting! I'm small, that's a fact, But then, I eat gnats!"

He sang and sang until he fell out of the nest. Mama sparrow flew after him. But a

tabby, green-eyed cat appeared on the spot.

The frightened little sparrow spread his wings, tottered on his grey legs and chirped:

"A pleasure to meet you!"

Mama sparrow pushed him aside. Her feathers were ruffled up, her beak opened. Ferocious and brave, she looked the cat straight in the eye.

"Away, away! Fly, Pudik, fly to the window!"

Fear lifted the little sparrow off the ground: he jumped, flapped his wings—once, twice—and he was on the window.

His mother flew up after him. Her tail was gone, but she was happy. Sitting next to Pudik she pecked at his forehead and asked:

"Cheep, cheep?"

"Well after all," said Pudik, "you can't learn everything at once!"

The cat sat on the ground, picking the sparrow's feathers from her claws. Her green eyes looked up at them, and she sorrowfully purred:

"Mew, such a soft spurrr-ow, just like a me-ouse. Mew, mew."

And all was well, except that Mama sparrow lost her tail.

Drawing by Vyacheslav CHEFRANOV



"...And then the beautiful girl obtained a magic mirror! She blew on it and said: "Show me my rescuer, mirror." The mirror grew foggy, then it cleared up. The girl saw a jet-black steed racing along the steppe. And on it a brave horseman..."

People have since time immemorial dreamed of seeing things that happen far away from them. The heroes of many folk tales had their magic mirrors. And there is such a "mirror" in every home.

You've guessed what we're talking about. Now then, look carefully about you.... Of course—the TVI

What can't you see on your television! Oceanographers are conducting studies on the bottom of the sea; an important football match is being played on another continent; a lunar rover rumbles over craters on the moon.... And you sit in your armchair and watch—the oceanographers, the football match or the lunar walk, whatever you prefer. All you have to do is change the television channel.

How does television allow us to see something that is happening thousands of kilometres away?

"Come to the television studio and I'll explain," my friend who works as a television cameraman told me.

And so I went to the studio. How bright it was! An announcer was sitting behind a desk and nearby was my friend with his camera. He was looking for the best spot to film.

"Imagine a mosaic," he told me.
"The artist uses small bits of different coloured glass to make a picture. It's the same with television. The camera sees an object and breaks it up into points that differ in colour and brightness. These points are the bits of glass' of a special television mosaic. Invisible radio waves transmit them around the world. They strike your television, which has its own "artist"—an electronic beam

THE EYE OF THE

that races around the screen and reassembles the mosaic. Instantly, you see everything on the screen that was seen by the camera.

And the television camera can see a good deal.

Blinding flame rages as metal boils in furnace. No man could look inside, but the television camera is at your service. Not the same as is

used for filming, of course. This is a special camera shielded with fire-proof armour.

Television cameras aid highway patrolmen to observe the flow of traffic on busy highways; robots are equipped with camera eyes, scien-





TELEVISION SEES ALL

tists attach television cameras to microscopes and make entire films about microbe life cycles.

The future? Lasers will be used to transmit television signals. The image will be three-dimensional and look like it stepped into your room. And the home television will be thinner—the size of a wall carpet. You'll just hang it up when you feel like watching, and when you've seen enough, fold it up and put it away to save space.

> Oleg CHERNIGOVSKY Drawing by Valery BASKOV

TELEGRAMS FROM KNOW-ALL More than 230 species of swans live the the cannot tolerate where Czechoslovakia. Some and the areas where these presence of man and the areas where Czechoslovakła. Some cannot kolerate the areas where close presence hear declared quiet zones. close presence or man, and the areas where they live have been declared quiet zones. Two Australian travellers covered 4,000 kilo-TWO AUSTRALIAN TRAVEILETS COVERED 4,000 Kilo-metres in an unusual machine powered house the metres of a consumer. metres in an unusual machine powered total-ly by solar energy. travelled the route in 20 been good: they travelled the days Japan is the only country in the world where wapan is the only country in the world where left pupils are taught to write with both their left pupils are taught to write and rinks bands

and right hands.

THAT'S SOMETHING!



A record was set in a race held in the Spanish city of Logrono: a distance of I metre 20 centimetres was "run" in 5 minutes. That's not too bad, considering the fact that the contestants were snails.



The smallest bush in the world is the dwarf willow that grows only in the tundra of Greenland. The adult bush is about as big as your finger-only five



Scientists claim that birds like the colour green best of all. They are eager to stay in artificial nests painted green and red. but are indifferent to nexts of other colours. For some reason they leave the white nests empty



"Don't come any closer or I'll gore you!"
The young saiga glared at the camera and lowered his head with its long, trunk-like nose.

Actually, he didn't have any horns yet, just two small bumps.

"Don't worry, little one. We won't hurt you. We just want to take your picture for Misha, alright?"

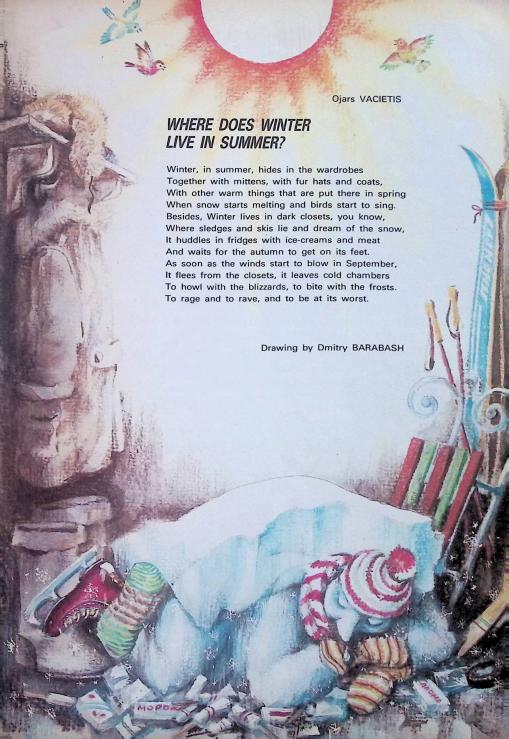
The young animal was born only a month ago, but he is already steady on his feet. And this is understandable. The saigas live in the wide-open spaces of the steppes and in semideserts. They have to travel great distances to find pastures with juicy grasses. And when a predator is near, they

can shift into "high gear". This little saiga is learning how to run swiftly as well, cutting through the air with his body stretched out and his head lowered. He could be a motorcycle racer! Running 70 kilometres per hour!

By the beginning of this century, hunters had almost wiped out all the saigas. But they came to their senses in time. Now it is forbidden to hunt saigas. More than two million of these swift-footed animals now live in the vast steppes of the Soviet Union.

Savva NOVIN Photographs by Igor KONSTANTINOV





THE MAGIC SAMPO MILL

Based on the Karelian-Finnish epic KALEVALA

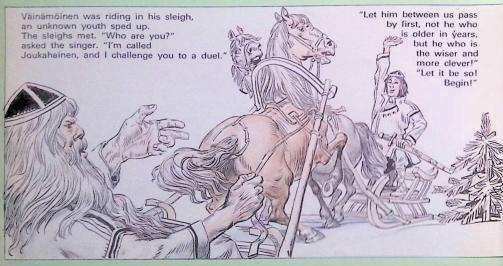
Illustrated by Sergei KRAVCHENKO

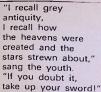
time and no place to study. So as not region and settlement.) to disturb anyone, Elias would take his books at dawn and climb up a tree to study while everyone else was still sleeping.

Elias grew up and became a doctor. He made an amazing discovery. No, not in medicine, but in history and culture. He discovered Kalevala. This fairy-tale land was the subject of and the mighty eagle to gaze ancient folk songs-runes. Lönnrot from.

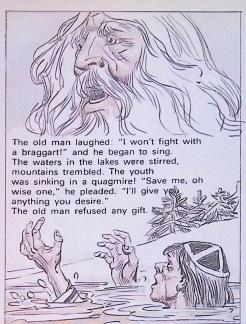
A poor peasant boy named Elias tirelessly collected and wrote down Lönnrot lived in Finland at the begin- these runes in Soviet Karelia. (In ning of the last century. He had little Karelia today there is a Kalevala

> Misha invites its readers to the fairyland of Kalevala. This is where the old wise man Väinämöinen lives. His songs have magical powers, and he is kind and just. When clearing the land to plant barley, he leaves a tall birch tree standing—a place for birds to rest, cuckoos to cuckoo

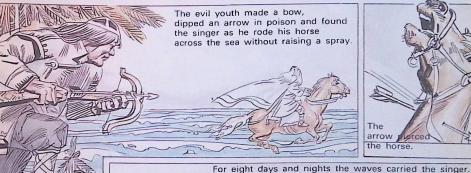








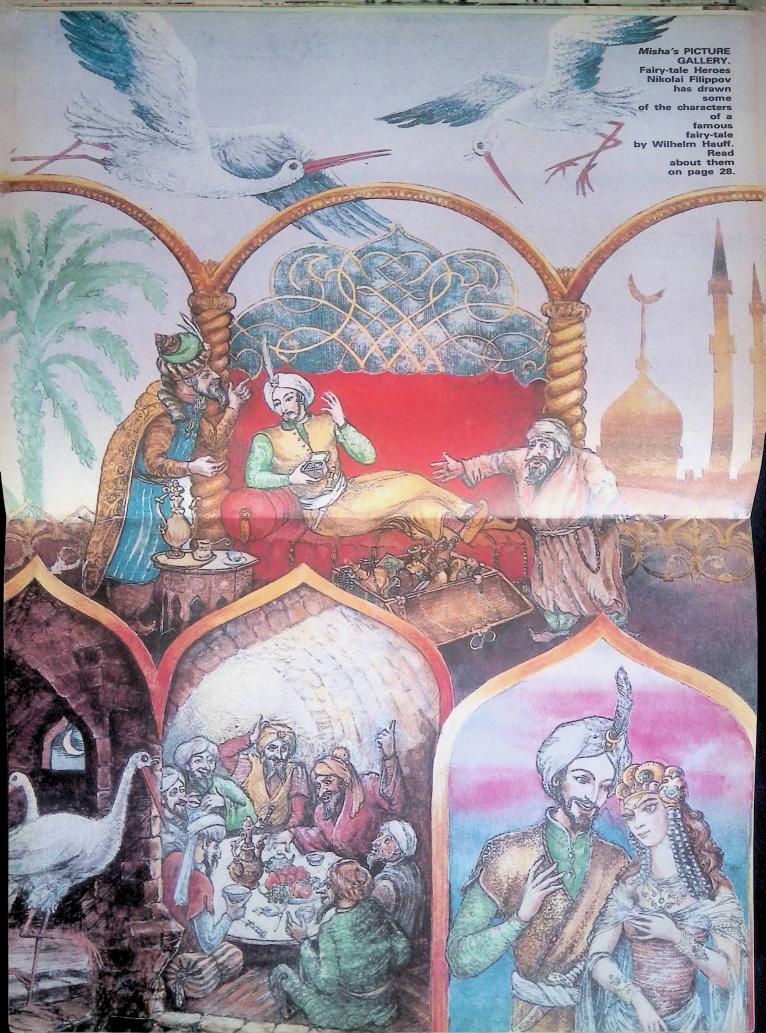


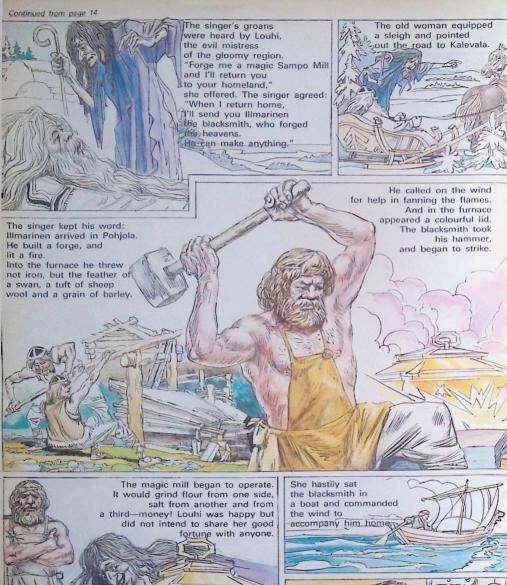




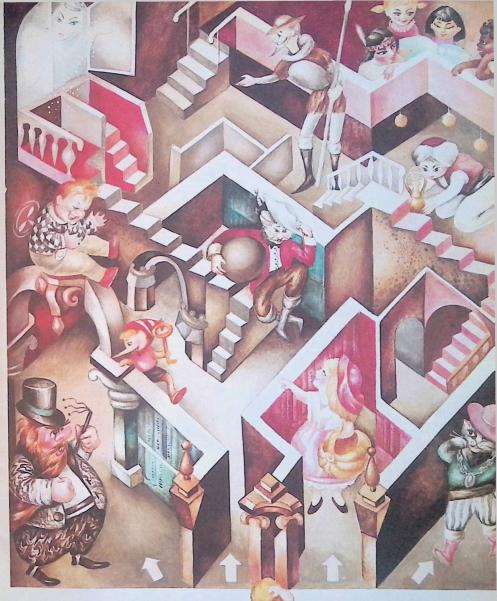
Finally, he was seen by an eagle: "Sit on my back!" And it carried the weak man to the shore of Pohjola-the country of mist, darkness and cold.











Look carefully at the drawing. Do you see the children reading a recent issue of Misha? Would you like to join them? Then begin to find your way through the maze drawn by Natalia Lebedeva. You'll meet different fairy-tale characters along the way. Recall their names and the fairy-tale they are in.

Happy journey!



DON'T BE I'M HERE

"I'm afraid," cries your small son when entering a dark room.

"Nonsense. There's nothing to be afraid of," you answer and hurry to put the boy to bed. You turn off the light, slam the door and go into the next room. Let him learn.... But it doesn't work out that way. Your child's fear of the dark remains for quite some time.

But what if we forget about household chores for ten minutes and sit down on the side of the bed. Let's whisper together with the child and fluff up his pillow. Of course, it isn't necessary to leave a bright light on, but you could turn on a dim table lamp. As you leave, assure your son that you are always close by in the next room, and don't close the door all the wav.

It is very important that the child not become excited right before bedtime. It's not a good idea to turn on the television late at night, especially if

there's a film with "shooting" on. Often nightmake the unknown and mysterious something frightening.

This is how fears grow in children, all the more so since they are familiar with only a small part of the vast world. On the other hand, they come into contact with strange objects and experience unusual occurrences frequently. Their imaginations are much richer and more inventive than ours. Therefore, fear can deeply upset a child and be the cause of deep neuroses or stuttering. A child will often show fear even in what an adult considers the most ordinary circumstances—in a metro station, bus or store.

The child has the right to expect help from us-his parents and teachers. After all, we are introducing him to our grown-up world. And the child's inter-personal relations will reflect how tactfully and good-naturedly the world has accepted the child.

One day I witnessed the following scene: a little boy about five years old began to quarrel with his grandmother on the bus. He was fidgity and whiny. The grandmother resorted to an old trick to calm him down:

"This man here is going to take you away!" The stranger played along:

"Come with me! I know what to do with bad boys!

The winning became a bawl: now the child was really afraid. The grandmother had a final alternative: a piece of candy. And at last silence was restored in the bus.



The episode ended peacefully enough. But the child retained his feelings of alarm: having frightened her grandson with a "mean stranger", the grandmother may have planted a seed of mistrust towards adults in the boy.

Always try to give your child encouragement, whatever the situation. If your boy is afraid of the mysterious calls of birds on a camping trip or the dark forest, this does not necessarily mean that he is a coward. Of course, a city father would like to see his son as fearless and agile as the country boy who easily climbs trees and swims streams. But don't be too hasty in making unflattering comparisons. It's better to explain to the boy what makes the noises in the forest, where the ducks have flown. Then the noises will no longer be mysterious and frightening. As for the country boy, try to imagine him on a busy city street, and you'll see that your son has his own abilities. A country boy would in all probability be lost in a city.

So, the cause of fears should be sought not in the child's individual character, but in his relationships with his surroundings. Even if your child's fear is merely a means of getting parental attention, it is nevertheless real. And it will take much patience and love to help him overcome it.

Yelena ILYENKOVA Cand. Sc. (Psychol.)



FROM the MOUTHS of BABES

Seryozha was cutting cabbage into tiny pieces in the kitchen.

"What are you doing?" his mother asked. "Making vitamins."

"Why are you always tripping?" Vitya's grandfather asked the boy.

"My shoelace is always putting its head under my shoe."

"Soon it will be my birthday!" Ira announced.
"When?"

"After four days after tomorrow."

Igor woke up and squinted his eyes from the light.

"Today our light woke up before the sun."

"A dog wanted to bite me but then changed it's mind," said Dima. "Why?"

"It remembered that it growled at me yesterday."

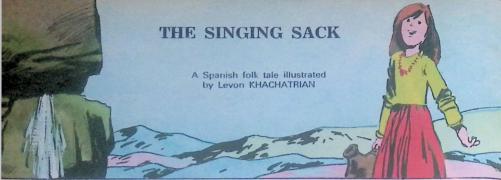
When Marina was leaving her grandmother she asked:

"Grandma, is it alright if I take a spare piece of cake and an apple as a keepsake?"

Maxim saw a large head of cabbage in a vegetable store:

"I'll bet there are a lot of cabbage-stumps in there!"

Prepared by Victor KONYAKHIN and Lev KOLCHUGIN



In the rugged Iberian mountains of northern Spain lived a poor woman and her daughter. The little girl was diligent, and her mother was very proud of her. There was one thing of value in their home—a coral necklace. The woman gave it

to the little girl, who took good care of it. Every morning the daughter would walk to the spring at the other side of the village to get water. She would take off her necklace and place it on the bank so that it would not fall into the water.



This was what she did that morning as well. After she had drawn her water she suddenly saw a frightening beggar behind a rock. The frightened little girl ran away, forgetting her necklace. When she arrived home, she remembered it and



returned to the stream. This was what the beggar was waiting for. He jumped out from behind the rock, grabbed the little girl and stuffed her into a sack. Then he heaved the sack onto his back and went around the villages begging.



When he arrived in a village, the beggar would cry: "Here is a miracle! A singing sack! Come and listen and don't be stingy with your money!" When a crowd had gathered, the beggar picked up a big stick and waved it threateningly at the



sack: "Sing, little sack or you'll get a taste of this stick!" And the little girl would sing in a sweet voice. She told her sad story in the song, but no one guessed that a real little girl was in the sack.



The beggar collected a lot of money and food, but he only gave the little girl dried crusts to eat. One day he came to the village where the girl's mother lived. The poor woman recognised her



daughter's voice right away and invited the beggar to spend the night in her hut. She fed him and gave him to drink, and when the beggar was snoring, she took her daughter out of the sack.



The mother put her daughter to bed, wrapped her in blankets and gave her something hot to eat. Then she put a cat and dog in the sack. Early the next morning the beggar took up the sack and went on his way. In the next village, just as



before, he called out: "Come see and hear! A miracle! A singing sack! Sing little sack, or you'll feel my stick." The sack remained silent The beggar hit it with his stick and the sack began to bark and mew.

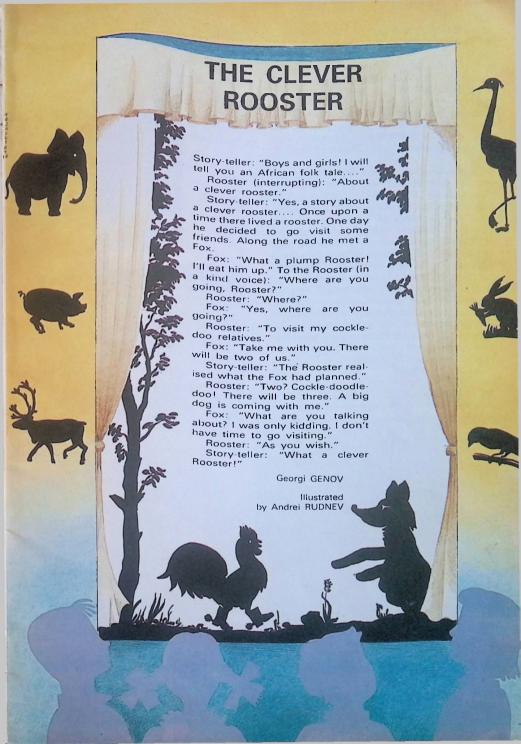


The peasants started to laugh at such singing. The furious beggar wanted to punish the little girl. He opened the sack, and the cat and dog jumped out. They pounced on the beggar, who



ran away in fright. The coral necklace had been lost, but the poor woman wasn't sad. The most important thing was that her kind, diligent daughter was back.





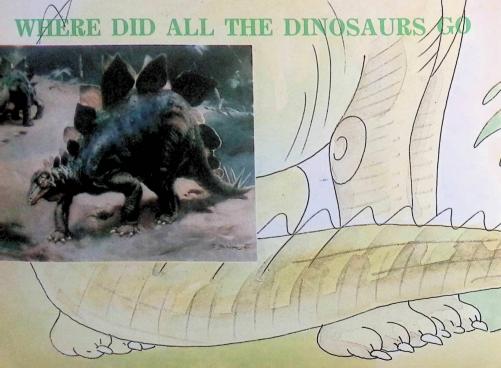
One day I happened to see a newspaper with a picture of some enormous tracks. Compared to them, a man's footprints looked smaller than a baby's. Under the picture were the words: "Dinosaur prints". Palaeontologists—scientists who study animals who became extinct long ago—discovered them in the Soviet Republic of Turkmenia. Dinosaurs lived on earth millions of years ago and disappeared long before people appeared. But some traces of their existence still remain. They have been preserved in deep, ancient layers of the earth.

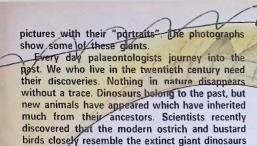
"What did dinosaurs look like? What did they eat? Did they have any enemies? Why did they disappear? No doubt Misha's readers are also interested in learning the answers to these questions," I said to myself and went to visit the USSR Academy of Sciences Institute of Palaeontology.

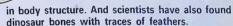
"The largest dinosaurs were 30 metres in length and 12 metres tall," Sergei Kurzanov, a research associate at the institute, began. "Imagine! A building four stories high! But there were also small dinosaurs hardly bigger than a nouse." Kurzanov has been studying dinosaurs for many years and talks about them like they were ordinary animals. "There were giant bipeds and quadrupeds, swimmers and runners, carmyores and herbivores, and even flying dinosaurs. Sometimes the young of one species were patten by another."



It isn't very easy to study animals that disappeared so long ago. So far, scientists have only been able to uncover separate bones or their impressions in rocks. And also—tracks. Palaeontologists have learned how to reconstruct dinesaur skeletons and even how they looked. The institute has a marvellous museum where huge skeletons of different dinosaurs are kept. The museum even has







To this day palaeontologists disagree as to why these ancient animals became extinct. Some experts even suggest that perhaps not all of them have. What if in some remote corner of the planet the prehistoric giants still live? There must be some reason why different peoples have legends about dragons resembling flying lizards and dinosaurs. And sailors roaming the oceans have reported in the past (and continue to do so) the sighting of strange creatures on uninhabited islands. What are they? Fantasies or real beings? Scientists still haven't answered these guestions.

"And what if dinosaurs did live till the time man made his first appearance? What then? Would the primitive hunters been able to defend themselves from the huge animals?" I asked Sergei Kurzanov.

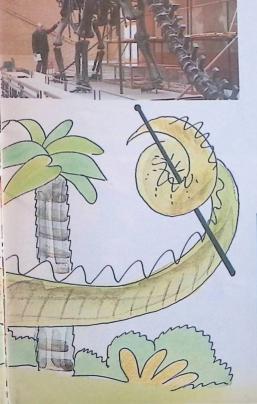
Sergei smiled and said seriously:

"People managed with the sabre-toothed tiger and conquered cave bears and the rhinoceros. And people would have conquered the dinosaur as well. After all, they were people!"

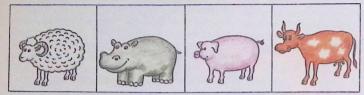
Nina GROZOVA

Drawing by Valery LOGINOV, photographs by Nikita BLIKOV

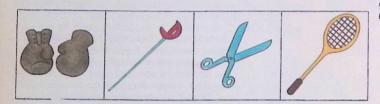






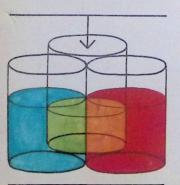


One picture does not belong in each of the two rows. Which one? Explain why.



MISHA'S Picture Gallery (answer)

A long time ago Caliph Hasid ruled Baghdad. One day a wandering pedlar gave him a small box with black powder inside and a strange inscription. Scholars figured out what the inscription said: if you sniff the powder and say the magic word "mutabar", you could turn into an animal, bird or fish and understand the language of any living creature in the world. But if you laughed while in the form of a bird or animal, you would forget forever the magic word. The next day the caliph and his vizier turned into storks. The birds' conversations and antics were so funny that they forgot the warning and laughed. Read the story "Kalif the Storch" by German writer Wilhelm Hauff to find out what happens.

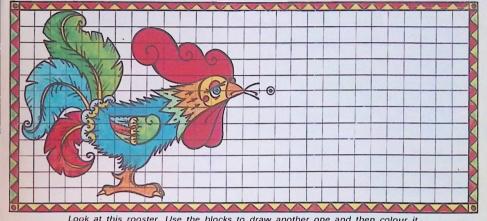


What colour is the liquid in the middle glass?



Here are numbers from one to nine. Point them out.





Look at this rooster. Use the blocks to draw another one and then colour it





Find the two horses that are alike



How are the pictures different?

Drawings by: Andrei DMITRIYEV Yuri MAKARENKO, Yelena SADOVNIKOVA, Irina SAFRONOVA, Levon KHACHATRIAN





With a friend you'll be OK (2) In whatever weather.



Refrain: Blazing heat, raging storm Cannot do me any harm When I am marching with my chum



If I meet a forest bear (2) I won't show white feather For the bear is all alone, (2) But we are together. Refrain



Go hiking with your friend, (2) Always stick together With a friend you'll be OK (2) In whatever weather! Refrain

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