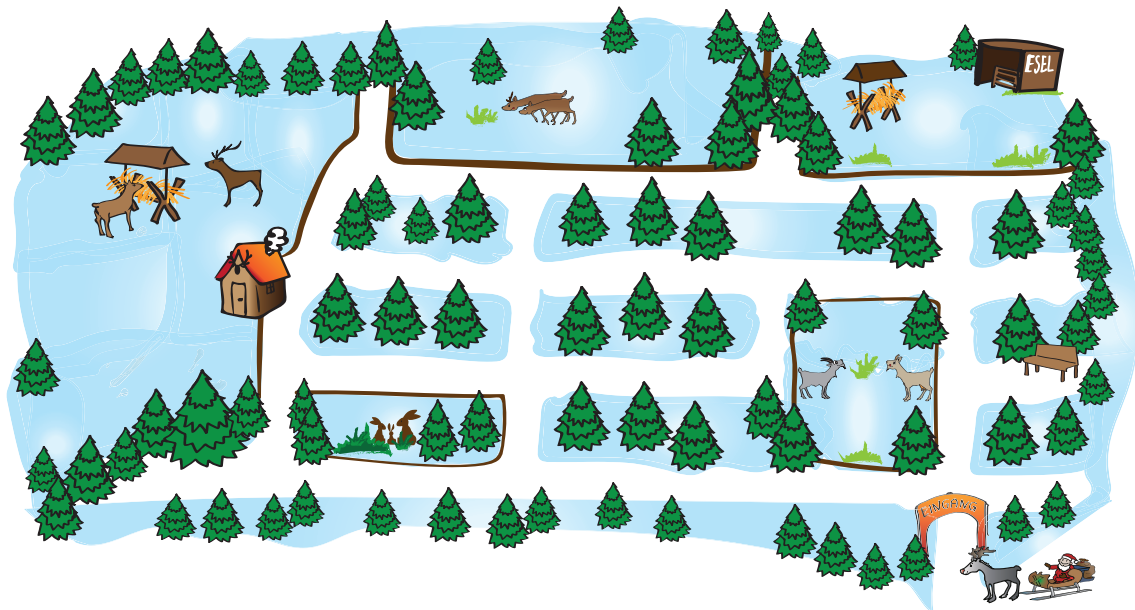


# 1 Animals in winter



Jan, Nele, Paula and Tim are good friends. They learn and play together, especially in the run-up to Christmas. All 4 friends are very interested in animals. Today they went to the wildlife park.



Nele tells:

“From the entrance we went straight past the goats. At the donkey enclosure we turned left. Then we walked past the roe deer to the deer enclosure. We took a break at the forester’s lodge.

We found 4 animals in each enclosure. We only didn’t see donkeys.”

How many animals did the children see on the way to the forester’s lodge?



# 2 Ladybirds



Nele, Jan, Paula and Tim decorate the Advent wreath. They make ladybirds out of chestnuts. The wings are made of coloured paper. Only the dots are still missing.



Jan cuts out 7 round dots. Nele and Paula each cut out 5 dots. Tim cuts out 3 dots.  
How many dots do the 4 friends cut out for the ladybirds in total?



12



13



16



18



20

# 3 Dog jumpers



“Have you noticed that there are 5 dogs in our street lately?” asks Paula.

“Yes, and since yesterday they’ve all been running around with jumpers with dots or checks or stripes,” says Jan.

Nele thinks: “The Klein family’s dog has a particularly nice jumper, even with a hood.” “But without stripes,” Tim adds.

What is the Klein family dog?



# 4 Crossword animals



Tim, Jan, Nele and Paula's class is rehearsing a play for the school Christmas party. Tim's mother has sewn lovely animal costumes for it.

At the end of each rehearsal there is a riddle to solve. And every time there is an animal in it!

Today we have to solve the HASE-riddle. In the letter grid, the whole word HASE can be read either from left to right or from top to bottom. Paula has already found HASE once.



How often does the word HASE occur in total?



2 times



3 times



4 times



6 times



8 times



# 5 Wild boars



The wild boars in the zoo gave birth last spring. "Soon the wild boars will get a bigger enclosure," Jan tells us. "My grandma told me that too," Nele says, "it will be twice as long and twice as wide as the old one."



"How much bigger is the area then?" Tim wants to know.

"Let's try it out," suggests Paula. "We'll draw a picture of the little enclosure on some paper and then we'll double the length and the width. Let's see if we can work it out like that."



How many times does the old enclosure fit into the new enclosure?



2 times



3 times



4 times

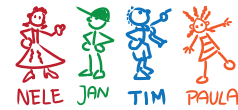


6 times



8 times

# 6 Chocolate animals



It's St Nicholas' Day. Nele, Jan, Tim and Paula have little presents in their cleaned boots. They have all received chocolate animals.



They compare how many of each type there are in total.

- There are fewer hedgehogs than reindeer.
- The reindeer and the owls together are as many as the rabbits.
- There are fewer squirrels than owls.

Of which type are there the most chocolate animals in total?



Reindeer



Owls



Squirrels



Hedgehogs








Rabbits

# 7

## School mascot



In school, the children in years 3 and 4 vote for a school mascot. The big board shows how many votes the 5 animals have received.

	3A	3B	4A	4B
	4	4	3	5
	5	4	3	5
	6	5	7	6
	5	4	5	5
	3	5	3	2

"I know who got the most votes," Paula says happily. "Of course, the beaver," says Jan, "he has the most votes in all four classes." "And which animal got the fewest votes overall?," asks Tim. "No animal got the fewest votes in all four classes," Nele says. She has an idea: "For each animal, we calculate the sum of the votes it got. And then we can compare."

Which animal got the fewest votes in total?



Stork



Hedgehog



Beaver



Raven



Fox

# 8

## Animal biscuits



Tim, Jan, Paula and Nele baked biscuits together with Jan's big brother. After baking, they taste them. Everyone takes a plate full.

On Nele's plate there are twice as many kangaroos as hedgehogs and one more rabbit than kangaroos.

Which plate is Nele's?

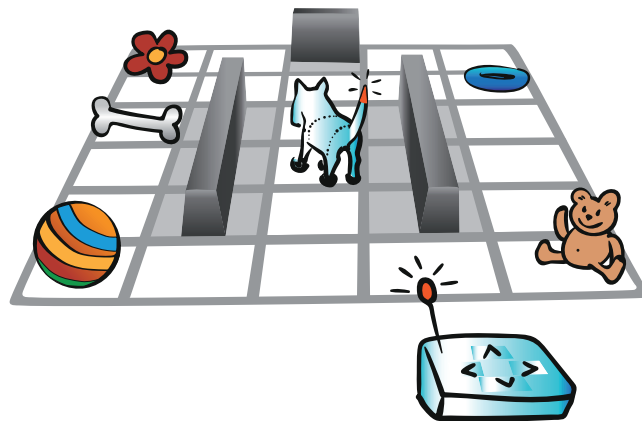


# 9 Dog robot



Jan, Paula, Nele and Tim are going on a trip to the Museum of Technology today with their school class. There is a dog robot there. It is controlled by a remote control with 4 buttons:

- the button  $\uparrow$  means 'go one field forward'
- the button  $\downarrow$  means 'go one field backwards'
- the button  $\Rightarrow$  means 'turn on the spot to the right'
- the button  $\Leftarrow$  means 'turn on the spot to the left'



Jan is controlling the dog robot.

He presses the sequence of buttons:  $\uparrow \uparrow \Leftarrow \uparrow \uparrow \Leftarrow \uparrow$ .

What is on the field where the dog robot is then standing?



a ball



a flower



a teddy



a play ring



a bone

# 10 Plumage



“Were you at your uncle’s this weekend?” asks Nele.

“Yes,” Paula answers, “I found a book about parrots at his place. I drew five parrots from it.”

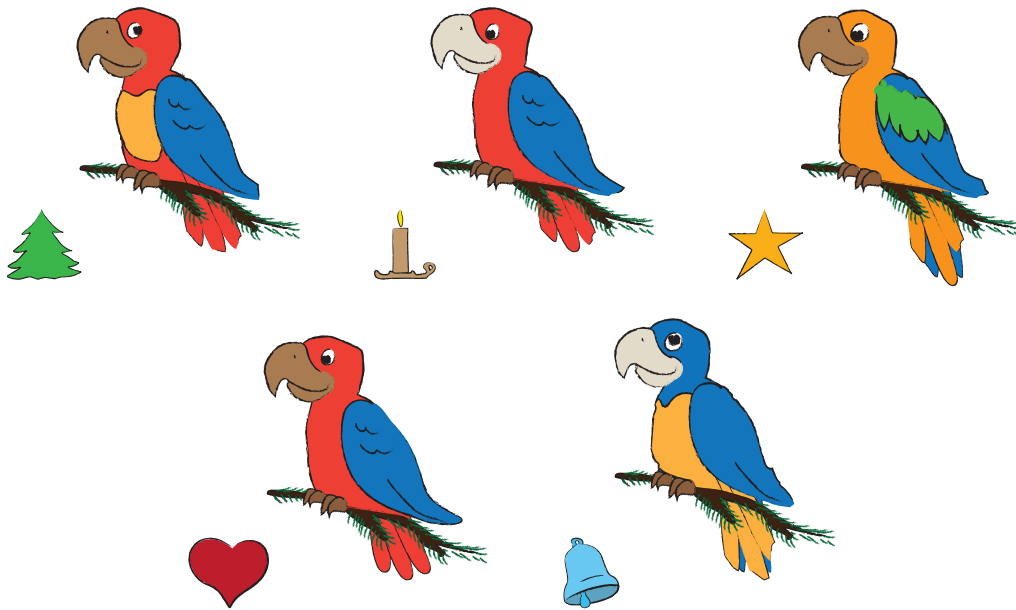
“Show me,” asks Jan.

“I even gave them names, Jojo, Bibi, Neo, Kiri and Micki,” says Paula and shows her drawings.

“Which one is Jojo?” asks Tim.

“Jojo only has red and blue feathers and a dark beak,” Paula explains.

Which parrot did Paula call Jojo?



# 11

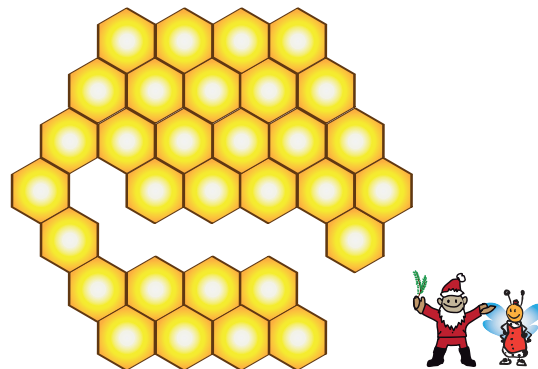
## Honeycomb



Paula, Nele, Jan and Tim visit a beekeeper.

This year her bees have produced a lot of honey.

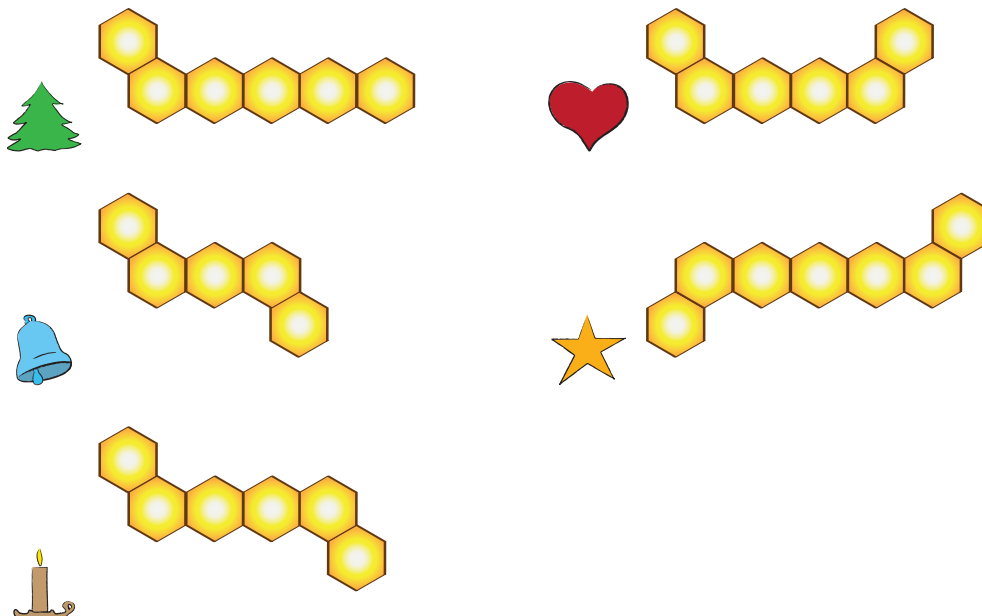
She shows the children a fragment of a honeycomb:



“The honeycombs are hexagonal,” Nele notices.

A part is missing in the middle of the fragment.

Which part fits into the gap?



# 12

## Mussels and snails



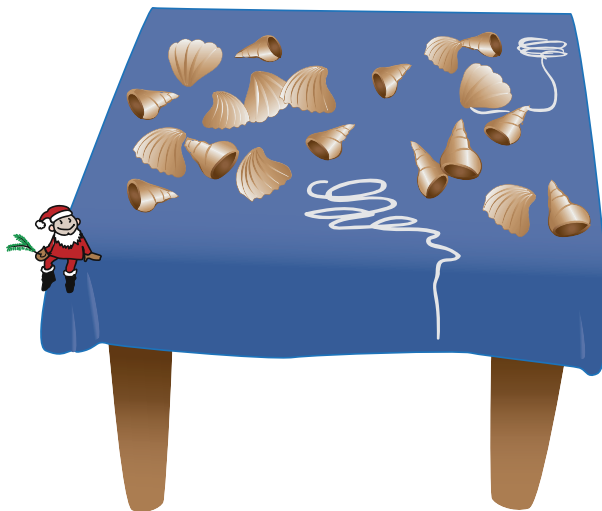
Tim collected mussels and snails on holiday. He still has 9 mussels and 11 snails left over. He wants to make a necklace for Nele.

“The necklace should be as long as possible, always alternating between 2 mussels and 3 snails,” Nele asks.

“There should be 2 mussels at the beginning and 2 at the end,” says Jan.

Paula wants all the mussels and snails that are left over for crafting.

Tim makes the necklace as Nele and Jan wish.



How many mussels and how many snails are left?



2 mussels  
and 2 snails



1 mussel  
and 1 snail



no mussels  
and 2 snails



1 mussel  
and 2 snails



1 mussel  
and no snails



# 13 Cats



Jan found out what Paula wishes for her birthday: a stuffed cat. Now Tim, Nele and Jan pick out a stuffed cat for Paula.

Jan says: "The fur should be brown."

Tim wishes: "But the paws should be white."

Nele adds: "Yes, and the tip of the tail should be white and the fur should not be striped."

Which stuffed cat fits all the wishes?



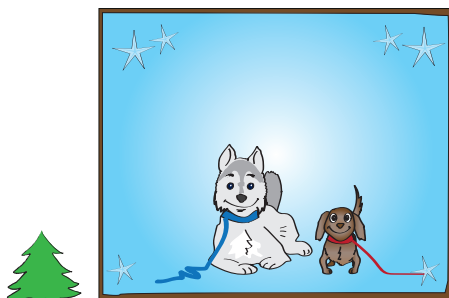
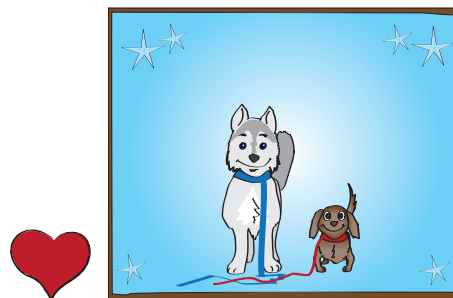
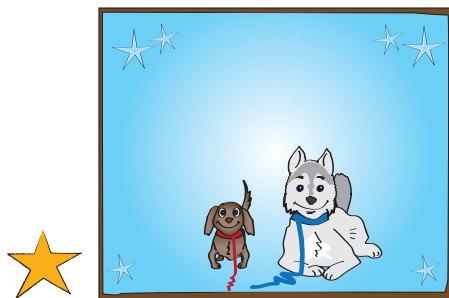
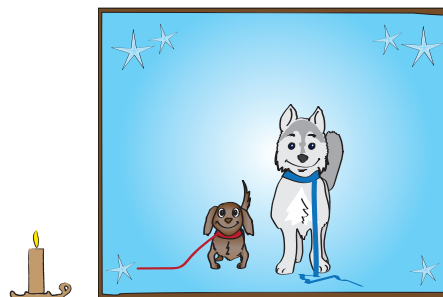
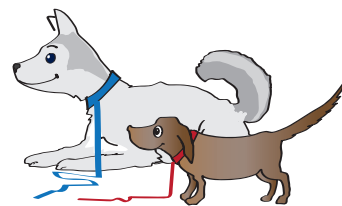
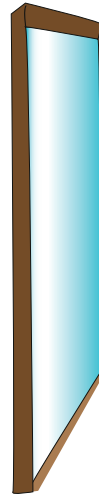
# 14

## Animals in the mirror



When Nele, Paula, Tim and Jan walk past the bakery, there are 2 dogs there and they look at the shop window. They see their reflection in the window.

Which picture is the reflection of the two dogs?



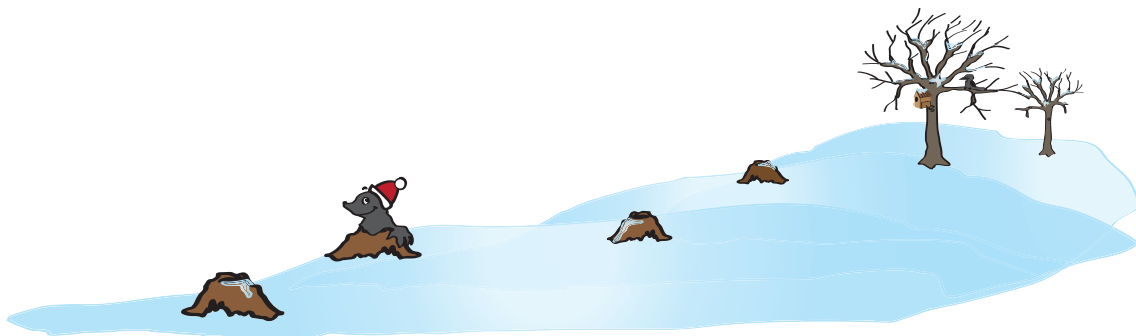
# 15 Mole



After school, Paula, Nele, Tim and Jan walk through a small park.

“Look, molehills,” says Paula.

“Yes, 4 of them,” Nele counts.



“I wonder if there is always a connecting tunnel from every hill to every other hill,” Tim thinks aloud.

How many tunnels would that be?



10



9



8



7



6

# 16 Mouse race



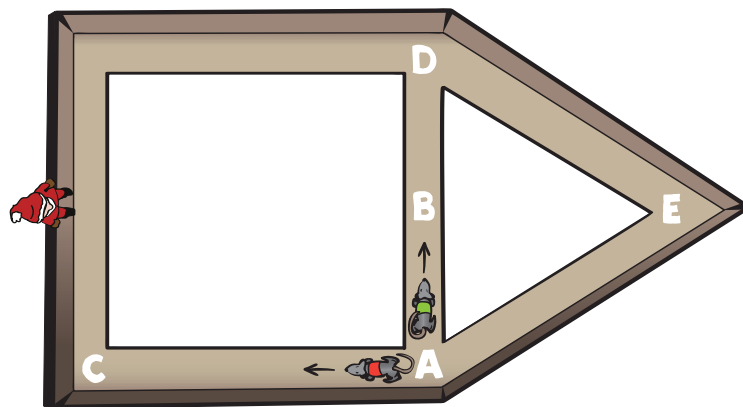
“Yesterday I was at Ludwig’s,” Tim recounts.

“Have you seen his two mice?” asks Nele.

“They are called Alpha and Omega,” Paula remembers.

“Yes, like the first and the last letter in the Greek alphabet,” Jan knows.

Tim helped Ludwig to build a race track for the mice. It consists of a square and a triangle. The sides of the triangle are the same length as the sides of the square.



Alpha in red always runs in the square all around in the direction of the arrow.

Omega in green always runs in the triangle all around in the direction of the arrow.

Alpha and Omega are equally fast. They start at the same time at point A.

At which point will they meet the next time?



at point A



at point B



at point C



at point D



at point E

# 17 Chickens



At the weekend, the children go on a trip to a children's farm.

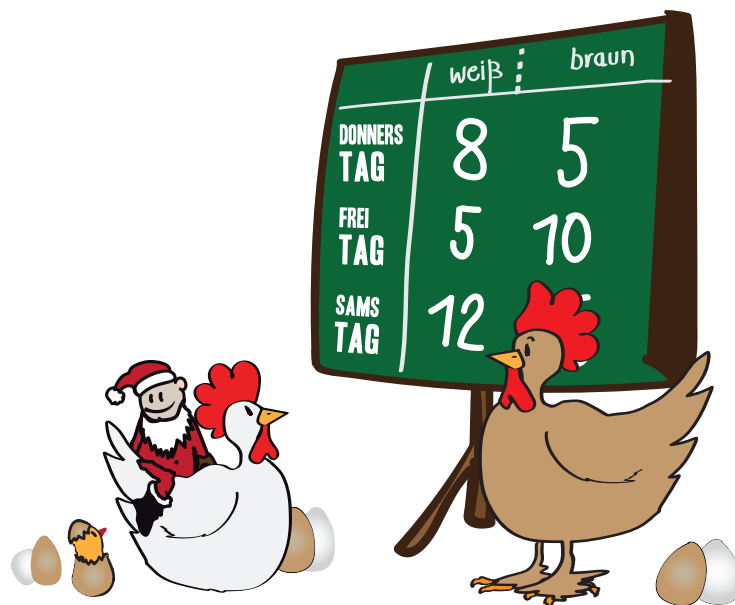
Jan and Tim are allowed to collect the freshly laid eggs.

Nele and Paula have discovered a board. On it is written down how many white and how many brown eggs have been laid every day.

"Yesterday, on Friday (Freitag in German), 5 white and 10 brown eggs were laid," Paula reads out.

"Twice as many brown eggs as white eggs," Nele calculates.

Jan writes down today's numbers.



"Today it is the other way round. There are twice as many white eggs as brown eggs," Tim notes.

How many eggs did the hens lay in total today, on Saturday (Samstag in German)?



# 18 Zebras



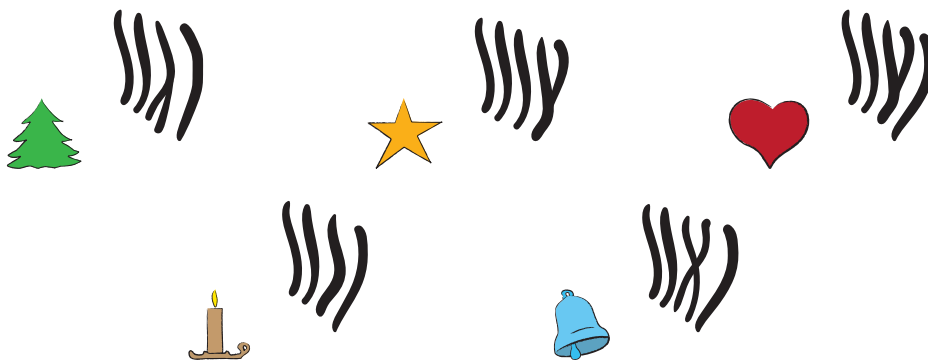
Nele, Tim, Jan and Paula saw a film on TV about animals in the savannah. They found the zebras most interesting.

“The black lines are of different thicknesses,” Nele notes.

“I’m sure you can tell the zebras apart by the lines,” says Tim.



Which detail can be found in the zebra?



# 19

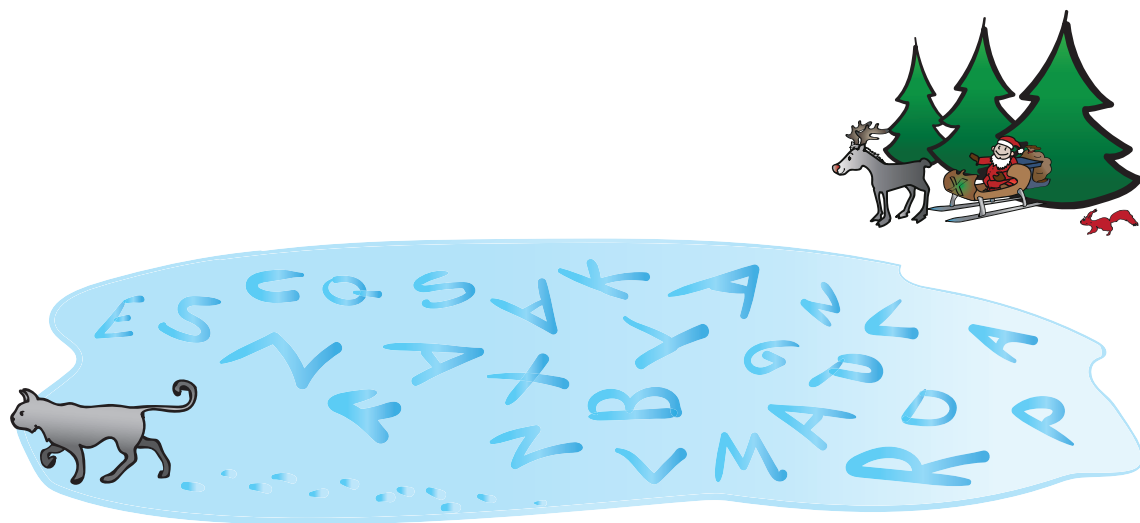
## ABC, the cat ran in the snow



Paula, Tim, Jan and Nele are playing with Jan's cat in the snow.

They sing 'ABC, the cat ran in the snow' and draw letters in the snow.

Afterwards they look at their work.



How often has the letter A been drawn in the snow?



2 times



3 times



4 times



5 times

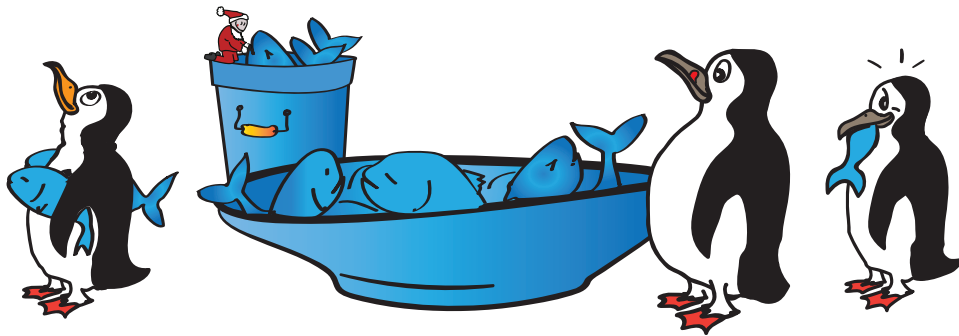


6 times

# 20 Penguins



Tim, Paula, Jan and Nele watch the penguins being fed in the zoo.  
When the keeper puts the bucket down, a penguin steals 2 fish.  
The keeper pours 10 fish into a bowl.



And already a penguin grabs a fish from the bowl. There are now 3 fish left in the bucket.

How many fish were there at the beginning?



11



12



13



15



17

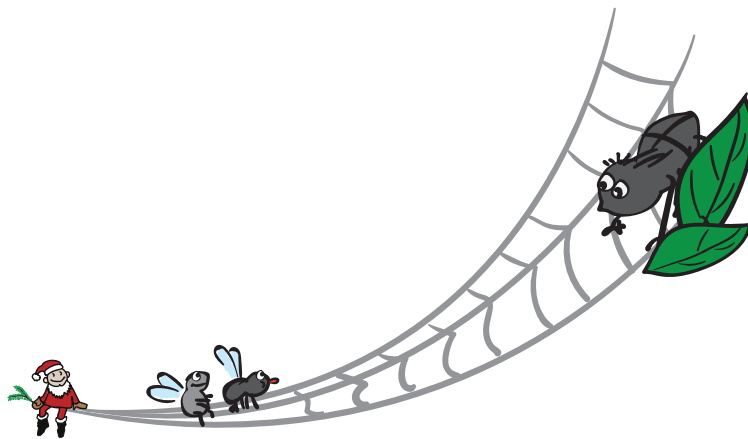


# 21 Spider web



Jan walked through the settlement with Tim and Paula. There are still remnants of Halloween at the last house.

Jan tells Nele: "The big spider web with a spider and 2 flies is still hanging there."



"I wanted to count the legs, but then I ran after Tim and Paula," he continues.

"Well, that's not difficult," says Nele, "we can work that out. Spiders have 8 legs and flies 6."

How many legs are there in total?



15



16



17



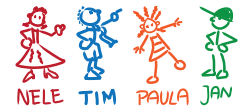
18



20

# 22

## Walrus puzzle



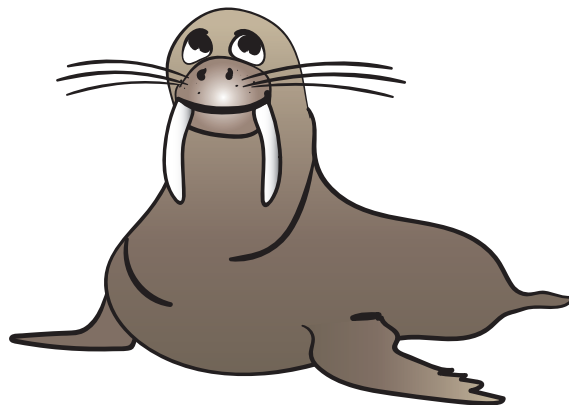
Nele and Tim have seen a film about animals in the polar zone. The large walrus live together in hundreds. Because of global warming, they have to move further and further north. Otherwise they won't find any ice floes on which to give birth to their pups.

Paula draws several walruses on cardboard.

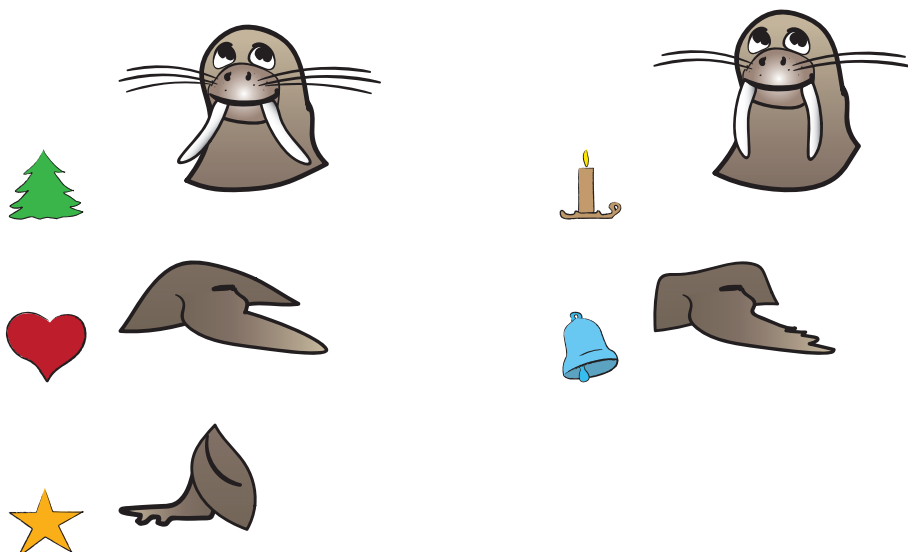
Jan cuts out the walruses. Then he cuts them into pieces.

Several puzzles are created.

Nele puzzles the walrus in the picture.



Which of the parts did she use for this?



# 23

## Reindeer antlers



Paula, Tim, Nele and Jan visit a reindeer enclosure. Both male and female reindeer have antlers. They shed them every year. Then they grow new ones.

“The antlers have many ends - these are the tips on the antlers,” Jan explains.

There are 5 reindeer standing close together in front.

Which reindeer has the antlers with the second most ends?







# 24 Christmas Eve



Now the time has come, it's Christmas Eve. A few days ago, the holidays began for Tim, Paula, Nele and Jan.






Every day since 1 December, the 4 friends have had a little task. They puzzled together and then entered their result in the solution grid.

They notice a special order.

The pattern begins with   . These two pictures follow in reverse order   .

Then come   , followed by these two pictures in reverse order   .

Now comes the last small picture  , and for this we take again the 1st small picture  , followed by these two pictures in reverse order   .

And so it goes on according to the rule, so that the pictures alternate in sequence in the combination of 4. Next, therefore, are  and  in the combination of 4. The pattern closes after 20 December with the first 3 different small pictures  ,  and  .



Who has the correct solution picture like  
Tim, Paula, Nele and Jan?