

1

Advent wreath



Jan, Nele, Paula and Tim are good friends. They learn and play together, especially in the run-up to Christmas.

This year, they have decorated a big Advent wreath with bells, baubles and little mushrooms for their classroom.



They put a bell, 4 balls and 2 small mushrooms around each of the 4 candles.
How many bells, balls and mushrooms are there altogether?



2 bells, 12 balls, 6 mushrooms



4 bells, 10 balls, 4 mushrooms



4 bells, 16 balls, 8 mushrooms



6 bells, 15 balls, 8 mushrooms



2 bells, 14 balls, 6 mushrooms

2 Photo clippings

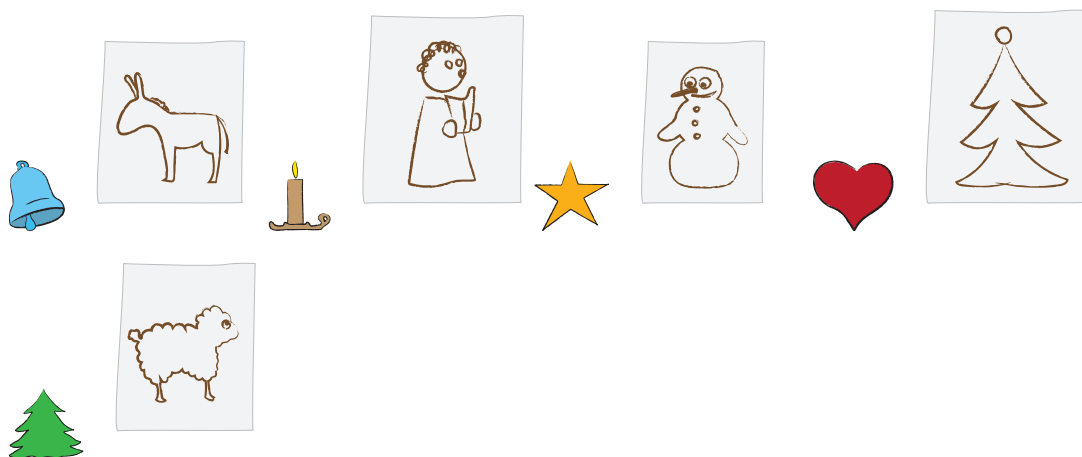


Nele visited her uncle in the Erz mountains. She really liked the big pyramid on the market square. She took a picture of it and painted copies of the figures.



“But you didn’t look very closely at some of the drawings,” Jan, Paula and Tim agree. “You’re right,” says Nele. “Only one drawing is really correct.”

Which drawing matches the photo exactly?



3

Knitting Socks



Paula's grandmother is knitting socks, one each for Jan, Nele, Tim and Paula. In each of the socks, the 4 children are supposed to find a little present on St Nicholas' Day.

Each sock has a wide coloured stripe - white, green, blue or yellow.

Paula gets to choose her sock. She chooses the one with the yellow stripe.



How many ways are there to distribute the other 3 socks to Jan, Nele and Tim?



3



4



6



8



10

4 Origami



Tim, Jan, Nele and Paula want to fold different animals.

They have 15 sheets of origami paper, one for each animal.

After an hour they have finished 2 frogs, 3 butterflies, a fox and a kangaroo.



How many more animals can they fold?



10



9



8



7



6

5 Advent candles



The candle that was lit on the first Advent burnt down completely.
Jan replaced it with a new candle. Now the wreath is complete again.



Nele gets to light 2 candles today.
Tim and Paula guess which two candles Nele will light.
How many ways can Nele choose 2 of the 4 candles?



3



4



6



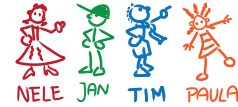
8



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6

Nicolas



Today, Nele, Jan, Tim and Paula's Santa socks, knitted by Paula's grandmother, have little presents.

The socks hang in the order yellow - green - blue - white.



Grandmother explains that Tim's sock does not hang next to Nele's sock.

Paula's sock is not next to Jan's sock.

But: the socks of the two boys and also the socks of the two girls are next to each other.

Paula's sock is on the outside left.

What does the strip of Tim's sock look like?



White



Green or Yellow



Yellow or Blue



Blue



Green

7 Oranges and Cloves



Paula, Jan, Tim and Nele have a new classmate, Ingra from Sweden.

She told them about a Swedish Christmas custom.

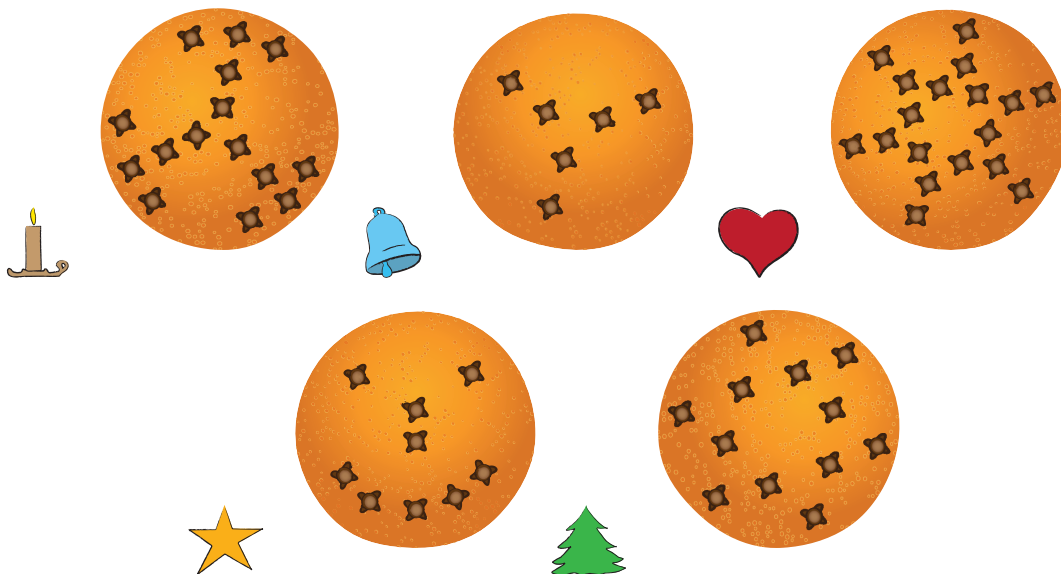
You can spike oranges with cloves and put them in a bowl. It smells wonderful.
The 5 children try it out.

Nele used the most cloves.

Paula used twice as many cloves as Tim.

Jan has used 3 cloves less than Paula.

Which orange is from Ingra?

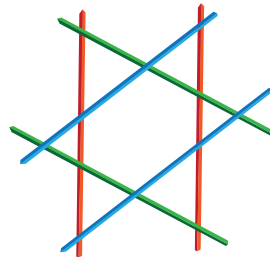


8

Straw Stars



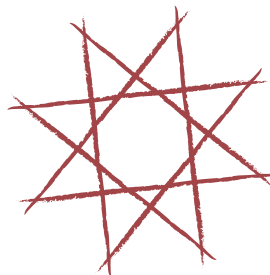
Tim would like to weave a star with coloured straw. Each of the 2 straws that touch each other should be of different colours.



“Your first star made of 6 straws is beautiful,” Jan states.

“You couldn’t have weaved it with less than 3 colours,” Paula remarks.

“Can you do it with 8 straws?” Nele ponders. She draws how she imagines the star will look like. In this star too, every 2 straws that touch each other should be of different colours.



How many different colours are needed for this straw star?



2



3



4



5



6

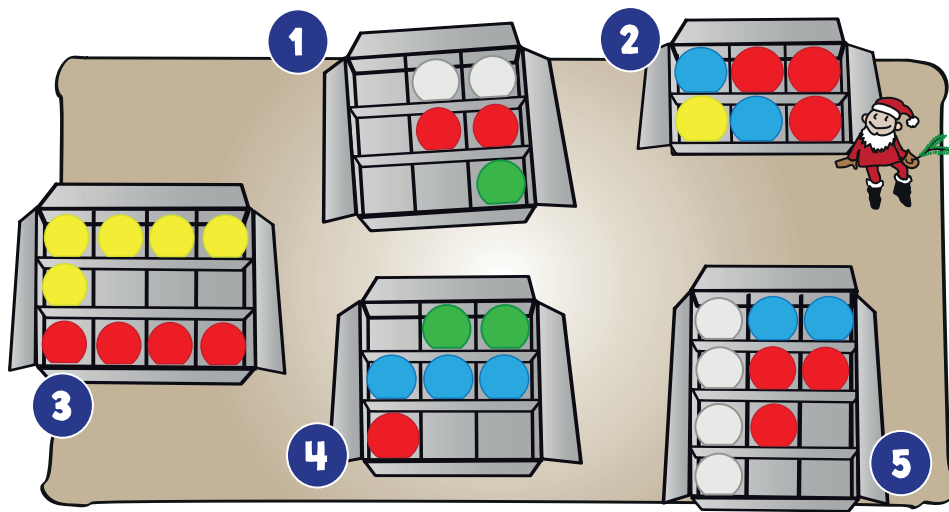
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Colourful Baubles



The caretaker decorates the big Christmas tree in the school. Jan, Paula, Nele and Tim pass him the baubles.

There are 5 boxes of coloured baubles, each with red baubles. They have already given some of the baubles to the caretaker.



In which box are there now half as many red baubles as other coloured ones?



in box 1



in box 2



in box 3



in box 4



in box 5

10 Star Chain



Nele, Paula, Jan and Tim cut out stars from paper. The stars are to be hung in the window as a long chain.



Paula has cut out 11 stars, one star more than Jan.

Tim has cut out 2 stars less than Jan, but 3 stars more than Nele.

How many more stars did Paula cut out than Nele?



3



5



6



8



9

11

Invitation



Paula's birthday is on 13 December. Naturally, Nele, Jan and Tim are supposed to come to the birthday party.

Paula writes invitations and stamps a border at the bottom with 5 different potato stamps: heart, fir tree, boot, sheep, star, then heart again, fir tree, boot, sheep, star and so on ...

She continues in the same order on the back of the invitations....



What does she stamp on the back of the invitations as the 5th picture?



A heart



A fir tree



A boot



A sheep



A star

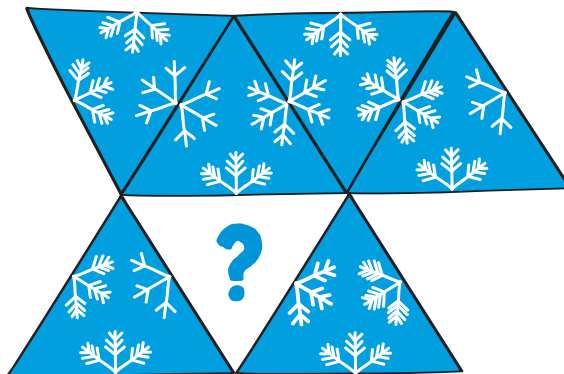
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Advent Puzzle

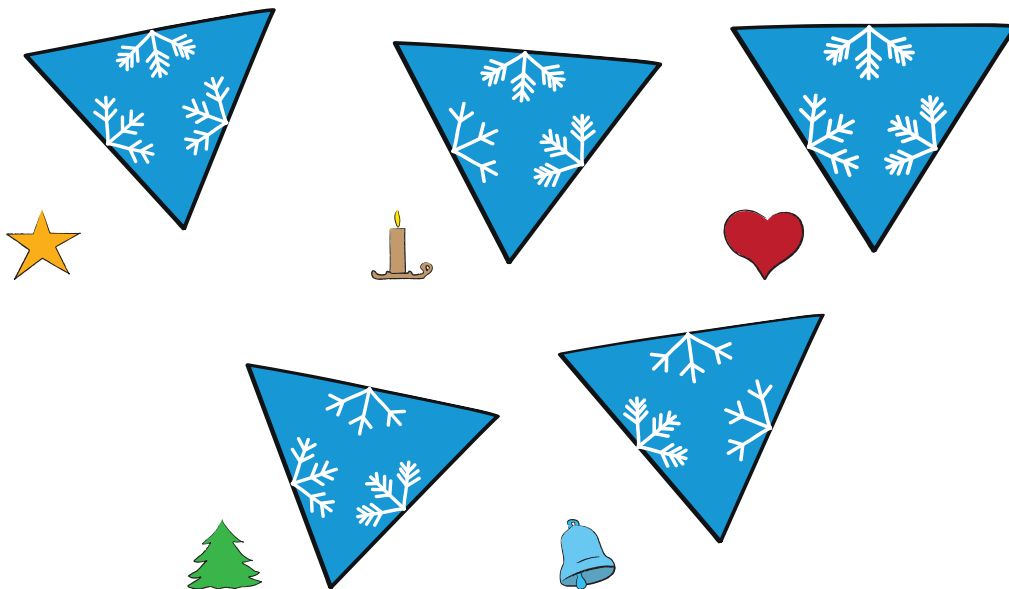


Tim has discovered a wintry puzzle at his great-aunt's house. Nele, Jan and Paula are curious.

All 4 children do the puzzle together.



Which part goes into the gap?



13

Chocolate Cookies



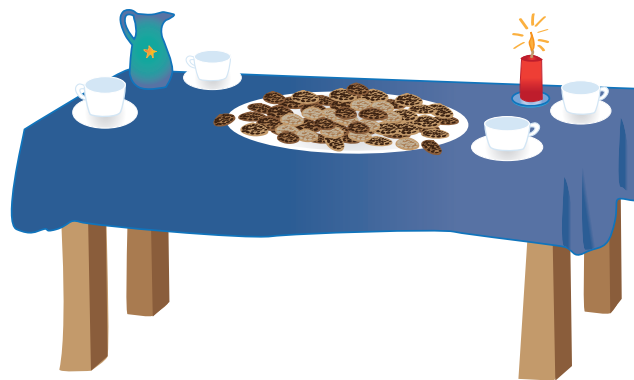
"Look," Jan marvels, "Paula, the birthday girl, has baked chocolate biscuits for us. There are at least 100 of them!"

"That's too many," says Tim. "There are at most half that many."

"That's only supposed to be 50? That's at least 70," says Nele.

"I'm sure there aren't that many," says Paula, "but there are at least 50."

Paula's mother counts now. "There are exactly 60," she says.



Who is correct?



Only Jan



Only Tim



Nele and Tim



Jan and Tim



Only Paula

14 Mirrored Numbers



Now it's already raining for the second day!

Nele, Paula, Tim and Jan think about what they want to do after the rain. Everyone has ideas.

"We'll write a list," Tim suggests, "using first, second and so on."

To make it look funnier, they write their mirror image to the left of each number.



Which picture shows the 5 and its mirror image to the left?



15 Birthday



Paula is the first one in the classroom today. She draws a birthday greeting for Mrs Zahl, her class teacher, on the blackboard. When Nele, Tim and Jan arrive, she has finished.



"It looks funny," says Tim. "If you follow the lines between the letters you can read ZAHL in different ways."

"Yes, there are quite a few ways," says Jan.

"And we're about to have a maths problem," Nele notes.

How many different ways are there to read the name ZAHL?



16

Colourful Baubles Again



Tim is a little late for the class Christmas party today. Nele and Paula tell him the news:

Jan had a box of baubles in 5 colours: 4 red, 2 silver, 6 blue, 1 green and 7 golden.

He put exactly 10 of these baubles on the fir tree bouquet. The bouquet now has baubles in three colours. And there are baubles in 2 colours left in the box.



Which baubles are still in the box?



the green and
silver ones



the silver and
red ones



the red and
blue ones



the blue and
green ones



the gold and
red ones

17

In the Department Store



Jan, Tim, Nele, Paula and Ben are in the department store. They want to buy tinsel and napkins for Christmas.

There are 2 of the 5 children on the top floor, the other 3 children are downstairs.

Tim is not on the same floor as Ben and Nele.

Jan is not on the same floor as Paula and Ben.



Who is on the top floor?



Nele and Paula



Jan and Ben



Paula and Ben



Tim and Jan



Paula and Tim

18 Snow Globe



Nele wants a snow globe for Christmas.

In the shop she looks at 5 different snow globes with Tim, Jan and Paula.

"I already know which one I want," says Nele. "I would like the one with the Christmas tree, but without Father Christmas."

Which snow globe does Nele want?



19

Decorating Cookies



Today, Paula baked some cookies. After chilling, Tim and Jan decorate the cookies. They skilfully squirt little chocolate mousses from the outside to the inside.

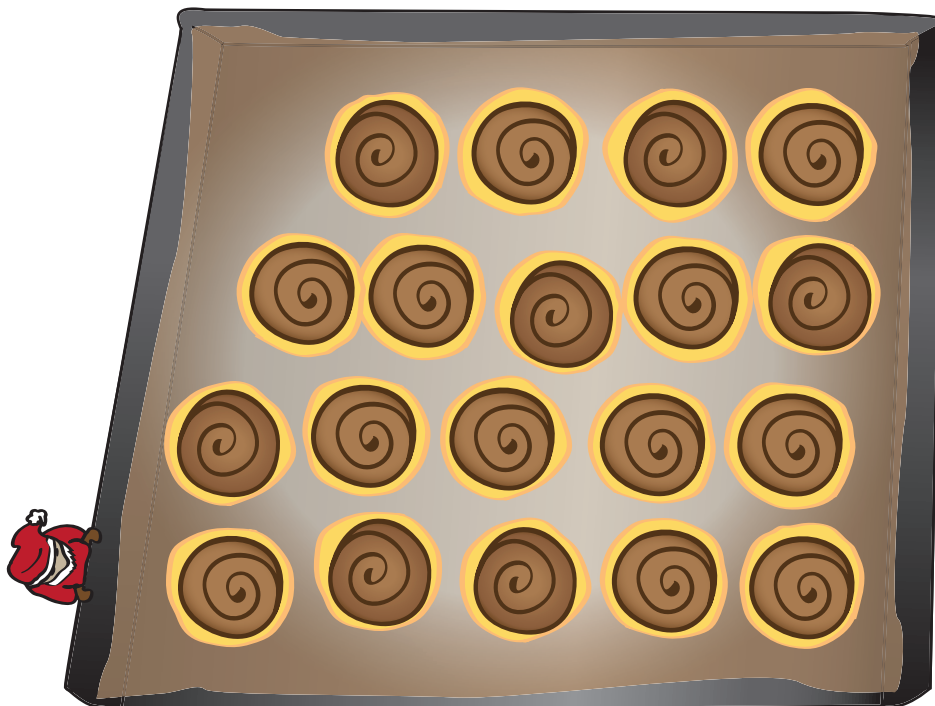
Tim squirts the mousses anti-clockwise



and Jan clockwise



. Nele counts the mousses.



How many mousses did Tim make?



6



8



9



10



12

20 Shop Window



Tim, Paula, Jan and Nele watch as the toy shop window is decorated.



The 4 stuffed toys are placed next to each other in a row.

Now the elephant is right next to the kangaroo, but not next to the owl.

The owl is not standing right next to the sheep.

What is standing right next to the sheep?



only the kangaroo



the kangaroo and the elephant



the kangaroo and the owl



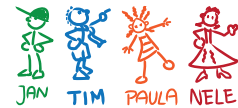
the elephant and the owl



only the elephant

21

Giftbox



Jan wrapped a shoebox with blue paper for a Christmas present.

Tim and Paula have brought him 10 stickers for the lid: Snowmen, stars and snowflakes.

Nele cut out 2 hearts from coloured paper for each of the 4 side panels and stuck them on.

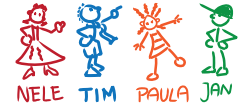


How many snowmen, stars, hearts and snowflakes are there in total on the finished gift box?



22

Christmas Tree Ornaments



Nele, Tim, Paula and Jan have promised to decorate the Christmas tree at Nele's grandmother's.

They have silver, gold and red decorations.

There is a star, a bell, a bauble and a snowman of each colour.



How many decorations are there?



7



9



10



12



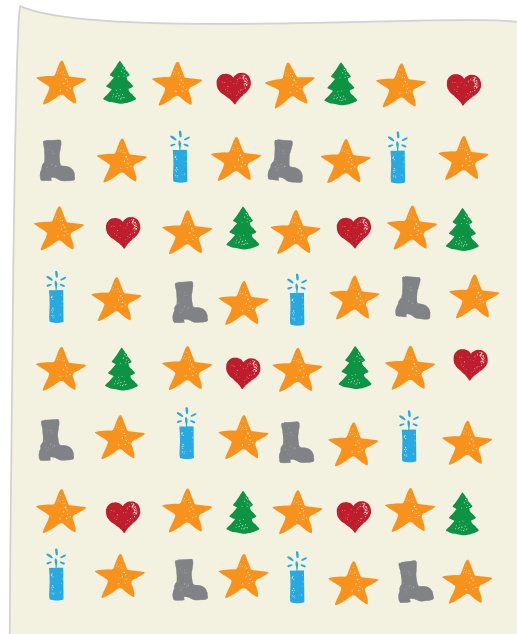
15

23

Present paper



Christmas is already very close. Paula, Tim, Nele and Jan now have all the presents. They print wrapping paper with potato printing stamps.



Nele has printed cut-outs of the wrapping paper on an extra sheet of paper.

“But one of the 5 cut-outs doesn’t fit into the wrapping paper”, says Jan.

Which cut-out does not fit into the wrapping paper?



24 Christmas Eve



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

Every day since 1 December, the 4 friends have had a little task to solve. They worked together to solve the problem and then entered their result in the solving grid.

They notice a special order.

The pattern begins with , then comes , it's followed by , then , then , now it begins again with , then comes , it's followed by  and so on, the images always appear in the same order.



And this continues until the last day.

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