

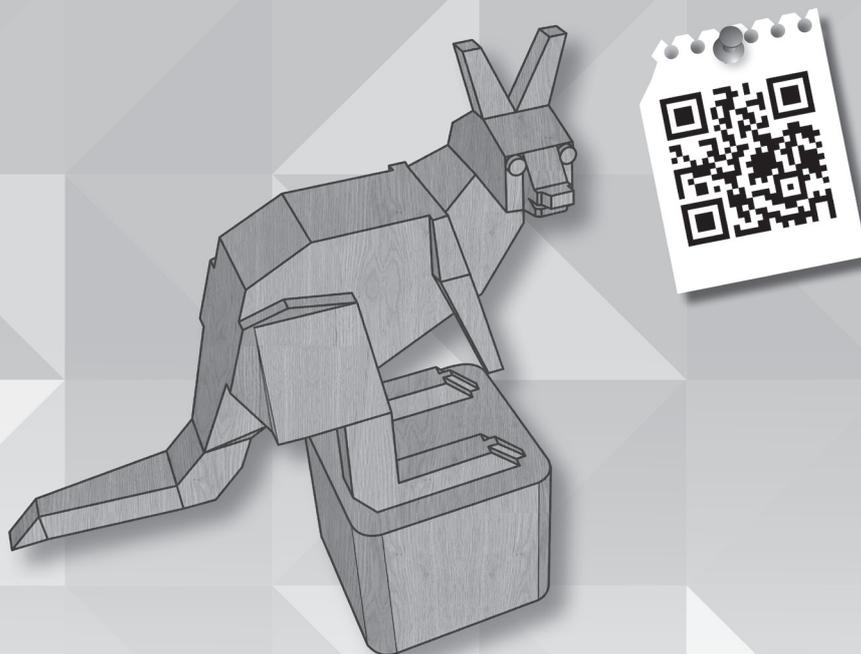
WereldWijde WiskundeWedstrijd

W4Kangoeroe

COMPETITION PERIOD

MARCH 19 TO 27

WWW.W4KANGOEROE.NL



GOOD LUCK AND MOST OF ALL HAVE FUN!

© Stichting Wiskunde Kangoeroe



calculators are not allowed



you may use 50 minutes



only a pencil, an eraser and scribbling paper are allowed



results and prizes will arrive at school at the end of May



answers will be posted on the website about April 4th



solutions will be posted on the website about April 20th

wizKID
group 5 & 6 primary school

zwijse n

Breng Leren tot Leven
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www.e-nemo.nl

FLEXIQ

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www.smart.be

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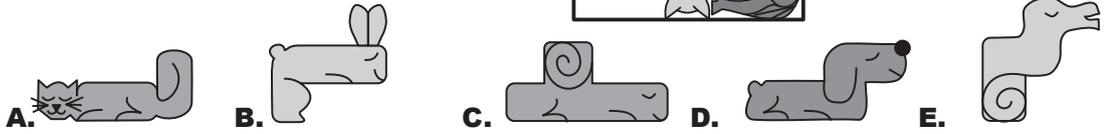
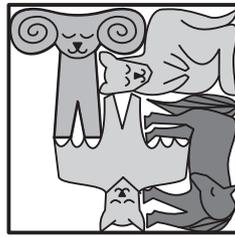


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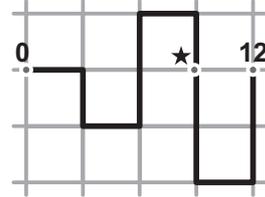
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rijksmuseum
boerhaave

1. Which animal belongs in the empty spot?



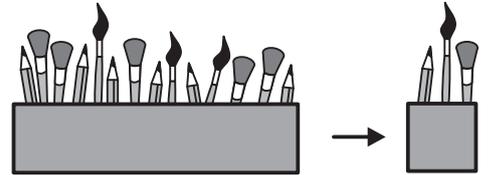
2. Aline puts the numbers from 0 to 12 on the black number line.



Which number does she put on the ★?

- A. 3 B. 5 C. 6 D. 7 E. 9

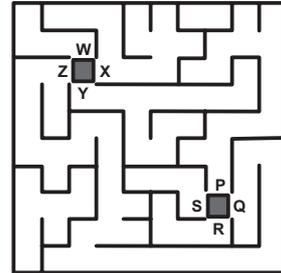
3. Anita wants to fill small boxes, each with 1 pencil, 1 round brush and 1 pointed brush.



How many small boxes can Anita fill from the large box?

- A. 2 B. 3 C. 4 D. 5 E. 6

4. Vilka stands on the grey square between W, X, Y, and Z. Kelia stands on the grey square between P, Q, R, and S.



Which route should Vilka take in order to meet Kelia?

- A. from X to P
 B. from Y to P
 C. from Z to P
 D. from X to Q
 E. from Z to Q

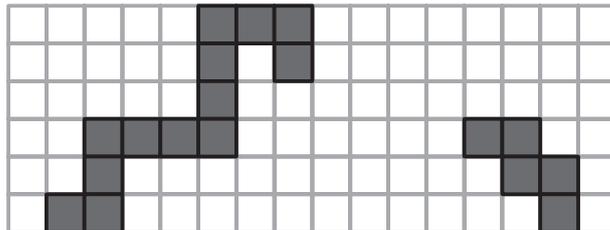
5. Finn has 5 pencils. The shortest one is blue. The green and red pencils are the same length. The purple pencil is shorter than the yellow one.



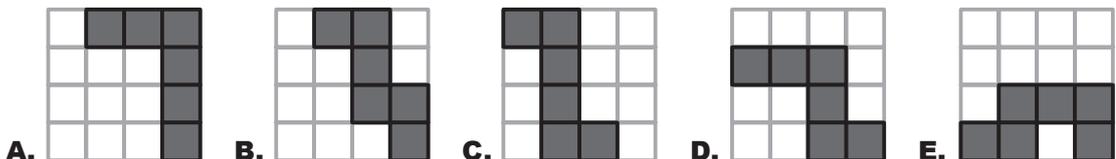
Which pencil is purple?

- A. A B. B C. C D. D E. E

6. Part of the path is missing.



Which piece is it?
 The piece may not be turned.
 The pieces must touch each other along a side.



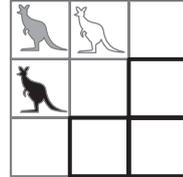
7. A rhinoceros , an anteater , a kangaroo  and a lion  escape from the zoo.

In what order do they escape through the gate?

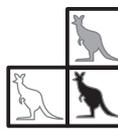


- A.  B.  C. 
 D.  E. 

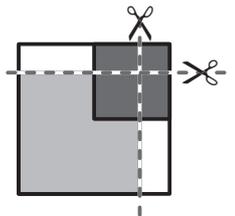
8. *Daan* wants to draw a white, grey or black kangaroo in each square. Then, in every row and every column, there is exactly 1 white, 1 grey and 1 black kangaroo. A row is from left to right. A column is from top to bottom.



What does *Daan* draw in the outlined part?

- A.  B.  C. 
 D.  E. 

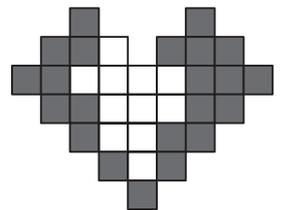
9. *Anna* places a big white square on a table. She then places a light grey square on top of it and after that a dark grey square, as shown in the picture. She cuts the stack of squares along the lines.



How many squares does she get?

- A. 3 B. 4 C. 5 D. 6 E. 9

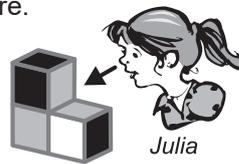
10. *Bella* makes a grey heart for her friend. She uses 4 grey pieces of paper to completely cover the white heart. She intends to use 4 of the following pieces to finish it.



Which piece **doesn't** she need?

- A.  B.  C.  D.  E. 

11. *Julia* places 3 exactly the same blocks as shown in the picture. On each block, a black face is opposite a white face. On each block, a grey face is opposite a grey face.



Julia looks at the blocks.

What does she see?

- A.  B.  C. 
 D.  E. 

12. Each arrow shows how *Indira* should go from one square to the next. She wants to visit every square exactly once.

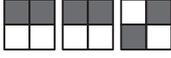
	A	B	C	D
1				
2				
3				

On which square should *Indira* start?

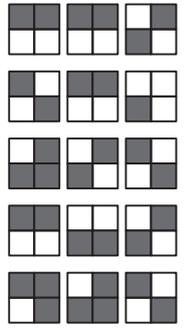
- A. A1 B. B1 C. C2 D. D2 E. A3

13. Each digit from 0 to 9 has its own pattern.

For example, like this: 

3 patterns like these together  make a number.

The numbers on the right are: 183, 451, 521, 872 and 882, but in a different order.

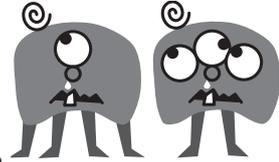


Which number is on the bottom row?

- A. 183 B. 451 C. 521 D. 872 E. 882

14. In *Fantasy Village* there are 2 kinds of fantasy animals:

- Fantasy animals with 1 eye and 4 legs
 - Fantasy animals with 3 eyes and 2 legs
- Altogether, the fantasy animals have 9 eyes and 16 legs.

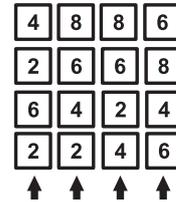


How many fantasy animals with 1 eye are there in *Fantasy Village*?

- A. 1 B. 2 C. 3 D. 4 E. 5

15. *Selina* has built towers of blocks on each square.

On top of each tower is the number that shows how high it is. From the front, in the direction of the arrows, *Selina* cannot see towers if they are behind a higher tower.



How many towers can *Selina* see?

- A. 8 B. 9 C. 10 D. 11 E. 12

16. *Cela*, *Ela* and *Fela* go to an ice cream shop.

One buys strawberry ice cream. 
 Another buys vanilla ice cream. 
 Another buys chocolate ice cream. 
 Each girl buys a different number of scoops: 1, 2 or 3.

Cela does not buy strawberry ice cream and takes the smallest number.
Ela does not buy chocolate ice cream.
 The chocolate ice cream has the most scoops.

Which ice cream does *Fela* buy?

- A.  B.  C.  D.  E. 

17. *Rosie* writes the digits 2, 0 and 6 in the table so that in each row and in each column there is exactly one 0, one 6 and two 2's.

A row is from left to right.
 A column is from top to bottom.

Rosie has already filled in part of the table.

2			
	0		?
		2	
	?		6

When *Rosie* is finished, what will be the total sum of the digits in the squares with the question marks?

- A. 0 B. 2 C. 4 D. 6 E. 8

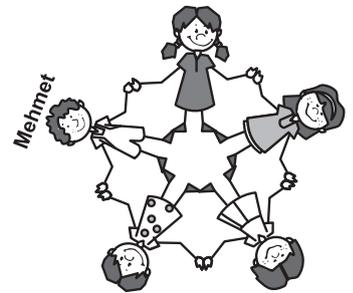
18. The 5 polar bears *Karen*, *Leo*, *Marieke*, *Nadja* and *Peter* keep the fish they caught in buckets. *Karen* says to *Leo*: 'Give me 2 fish and then we will have the same number of fish.' *Marieke* says to *Karen* and *Leo*: 'I have half the number of fish that you have together.'



Which bucket belongs to *Leo*?

- A. A B. B C. C D. D E. E

19. 5 children *Hoa*, *Mehmet*, *Thea*, *Lisa* and *Carine* are holding hands.
Hoa is holding *Mehmet's* left hand.
Lisa is not holding *Thea's* hand.
Thea is holding *Carine's* right hand.



Who is holding *Lisa's* hands?

- A. *Hoa* and *Carine* B. *Hoa* and *Mehmet* C. *Thea* and *Mehmet*
 D. *Carine* and *Mehmet* E. *Thea* and *Carine*

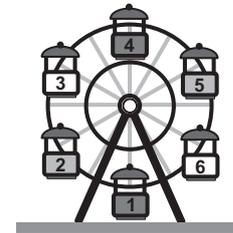
20. *Alex* has 13 cards with numbers and arithmetic symbols.
 He chooses 6 cards and makes a calculation that is correct.
 The top half of the calculation is covered.



What is the total sum of the 4 numbers that *Alex* uses?

- A. 19 B. 21 C. 23 D. 25 E. 32

21. The Ferris wheel in the picture has 6 cabins.
 At a fair there is a Ferris wheel with more cabins.
 The bottom cabin has number 1 and each next cabin has a number that is 1 higher.
 When cabin number 1 is all the way at the bottom, cabin number 12 is all the way at the top.



How many cabins does this Ferris wheel have?

- A. 12 B. 15 C. 18 D. 22 E. 26

22. The 3 girls *Lea*, *Ida*, and *Mia* each have a box with sticks.

One has $\overline{1 \text{ cm}}$ sticks.

One has $\overline{2 \text{ cm}}$ sticks.

One has $\overline{3 \text{ cm}}$ sticks.

We do not know who has which sticks.

Lea puts her stick on the ground first.

Then each girl puts her stick to the right of the previous stick, in this order:

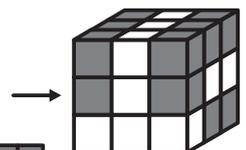
Mia, *Ida*, *Lea*, *Mia*, *Ida*, *Lea*, and so on.

They keep going in a straight line until it is 50 cm long.

Which 2 sticks are at the beginning and at the end of the line?

- A. $\overline{1 \text{ cm}}$... $\overline{2 \text{ cm}}$ B. $\overline{2 \text{ cm}}$... $\overline{3 \text{ cm}}$ C. $\overline{3 \text{ cm}}$... $\overline{1 \text{ cm}}$
 D. $\overline{3 \text{ cm}}$... $\overline{3 \text{ cm}}$ E. $\overline{2 \text{ cm}}$... $\overline{2 \text{ cm}}$

23. The large cube is made of 16 grey cubes and 11 white cubes, all of the same size.
Lily looks at the cube in the direction of the arrow.



What could she see?

- A. B. C. D. E.

24. In each square there is at least 1 candy.
 The number shows, for each square, how many candies are in the neighboring squares altogether.
 If 2 squares touch along an edge, they are neighbors.

2	4	3
7	7	3
4	6	5

How many candies are there in total in the 9 squares?

- A. 16 B. 17 C. 18 D. 20 E. 21