

wereldwijde wiskundewedstrijd

# W4Kangoeroe

THURSDAY MARCH 15TH  
2018



[WWW.W4KANGOEROE.NL](http://WWW.W4KANGOEROE.NL)

Good luck and most of  
all have fun.



Breng leren tot leven  
[www.zwijzen.nl](http://www.zwijzen.nl)



[www.e-nemo.nl](http://www.e-nemo.nl)



[www.education.ti.com](http://www.education.ti.com)



[www.smart.be](http://www.smart.be)



[www.sanderspuzzelboeken.nl](http://www.sanderspuzzelboeken.nl)



[www.schoolsupport.nl](http://www.schoolsupport.nl)



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[www.platformwiskunde.nl](http://www.platformwiskunde.nl)



[www.denksport.nl](http://www.denksport.nl)



[www.museumboerhaave.nl](http://www.museumboerhaave.nl)

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calculators are not allowed



30 minutes for 12 questions (group 3)  
60 minutes for 24 questions (group 4)



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 March 25th

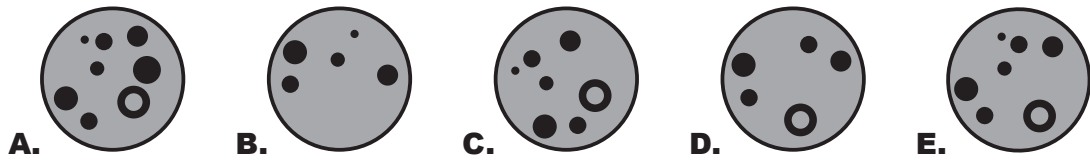
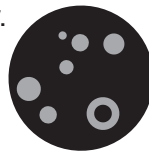


solutions will be posted on the website about April 16th

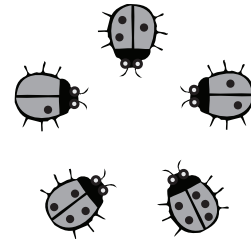
wizFUN  
group 3 & 4 primary school

1. Interchange the colours black and grey.

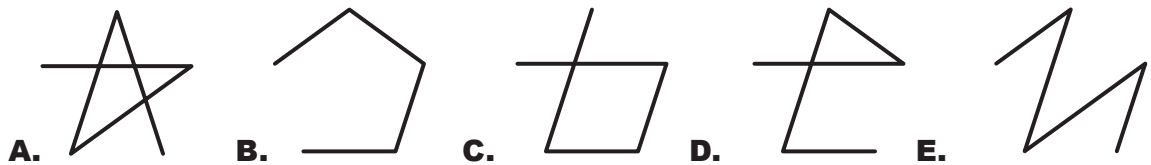
What will you get?



2. *Els* is drawing lines between the ladybugs. She does so in order of the number of dots.

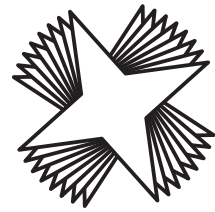


Which figure did *Els* draw?



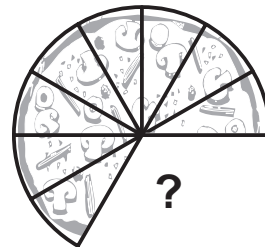
3. *Sofie* glued stars on top of each other. Each star has 4 points.

What is the least number of stars *Sofie* can have glued together?



- A. 5      B. 6      C. 7      D. 8      E. 9

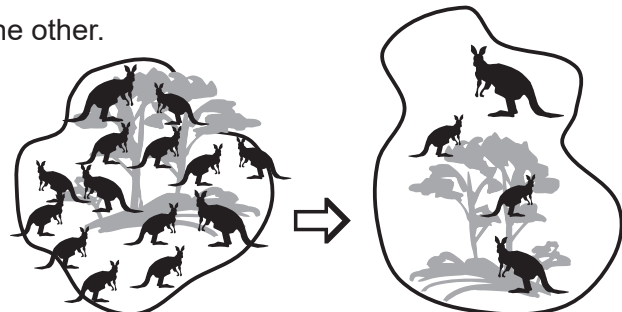
4. The pizza has been cut into equal pieces. *Peter* has eaten a couple of pieces.



How many pieces did *Peter* eat?

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

5. Some kangaroos are hopping from one park to the other. They follow the arrow. Afterwards there are equal numbers of kangaroos in both parks.



How many kangaroos were hopping?

- A. 4      B. 5      C. 6      D. 8      E. 9

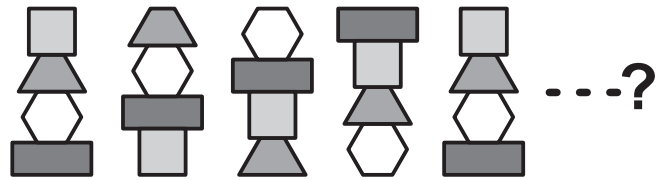
6. The ladybugs are sitting in a row. One of the lady bugs flies away. Now there are 20 dots left.



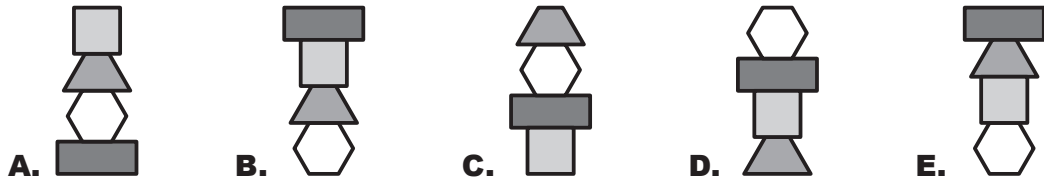
How many dots did the ladybug have that flew away?

- A. 3      B. 4      C. 5      D. 6      E. 7

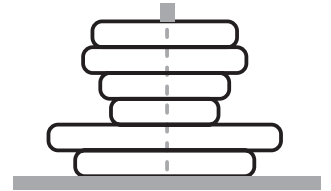
7. *Klaas* builds towers.  
The first 5 have been drawn alongside.  
*Klaas* sticks to the pattern.



What does tower 16 look like?



8. *Ibrahim* made a tower out of wooden discs.  
The tower looks like this from the side (see picture).  
He looks at the tower from above.



How many discs will *Ibrahim* see?

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

9. *Madam Mikmak* has a pile of brooms.  
She takes the brooms away one by one.  
She does this each time in such a way that the other brooms do not move



Which will be the last broom taken away by *Madam Mikmak*?

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

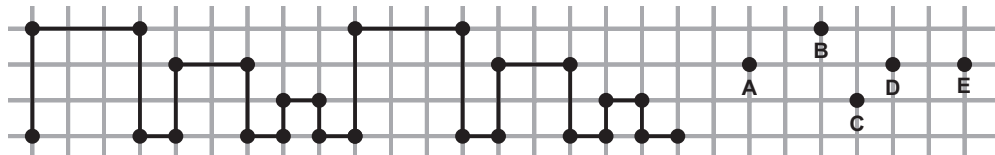
10. These are 2 glass plates with a drawing on each.  
*Amira* places them exactly on top of each other.



What does she see?



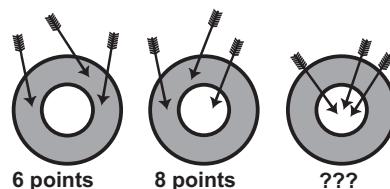
11. *Peter* draws the same pattern twice, one next to the other.  
Now he draws the same pattern again, next to the last one.



Through which point will his drawing go then?

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

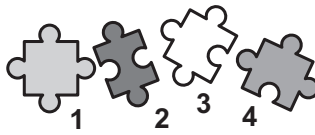
12. *Diana* has shot arrows 3 times.  
The first time she got 6 points.  
The second time she got 8 points.



How many points did she get the third time?

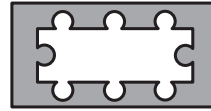
- A. 8      B. 10      C. 12      D. 14      E. 16

13. *Sira* has 4 puzzle pieces.



She will lay this puzzle.

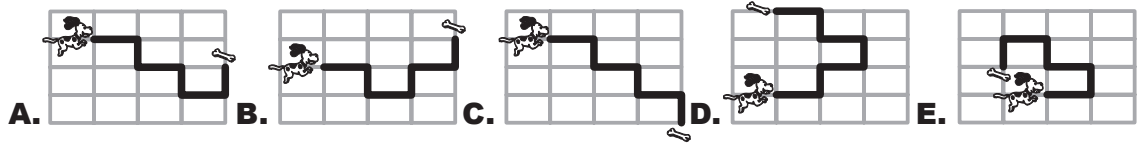
Which piece will not be used by *Sira*?



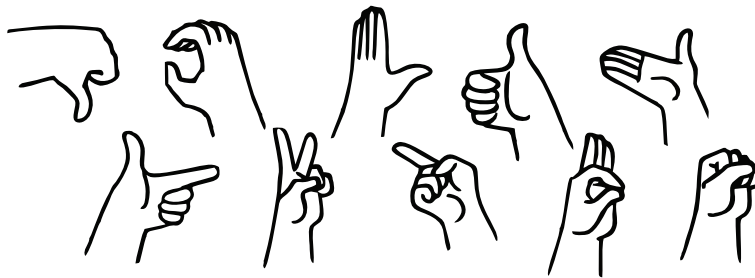
- A. 1                      B. 2                      C. 3                      D. 4  
E. she needs all four pieces

14. The dog walks to its bone. It took 3 right turns and 2 left turns.

Which path did the dog walk?



15. In the figure *Jet's* hands have been drawn a couple of times.

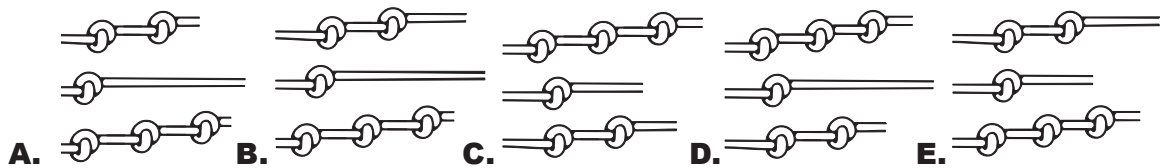


How many times can her right hand be seen in the figure?

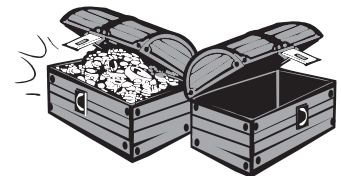
- A. 3                      B. 4                      C. 5                      D. 6                      E. 7

16. *Karlijn* has cut a thick rope in 3 pieces. The pieces have the same length. Then *Karlijn* made knots in each piece. All knots are the same.

Which figure shows the 3 pieces of rope with the knots?



17. A pirate has 2 treasure chests. The first treasure chest contains 10 euros. The second treasure chest is empty.



Each day he throws 1 euro in the first treasure chest and 2 euros in the second treasure box.

After how many days do the 2 treasure boxes contain the same number of euros?

- A. 5                      B. 8                      C. 10                      D. 12                      E. that will never happen

18. Every ice cream costs 1 euro. When you buy 6 ice creams you will get a discount. 6 ice creams together cost 5 euro only. You want to buy as many ice creams as possible.



How many ice creams can you buy then for 36 euros?

- A. 30                      B. 36                      C. 42                      D. 43                      E. 45

- 19.** Carl writes down numbers. Each number has different digits (so 88 is not allowed). The numbers are greater than 10. The numbers are smaller than 25. Carl can only use the digits 2, 0, 1 and 8. Carl writes down all numbers that are allowed.

How many numbers does Carl write down?

- A.** 4                      **B.** 5                      **C.** 6                      **D.** 7                      **E.** 8

- 20.** It is going to rain. 30 gnomes want to take shelter underneath the mushrooms. Under each mushroom as many gnomes can take shelter as there are dots on the mushroom.



In the figure you see the front of the mushrooms. Each mushroom has the same number of dots on the back and on the front. There is one mushroom with an odd number of dots.

How many gnomes will get wet?

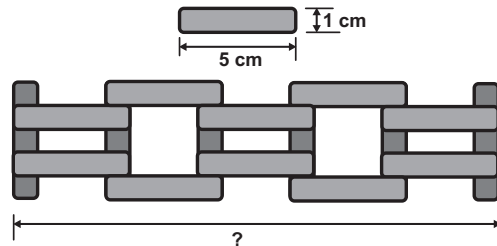
- A.** 2                      **B.** 3                      **C.** 4                      **D.** 5                      **E.** 6

- 21.** Mira has 3 sheets of white paper. She also has 2 sheets of yellow paper. And she has 2 sheets of blue paper. She cuts all sheets that are not blue in two. After that she cuts all sheets that are not white in two.

How many pieces of paper does Mira have now?

- A.** 14                      **B.** 16                      **C.** 17                      **D.** 18                      **E.** 20

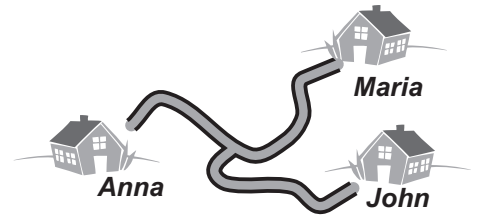
- 22.** Daddy is making a fence out of little sticks. Each little stick is 5 cm long and 1 cm wide. The fence is shown alongside.



How long is the fence?

- A.** 20 cm                      **B.** 21 cm                      **C.** 22 cm                      **D.** 23 cm                      **E.** 25 cm

- 23.** The road from Anna to Maria is 16 km long. The road from Maria to John is 20 km long. The road from Maria to the crossing is 9 km long.



How long is the road from Anna to John?

- A.** 7 km                      **B.** 9 km                      **C.** 11 km                      **D.** 16 km                      **E.** 18 km

- 24.** Amal is buying toys. She looks at all the prices.

She then notices:  $\text{Bicycle} + \text{Bicycle} + \text{Bicycle} = \text{Rocking horse}$       $\text{Bicycle} + \text{Rocking horse} = \text{Ball}$       $\text{Drum} + \text{Rocking horse} = \text{Bicycle} + \text{Ball}$

Which toy is the cheapest and which is the most expensive?

- A.** Is the cheapest and is the most expensive
- B.** is the cheapest and is the most expensive
- C.** Is the cheapest and is the most expensive
- D.** Is the cheapest and is the most expensive
- E.** Is the cheapest and is the most expensive